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Huntington Beach Energy Project

(12-AFC-02)

Resubmission of Data Responses, Set 1B, 4, and 5

(Updated Responses to Data Requests 23 to 26 [Biological Resources], 104 to 106 [Air Quality], and 107 to 109 [Public Health])

Submitted to

California Energy Commission

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Attachments

Introduction

Attached is AES Southland Development, LLC's (AES or the Applicant) updated responses to the California Energy Commission (CEC) Staff's Data Requests, Set 1B (Biological Resources, requests 23 through 26), Set 4 (Air Quality, requests 104 through 106), and Set 5 (Public Health, requests 107 through 109) regarding the Huntington Beach Energy Project (HBEP) (12-AFC-02) Application for Certification (AFC).

The responses are presented in the same order as CEC Staff presented them and are keyed to the Data Request numbers. New or revised graphics or tables are numbered in reference to the Data Request number. For example, the first table used in response to Data Request 104 would be numbered Table DR104-1. The first attachment used in response to Data Request 104 would be Attachment DR104-1, and so on. Figures or tables from previous submissions that have been revised have "R" following the original number, indicating a revision.

Additional tables, figures, or documents submitted in response to a data request (for example, supporting data or stand-alone documents such as plans, folding graphics, etc.) are found at the end of the section and may not be sequentially numbered.

Biological Resources (23–26)

BACKGROUND

The AFC (Section 5.2.3.3.1) states that the critical load for atmospheric nitrogen deposition into coastal wetlands is difficult to establish because wetlands subject to tidal exchange have open nutrient cycles. It further states that nitrogen loading in wetlands is often affected by sources other than atmospheric deposition. In addition, it states that air pollution controls limit emissions of oxides of nitrogen (NO_x) and that Regional Clean Air Incentives Market (RECLAIM) puts a cap on region wide NO_x emissions. The section concludes that the HBEP nitrogen deposition impacts are not expected to contribute significantly to nitrogen loading on coastal salt marshes. However, there is no discussion of the relative location of the proposed project and sensitive habitats that could be affected by nitrogen emissions from HBEP nor is there a quantitative analysis of nitrogen deposition impacts.

Background data that could be used in conjunction with nitrogen deposition modeling for the HBEP could be established using available resources such as the CEC publication *Assessment of Nitrogen Deposition: Modeling and Habitat Assessment* (CEC-500-2006-032, March 2007). However, because no nitrogen deposition modeling was performed for the HBEP, this step is still needed and the qualitative information provided in the AFC does not support the Applicant's conclusion that nitrogen deposition from HBEP emissions would have no impacts on coastal salt marshes. CEC Staff believes that nitrogen deposition resulting from emissions from the proposed HBEP, namely NO_x and ammonia (NH_3), could have negative impacts on biological resources and that a quantitative analysis of such impacts is needed.

Impacts of excessive nitrogen deposition to plant communities include direct toxicity, changes in species composition among native species, and enhancement of non-native invasive species. The increased dominance and growth of invasive annual grasses is especially prevalent in low-biomass vegetation communities that are naturally nitrogen-limited, such as salt marshes. Invasive non-native vegetation, enhanced by atmospheric nitrogen deposition, affects these species by outcompeting them for space, sunlight, moisture, and nutrients. The salt marshes fringing estuaries intercept a substantial part of the land-derived nitrogen load and thus protect other components of estuaries from eutrophication; loss of these fringing marshes would therefore have wider consequences. Additionally, southern coastal salt marsh, southern coast live oak woodland, and southern dune scrub located in the vicinity of the project site could potentially be impacted by nitrogen deposition contributed by the HBEP. The anticipated nitrogen emissions may contribute to the ongoing (cumulative) degradation of sensitive species habitat located near the project site.

In order to assess impacts to nitrogen-sensitive biological resources, staff requires additional information on nitrogen deposition as established by proper modeling of nitrogen emissions resulting from the HBEP.

DATA REQUEST

23. Please quantify the existing baseline total nitrogen deposition rate in the vicinity of the HBEP in kilograms-Nitrogen per hectare per year (kg-N ha^{-1} yr^{-1}). The geographical extent of the nitrogen deposition mapping should be directed by the results (i.e., extend geographically to where the deposition is considered below any stated threshold of significance for vegetation communities). Conduct a literature review to identify appropriate thresholds. Thresholds for nitrogen deposition by vegetation type are available within the March 2007 CEC Public Interest Energy Research (PIER) report, titled *Assessment of Nitrogen Deposition: Modeling and Habitat Assessment*, available at: http://www.energy.ca.gov/2006publications/CEC-500-2006-032/CEC-500-2006-032.PDF,

and the May 2007 CEC PIER report, titled *Impacts of Nitrogen Deposition on California Ecosystems and Biodiversity*, available at: http://www.energy.ca.gov/2005publications/CEC-500-2005-165/CEC-500-2005-165.PDF. Please include references and guidelines used in your baseline analyses.

Response: Please note that the response has not changed since originally submitted on January 17, 2013 (CEC TN# 69182).

DATA REQUEST

24. Please use AERMOD or an equivalent model to provide an analysis of impacts due to total nitrogen deposition from operation of the HBEP. The analysis should specify the amount of total nitrogen deposition in kg-N ha^{-1} yr^{-1} at the Huntington Beach Wetlands Conservancy's Coastal Marsh Restoration Complex, the U.S. Army Corps of Engineers (USACE) Salt Marsh Restoration Project, the Talbert Nature Preserve, the Bolsa Chica Ecological Reserve, and the Seal Beach National Wildlife Refuge and any other special status habitats, vegetation types, and critical habitat for wet and dry deposition. Please provide the complete citation for references used in determining this number

Response: The wet and dry nitrogen deposition resulting directly from depositional nitrogen emissions from the six combustion turbines at the proposed HBEP were evaluated using AERMOD (version 12345). AERMOD is considered a conservative model for this analysis as it is a steady-state Gaussian plume dispersion model and does not calculate the complex chemical transformations and equilibria associated with nitrogen deposition.

Several additional conservative assumptions were used in the modeling with regard to nitrogen formation and deposition:

- 100 percent conversion of NO_x and NH_3 into atmospherically derived nitrogen (ADN) within the turbine stacks rather than allowing for the conversion of NO_x and NH_3 to occur over distance and time within the atmosphere, which would be more realistic.
- Depositional rates and parameters were based upon nitric acid (HNO_3) which, of all the depositing species, has the highest affinity for impacts to soils and vegetation and tendency to stick to what it is deposited on.
- Maximum settling velocities were selected to produce conservative deposition rates.
- Maximum potential emissions for the HBEP facility were assumed to occur each year.
- The approach assumes no net benefit from the discontinuation of the existing boilers at the Huntington Beach Generating Station. Huntington Beach Generating Station Units 3 and 4 were recently shut down and Units 1 and 2 will be shut down prior to completion of the project.

Emissions

Emissions of depositional nitrogen were conservatively calculated as a complete conversion of in-stack NO_x and NH_3 from each of the six combustion turbines. This was done by multiplying the nitrogen mass fraction of each of the pollutants by the respective average annual emissions. For example, the mass fraction of nitrogen (14 grams per mol [g/mol]) in NO_x (as nitrogen dioxide [NO_2], 46 g/mol) is 0.304, while the mass

fraction of nitrogen in NH_3 (17 g/mol) is 0.824.[1] Table DR24-1R presents the emissions for each combustion turbine.

TABLE DR24-1R
HBEP Average Annual Depositional Nitrogen Emissions (per turbine)

NO_x Emissions (tpy)	NH_3 Emissions (tpy) [a]	Depositional Nitrogen from NO_x (tpy) [b]	Depositional Nitrogen from NH_3 (tpy)	Total Depositional Nitrogen (tpy)
40.4	16.0	12.3	13.1	25.4

[a] Average annual NH_3 assumed to be 2.5 parts per million by volume (ppmv) (see footnote below).
[b] Molecular weight of NO_x calculated as NO_2.

tpy = tons per year

Model Setup

The AERMOD model setup for the nitrogen deposition modeling was based on the same source locations and stack parameters identified for the annual NO_2 modeling included in HBEP AFC Appendix 5.1C (12-AFC-02). Receptor grids were developed for each of the wetland areas identified in Data Request 24, with receptors located at 25-meter increments along the perimeter of each of the wetland areas and Cartesian-grid receptors spaced at 100-meter increments within the wetland areas.

AERMOD also requires additional depositional parameters in order to model wet and dry deposition, which are discussed below.

Deposition Parameters:
The dry deposition algorithms in AERMOD include land use characteristics and some dry gas deposition resistance terms based on five seasonal categories and nine land use categories. The seasonal categories used for each month of modeling are as follows:

- Midsummer: April, May, June, and July
- Autumn: August, September, and October
- Late Autumn/Winter without snow: November, December, and January
- Transitional Spring: February and March

Land use categories are used within AERMOD to calculate dry deposition of the emitted nitrogen compounds. For example, in areas of lush vegetation, the gaseous nitrogen compounds would have a higher uptake and, therefore, dry deposition would be higher at these areas than in bodies of water or urban areas with fewer trees. The land use categories used in the analysis were determined for each 10 degree increment within a 3-kilometer-radius area surrounding HBEP, with 0 degrees representing due north, and are as follows:

- Suburban areas, grassy: Sectors 1–14 and 30–36
- Bodies of water: Sectors 15–29

[1] The Applicant has requested a maximum allowable NH_3 emission concentration of 5 parts per million by volume (ppmv) but the NH_3 emissions are expected to be significantly lower than the allowable limit as the catalyst will be in a new, clean condition and catalyst efficiency will be at its highest. However, as the selective catalyst reduction (SCR) system degrades, the NH_3 emissions will increase to a point where catalyst replacement is required. The SCR degradation is measured periodically and the rate of degradation can be predicted so that catalyst replacement can be scheduled to avoid exceeding the allowable NO_x or NH_3 emission limitations. As a result, the replacement of the catalyst occurs well before the NH_3 emissions reach the maximum allowable concentration. Therefore, a median point in the range of NH_3 emissions was assumed to estimate the annual nitrogen deposition due to the NH_3 emissions.

AERMOD also requires the input of wet and dry depositional parameters based on the nitrogen-containing species being emitted. For this analysis, it was conservatively assumed that all nitrogen emitted was in the form of HNO_3 because HNO_3 is the most depositionally aggressive species. The depositional parameters are as follows:

- Diffusivity in Air: 0.1628 square centimeters per second (cm^2/s)
- Diffusivity in Water: 2.98×10^{-5} cm^2/s
- Cuticular Resistance Term: 1.0×10^5 seconds per centimeter (s/cm)
- Henry's Law Coefficient: 8.0×10^{-8} Pascal-cubic meter per mol ($Pa\ m^3/mol$)

Consistent with the addendum to the *Dispersion Modeling Protocol for the Huntington Beach Energy Project*, submitted on July 17, 2013, AERMOD was modeled with 5 years of integrated surface hourly (ISH) data collected at the John Wayne Airport meteorological monitoring station, owned and operated by the National Weather Service (NWS), in conjunction with the corresponding 1-minute automated surface observational system (ASOS) data.[2] This station was selected because the most recent 5 years of meteorological data are publicly available, the data have undergone a comprehensive quality assurance program administered by the NWS, the data are greater than 90 percent complete on a quarterly basis prior to data substitution, the wind rose is similar to expected winds for the coastal project location, and the surface characteristics surrounding the monitoring site are more representative than other nearby monitoring sites of the HBEP for the predominant wind directions. Five complete years of meteorological data collected from 2008 to 2012 were processed with the AERMET meteorological data preprocessor for use in the AERMOD modeling.

Model Results

The maximum modeled annual deposition over 3 years was combined with a conservative estimated background deposition rate of 2 kg-N ha^{-1} yr^{-1} and compared to the CL for nitrogen deposition for each of the habitat types present in the wetland areas. As previously noted in Table DR23-1, the Southern Cottonwood Willow Riparian Forest habitat listed in Figure 5.2-2 of the AFC was not included in this analysis because the data was obtained from a historical record and this riparian community has been extirpated (CDFG, 2012a; reference is listed in the AFC).

The results of the deposition modeling are shown in Table DR24-2R. In each case the maximum predicted nitrogen deposition was less than the CL deposition. Therefore, even with the use of the conservative methodology for estimating nitrogen deposition noted previously, any contribution of nitrogen deposition from HBEP would have a less-than-significant impact on sensitive species habitat located near the project site.

The dispersion modeling files, which include input and output files used in the analysis, have been included with this submission on compact disc. The maximum predicted nitrogen deposition and location within each of the sensitive areas are also identified in the following data response (Figure DR25-1R and Figure DR25-2R).

[2] Twice-daily National Climatic Data Center soundings from the San Diego Miramar NWS station (Station #03190) were also utilized in developing the AERMOD-ready meteorological data file.

TABLE DR24-2R

Comparison of the Predicted HBEP Nitrogen Deposition Flux to the Critical Loads of Nitrogen for the California Mediterranean Ecoregion and Wetlands

Habitat Type	Maximum Predicted Nitrogen Deposition Rate (kg-N ha^{-1} yr^{-1})	Background Nitrogen Deposition Rate (kg-N ha^{-1} yr^{-1})	Total Predicted Nitrogen Deposition Rate* (kg-N ha^{-1} yr^{-1})	CL for Nitrogen Deposition (kg-N ha^{-1} yr^{-1})	Location of Maximum Predicted Deposition (i.e., Name of Wetland and/or Protected Area)
Chaparral	0.07	2	2.1	4–10	Laguna Coast Wilderness Park
Coastal sage scrub	1.0	2	3.0	7.8–10	Talbert Nature Preserve
Coastal dunes	1.8	2	3.8	10–20	Huntington Beach Wetlands Conservancy
Freshwater marsh/wetland	0.2	2	2.2	2.7–13	San Joaquin Freshwater Marsh Reserve
Intertidal salt marshes	0.1	2	2.1	63–400	Seal Beach National Wildlife Refuge
Intertidal wetlands	1.8	2	3.8	50–100	Huntington Beach Wetlands Conservancy
Oak woodlands	0.1	2	2.1	4–10	Bommer Canyon Open Space Preserve
Serpentine grassland	1.0	2	3.0	6	Talbert Nature Preserve
Riparian forest	0.1	2	2.1	20–155	Laguna Coast Wilderness Park

*The total predicted nitrogen deposition is the sum of the estimated background deposition rate of 2 kg-N ha^{-1} yr^{-1} plus the maximum predicted deposition rate.

DATA REQUEST

25. Please provide an isopleths graphic over U.S. Geological Survey (USGS) 7.5-minute maps (or equally detailed map) of the direct nitrogen deposition rates caused by the project. This will be a graphical depiction of the projects' nitrogen deposition.

Response: The predicted nitrogen deposition flux isopleths are included in Figures DR25-1R and DR25-2R provided herewith.

DATA REQUEST

26. Please provide a comprehensive cumulative impact analysis for the direct nitrogen deposition in kg-N ha^{-1} yr^{-1} caused by HBEP. Provide an isopleths graphic over USGS 7.5-minute maps of the direct nitrogen deposition values in the cumulative analysis and specify the cumulative nitrogen deposition rate in kg-N ha^{-1} yr^{-1} at any affected special status habitat, vegetation type, or critical habitat. The geographical extent of the cumulative nitrogen deposition mapping should be directed by the results (i.e., extend geographically to where the deposition is considered below any stated threshold of significance).

Response: The sources included in the cumulative nitrogen deposition analysis are the same NO_x-emitting sources identified in the response to Data Request 11, which was submitted on January 17, 2013 (CEC TN# 69182). Similar to the HBEP sources, emissions of depositional nitrogen were conservatively calculated as a complete conversion of in-stack NO_x from each source. Emissions of NH_3 from the cumulative sources were considered negligible and, therefore, were not considered as a source of depositional nitrogen. Emissions from each source are shown in Table DR26-1.

TABLE DR26-1R
Cumulative Source Depositional Nitrogen Emissions

Source Description	NO_x Emissions (tpy)	Depositional Nitrogen from NO_x (tpy)*
Orange County Sanitation District (Facility ID 17301)		
Boiler	1.60	0.49
Digester Gas ICEs (3)	67.2	20.4
Orange County Sanitation District (Facility ID 29110)		
Emergency Diesel ICEs (8)	5.38	1.64

*Molecular weight of NO_x calculated as NO_2.

Model Setup

The cumulative nitrogen deposition analysis was performed using the same model settings and receptor grid outlined in the response to Data Request 24. Stack parameters for the cumulative sources are included in the response to Data Request 11, which was submitted on January 17, 2013.

Model Results

The maximum modeled annual deposition over 3 years was combined with an estimated background deposition rate of 2 kg-N ha^{-1} yr^{-1} and compared to the CL for nitrogen deposition for each of the habitat types present in the sensitive areas. The results of the deposition modeling are shown in Table DR26-2R. In each case, the maximum predicted nitrogen deposition was less than the CL deposition. Therefore, it is concluded that even with the use of the conservative methodology for estimating nitrogen deposition noted previously, the cumulative impacts would not contribute to the significant degradation of sensitive species habitat located near the project site.

The dispersion modeling files, which include input and output files used in the analysis, have been included with this submission on compact disc. The predicted nitrogen deposition flux isopleths, which include the maximum predicted nitrogen deposition flux and the location within each of the sensitive areas, are included in Figures DR26-1R and DR26-2R.

TABLE DR26-2R

Comparison of the Predicted Cumulative Sources and HBEP Nitrogen Deposition Flux to the Critical Loads of Nitrogen for the California Mediterranean Ecoregion and Wetlands

Habitat Type	Maximum Predicted Nitrogen Deposition Rate (kg-N ha^{-1} yr^{-1})	Background Nitrogen Deposition Rate (kg-N ha^{-1} yr^{-1})	Total Predicted Nitrogen Deposition Rate* (kg-N ha^{-1} yr^{-1})	CL for Nitrogen Deposition (kg-N ha^{-1} yr^{-1})	Location of Maximum Predicted Deposition (i.e., Name of Wetland and/or Protected Area)
Chaparral	0.1	2	2.1	4–10	Laguna Coast Wilderness Park
Coastal sage scrub	1.2	2	3.2	7.8–10	Talbert Nature Preserve
Coastal dunes	1.9	2	3.9	10–20	Huntington Beach Wetlands Conservancy
Freshwater marsh/wetland	0.2	2	2.2	2.7–13	San Joaquin Freshwater Marsh Reserve
Intertidal salt marshes	0.1	2	2.1	63–400	Seal Beach National Wildlife Refuge
Intertidal wetlands	1.9	2	3.9	50–100	Huntington Beach Wetlands Conservancy
Oak woodlands	0.1	2	2.1	4–10	Bommer Canyon Open Space Preserve
Serpentine grassland	1.2	2	3.2	6	Talbert Nature Preserve
Riparian forest	0.1	2	2.1	20–155	Laguna Coast Wilderness Park

*The total predicted nitrogen deposition is the sum of the estimated background deposition rate of 2 kg-N ha^{-1} yr^{-1} plus the maximum predicted deposition rate.

Figure DR25-1R: HBEP Total Nitrogen Deposition on Surrounding Habitats

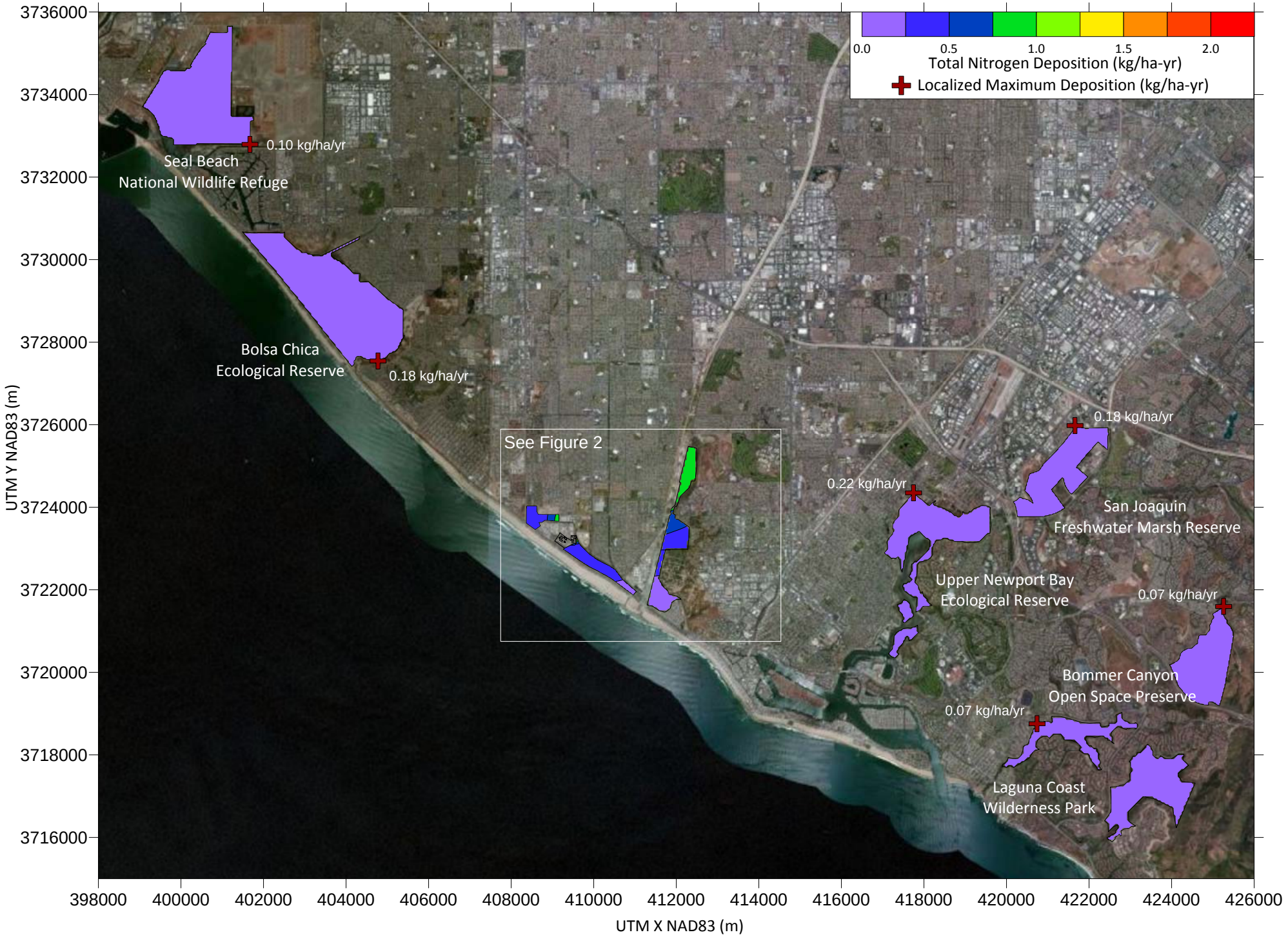


Figure DR25-2R: HBEP Total Nitrogen Deposition on Surrounding Habitats

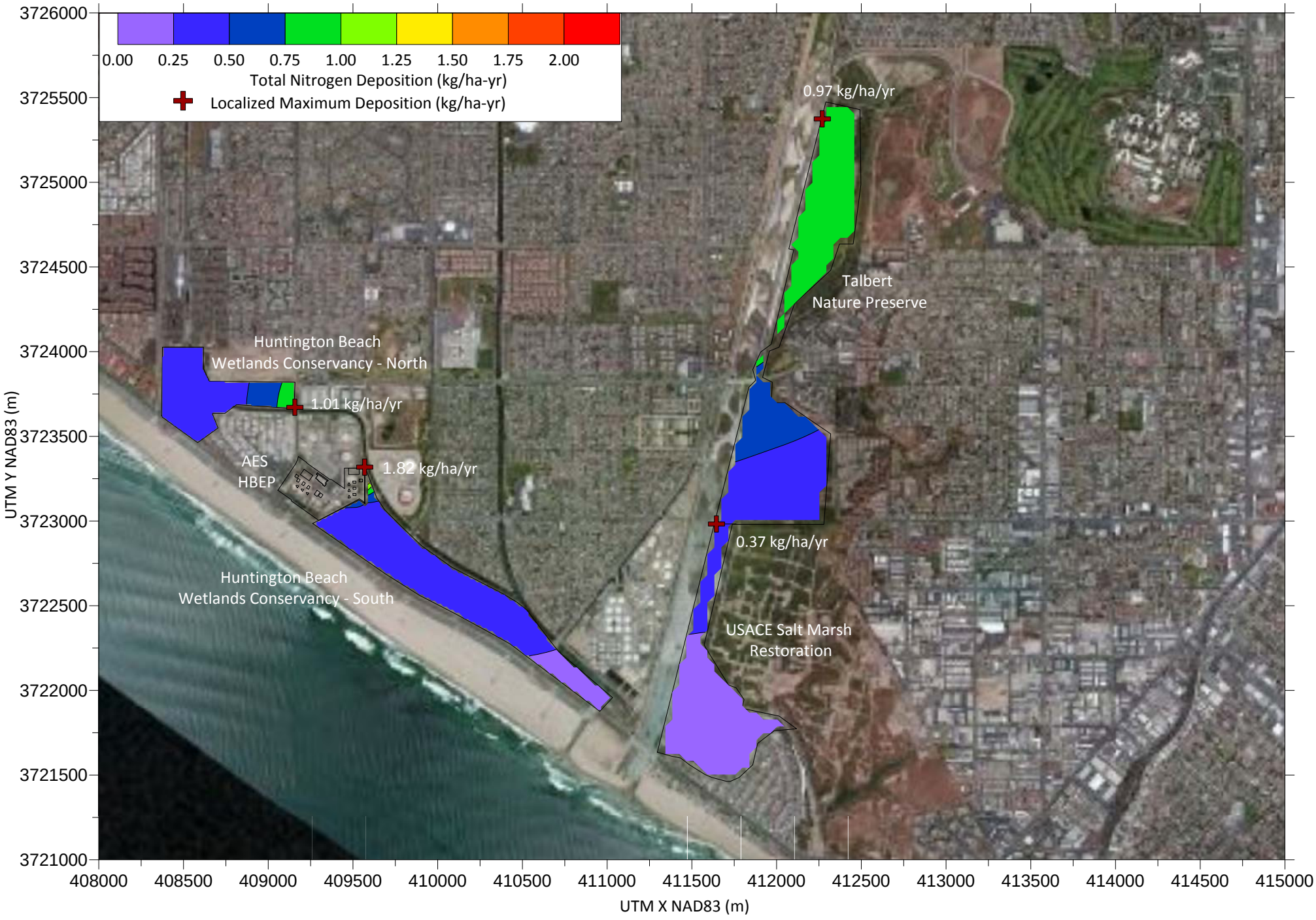


Figure DR26-1R: HBEP Cumulative Nitrogen Deposition on Surrounding Habitats

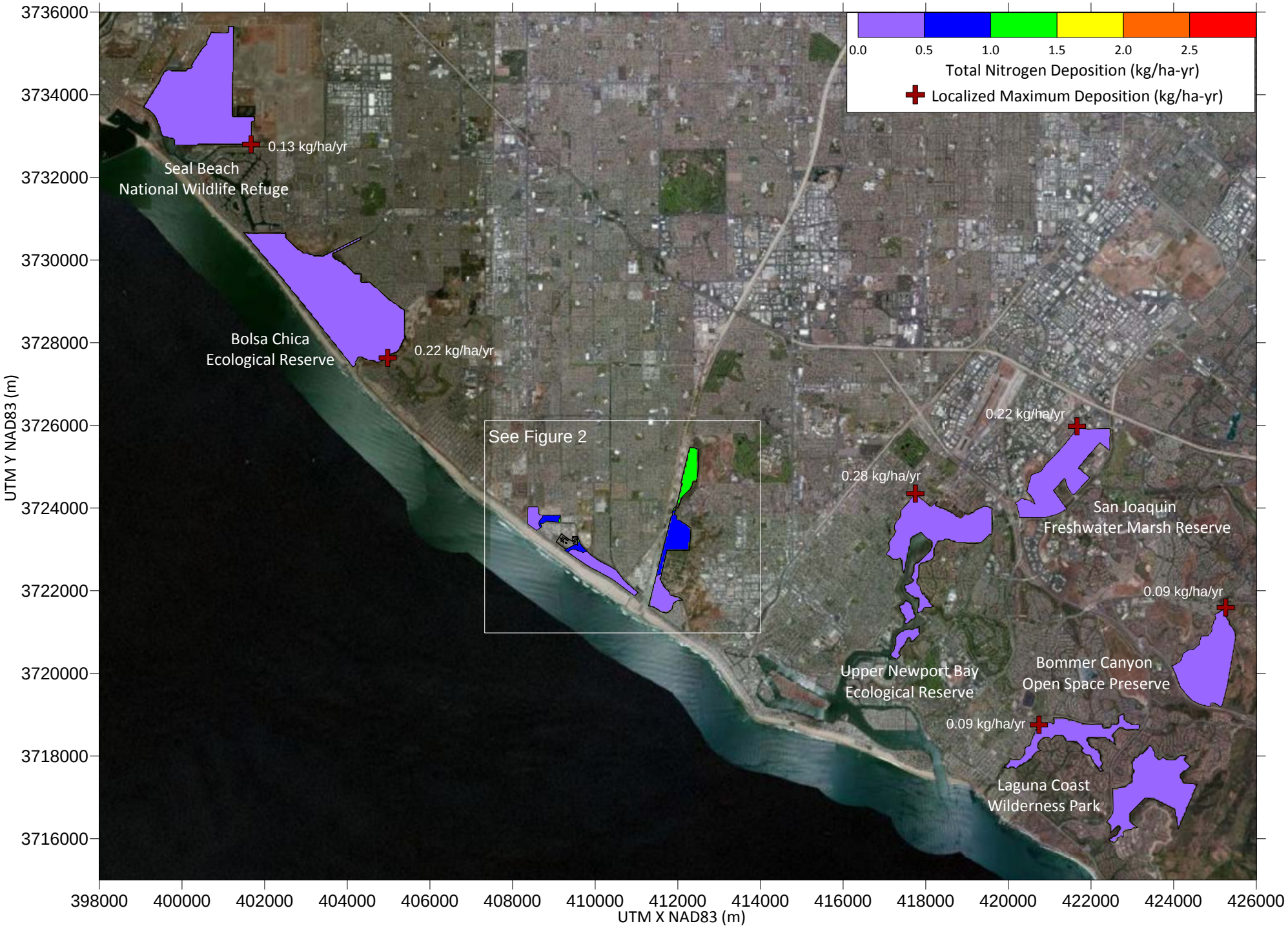
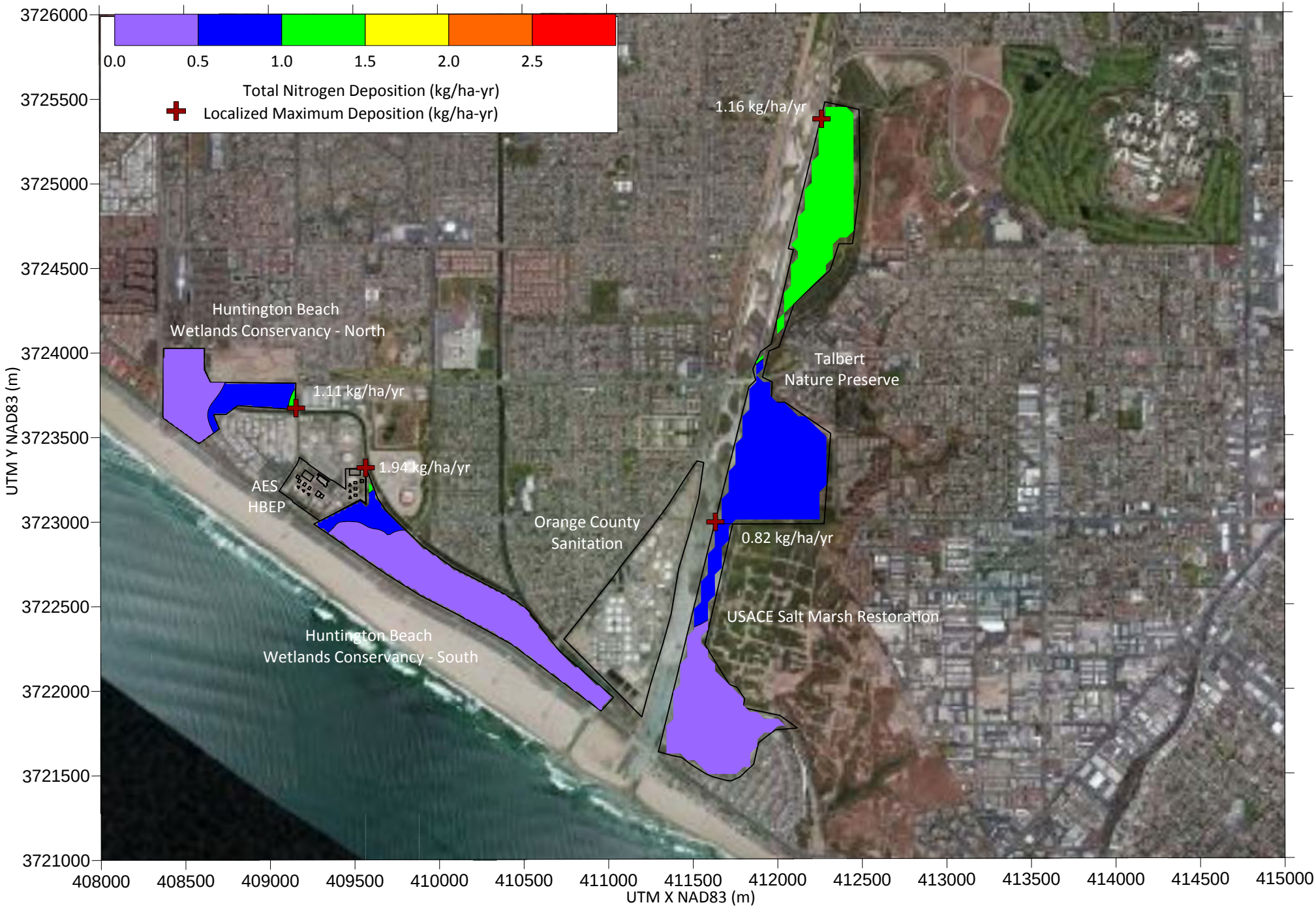


Figure DR26-2R: HBEP Cumulative Nitrogen Deposition on Surrounding Habitats



Air Quality (104–106)

BACKGROUND

The 3-year meteorological dataset used in the AFC and in several subsequent data responses has too many calm wind periods, which results in more than 10 percent missing hours when used in AERMOD. Staff usually accepts a maximum of 10 percent missing meteorological data, consistent with U.S. Environmental Protection Agency (EPA) guidance. The South Coast Air Quality Management District (SCAQMD) recently prepared a new, 5-year meteorological dataset which meets EPA and SCAQMD requirements. In addition, the Applicant has been using an ambient NO_2 ratio of 0.8 in the Plume Volume Molar Ratio Method (PVMRM) option to model for compliance with the Federal 1-hour NO_2 ambient air quality standard. It is Staff's understanding that an ambient NO_2 ratio of 0.9 should be used according to EPA guidance unless a different ratio can be justified.

DATA REQUEST

104. Please update all the modeling submitted on the project to date by using the new, 5-year meteorological dataset provided by SCAQMD. The updated modeling should include construction modeling, commissioning modeling, operation modeling, and overlap periods as well as cumulative impact modeling.

Response: Below is the Applicant's response to Staff's Data Request 104 using 5 years (2008 to 2012) of data collected at the John Wayne Airport meteorological monitoring station, owned and operated by the National Weather Service (NWS), in conjunction with the corresponding 1-minute automated surface observational system (ASOS) data.[3] This approach is consistent with the addendum to the *Dispersion Modeling Protocol for the Huntington Beach Energy Project*, submitted on July 17, 2013.

Dispersion Modeling Analysis

Dispersion modeling has been updated, as requested by CEC Staff. In addition to the use of the 5-year meteorological dataset described above, the following changes have been made to the dispersion modeling methodology:

- Ambient monitored background data from the Costa Mesa monitoring station have been updated to 2010, 2011, and 2012 to reflect the most recent 3 years available from the SCAQMD.
- Modeling of 1-hour NO_2 was performed using the EPA-recommended Tier 2 NO_x to NO_2 ambient ratio of 0.8.
- Modeling scenarios that were expected to have high 1-hour NO_2 impacts were refined by adding the 98th percentile seasonal, hour-of-day background NO_2 concentrations to the modeled impacts for compliance with the National Ambient Air Quality Standards (NAAQS). Background concentrations were provided by the SCAQMD for years 2009 through 2011.
- Modeling parameters for fugitive dust area sources were revised based on the EPA memorandum, titled *Haul Road Workgroup Final Report Submission to EPA-OAQPS* (EPA, 2012). The release height of fugitive dust sources was set to ground level (0 meters), and the initial vertical dimension set to 1 meter.

[3] Twice-daily National Climatic Data Center soundings from the San Diego Miramar NWS station (Station #03190) were also utilized in developing the AERMOD-ready meteorological data file.

- Construction emissions were revised to incorporate the construction mitigation measures identified in AFC Section 5.1.8.1. The revised emissions estimates are presented in Attachment DR104-5, which is a revision to AFC Appendix 5.1A. Specifically:
    - Fugitive dust emissions from unpaved roads were reduced up to 61 percent by watering 3 times daily (Jones & Stokes Associates [JSA], 2007).
    - Fugitive dust emissions from dismemberment and debris loading were reduced up to 36 percent by watering every 4 hours (SCAQMD, 2007).
    - Fugitive dust emissions from grading and bulldozing were reduced up to 61 percent by watering every 3 hours (SCAQMD, 2007).

Wind roses and wind tables for the 5-year meteorological dataset developed from the John Wayne Airport meteorological monitoring station and the San Diego Miramar upper air station are presented in Attachment DR104-1R.

Construction Impacts Analysis

The dispersion modeling for the HBEP construction impacts analysis followed the methodology outlined in Workshop Query 1, which was submitted to the CEC on March 13, 2013, with the refinements noted above. Table DR104-1R, which is a revision to Workshop Queries Table WSQ1-13, indicates that the maximum NO_2, sulfur dioxide (SO_2), and carbon monoxide (CO) construction impacts combined with the background concentrations will be below the ambient air quality standards (AAQS) for each averaging period.

The particulate matter with aerodynamic diameter less than or equal to 10 microns (PM_{10}) background concentrations nearly equal the state AAQS without adding the modeled concentrations. Similarly, the particulate matter with aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$) background concentrations equal approximately 70 percent of the AAQS without adding the modeled concentrations. As a result, the predicted PM_{10} and $PM_{2.5}$ impacts will be greater than the AAQS and construction impacts would contribute to a violation of the standards. Based on the modeling analysis, fugitive dust is a significant contributor to the predicted concentrations, but the maximum PM_{10} and $PM_{2.5}$ concentrations will remain near the property boundary.

All potential HBEP air quality impacts resulting from construction and operation will be mitigated to less than significant through a combination of emission offsets, air quality improvement projects and the permanent shutdown of existing electrical utility steam boilers. Under the provisions of SCAQMD Rule 1304(a)(2) and Regulation XX Regional Clean Air Incentives Market (RECLAIM), all emissions of state and federal non-attainment pollutants or their pre-cursors will be offset through the retirement of PM_{10}, SO_2 and VOC offsets from the SCAQMD internal bank of offsets and the Reclaim Trading Credit (RTC) requirements for NOx. In addition to the retired offsets, the HBEP will result in the permanent closure and retirement of Huntington Beach Generating Station units 1 & 2 and Redondo Beach Generating Station units 6 & 8, thereby eliminating all emissions from these additional sources. HBEP will also be subject to SCAQMD Rule 1304.1 fees, estimated at over $70 million dollars, which must be used to fund air quality improvement projects consistent with the SCAQMD's Air Quality Management Plan, with a priority for air quality improvement projects in the communities surrounding the location of the subject electrical generating facility. The combination of emission offsets, participation in RECLAIM, the shutdown of existing sources and the funding of over $70 million in air quality improvement projects mitigates all potential air quality impacts from the construction and operation of HBEP to less than significant.

A summary of the dispersion modeling input files for this scenario, as well as the complete modeling results, are presented in Attachment DR104-2R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

Commissioning Impacts Analysis

The dispersion modeling for the HBEP commissioning impacts analysis followed the methodology outlined in AFC Section 5.1.6.3, with the refinements noted above. Table DR104-2R, which is a revision to AFC Table 5.1-28, indicates that the maximum 1-hour CO modeled concentrations combined with the background concentrations will be below the AAQS but that the maximum NO_2 and 8-hour CO modeled concentrations combined with the background concentrations will be above the AAQS. These results, however, conservatively assume that all three turbines in one power block would be commissioned simultaneously. If the turbines are instead commissioned separately, the resulting modeled concentrations combined with the background concentrations will be below the AAQS, also shown in Table DR104-2R. Short-term SO_2, PM_{10}, and $PM_{2.5}$ impacts were not evaluated for commissioning as emissions of these pollutants are lower during commissioning than for normal operation. Annual impacts were not evaluated as the commissioning schedule is 180 days, and not likely to impact annual AAQS because the turbines are expected to operate less than 500 hours during the commissioning period.

TABLE DR104-1R

Maximum Modeled Impacts from Construction and the Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Modeled Concentration (µg/m³)	Background Concentration [a] (µg/m³)	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2 [b]	1-hour	91.7	140	232	339	—
	Federal 1-hour [c]	—	—	183	—	188
	Annual	7.33	21.3	28.6	57	100
SO_2	1-hour	0.22	24.9	25.1	655	—
	Federal 1-hour [d]	0.22	10.7	10.9	—	196
	3-hour	0.21	17.3	17.5	—	1,300
	24-hour	0.040	5.50	5.54	105	365
CO	1-hour	112	3,321	3,433	23,000	40,000
	8-hour	93.2	2,519	2,612	10,000	10,000
PM_{10}	24-hour	72.8	48.0	121	50	150
	Annual	14.6	19.2	33.8	20	—
$PM_{2.5}$	24-hour [e]	15.5	24.6	40.1	—	35
	Annual	3.72	8.60	12.3	12	12

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012 with the exception of the 3-hour SO_2 averaging period, which was taken as the highest concentrations monitored during 2008 through 2010.

[b] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.

[c] Total predicted concentration for the Federal 1-hour NO_2 standard is the maximum modeled concentration paired with the 3-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.

[d] Total predicted concentration for the Federal 1-hour SO_2 standard is the maximum modeled concentration combined with the 3-year average of 99th percentile background concentrations.

[e] Total predicted concentration for the Federal 24-hour $PM_{2.5}$ standard is the maximum modeled concentration combined with the 3-year average of 98th percentile background concentrations.

µg/m³ = micrograms per cubic meter

A summary of the dispersion modeling input files for this scenario, as well as the complete modeling results, are presented in Attachment DR104-2R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

TABLE DR104-2R

Turbine Commissioning Impacts Analysis—Maximum Modeled Impacts Compared to the Ambient Air Quality Standards

Pollutant	Averaging Time	Maximum Modeled Concentration (µg/m³)	Background Concentration (µg/m³) [a]	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
Commissioning of 3 Turbines						
NO_2 [b]	1-hour	276	140	416	339	—
CO	1-hour	9,971	3,321	13,292	23,000	40,000
	8-hour	7,789	2,519	10,308	10,000	10,000
Commissioning of 1 Turbine						
NO_2 [b]	1-hour	141	140	281	339	—
CO	1-hour	5,093	3,321	8,414	23,000	40,000
	8-hour	4,341	2,519	6,860	10,000	10,000

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012.
[b] The maximum 1-hour NO_2 concentration includes an ambient NO_2 ratio of 0.80 (EPA, 2011).

Operation Impacts Analysis

The dispersion modeling for the HBEP operation impacts analysis followed the methodology outlined in AFC Section 5.1.6.3, with the refinements noted above. The highest modeled concentrations were used to demonstrate compliance with the AAQS. Table DR104-3R, which is a revision of AFC Table 5.1-29, presents a comparison of the maximum HBEP operational impacts to the AAQS. The NO_2, CO, SO_2, and $PM_{2.5}$ modeled concentrations combined with the background concentrations do not exceed the AAQS. Therefore, HBEP will not cause or contribute to the violation of a standard and the NO_2, CO, SO_2, and $PM_{2.5}$ impacts from operation will be less than significant.

For PM_{10}, the background concentrations nearly equal the AAQS without the proposed project. As a result, the predicted project impacts plus background exceed the AAQS, with the exception of the Federal 24-hour standard, and the operation of the proposed project would contribute to a violation of the state standards absent mitigation. As discussed in AFC Section 5.1.8.2, Operational Mitigation, HBEP emissions will be fully offset consistent with SCAQMD Rules 1303, 1304, and 1304.1 using the SCAQMD internal offset bank. As noted above, all construction and operational particulate matter impacts will be mitigated to a less-than-significant level through a combination of air quality improvement projects, retirement of emission offsets and the shutdown of existing electrical generating units.

A complete list of offsite impacts for the multiple turbine operating scenarios is presented in Attachment DR104-2R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

TABLE DR104-3R
HBEP Operation Impacts Analysis—Maximum Modeled Impacts Compared to the Ambient Air Quality Standards

Pollutant	Averaging Time	Maximum Modeled Concentration (µg/m³)	Background Concentration (µg/m³) [a]	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2 [b]	1-hour	58.6	140	199	339	—
	Federal 1-hour [c]	58.6	100	159	—	188
	Annual	0.40	21.3	21.7	57	100
SO_2	1-hour	4.95	24.9	29.9	655	—
	Federal 1-hour [d]	4.95	10.7	15.7	—	196
	3-hour	3.70	17.3	21.0	—	1,300
	24-hour	1.22	5.50	6.72	105	365
CO	1-hour	328	3,321	3,649	23,000	40,000
	8-hour	78.4	2,519	2,597	10,000	10,000
PM_{10}	24-hour	4.72	48.0	52.7	50	150
	Annual	0.27	19.2	19.5	20	—
$PM_{2.5}$	24-hour [c]	4.72	24.6	29.3	—	35
	Annual	0.27	8.60	8.87	12	12

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012 with the exception of the 3-hour SO_2 averaging period, which was taken as the highest concentrations monitored during 2008 through 2010.
[b] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.
[c] Total predicted concentrations for the Federal 1-hour NO_2 standard and 24-hour $PM_{2.5}$ standard are the respective maximum modeled concentrations combined with the 3-year average of 98th percentile background concentrations.
[d] Total predicted concentration for the Federal 1-hour SO_2 standard is the maximum modeled concentration combined with the 3-year average of 99th percentile background concentrations.

Rule 2005

Table DR104-4R, which is a revision of AFC Table 5.1-30, presents the maximum modeled NO_2 concentrations from the refined dispersion modeling analysis for each turbine compared to the Rule 2005 significance threshold. The maximum modeled NO_2 concentrations were also added to representative background concentrations and the results compared to the state and Federal AAQS for NO_2. Although the NO_2 concentrations per turbine exceed the Rule 2005 1-hour significance threshold, they do not exceed either the state or Federal AAQS. Therefore, the predicted NO_2 impacts from operation will be less than significant per the Rule 2005 requirements.

TABLE DR104-4R
Rule 2005 Air Quality Thresholds and Standards Applicable to the Project (per emission unit)

Pollutant/ Averaging Period	Maximum Modeled Impact [a] (µg/m³)	Significant Threshold [b] (µg/m³)	Background Concentration (µg/m³) [c]	Total Predicted Concentration (µg/m³)	State/Federal Standard (µg/m³)
NO_2 (1-hour)	29.8	20	140	170	339/—
NO_2 (Federal 1-hour)	29.8	—	100	130	—/188
NO_2 (Annual)	0.071	1	21.3	21.4	57/100

[a] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.
[b] Allowable change in air quality concentration per emission unit per Rule 2005, Appendix A.
[c] Background concentrations were the highest concentrations monitored during 2010 through 2012.

Regulation XVII (Prevention of Significant Deterioration [PSD])

Table DR104-5R, which is a revision of AFC Table 5.1-31, presents a summary of the predicted hourly and annual NO_2 and 24-hour and annual PM_{10} impacts and a comparison to the Class II modeling significance

impact levels (SILs), Class II PSD Increment Standards, and the significant monitoring concentration levels. The maximum annual NO_2, 24-hour PM_{10}, and annual PM_{10} concentrations do not exceed the Class II SILs, PSD Class II Increment Standards, and significant monitoring concentrations. Therefore, additional analysis of annual NO_2, 24-hour PM_{10}, and annual PM_{10} impacts is not required. However, the maximum 1-hour NO_2 concentration exceeds the Class II SIL, with a radius of impact with predicted concentrations greater than 7.52 micrograms per cubic meter ($\mu g/m^3$) of 2.7 kilometers (km). Therefore, the cumulative impacts of the HBEP and competing sources must be assessed. The Applicant will conduct this additional modeling per the methodology outlined in the HBEP dispersion modeling protocol and addendum, with the SCAQMD's comments of August 9, 2013 incorporated, following approval of the competing source inventory by the SCAQMD.[4]

TABLE DR104-5R
HBEP Predicted Impacts Compared to the PSD Air Quality Impact Standards

Averaging Period/ Pollutant	Maximum Predicted Impact ($\mu g/m^3$) [a]	Significance Impact Level ($\mu g/m^3$)	PSD Class II Increment Standard ($\mu g/m^3$)	Significant Monitoring Concentrations ($\mu g/m^3$)
NO_2 (1-hour)	58.6	7.52 [b]	NS	NS
NO_2 (Annual)	0.40	1.0	25	14
PM_{10} (24-hour)	4.72	5.0	30	10
PM_{10} (Annual)	0.27	1.0	17	NS

[a] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.
[b] SIL for 1-hour NO_2 is based on SCAQMD correspondence.

NS = no standard

Table DR104-6R, which is a revision of AFC Table 5.1-32, presents a summary of the predicted annual NO_2 impacts and a comparison to the Class I modeling SIL and Class I PSD Increment Standard. The predicted impacts from the operation of the HBEP are below the Class I SIL and PSD Class I Increment Standard. Therefore, the project would have a negligible impact at the more distant Class I areas.

TABLE DR104-6R
HBEP Predicted Impacts Compared to the Class I SIL and Increment Standards

Averaging Period/ Pollutant	Maximum Predicted Impact at 50 km ($\mu g/m^3$)	Significance Impact Level ($\mu g/m^3$)	PSD Class I Increment Standard ($\mu g/m^3$)
NO_2 (Annual)	0.013	0.1	2.5

Cumulative Impacts Analysis

The dispersion modeling for the HBEP cumulative impacts analysis followed the methodology outlined in Data Request 11, which was submitted to the CEC on January 17, 2013, with the refinements noted above. Table DR104-7R, which is a revision of Data Responses, Set 1B Table DR11-3, presents a comparison of the maximum modeled cumulative impacts with the AAQS. The maximum modeled cumulative NO_2, CO, SO_2, and $PM_{2.5}$ concentrations combined with the background concentrations do not exceed the AAQS. The results of the cumulative modeling analysis also assume that the contribution to background air quality that results from the existing Huntington Beach Generating Station emissions would remain the same in the future. However, as noted in the AFC, the existing Huntington Beach Generating Station boiler Units 1 and 2 will be removed after completion of HBEP construction. Therefore, the cumulative sources are not expected

[4] The competing source inventory was submitted for SCAQMD approval on October 3, 2013.

to cause or contribute to the violation of a standard and the NO_2, CO, SO_2, and $PM_{2.5}$ impacts will be less than significant.

For PM_{10}, the background concentrations nearly equal the AAQS without the cumulative sources. As a result, the impact of the cumulative sources plus background exceeds the AAQS, with the exception of the state annual standard and Federal 24-hour standard, and the operation of the cumulative sources would contribute to a violation of the state 24-hour standard absent mitigation. As discussed in the AFC, HBEP emissions will be fully offset consistent with SCAQMD Rules 1303, 1304, and 1304.1 using the SCAQMD internal offset bank. Therefore the PM_{10} impacts will be mitigated to a less-than-significant level. As noted above, all construction and operational particulate matter impacts will be mitigated to a less-than-significant level through a combination of air quality improvement projects, retirement of emission offsets and the shutdown of existing electrical generating units.

A complete list of offsite impacts for the cumulative impact analysis is presented in Attachment DR104-3R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

TABLE DR104-7R
Cumulative Impacts Analysis—Maximum Modeled Impacts Compared to the Ambient Air Quality Standards

Pollutant	Averaging Time	Maximum Modeled Concentration (µg/m³)	Background Concentration (µg/m³) [a]	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2 [b]	1-hour	58.6	140	199	339	—
	Federal 1-hour [c]	—	—	148	—	188
	Annual	0.73	21.3	22.0	57	100
SO_2	1-hour	4.95	24.9	29.9	655	—
	Federal 1-hour [d]	4.95	10.7	15.7	—	196
	3-hour	4.08	17.3	21.4	—	1,300
	24-hour	1.22	5.50	6.7	105	365
CO	1-hour	328	3,321	3,649	23,000	40,000
	8-hour	78.4	2,519	2,597	10,000	10,000
PM_{10}	24-hour	4.73	48.0	52.7	50	150
	Annual	0.28	19.2	19.5	20	—
$PM_{2.5}$	24-hour [e]	4.73	24.6	29.3	—	35
	Annual	0.28	8.60	8.88	12	12

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012 with the exception of the 3-hour SO_2 averaging period, which was taken as the highest concentrations monitored during 2008 through 2010.
[b] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.
[c] Total predicted concentration for the Federal 1-hour NO_2 standard is the maximum modeled concentration paired with the 3-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.
[d] Total predicted concentration for the Federal 1-hour SO_2 standard is the maximum modeled concentration combined with the 3-year average of 99th percentile background concentrations.
[e] Total predicted concentration for the Federal 24-hour $PM_{2.5}$ standard is the maximum modeled concentration combined with the 3-year average of 98th percentile background concentration.

Construction Overlap Impacts Analysis

The dispersion modeling for the HBEP construction overlap impacts analysis followed the methodology outlined in Workshop Query 2, which was submitted to the CEC on March 13, 2013, with the refinements noted above. Table DR104-8R, which is a revision to Workshop Queries Table WSQ2-1, indicates the maximum NO_2, SO_2, CO, and $PM_{2.5}$ modeled concentrations combined with the background concentrations do not exceed the AAQS. Therefore, Block 1 operation and construction of Block 2 will not cause or contribute to the violation of a standard and the NO_2, SO_2, CO, and $PM_{2.5}$ impacts will be less than significant.

For PM_{10}, the background concentrations nearly equal the state AAQS without adding the modeled concentrations. As a result, the predicted scenario impacts plus background exceed the state AAQS and would contribute to a violation of the state AAQS. As noted above, all construction and operational particulate matter impacts will be mitigated to a less-than-significant level through a combination of air quality improvement projects, retirement of emission offsets and the shutdown of existing electrical generating units.

A summary of the dispersion modeling input files for this scenario, as well as the complete modeling results, are presented in Attachment DR104-4R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

TABLE DR104-8R
Maximum Modeled Impacts from Block 1 Operation and Construction of Block 2 and the Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Modeled Concentration (µg/m³)	Background Concentration [a] (µg/m³)	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2	1-hour [b]	63.0	140	203	339	—
	Federal 1-hour [b, c]	63.0	100	163	—	188
	Annual [d]	3.38	21.3	24.7	57	100
SO_2	1-hour	1.32	24.9	26.2	655	—
	Federal 1-hour [e]	1.32	10.7	12.0	—	196
	3-hour	1.01	17.3	18.3	—	1,300
	24-hour	0.36	5.50	5.86	105	365
CO	1-hour	97.9	3,321	3,419	23,000	40,000
	8-hour	53.8	2,519	2,573	10,000	10,000
PM_{10}	24-hour	18.9	48.0	66.9	50	150
	Annual	5.96	19.2	25.2	20	—
$PM_{2.5}$	24-hour [c]	2.08	24.6	26.7	—	35
	Annual	0.79	8.60	9.4	12	12

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012 with the exception of the 3-hour SO_2 averaging period, which was taken as the highest concentrations monitored during 2008 through 2010.
[b] The maximum 1-hour NO_2 concentration includes an ambient NO_2 ratio of 0.80 (EPA, 2011).
[c] Total predicted concentrations for the Federal 1-hour NO_2 standard and 24-hour $PM_{2.5}$ standard are the respective maximum modeled concentrations combined with the 3-year average of 98th percentile background concentrations.
[d] The maximum annual NO_2 concentration includes an ambient NO_2 ratio of 0.75 (EPA, 2005).
[e] Total predicted concentration for the Federal 1-hour SO_2 standard is the maximum modeled concentration combined with the 3-year average of 99th percentile background concentrations.

Table DR104-9R, which is a revision to Workshop Queries Table WSQ2-2, indicates that the maximum NO_2, SO_2, and CO modeled concentrations combined with the background concentrations do not exceed the AAQS. Therefore, operation of HBEP (Blocks 1 and 2) with demolition of Huntington Beach Generating Station Units 1 and 2 will not cause or contribute to the violation of a standard and the NO_2, SO_2, and CO impacts will be less than significant.

For particulate matter, the PM_{10} background concentrations nearly equal the state AAQS without adding the modeled concentrations and the 24-hour PM_{10} modeled concentration exceeds the state AAQS without adding the background concentration. The $PM_{2.5}$ background concentrations equal approximately 70 percent of the state AAQS without adding the modeled concentrations. As a result, the predicted scenario PM_{10} and $PM_{2.5}$ impacts will be greater than the AAQS, with the exception of the state annual $PM_{2.5}$ standard. Based on the modeling analysis, although fugitive dust is a significant contributor to the predicted concentrations, the maximum PM_{10} and $PM_{2.5}$ concentrations will remain at or near the property boundary. As noted above, all construction and operational particulate matter impacts will be mitigated to a less-than-

significant level through a combination of air quality improvement projects, retirement of emission offsets and the shutdown of existing electrical generating units.

A summary of the dispersion modeling input files for this scenario, as well as the complete modeling results, are presented in Attachment DR104-4R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

TABLE DR104-9R
Maximum Modeled Impacts from HBEP Operation with Demolition of Units 1 and 2 and the Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Modeled Concentration (µg/m³)	Background Concentration [a] (µg/m³)	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2	1-hour [b]	82.5	140	223	339	—
	Federal 1-hour [b, c]	—	—	174	—	188
	Annual [d]	4.59	21.3	25.9	57	100
SO_2	1-hour	4.97	24.9	29.9	655	—
	Federal 1-hour [e]	4.97	10.7	15.7	—	196
	3-hour	3.72	17.3	21.0	—	1,300
	24-hour	1.23	5.50	6.73	105	365
CO	1-hour	338	3,321	3,659	23,000	40,000
	8-hour	106	2,519	2,625	10,000	10,000
PM_{10}	24-hour	78.3	48.0	126	50	150
	Annual	12.2	19.2	31.4	20	—
$PM_{2.5}$	24-hour [c]	13.8	24.6	38.4	—	35
	Annual	1.96	8.60	10.6	12	12

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012 with the exception of the 3-hour SO_2 averaging period, which was taken as the highest concentrations monitored during 2008 through 2010.
[b] The maximum 1-hour NO_2 concentration includes an ambient NO_2 ratio of 0.80 (EPA, 2011).
[c] Total predicted concentrations for the Federal 1-hour NO_2 standard and 24-hour $PM_{2.5}$ standard are the respective maximum modeled concentrations combined with the 3-year average of 98th percentile background concentrations.
[d] The maximum annual NO_2 concentration includes an ambient NO_2 ratio of 0.75 (EPA, 2005).
[e] Total predicted concentration for the Federal 1-hour SO_2 standard is the maximum modeled concentration combined with the 3-year average of 99th percentile background concentrations.

Table DR104-10R, which is a revision to Workshop Queries Table WSQ2-3, indicates that the maximum CO, SO_2, and NO_2 modeled concentrations combined with the background concentrations do not exceed the AAQS, with the exception of the Federal 1-hour NO_2 standard. Therefore, construction of HBEP and demolition of Huntington Beach Generating Station Units 3 and 4 will not cause or contribute to the violation of a standard, and these impacts will be less than significant.

For the Federal 1-hour NO_2 standard, modeled concentrations were determined by averaging the maximum hourly emissions over the worst-case year of overlapping construction activities. Although the maximum total predicted impacts[5] exceed the Federal 1-hour NO_2 standard, the elevated impacts only occur in areas that are not considered residential, commercial, or habitable, as presented in Figure DR104-1. Additionally, it is expected that the exceedances would be limited during the overlapping construction activities and could be further reduced by making less conservative assumptions regarding the construction equipment emissions. Currently, the construction equipment emissions are based on default fleet emission rates provided by the OFFROAD model. Instead, the Applicant could have assumed the construction equipment

[5] The maximum total predicted impacts were determined using the high first high modeled values. Note that the high eighth high modeled values (i.e., the 98th percentile values) are all below the Federal 1-hour NO_2 standard of 188 µg/m³.

fleet used to construct HBEP utilizes Tier III (or higher) compliant diesel-fired engines, which would reduce NO_x emissions and NO_2 impacts to levels below the Federal 1-hour NO_2 standard.

For particulate matter, the PM_{10} background concentrations nearly equal the state AAQS without adding the modeled concentrations and the $PM_{2.5}$ background concentrations equal approximately 70 percent of the state AAQS without adding the modeled concentrations. As a result, the predicted scenario impacts will be greater than the AAQS. Based on the modeling analysis, although fugitive dust is a significant contributor to the predicted concentrations, the maximum PM_{10} and $PM_{2.5}$ concentrations will remain at or near the property boundary.

As noted above, all construction and operational air quality impacts will be mitigated to a less-than-significant level through a combination of air quality improvement projects, retirement of emission offsets and the shutdown of existing electrical generating units.

A summary of the dispersion modeling input files for this scenario, as well as the complete modeling results, are presented in Attachment DR104-4R. The AERMOD input and output files have been separately prepared and are included with this submission on DVD.

TABLE DR104-10R
Maximum Modeled Impacts from HBEP Construction and Demolition of Units 3 and 4 and the Ambient Air Quality Standards

Pollutant	Averaging Period	Maximum Modeled Concentration (µg/m³)	Background Concentration [a] (µg/m³)	Total Predicted Concentration (µg/m³)	State Standard (µg/m³)	Federal Standard (µg/m³)
NO_2 [b]	1-hour	117	140	257	339	—
	Federal 1-hour [c]	-	—	196	—	188
	Annual	7.14	21.3	28.4	57	100
SO_2	1-hour	0.29	24.9	25.2	655	—
	Federal 1-hour [d]	0.29	10.7	11.0	—	196
	3-hour	0.28	17.3	17.6	—	1,300
	24-hour	0.054	5.50	5.6	105	365
CO	1-hour	131	3,321	3,452	23,000	40,000
	8-hour	110	2,519	2,629	10,000	10,000
PM_{10}	24-hour	86.7	48.0	135	50	150
	Annual	21.7	19.2	40.9	20	—
$PM_{2.5}$	24-hour [e]	18.4	24.6	43.0	—	35
	Annual	3.64	8.60	12.2	12	12

[a] Background concentrations were the highest concentrations monitored during 2010 through 2012 with the exception of the 3-hour SO_2 averaging period, which was taken as the highest concentrations monitored during 2008 through 2010.
[b] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.
[c] Total predicted concentration for the Federal 1-hour NO_2 standard is the maximum modeled concentration paired with the 3-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.
[d] Total predicted concentration for the Federal 1-hour SO_2 standard is the maximum modeled concentration combined with the 3-year average of 99th percentile background concentrations.
[e] Total predicted concentration for the Federal 24-hour $PM_{2.5}$ standard is the maximum modeled concentration combined with the 3-year average of 98th percentile background concentration.

References

Jones & Stokes Associates (JSA). 2007. Software User's Guide: URBEMIS2007 for Windows. November.

South Coast Air Quality Management District (SCAQMD). 2007. CEQA Handbook, Table XI-A Mitigation Measure Examples: Fugitive Dust from Construction & Demolition. April.

U.S. Environmental Protection Agency (EPA). 2005. Guideline on Air Quality Models, 40 Code of Federal Regulations (CFR), Part 51, Appendix W. November.

U.S. Environmental Protection Agency (EPA). 2011. Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2, National Ambient Air Quality Standard. March.

U.S. Environmental Protection Agency (EPA). 2012. Haul Road Workgroup Final Report Submission to EPA-OAQPS. March.

DATA REQUEST

105. Please justify the use of an ambient NO_2 ratio of 0.8 or update all 1-hour NO_2 modeling by using an ambient NO_2 ratio of 0.9.

Response: Please note that the response has not changed since originally submitted on May 17, 2013 (CEC TN# 70870), with the exception of the meteorological dataset described in the response to Data Request 104 above.

DATA REQUEST

106. Please ensure the newest AERMOD Version (Version 12345) is used consistently for all the above modeling and set the wind speed option as appropriate ("Vector" or "Scalar") to match the nature of the 5-year meteorological dataset.

Response: As noted in the response to Data Request 104 above, all of the revised air dispersion modeling results presented above were prepared using 5 years (2008 to 2012) of data collected at the John Wayne Airport meteorological monitoring station, owned and operated by the NWS, in conjunction with the corresponding 1-minute ASOS data[6] and AERMOD Version 12345. As the meteorological dataset was developed with scalar mean winds per EPA guidance, the VECTORWS option in AERMOD was not selected.

[6] Twice-daily National Climatic Data Center soundings from the San Diego Miramar NWS station (Station #03190) were also utilized in developing the AERMOD-ready meteorological data file.

FIGURE DR104-1

1-hour NO_2 Maximum Modeled Impacts for the Worst-Case Year from HBEP Construction and Demolition of Units 3 and 4

Public Health (107–109)

BACKGROUND

The Applicant's Health Risk Assessment (HRA) was prepared using the California Air Resources Board's (ARB's) HARP model, version 1.4f (ARB, 2011) and HARP On-ramp program (version 1.0). The HARP On-ramp tool was used to import the AERMOD air dispersion modeling results into the HARP Risk Module. Emissions of non-criteria pollutants from the project were analyzed using emission factors obtained mainly from the ARB California Air Toxics Emission Factors (CATEF) emission database (ARB, 2012). Air dispersion modeling combined the emissions with site-specific terrain and meteorological conditions to analyze the mean short-term and long-term concentrations in air for use in the HRA. Ambient concentrations were used in conjunction with Reference Exposure Levels (RELs) and cancer unit risk factors to estimate the cancer and non-cancer risks from operations.

Air Quality staff submitted a data request to require the Applicant to update all the modeling submitted on the project to date using the new, 5-year meteorological dataset provided by the SCAQMD. Since the results of the HRA are also subject to the results of air modeling, an updated HRA is necessary.

DATA REQUEST

107. After updating any air quality modeling using the new 5-year meteorological dataset provided by the SCAQMD, please provide updated information for the corresponding HRA for air toxics, for both construction and operation.

Response: All HRA modeling conducted to date for the CEC, both in the initial licensing application and in subsequent toxics modeling, has been updated to reflect the 5-year meteorological dataset developed from ISH data collected at the John Wayne Airport meteorological monitoring station, owned and operated by the NWS, in conjunction with the corresponding 1-minute ASOS data and twice-daily National Climatic Data Center soundings from the San Diego Miramar NWS station. The operational HRA modeling followed the methodology outlined in AFC Section 5.9.3.1, which was submitted to the CEC in June 2012, and includes the use of the EPA's AP-42 emission factors and the SCAQMD-recommended formaldehyde emission factor described in Data Request 108 below. The construction HRA modeling followed the methodology outlined in Data Responses, Set 2A – 75, which was submitted to the CEC on February 22, 2013. Table DR107-1R, which is a revision to AFC Table 5.9-4, summarizes the HRA results for facility-wide operation. Table DR107-2R, which is a revision to AFC Table 5.9-3, summarizes HRA results for individual turbine operation. Table DR107-3R, which is an update to the results presented in Data Responses, Set 2A – 75, summarizes the construction HRA results.

TABLE DR107-1R
Operation: Health Risk Assessment Summary – Facility

Risk	Receptor Number	Value	Universal Transverse Mercator (NAD 83)
Cancer Risk at the PMI [a]	11421	2.54 per million	409.8, 3723.65
Cancer Risk at the PMI [b]	11421	2.47 per million	409.8, 3723.65
Cancer Risk at the MEIR [b]	10360	2.20 per million	410, 3723.8
Highest Cancer Risk at a Sensitive Receptor [b]	3605	1.65 per million	409.96952, 3724.22287
Cancer Risk at the MEIW	11421	0.446 per million	409.8, 3723.65

TABLE DR107-1R
Operation: Health Risk Assessment Summary – Facility

Risk	Receptor Number	Value	Universal Transverse Mercator (NAD 83)
Chronic Hazard Index at the PMI	11421	0.00778	409.8, 3723.65
Resident Chronic Hazard Index	10360	0.00691	410, 3723.8
Worker Chronic Hazard Index	11421	0.00778	409.8, 3723.65
Chronic Hazard Index at a Sensitive Receptor	3605	0.00519	409.96952, 3724.22287
Acute Hazard Index at the PMI	8982	0.0781	409.2109, 3723.357
Resident Acute Hazard Index	9352	0.0502	409.1, 3723.6
Worker Acute Hazard Index	8982	0.0781	409.2109, 3723.357
Acute Hazard Index at a Sensitive Receptor	3602	0.0183	410.02705, 3723.14007

[a] Cancer risk values represent the Office of Environmental Health Hazard Assessment (OEHHA) Derived Methodology.
[b] Risk values represent the Derived Adjusted Methodology.

PMI = Point of Maximum Impact
MEIR = Maximally Exposed Individual Resident
MEIW = Maximally Exposed Individual Worker

TABLE DR107-2R
Operation: Health Risk Assessment Summary – Individual Units

Risk	Turbine 1	Turbine 2	Turbine 3	Turbine 4	Turbine 5	Turbine 6
Cancer Risk at the PMI [a] (per million)	0.49	0.49	0.61	0.49	0.49	0.50
Cancer Risk at the PMI [b] (per million)	0.48	0.48	0.59	0.48	0.48	0.49
Cancer Risk at the MEIR [b] (per million)	0.391	0.358	0.34	0.43	0.43	0.43
Highest Cancer Risk at a Sensitive Receptor [b] (per million)	0.303	0.302	0.31	0.23	0.24	0.26
Cancer Risk at the MEIW (per million)	0.086	0.086	0.107	0.087	0.087	0.088
Chronic Hazard Index at the PMI	0.0015	0.00151	0.00187	0.00151	0.00151	0.00153
Resident Chronic Hazard Index	0.00123	0.00113	0.00107	0.00136	0.00136	0.00136
Worker Chronic Hazard Index	0.0015	0.00151	0.00187	0.00151	0.00151	0.00153
Chronic Hazard Index at a Sensitive Receptor	0.000954	0.000952	0.000975	0.000726	0.000767	0.000818
Acute Hazard Index at the PMI	0.0277	0.033	0.0226	0.00414	0.0104	0.0127
Resident Acute Hazard Index	0.0149	0.0189	0.0106	0.00296	0.00502	0.00669
Worker Acute Hazard Index	0.0277	0.033	0.0226	0.00414	0.01040	0.0127
Acute Hazard Index at a Sensitive Receptor	0.00338	0.00369	0.00415	0.00255	0.00236	0.00255

[a] Cancer risk values represent the OEHHA Derived Methodology.
[b] Risk values represent the Derived Adjusted Methodology.

TABLE DR107-3R
Construction: Health Risk Assessment Summary – Facility

Risk [a]	Receptor Number	Value	Universal Transverse Mercator (NAD 83)
Cancer Risk at the PMI [b]	7705	12.3 per million	409.5662, 3723.3128
Cancer Risk at the MEIR [b]	7759	3.5 per million	409.1, 3723.35
Highest Cancer Risk at a Sensitive Receptor [b]	3602	1.26 per million	410.02705, 3723.14007
Cancer Risk at the PMI [c]	7705	18.2 per million	409.5662, 3723.3128
Cancer Risk at the MEIR [c]	7759	5.18 per million	409.1, 3723.35
Highest Cancer Risk at a Sensitive Receptor [c]	3602	1.86 per million	410.02705, 3723.14007
Cancer Risk at the MEIW [d]	7705	11 per million	409.5662, 3723.3128
Chronic Hazard Index at the PMI	7705	0.0461	409.5671, 3723.225
Resident Chronic Hazard Index	7759	0.0131	409.1, 3723.35
Chronic Hazard Index at a Sensitive Receptor	3602	0.00472	410.02705, 3723.14007
Worker Chronic Hazard Index [d]	7705	0.155	409.5662, 3723.3128

[a] Values represent the OEHHA Derived Methodology.
[b] Based on an average breathing rate of 271 Liters/kilogram/day.
[c] Based on an average breathing rate of 452 Liters/kilogram/day.
[d] Cancer risk at the MEIW and Worker Chronic Hazard Index was adjusted assuming a 3.36 ground level concentration (GLC) factor and 9 years of exposure.

Based on the operational analysis, the predicted incremental increase in cancer risk at the Point of Maximum Impact (PMI) associated with operational activities is 2.54 per million; the predicted chronic and acute health indices at the PMI are 0.00778 and 0.0782, respectively. HBEP's design includes an oxidation catalyst system to reduce emissions of incomplete combustion products (CO and volatile organic compounds). This system would be expected to also reduce HBEP emissions of toxic air contaminants and is considered the best available control technology for toxic organic compounds (T-BACT) from combustion turbines. The predicted incremental increase in cancer risk and chronic and acute health indices at the PMI are less than the California Environmental Quality Act (CEQA) significance thresholds of 10 in one million and 1.0, respectively. Therefore, impacts associated with operational activities are less than significant. Furthermore, the HBEP operational risk assessment conservatively does not include reductions in public health impacts associated with the permanent shutdown of the existing Huntington Beach Generating Station Units 1 and 2.

Based on the construction analysis, the predicted incremental increase in cancer risk at the PMI, Maximally Exposed Individual Resident (MEIR), and Maximally Exposed Individual Worker (MEIW) associated with construction activities are 18.2, 5.18, and 11 in one million, respectively.[7] The predicted chronic risks at the PMI, MEIR, and MEIW are 0.0461, 0.0131, and 0.155, respectively. Although the PMI and MEIW excess cancer risk is greater than 10 in one million, the elevated risk only occurs in areas where public access is controlled (i.e., within the AES-controlled fence line) or in areas that are not considered residential, commercial, or habitable, as presented in Figure DR109-1R. Additionally, any potential exposure would be sporadic and limited in length. Further, the predicted incremental increase in cancer risk at the MEIR and chronic health index at the PMI, MEIR, and MEIW are less than the CEQA significance thresholds of 10 in one

[7] Note that the PMI and MEIR values represent the cancer risk for a 9-year average breathing rate of 452 Liters/kilogram/day. The 70-year average breathing rate of 271 Liters/kilogram/day led to lower cancer risks at the same locations.

million and 1.0, respectively. Therefore, impacts associated with the finite construction activities are less than significant.

The HARP report files have been separately prepared and are included with this submission on DVD. Note that utilizing the revised 5-year meteorological dataset for this analysis resulted in construction HRA impacts similar to those submitted as part of Data Responses, Set 2A – 75. Operational HRA impacts, however, did increase from those originally presented in AFC Section 5.9.3.1.

DATA REQUEST

108. Please provide updated information for the HRA using the SCAQMD's suggested formaldehyde emission factor, $3.6x10^{-4}$ pounds per million British thermal units (lbs/MMBtu).

Response: A revised HRA using the 5-year meteorological dataset developed from ISH data collected at the John Wayne Airport meteorological monitoring station, in conjunction with the corresponding 1-minute ASOS data, and twice-daily National Climatic Data Center soundings from the San Diego Miramar NWS station was conducted for the operational impacts (see the response to Data Request 107 above). This assessment used the SCAQMD-recommended formaldehyde emission factor of 3.6×10^{-4} lbs/MMBtu and the AP-42 emission factors, which were also recommended by the SCAQMD.

DATA REQUEST

109. If the results of any HRA results in a health risk of greater than 10 in a million, please provide a map containing health risk isopleths, including an isopleth showing the risk value of 10 in a million.

Response: Figure DR109-1R presents the isopleths showing the diesel particulate matter (DPM) excess cancer risks resulting from HBEP construction activities, which are greater than 10 in one million. As explained in the response to Data Request 107 above, this risk only occurs in areas where public access is controlled (i.e., within the AES-controlled fence line) or in areas that are not considered residential, commercial, or habitable. Additionally, potential exposure would be sporadic and limited in length. Therefore, the PMI and MEIW excess cancer risks represent an overestimate of the expected actual impacts to public health resulting from HBEP construction. Note that the excess cancer risk isopleths for locations greater than 10 in one million is similar to that submitted with Data Responses, Set 2A – 76, despite incorporation of the revised 5-year meteorological dataset.

FIGURE DR109-1R

HBEP Construction Excess Cancer Risk Assessment Isopleths 10 in One Million

Attachment DR104-1R
Wind Roses and Wind Tables

Huntington Beach Energy Project
Attachment DR104-1R Table 1
First Quarter Wind Table
October 2013

Frequency Distribution (Hours)
Date Range: January 1 - March 31 (2008 - 2012)

Wind Speed (m/s) Wind Direction (from)	0.3 - 0.5	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	≥ 11.1	Total
N	0	241	198	8	0	0	0	447
NNE	0	191	402	16	7	0	0	616
NE	0	108	331	55	81	14	0	589
ENE	0	76	276	75	48	5	0	480
E	0	71	317	19	0	0	0	407
ESE	0	50	463	24	0	0	0	537
SE	0	62	403	49	6	0	0	520
SSE	0	63	238	47	33	9	1	391
S	0	65	336	113	59	9	0	582
SSW	0	94	765	467	58	1	0	1,385
SW	0	153	1,070	470	28	0	0	1,721
WSW	0	191	856	253	9	0	0	1,309
W	0	131	364	89	19	0	0	603
WNW	0	124	156	9	3	0	0	292
NW	0	129	167	4	0	0	0	300
NNW	0	146	135	7	0	0	0	288
Total	0	1,895	6,477	1,705	351	38	1	10,467

Frequency of Calm Winds: 335
Frequency of Missing Winds: 294

Huntington Beach Energy Project
Attachment DR104-1R Table 2
Second Quarter Wind Table
October 2013

Frequency Distribution (Hours)
Date Range: April 1 - June 30 (2008 - 2012)

Wind Speed (m/s) Wind Direction (from)	0.3 - 0.5	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	≥ 11.1	Total
N	0	43	71	0	0	0	0	114
NNE	0	36	76	1	0	0	0	113
NE	0	27	76	9	13	0	0	125
ENE	0	23	91	3	2	0	0	119
E	0	17	165	2	0	0	0	184
ESE	0	21	382	18	0	0	0	421
SE	0	37	537	18	2	0	0	594
SSE	0	30	461	49	4	0	0	544
S	0	25	534	123	24	0	0	706
SSW	0	33	1,035	1,013	191	1	0	2,273
SW	0	47	1,309	1,264	125	0	0	2,745
WSW	0	55	1,018	458	23	0	0	1,554
W	0	69	391	92	19	0	0	571
WNW	0	41	143	7	0	0	0	191
NW	0	30	94	3	0	0	0	127
NNW	0	22	66	0	0	0	0	88
Total	0	556	6,449	3,060	403	1	0	10,469

Frequency of Calm Winds: 336
Frequency of Missing Winds: 294

Huntington Beach Energy Project
Attachment DR104-1R Table 3
Third Quarter Wind Table
October 2013

Frequency Distribution (Hours)
Date Range: July 1 - September 30 (2008 - 2012)

Wind Speed (m/s) Wind Direction (from)	0.3 - 0.5	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	≥ 11.1	Total
N	0	19	31	0	0	0	0	50
NNE	0	8	33	0	0	0	0	41
NE	0	11	22	0	0	0	0	33
ENE	0	7	22	0	0	0	0	29
E	0	17	58	0	0	0	0	75
ESE	0	12	167	0	0	0	0	179
SE	0	19	315	2	0	0	0	336
SSE	0	31	343	3	0	0	0	377
S	0	42	491	33	4	0	0	570
SSW	0	48	1,363	826	118	0	0	2,355
SW	0	77	2,111	1,446	93	0	0	3,727
WSW	0	118	1,383	243	0	0	0	1,744
W	0	138	474	8	0	0	0	620
WNW	0	52	223	0	0	0	0	275
NW	0	39	132	0	0	0	0	171
NNW	0	22	92	0	0	0	0	114
Total	0	660	7,260	2,561	215	0	0	10,696

Frequency of Calm Winds: 285
Frequency of Missing Winds: 294

Huntington Beach Energy Project
Attachment DR104-1R Table 4
Fourth Quarter Wind Table
October 2013

Frequency Distribution (Hours)
Date Range: October 1 - December 31 (2008 - 2012)

Wind Speed (m/s) Wind Direction (from)	0.3 - 0.5	0.5 - 2.1	2.1 - 3.6	3.6 - 5.7	5.7 - 8.8	8.8 - 11.1	≥ 11.1	Total
N	0	239	244	0	1	0	0	484
NNE	0	188	450	8	3	1	0	650
NE	0	121	346	50	47	20	3	587
ENE	0	79	242	46	36	1	0	404
E	0	81	304	9	1	0	0	395
ESE	0	44	416	14	0	0	0	474
SE	0	56	377	19	1	0	0	453
SSE	0	64	284	29	6	2	0	385
S	0	67	355	70	31	5	0	528
SSW	0	106	779	343	29	2	0	1,259
SW	0	209	1,278	315	10	0	0	1,812
WSW	0	182	1,072	146	1	0	0	1,401
W	0	190	406	64	6	0	0	666
WNW	0	132	183	16	0	0	0	331
NW	0	155	194	22	3	0	0	374
NNW	0	156	205	10	2	0	0	373
Total	0	2,069	7,135	1,161	177	31	3	10,576

Frequency of Calm Winds: 390
Frequency of Missing Winds: 294

Attachment DR104-2R
Supporting Documentation for Construction, Commissioning, and Operational Impacts Analysis

Huntington Beach Energy Project
Attachment DR104-2R Table 1
Construction Source Parameters for AERMOD Input
October 2013

Area Poly Sources

Source ID	Base Elevation (m)	Release Height (m)	Number of Vertices	Vertical Dimension (m)	Easting (X1) (m)	Northing (Y1) (m)	Easting (X2) (m)	Northing (Y2) (m)	Easting (X3) (m)	Northing (Y3) (m)	Easting (X4) (m)	Northing (Y4) (m)	Easting (X5) (m)	Northing (Y5) (m)	Easting (X6) (m)	Northing (Y6) (m)	Easting (X7) (m)	Northing (Y7) (m)	Easting (X8) (m)	Northing (Y8) (m)	Easting (X9) (m)	Northing (Y9) (m)
FUGE	3.7	0.0	9	1.0	409452	3723309	409563	3723310	409565	3723115	409537	3723136	409449	3723089	409315	3723180	409358	3723245	409372	3723242	409453	3723187

Area Sources

Source ID	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North	Vertical Dimension (m)
FUGW	409066	3723183	3.7	0.0	165	215	35	1.0

Point Sources [a]

Source ID	Stack Release Type (Beta)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
E(1-70)	Horizontal	3.7	4.6	533.00	18.00	0.127
W(1-72)	Horizontal	3.7	4.6	533.00	18.00	0.127

[a] A complete list of exhaust point source locations and parameters can be found in Attachment DR104-2R Table 2.

Huntington Beach Energy Project
Attachment DR104-2R Table 5
Commissioning Source Parameters for AERMOD Input
October 2013

Point Sources

Scenario	Building Name	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)	NO_2 (g/s)	NO_2 (lb/hr)	CO (g/s)	CO (lb/hr)
5% Load	Stack 1	409185	3723252	3.7	36.6	500	10.1	5.49	6.11	48.5	215.4	1709
	Stack 2	409216	3723231	3.7	36.6	500	10.1	5.49	6.11	48.5	215.4	1709
	Stack 3	409245	3723210	3.7	36.6	500	10.1	5.49	6.11	48.5	215.4	1709
	Stack 4	409522	3723157	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 5	409522	3723194	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 6	409522	3723230	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
40% Load	Stack 1	409185	3723252	3.7	36.6	473	9.9	5.49	3.27	26.0	172.9	1373
	Stack 2	409216	3723231	3.7	36.6	473	9.9	5.49	3.27	26.0	172.9	1373
	Stack 3	409245	3723210	3.7	36.6	473	9.9	5.49	3.27	26.0	172.9	1373
	Stack 4	409522	3723157	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 5	409522	3723194	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 6	409522	3723230	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
50% Load	Stack 1	409185	3723252	3.7	36.6	466	9.9	5.49	13.82	109.7	399.3	3169
	Stack 2	409216	3723231	3.7	36.6	466	9.9	5.49	13.82	109.7	399.3	3169
	Stack 3	409245	3723210	3.7	36.6	466	9.9	5.49	13.82	109.7	399.3	3169
	Stack 4	409522	3723157	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 5	409522	3723194	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 6	409522	3723230	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
100% Load	Stack 1	409185	3723252	3.7	36.6	472	22.7	5.49	5.29	42.0	3.57	28.4
	Stack 2	409216	3723231	3.7	36.6	472	22.7	5.49	5.29	42.0	3.57	28.4
	Stack 3	409245	3723210	3.7	36.6	472	22.7	5.49	5.29	42.0	3.57	28.4
	Stack 4	409522	3723157	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 5	409522	3723194	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3
	Stack 6	409522	3723230	3.7	36.6	461	15.4	5.49	3.21	25.5	14.53	115.3

Huntington Beach Energy Project
Attachment DR104-2R Table 6
Commissioning Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 1 North (Y) (m)	Corner 2 East (X) (m)	Corner 2 North (Y) (m)	Corner 3 East (X) (m)	Corner 3 North (Y) (m)	Corner 4 East (X) (m)	Corner 4 North (Y) (m)
Admin	2	1	3.66	3.35	16	409290	3723286	409355	3723240	409351	3723235	409348	3723237
Admin	*	2	*	5.18	14	409287	3723281	409348	3723237	409338	3723223	409343	3723219
STG2	1	1	3.66	12.19	4	409165	3723276	409180	3723266	409170	3723252	409156	3723262
ACC2	1	1	3.66	31.70	4	409212	3723305	409263	3723269	409241	3723237	409189	3723274
ACC1	1	1	3.66	31.70	4	409474	3723311	409536	3723311	409537	3723274	409474	3723274
STG1	1	1	3.66	12.19	4	409538	3723247	409556	3723247	409556	3723231	409538	3723231
CTG4	1	1	3.66	28.04	4	409500	3723162	409517	3723162	409517	3723149	409500	3723150
CTG5	1	1	3.66	28.04	4	409500	3723198	409517	3723198	409517	3723186	409500	3723186
CTG6	1	1	3.66	28.04	4	409499	3723236	409517	3723236	409517	3723223	409499	3723224
CTG1	1	1	3.66	28.04	4	409166	3723235	409176	3723252	409188	3723244	409178	3723228
CTG2	1	1	3.66	28.04	4	409197	3723216	409207	3723232	409219	3723224	409209	3723208
CTG3	1	1	3.66	28.04	4	409226	3723194	409236	3723210	409247	3723203	409237	3723187
AIRIN6	1	1	3.66	11.61	6	409470	3723211	409470	3723215	409475	3723225	409477	3723225
AIRIN5	1	1	3.66	11.61	6	409471	3723174	409471	3723178	409476	3723188	409478	3723188
AIRIN4	1	1	3.66	11.61	6	409471	3723136	409471	3723141	409476	3723151	409478	3723151
AIRIN1	1	1	3.66	11.61	6	409172	3723196	409169	3723199	409163	3723209	409164	3723211
AIRIN2	1	1	3.66	11.61	6	409202	3723175	409199	3723178	409194	3723188	409195	3723190
AIRIN3	1	1	3.66	11.61	6	409232	3723154	409229	3723157	409224	3723167	409225	3723169
B1	2	1	3.66	23.16	4	409293	3723102	409312	3723128	409335	3723112	409317	3723086
B1	*	2	*	37.64	4	409301	3723114	409312	3723128	409335	3723112	409326	3723098
B2	2	1	3.66	23.16	4	409252	3723127	409272	3723153	409295	3723137	409277	3723111
B2	*	2	*	37.64	4	409261	3723139	409272	3723153	409295	3723137	409285	3723123

Tank Name	Base Elevation (m)	Center East (X) (m)	Center North (Y) (m)	Tank Height (m)	Tank Diameter (m)
Stack12	3.66	409274	3723095	60.96	6.27

Huntington Beach Energy Project
Attachment DR104-2R Table 6
Commissioning Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 5 East (X) (m)	Corner 5 North (Y) (m)	Corner 6 East (X) (m)	Corner 6 North (Y) (m)	Corner 7 East (X) (m)	Corner 7 North (Y) (m)	Corner 8 East (X) (m)	Corner 8 North (Y) (m)	Corner 9 East (X) (m)	Corner 9 North (Y) (m)	Corner 10 East (X) (m)	Corner 10 North (Y) (m)
Admin	2	1	3.66	3.35	16	409338	3723223	409343	3723219	409333	3723205	409321	3723213	409323	3723216	409296	3723237
Admin	*	2	*	5.18	14	409333	3723205	409321	3723213	409323	3723216	409296	3723237	409296	3723237	409292	3723241
STG2	1	1	3.66	12.19	4												
ACC2	1	1	3.66	31.70	4												
ACC1	1	1	3.66	31.70	4												
STG1	1	1	3.66	12.19	4												
CTG4	1	1	3.66	28.04	4												
CTG5	1	1	3.66	28.04	4												
CTG6	1	1	3.66	28.04	4												
CTG1	1	1	3.66	28.04	4												
CTG2	1	1	3.66	28.04	4												
CTG3	1	1	3.66	28.04	4												
AIRIN6	1	1	3.66	11.61	6	409482	3723215	409482	3723210								
AIRIN5	1	1	3.66	11.61	6	409483	3723178	409483	3723174								
AIRIN4	1	1	3.66	11.61	6	409483	3723140	409483	3723136								
AIRIN1	1	1	3.66	11.61	6	409176	3723208	409179	3723206								
AIRIN2	1	1	3.66	11.61	6	409206	3723187	409209	3723185								
AIRIN3	1	1	3.66	11.61	6	409236	3723166	409239	3723164								
B1	2	1	3.66	23.16	4												
B1	*	2	*	37.64	4												
B2	2	1	3.66	23.16	4												
B2	*	2	*	37.64	4												

Tank Name	Base Elevation (m)	Center East (X) (m)	Center North (Y) (m)	Tank Height (m)	Tank Diameter (m)
Stack12	3.66	409274	3723095	60.96	6.27

Huntington Beach Energy Project
Attachment DR104-2R Table 6
Commissioning Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 11 East (X) (m)	Corner 11 North (Y) (m)	Corner 12 East (X) (m)	Corner 12 North (Y) (m)	Corner 13 East (X) (m)	Corner 13 North (Y) (m)	Corner 14 East (X) (m)	Corner 14 North (Y) (m)	Corner 15 East (X) (m)	Corner 15 North (Y) (m)	Corner 16 East (X) (m)	Corner 16 North (Y) (m)
Admin	2	1	3.66	3.35	16	409296	3723237	409292	3723241	409293	3723243	409279	3723252	409292	3723270	409283	3723276
Admin	*	2	*	5.18	14	409293	3723243	409279	3723252	409292	3723270	409283	3723276				
STG2	1	1	3.66	12.19	4												
ACC2	1	1	3.66	31.70	4												
ACC1	1	1	3.66	31.70	4												
STG1	1	1	3.66	12.19	4												
CTG4	1	1	3.66	28.04	4												
CTG5	1	1	3.66	28.04	4												
CTG6	1	1	3.66	28.04	4												
CTG1	1	1	3.66	28.04	4												
CTG2	1	1	3.66	28.04	4												
CTG3	1	1	3.66	28.04	4												
AIRIN6	1	1	3.66	11.61	6												
AIRIN5	1	1	3.66	11.61	6												
AIRIN4	1	1	3.66	11.61	6												
AIRIN1	1	1	3.66	11.61	6												
AIRIN2	1	1	3.66	11.61	6												
AIRIN3	1	1	3.66	11.61	6												
B1	2	1	3.66	23.16	4												
B1	*	2	*	37.64	4												
B2	2	1	3.66	23.16	4												
B2	*	2	*	37.64	4												

Tank Name	Base Elevation (m)	Center East (X) (m)	Center North (Y) (m)	Tank Height (m)	Tank Diameter (m)
Stack12	3.66	409274	3723095	60.96	6.27

Huntington Beach Energy Project
Attachment DR104-2R Table 7
Commissioning Modeling Results Summary
October 2013

Commissioning of 3 Turbines

		NO_2 ($\mu g/m^3$)	CO ($\mu g/m^3$)	
Scenario	Year	1-hr	1-hr	8-hr
5% Load	2008	113	4,962	3,058
	2009	105	4,615	2,238
	2010	116	5,111	3,927
	2011	114	5,015	1,608
	2012	112	4,926	3,004
40% Load	2008	61.4	4,058	2,546
	2009	58.5	3,860	1,977
	2010	64.0	4,225	3,315
	2011	61.9	4,087	1,431
	2012	61.2	4,042	2,558
50% Load	2008	261	9,422	5,923
	2009	252	9,086	4,695
	2010	276	9,971	7,789
	2011	262	9,479	3,463
	2012	260	9,398	6,050
100% Load	2008	49.0	99.1	44.4
	2009	30.1	73.4	39.8
	2010	53.9	88.8	39.8
	2011	49.8	86.5	57.1
	2012	43.0	70.4	48.2

Commissioning of 1 Turbine

		NO_2 ($\mu g/m^3$)	CO ($\mu g/m^3$)	
Scenario	Year	1-hr	1-hr	8-hr
5% Load	2008	59.7	2,629	1,952
	2009	59.2	2,604	1,558
	2010	60.2	2,649	2,231
	2011	58.6	2,580	1,366
	2012	60.0	2,642	1,740
40% Load	2008	32.5	2,147	1,623
	2009	32.6	2,156	1,348
	2010	32.9	2,170	1,861
	2011	32.2	2,126	1,218
	2012	33.1	2,187	1,465
50% Load	2008	139	5,013	3,776
	2009	140	5,038	3,170
	2010	140	5,040	4,341
	2011	137	4,946	2,914
	2012	141	5,093	3,425
100% Load	2008	30.4	99.1	44.3
	2009	26.4	73.3	39.0
	2010	29.8	88.8	39.8
	2011	27.7	86.5	57.1
	2012	28.7	70.4	47.9

The maximum 1-hour NO_2 concentrations include an ambient NO_2 ratio of 0.80.

Huntington Beach Energy Project
Attachment DR104-2R Table 8
Operational Modeling Parameters - Stack Parameters
October 2013

Point Sources

Scenario	Source ID	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
1	Stack 1	409185	3723252	3.7	36.6	457	24.1	5.49
	Stack 2	409216	3723231	3.7	36.6	457	24.1	5.49
	Stack 3	409245	3723210	3.7	36.6	457	24.1	5.49
	Stack 4	409522	3723157	3.7	36.6	457	24.1	5.49
	Stack 5	409522	3723194	3.7	36.6	457	24.1	5.49
	Stack 6	409522	3723230	3.7	36.6	457	24.1	5.49
2	Stack 1	409185	3723252	3.7	36.6	474	25.0	5.49
	Stack 2	409216	3723231	3.7	36.6	474	25.0	5.49
	Stack 3	409245	3723210	3.7	36.6	474	25.0	5.49
	Stack 4	409522	3723157	3.7	36.6	474	25.0	5.49
	Stack 5	409522	3723194	3.7	36.6	474	25.0	5.49
	Stack 6	409522	3723230	3.7	36.6	474	25.0	5.49
3	Stack 1	409185	3723252	3.7	36.6	470	22.4	5.49
	Stack 2	409216	3723231	3.7	36.6	470	22.4	5.49
	Stack 3	409245	3723210	3.7	36.6	470	22.4	5.49
	Stack 4	409522	3723157	3.7	36.6	470	22.4	5.49
	Stack 5	409522	3723194	3.7	36.6	470	22.4	5.49
	Stack 6	409522	3723230	3.7	36.6	470	22.4	5.49
4	Stack 1	409185	3723252	3.7	36.6	467	19.5	5.49
	Stack 2	409216	3723231	3.7	36.6	467	19.5	5.49
	Stack 3	409245	3723210	3.7	36.6	467	19.5	5.49
	Stack 4	409522	3723157	3.7	36.6	467	19.5	5.49
	Stack 5	409522	3723194	3.7	36.6	467	19.5	5.49
	Stack 6	409522	3723230	3.7	36.6	467	19.5	5.49
5	Stack 1	409185	3723252	3.7	36.6	463	17.5	5.49
	Stack 2	409216	3723231	3.7	36.6	463	17.5	5.49
	Stack 3	409245	3723210	3.7	36.6	463	17.5	5.49
	Stack 4	409522	3723157	3.7	36.6	463	17.5	5.49
	Stack 5	409522	3723194	3.7	36.6	463	17.5	5.49
	Stack 6	409522	3723230	3.7	36.6	463	17.5	5.49
6	Stack 1	409185	3723252	3.7	36.6	454	22.6	5.49
	Stack 2	409216	3723231	3.7	36.6	454	22.6	5.49
	Stack 3	409245	3723210	3.7	36.6	454	22.6	5.49
	Stack 4	409522	3723157	3.7	36.6	454	22.6	5.49
	Stack 5	409522	3723194	3.7	36.6	454	22.6	5.49
	Stack 6	409522	3723230	3.7	36.6	454	22.6	5.49
7	Stack 1	409185	3723252	3.7	36.6	471	23.6	5.49
	Stack 2	409216	3723231	3.7	36.6	471	23.6	5.49
	Stack 3	409245	3723210	3.7	36.6	471	23.6	5.49
	Stack 4	409522	3723157	3.7	36.6	471	23.6	5.49
	Stack 5	409522	3723194	3.7	36.6	471	23.6	5.49
	Stack 6	409522	3723230	3.7	36.6	471	23.6	5.49
8	Stack 1	409185	3723252	3.7	36.6	467	21.3	5.49
	Stack 2	409216	3723231	3.7	36.6	467	21.3	5.49
	Stack 3	409245	3723210	3.7	36.6	467	21.3	5.49
	Stack 4	409522	3723157	3.7	36.6	467	21.3	5.49
	Stack 5	409522	3723194	3.7	36.6	467	21.3	5.49
	Stack 6	409522	3723230	3.7	36.6	467	21.3	5.49

Huntington Beach Energy Project
Attachment DR104-2R Table 8
Operational Modeling Parameters - Stack Parameters
October 2013

Point Sources

Scenario	Source ID	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
9	Stack 1	409185	3723252	3.7	36.6	463	19.2	5.49
	Stack 2	409216	3723231	3.7	36.6	463	19.2	5.49
	Stack 3	409245	3723210	3.7	36.6	463	19.2	5.49
	Stack 4	409522	3723157	3.7	36.6	463	19.2	5.49
	Stack 5	409522	3723194	3.7	36.6	463	19.2	5.49
	Stack 6	409522	3723230	3.7	36.6	463	19.2	5.49
10	Stack 1	409185	3723252	3.7	36.6	460	16.7	5.49
	Stack 2	409216	3723231	3.7	36.6	460	16.7	5.49
	Stack 3	409245	3723210	3.7	36.6	460	16.7	5.49
	Stack 4	409522	3723157	3.7	36.6	460	16.7	5.49
	Stack 5	409522	3723194	3.7	36.6	460	16.7	5.49
	Stack 6	409522	3723230	3.7	36.6	460	16.7	5.49
11	Stack 1	409185	3723252	3.7	36.6	455	21.8	5.49
	Stack 2	409216	3723231	3.7	36.6	455	21.8	5.49
	Stack 3	409245	3723210	3.7	36.6	455	21.8	5.49
	Stack 4	409522	3723157	3.7	36.6	455	21.8	5.49
	Stack 5	409522	3723194	3.7	36.6	455	21.8	5.49
	Stack 6	409522	3723230	3.7	36.6	455	21.8	5.49
12	Stack 1	409185	3723252	3.7	36.6	472	22.7	5.49
	Stack 2	409216	3723231	3.7	36.6	472	22.7	5.49
	Stack 3	409245	3723210	3.7	36.6	472	22.7	5.49
	Stack 4	409522	3723157	3.7	36.6	472	22.7	5.49
	Stack 5	409522	3723194	3.7	36.6	472	22.7	5.49
	Stack 6	409522	3723230	3.7	36.6	472	22.7	5.49
13	Stack 1	409185	3723252	3.7	36.6	465	19.0	5.49
	Stack 2	409216	3723231	3.7	36.6	465	19.0	5.49
	Stack 3	409245	3723210	3.7	36.6	465	19.0	5.49
	Stack 4	409522	3723157	3.7	36.6	465	19.0	5.49
	Stack 5	409522	3723194	3.7	36.6	465	19.0	5.49
	Stack 6	409522	3723230	3.7	36.6	465	19.0	5.49
14	Stack 1	409185	3723252	3.7	36.6	463	17.3	5.49
	Stack 2	409216	3723231	3.7	36.6	463	17.3	5.49
	Stack 3	409245	3723210	3.7	36.6	463	17.3	5.49
	Stack 4	409522	3723157	3.7	36.6	463	17.3	5.49
	Stack 5	409522	3723194	3.7	36.6	463	17.3	5.49
	Stack 6	409522	3723230	3.7	36.6	463	17.3	5.49
15	Stack 1	409185	3723252	3.7	36.6	461	15.4	5.49
	Stack 2	409216	3723231	3.7	36.6	461	15.4	5.49
	Stack 3	409245	3723210	3.7	36.6	461	15.4	5.49
	Stack 4	409522	3723157	3.7	36.6	461	15.4	5.49
	Stack 5	409522	3723194	3.7	36.6	461	15.4	5.49
	Stack 6	409522	3723230	3.7	36.6	461	15.4	5.49

Huntington Beach Energy Project
Attachment DR104-2R Table 9
Operational Modeling Parameters - Emission Rates
October 2013

Per Turbine Emission Rates for 1-hr, 3-hr, 8-hr, and 24-hr Emissions Scenarios

	1-hr NO_2		1-hr CO		8-hr CO		1-hr SO_2		3-hr SO_2		24-hr SO_2		24-hr PM_{10}		24-hr $PM_{2.5}$	
Scenario	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
1	3.21	25.5	14.36	114	6.09	48.3	0.33	2.64	0.33	2.64	0.33	2.64	1.20	9.50	1.20	9.50
2	3.21	25.5	14.36	114	5.91	46.9	0.25	1.97	0.25	1.97	0.25	1.97	0.57	4.50	0.57	4.50
3	3.21	25.5	14.36	114	5.86	46.5	0.23	1.79	0.23	1.79	0.23	1.79	0.57	4.50	0.57	4.50
4	3.21	25.5	14.36	114	5.81	46.1	0.20	1.60	0.20	1.60	0.20	1.60	0.57	4.50	0.57	4.50
5	3.21	25.5	14.36	114	5.78	45.9	0.18	1.46	0.18	1.46	0.18	1.46	0.57	4.50	0.57	4.50
6	3.21	25.5	14.36	114	6.06	48.1	0.32	2.51	0.32	2.51	0.32	2.51	1.20	9.50	1.20	9.50
7	3.21	25.5	14.36	114	5.88	46.7	0.23	1.85	0.23	1.85	0.23	1.85	0.57	4.50	0.57	4.50
8	3.21	25.5	14.36	114	5.83	46.3	0.21	1.67	0.21	1.67	0.21	1.67	0.57	4.50	0.57	4.50
9	3.21	25.5	14.36	114	5.80	46.0	0.19	1.52	0.19	1.52	0.19	1.52	0.57	4.50	0.57	4.50
10	3.21	25.5	14.36	114	5.76	45.7	0.17	1.36	0.17	1.36	0.17	1.36	0.57	4.50	0.57	4.50
11	3.21	25.5	14.36	114	6.04	47.9	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
12	3.21	25.5	14.36	114	5.85	46.4	0.22	1.78	0.22	1.78	0.22	1.78	0.57	4.50	0.57	4.50
13	3.21	25.5	14.36	114	5.78	45.9	0.18	1.46	0.18	1.46	0.18	1.46	0.57	4.50	0.57	4.50
14	3.21	25.5	14.36	114	5.75	45.6	0.17	1.33	0.17	1.33	0.17	1.33	0.57	4.50	0.57	4.50
15	3.21	25.5	14.36	114	5.72	45.4	0.15	1.21	0.15	1.21	0.15	1.21	0.57	4.50	0.57	4.50

Per Turbine Emission Rates for Annual Average Emissions Scenarios

	Annual NO_2		Annual PM_{10}		Annual $PM_{2.5}$	
Scenario	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
7	1.16	9.22	0.48	3.78	0.48	3.78
8	1.08	8.57	0.48	3.78	0.48	3.78
9	1.01	8.03	0.48	3.78	0.48	3.78
10	0.94	7.47	0.48	3.78	0.48	3.78

Huntington Beach Energy Project
Attachment DR104-2R Table 10
Operational Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 1 North (Y) (m)	Corner 2 East (X) (m)	Corner 2 North (Y) (m)	Corner 3 East (X) (m)	Corner 3 North (Y) (m)	Corner 4 East (X) (m)	Corner 4 North (Y) (m)	Corner 5 East (X) (m)	Corner 5 North (Y) (m)	Corner 6 East (X) (m)	Corner 6 North (Y) (m)
Admin	2	1	3.66	3.35	16	409290	3723286	409355	3723240	409351	3723235	409348	3723237	409338	3723223	409343	3723219
Admin	*	2	*	5.18	14	409287	3723281	409348	3723237	409338	3723223	409343	3723219	409333	3723205	409321	3723213
adminnew	1	1	3.66	12.19	4	409288	3723182	409306	3723169	409288	3723144	409271	3723157				
Maint	1	1	3.66	10.67	4	409308	3723165	409323	3723154	409310	3723137	409295	3723147				
STG2	1	1	3.66	12.19	4	409165	3723276	409180	3723266	409170	3723252	409156	3723262				
ACC2	1	1	3.66	31.70	4	409212	3723305	409263	3723269	409241	3723237	409189	3723274				
ACC1	1	1	3.66	31.70	4	409474	3723311	409536	3723311	409537	3723274	409474	3723274				
STG1	1	1	3.66	12.19	4	409538	3723247	409556	3723247	409556	3723231	409538	3723231				
CTG4	1	1	3.66	28.04	4	409500	3723162	409517	3723162	409517	3723149	409500	3723150				
CTG5	1	1	3.66	28.04	4	409500	3723198	409517	3723198	409517	3723186	409500	3723186				
CTG6	1	1	3.66	28.04	4	409499	3723236	409517	3723236	409517	3723223	409499	3723224				
CTG1	1	1	3.66	28.04	4	409166	3723235	409176	3723252	409188	3723244	409178	3723228				
CTG2	1	1	3.66	28.04	4	409197	3723216	409207	3723232	409219	3723224	409209	3723208				
CTG3	1	1	3.66	28.04	4	409226	3723194	409236	3723210	409247	3723203	409237	3723187				
AIRIN6	1	1	3.66	11.61	6	409470	3723211	409470	3723215	409475	3723225	409477	3723225	409482	3723215	409482	3723210
AIRIN5	1	1	3.66	11.61	6	409471	3723174	409471	3723178	409476	3723188	409478	3723188	409483	3723178	409483	3723174
AIRIN4	1	1	3.66	11.61	6	409471	3723136	409471	3723141	409476	3723151	409478	3723151	409483	3723140	409483	3723136
AIRIN1	1	1	3.66	11.61	6	409172	3723196	409169	3723199	409163	3723209	409164	3723211	409176	3723208	409179	3723206
AIRIN2	1	1	3.66	11.61	6	409202	3723175	409199	3723178	409194	3723188	409195	3723190	409206	3723187	409209	3723185
AIRIN3	1	1	3.66	11.61	6	409232	3723154	409229	3723157	409224	3723167	409225	3723169	409236	3723166	409239	3723164

Huntington Beach Energy Project
Attachment DR104-2R Table 10
Operational Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 7 East (X) (m)	Corner 7 North (Y) (m)	Corner 8 East (X) (m)	Corner 8 North (Y) (m)	Corner 9 East (X) (m)	Corner 9 North (Y) (m)	Corner 10 East (X) (m)	Corner 10 North (Y) (m)	Corner 11 East (X) (m)	Corner 11 North (Y) (m)	Corner 12 East (X) (m)	Corner 12 North (Y) (m)
Admin	2	1	3.66	3.35	16	409333	3723205	409321	3723213	409323	3723216	409296	3723237	409296	3723237	409292	3723241
Admin	*	2	*	5.18	14	409323	3723216	409296	3723237	409296	3723237	409292	3723241	409293	3723243	409279	3723252
adminnew	1	1	3.66	12.19	4												
Maint	1	1	3.66	10.67	4												
STG2	1	1	3.66	12.19	4												
ACC2	1	1	3.66	31.70	4												
ACC1	1	1	3.66	31.70	4												
STG1	1	1	3.66	12.19	4												
CTG4	1	1	3.66	28.04	4												
CTG5	1	1	3.66	28.04	4												
CTG6	1	1	3.66	28.04	4												
CTG1	1	1	3.66	28.04	4												
CTG2	1	1	3.66	28.04	4												
CTG3	1	1	3.66	28.04	4												
AIRIN6	1	1	3.66	11.61	6												
AIRIN5	1	1	3.66	11.61	6												
AIRIN4	1	1	3.66	11.61	6												
AIRIN1	1	1	3.66	11.61	6												
AIRIN2	1	1	3.66	11.61	6												
AIRIN3	1	1	3.66	11.61	6												

Huntington Beach Energy Project
Attachment DR104-2R Table 10
Operational Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 13 East (X) (m)	Corner 13 North (Y) (m)	Corner 14 East (X) (m)	Corner 14 North (Y) (m)	Corner 15 East (X) (m)	Corner 15 North (Y) (m)	Corner 16 East (X) (m)	Corner 16 North (Y) (m)
Admin	2	1	3.66	3.35	16	409293	3723243	409279	3723252	409292	3723270	409283	3723276
Admin	*	2	*	5.18	14	409292	3723270	409283	3723276				
adminnew	1	1	3.66	12.19	4								
Maint	1	1	3.66	10.67	4								
STG2	1	1	3.66	12.19	4								
ACC2	1	1	3.66	31.70	4								
ACC1	1	1	3.66	31.70	4								
STG1	1	1	3.66	12.19	4								
CTG4	1	1	3.66	28.04	4								
CTG5	1	1	3.66	28.04	4								
CTG6	1	1	3.66	28.04	4								
CTG1	1	1	3.66	28.04	4								
CTG2	1	1	3.66	28.04	4								
CTG3	1	1	3.66	28.04	4								
AIRIN6	1	1	3.66	11.61	6								
AIRIN5	1	1	3.66	11.61	6								
AIRIN4	1	1	3.66	11.61	6								
AIRIN1	1	1	3.66	11.61	6								
AIRIN2	1	1	3.66	11.61	6								
AIRIN3	1	1	3.66	11.61	6								

Huntington Beach Energy Project
Attachment DR104-2R Table 11
Operational Modeling Results Summary
October 2013

Case 1: 32°F, 100% Load with Duct Burner Firing

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	32.9	-	184	32.9	4.26	3.01	1.04	3.75	-	3.75	-
2009	17.2	-	96.0	23.2	2.22	1.70	0.47	1.70	-	1.70	-
2010	35.3	-	197.3	36.4	4.57	3.27	0.83	2.98	-	2.98	-
2011	30.4	-	169.8	33.6	3.94	2.85	0.77	2.77	-	2.77	-
2012	24.5	-	137	24.0	3.17	2.04	0.69	2.47	-	2.47	-

Case 2: 32°F, 100% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	31.2	-	174	28.8	3.02	2.06	0.70	1.60	-	1.60	-
2009	15.7	-	88.0	20.7	1.52	1.18	0.32	0.74	-	0.74	-
2010	33.4	-	186.4	32.5	3.22	2.26	0.55	1.26	-	1.26	-
2011	28.6	-	159.8	30.4	2.76	1.99	0.54	1.22	-	1.22	-
2012	22.7	-	127	20.8	2.19	1.39	0.44	1.01	-	1.01	-

Case 3: 32°F, 90% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	36.4	-	203	37.3	3.19	2.35	0.83	2.08	-	2.08	-
2009	19.4	-	108.2	23.4	1.70	1.27	0.33	0.84	-	0.84	-
2010	39.6	-	221.1	40.7	3.47	2.54	0.66	1.67	-	1.67	-
2011	34.4	-	192.0	35.1	3.02	2.07	0.57	1.43	-	1.43	-
2012	27.9	-	156	27.7	2.45	1.62	0.51	1.29	-	1.29	-

Case 4: 32°F, 80% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	43.8	-	245	50.7	3.43	2.67	0.99	2.79	-	2.79	-
2009	26.7	-	149.4	26.7	2.10	1.43	0.35	0.97	-	0.97	-
2010	46.9	-	262	51.4	3.68	2.85	0.75	2.11	-	2.11	-
2011	42.8	-	239.1	41.5	3.36	2.15	0.62	1.74	-	1.74	-
2012	36.0	-	201	37.1	2.82	1.95	0.58	1.64	-	1.64	-

Case 5: 32°F, 70% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	49.1	-	274	63.3	3.51	2.93	1.14	3.53	-	3.53	-
2009	32.9	-	184	29.8	2.36	1.62	0.39	1.20	-	1.20	-
2010	53.0	-	296	60.9	3.80	3.07	0.82	2.52	-	2.52	-
2011	49.6	-	277	48.1	3.55	2.22	0.69	2.14	-	2.14	-
2012	42.8	-	239	48.5	3.07	2.23	0.64	1.96	-	1.96	-

Case 6: 66°F, 100% Load with Duct Burner Firing

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	36.3	-	203	38.4	4.47	3.27	1.17	4.41	-	4.41	-
2009	19.5	-	109.0	25.0	2.40	1.80	0.49	1.84	-	1.84	-
2010	39.5	-	220.8	41.7	4.86	3.54	0.93	3.51	-	3.51	-
2011	34.1	-	190.6	36.7	4.20	2.93	0.80	3.05	-	3.05	-
2012	28.1	-	157	28.5	3.46	2.27	0.73	2.76	-	2.76	-

Case 7: 66°F, 100% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	34.2	0.34	191	32.9	3.11	2.19	0.76	1.86	0.19	1.86	0.19
2009	17.5	0.32	97.9	22.1	1.59	1.22	0.33	0.79	0.18	0.79	0.18
2010	36.4	0.27	203.7	36.5	3.31	2.38	0.61	1.48	0.15	1.48	0.15
2011	31.4	0.32	175.2	32.9	2.85	2.01	0.55	1.33	0.17	1.33	0.17
2012	25.8	0.32	144	24.1	2.34	1.48	0.48	1.18	0.18	1.18	0.18

Case 8: 66°F, 90% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	38.8	0.35	217	42.0	3.18	2.42	0.86	2.32	0.21	2.32	0.21
2009	21.7	0.34	121.5	24.6	1.78	1.29	0.33	0.89	0.20	0.89	0.20
2010	42.4	0.28	237.1	44.4	3.48	2.59	0.68	1.82	0.17	1.82	0.17
2011	37.3	0.33	208.6	37.3	3.06	2.04	0.56	1.52	0.19	1.52	0.19
2012	30.8	0.34	172	30.8	2.53	1.69	0.52	1.40	0.20	1.40	0.20

Huntington Beach Energy Project
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Operational Modeling Results Summary
October 2013

Case 9: 66°F, 80% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	44.2	0.37	247	52.6	3.29	2.64	0.97	2.88	0.23	2.88	0.23
2009	27.7	0.36	154.6	27.3	2.06	1.40	0.34	1.01	0.22	1.01	0.22
2010	47.8	0.30	267	52.8	3.56	2.78	0.73	2.17	0.19	2.17	0.19
2011	43.7	0.35	244	42.5	3.26	2.09	0.61	1.79	0.22	1.79	0.22
2012	37.4	0.36	209	38.4	2.79	1.93	0.57	1.69	0.22	1.69	0.22

Case 10: 66°F, 70% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	50.9	0.40	284	68.7	3.39	2.93	1.16	3.85	0.27	3.85	0.27
2009	36.1	0.38	202	31.4	2.41	1.68	0.42	1.39	0.26	1.39	0.26
2010	54.7	0.33	306	64.7	3.65	3.05	0.82	2.71	0.22	2.71	0.22
2011	52.2	0.37	292	50.5	3.48	2.17	0.69	2.29	0.25	2.29	0.25
2012	46.2	0.38	258	52.7	3.08	2.26	0.64	2.13	0.26	2.13	0.26

Case 11: 110°F, 100% Load with Duct Burner Firing

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	38.0	-	213	41.8	4.57	3.43	1.22	4.72	-	4.72	-
2009	21.0	-	117.5	25.7	2.53	1.85	0.49	1.90	-	1.90	-
2010	41.2	-	230.1	44.5	4.95	3.70	0.97	3.74	-	3.74	-
2011	36.1	-	202.0	38.3	4.34	2.98	0.82	3.19	-	3.19	-
2012	29.6	-	165	30.9	3.55	2.41	0.76	2.95	-	2.95	-

Case 12: 110°F, 100% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	35.7	-	199	35.6	3.11	2.25	0.79	2.00	-	2.00	-
2009	18.9	-	105.6	22.8	1.65	1.22	0.33	0.83	-	0.83	-
2010	38.7	-	216.4	39.2	3.38	2.45	0.64	1.61	-	1.61	-
2011	33.5	-	187.0	34.2	2.92	2.01	0.55	1.39	-	1.39	-
2012	27.5	-	154	26.5	2.40	1.54	0.49	1.24	-	1.24	-

Case 13: 110°F, 90% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	44.8	-	250	53.2	3.21	2.56	0.95	2.93	-	2.93	-
2009	28.3	-	158.4	27.4	2.03	1.38	0.33	1.01	-	1.01	-
2010	48.7	-	272	53.5	3.49	2.71	0.71	2.20	-	2.20	-
2011	44.7	-	250	43.0	3.20	2.03	0.59	1.82	-	1.82	-
2012	37.6	-	210	39.3	2.70	1.92	0.55	1.71	-	1.71	-

Case 14: 110°F, 80% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	49.4	-	276	64.6	3.22	2.73	1.07	3.63	-	3.63	-
2009	33.8	-	189	30.1	2.21	1.53	0.37	1.25	-	1.25	-
2010	53.5	-	299	61.9	3.49	2.87	0.77	2.59	-	2.59	-
2011	50.4	-	281	48.5	3.29	2.05	0.64	2.18	-	2.18	-
2012	44.1	-	246	49.9	2.87	2.09	0.59	2.01	-	2.01	-

Case 15: 110°F, 70% Load

	NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
2008	54.1	-	302	78.4	3.21	2.88	1.17	4.36	-	4.36	-
2009	41.4	-	231	36.2	2.46	1.74	0.43	1.61	-	1.61	-
2010	58.6	-	328	71.9	3.48	2.99	0.81	3.00	-	3.00	-
2011	56.1	-	314	54.9	3.33	2.10	0.68	2.54	-	2.54	-
2012	51.4	-	287	59.7	3.05	2.31	0.66	2.45	-	2.45	-

The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 and 0.75, respectively.

Huntington Beach Energy Project
Attachment DR104-2R Table 12
SCAQMD Rule 2005 NO2 Modeling Results Summary
October 2013

Stack 1

Year	1-hr Concentration (µg/m³)	Annual Concentration (µg/m³)
2008	24.96	0.06
2009	23.07	0.06
2010	24.77	0.05
2011	23.4	0.06
2012	24.3	0.06

Stack 2

Year	1-hr Concentration (µg/m³)	Annual Concentration (µg/m³)
2008	25.5	0.06
2009	23.6	0.06
2010	26.9	0.05
2011	29.8	0.06
2012	26.1	0.06

Stack 3

Year	1-hr Concentration (µg/m³)	Annual Concentration (µg/m³)
2008	18.8	0.07
2009	17.7	0.07
2010	20.4	0.06
2011	17.1	0.06
2012	16.2	0.07

Stack 4

Year	1-hr Concentration (µg/m³)	Annual Concentration (µg/m³)
2008	3.70	0.07
2009	3.67	0.06
2010	3.62	0.05
2011	3.58	0.06
2012	3.74	0.06

Stack 5

Year	1-hr Concentration (µg/m³)	Annual Concentration (µg/m³)
2008	7.78	0.07
2009	3.70	0.06
2010	9.33	0.05
2011	6.35	0.06
2012	4.05	0.06

Stack 6

Year	1-hr Concentration (µg/m³)	Annual Concentration (µg/m³)
2008	11.41	0.07
2009	11.19	0.06
2010	10.62	0.05
2011	8.32	0.06
2012	11.40	0.06

The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 and 0.75, respectively.

Huntington Beach Energy Project
Attachment DR104-2R Table 13
Class I SIL and Increment Modeling Results
October 2013

Annual NO2 Concentrations at 50 km Receptor Ring

Year	2008	2009	2010	2011	2012
All	0.013	0.012	0.013	0.013	0.013
Stack 1	0.0022	0.0020	0.0021	0.0021	0.0021
Stack 2	0.0022	0.0020	0.0021	0.0021	0.0021
Stack 3	0.0022	0.0020	0.0021	0.0021	0.0021
Stack 4	0.0022	0.0021	0.0021	0.0021	0.0022
Stack 5	0.0022	0.0021	0.0021	0.0021	0.0022
Stack 6	0.0022	0.0021	0.0021	0.0021	0.0022

Huntington Beach Energy Project
Attachment DR104-2R Table 2
Detailed Exhaust Stack Parameters
October 2013

Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
E01	Horizontal	409329	3723184	3.7	4.6	533	18	0.127
E02	Horizontal	409345	3723173	3.7	4.6	533	18	0.127
E03	Horizontal	409362	3723161	3.7	4.6	533	18	0.127
E04	Horizontal	409378	3723150	3.7	4.6	533	18	0.127
E05	Horizontal	409341	3723203	3.7	4.6	533	18	0.127
E06	Horizontal	409358	3723191	3.7	4.6	533	18	0.127
E07	Horizontal	409374	3723180	3.7	4.6	533	18	0.127
E08	Horizontal	409391	3723168	3.7	4.6	533	18	0.127
E09	Horizontal	409354	3723222	3.7	4.6	533	18	0.127
E10	Horizontal	409371	3723210	3.7	4.6	533	18	0.127
E11	Horizontal	409387	3723199	3.7	4.6	533	18	0.127
E12	Horizontal	409404	3723187	3.7	4.6	533	18	0.127
E13	Horizontal	409395	3723138	3.7	4.6	533	18	0.127
E14	Horizontal	409412	3723126	3.7	4.6	533	18	0.127
E15	Horizontal	409428	3723115	3.7	4.6	533	18	0.127
E16	Horizontal	409445	3723103	3.7	4.6	533	18	0.127
E17	Horizontal	409408	3723157	3.7	4.6	533	18	0.127
E18	Horizontal	409424	3723145	3.7	4.6	533	18	0.127
E19	Horizontal	409441	3723133	3.7	4.6	533	18	0.127
E20	Horizontal	409457	3723122	3.7	4.6	533	18	0.127
E21	Horizontal	409420	3723175	3.7	4.6	533	18	0.127
E22	Horizontal	409437	3723164	3.7	4.6	533	18	0.127
E23	Horizontal	409454	3723152	3.7	4.6	533	18	0.127
E24	Horizontal	409470	3723141	3.7	4.6	533	18	0.127
E25	Horizontal	409487	3723129	3.7	4.6	533	18	0.127
E26	Horizontal	409469	3723294	3.7	4.6	533	18	0.127
E27	Horizontal	409469	3723276	3.7	4.6	533	18	0.127
E28	Horizontal	409469	3723257	3.7	4.6	533	18	0.127
E29	Horizontal	409469	3723239	3.7	4.6	533	18	0.127
E30	Horizontal	409469	3723221	3.7	4.6	533	18	0.127
E31	Horizontal	409469	3723202	3.7	4.6	533	18	0.127
E32	Horizontal	409469	3723184	3.7	4.6	533	18	0.127
E33	Horizontal	409469	3723166	3.7	4.6	533	18	0.127
E34	Horizontal	409488	3723294	3.7	4.6	533	18	0.127
E35	Horizontal	409488	3723276	3.7	4.6	533	18	0.127
E36	Horizontal	409488	3723257	3.7	4.6	533	18	0.127
E37	Horizontal	409488	3723239	3.7	4.6	533	18	0.127
E38	Horizontal	409489	3723221	3.7	4.6	533	18	0.127
E39	Horizontal	409489	3723203	3.7	4.6	533	18	0.127
E40	Horizontal	409489	3723184	3.7	4.6	533	18	0.127
E41	Horizontal	409489	3723166	3.7	4.6	533	18	0.127
E42	Horizontal	409489	3723148	3.7	4.6	533	18	0.127
E43	Horizontal	409508	3723294	3.7	4.6	533	18	0.127
E44	Horizontal	409508	3723276	3.7	4.6	533	18	0.127
E45	Horizontal	409508	3723258	3.7	4.6	533	18	0.127
E46	Horizontal	409508	3723239	3.7	4.6	533	18	0.127
E47	Horizontal	409508	3723221	3.7	4.6	533	18	0.127
E48	Horizontal	409508	3723203	3.7	4.6	533	18	0.127
E49	Horizontal	409508	3723184	3.7	4.6	533	18	0.127
E50	Horizontal	409508	3723166	3.7	4.6	533	18	0.127
E51	Horizontal	409508	3723148	3.7	4.6	533	18	0.127
E52	Horizontal	409527	3723294	3.7	4.6	533	18	0.127
E53	Horizontal	409527	3723276	3.7	4.6	533	18	0.127
E54	Horizontal	409527	3723258	3.7	4.6	533	18	0.127
E55	Horizontal	409527	3723239	3.7	4.6	533	18	0.127
E56	Horizontal	409528	3723221	3.7	4.6	533	18	0.127
E57	Horizontal	409528	3723203	3.7	4.6	533	18	0.127
E58	Horizontal	409528	3723185	3.7	4.6	533	18	0.127
E59	Horizontal	409528	3723166	3.7	4.6	533	18	0.127
E60	Horizontal	409528	3723148	3.7	4.6	533	18	0.127
E61	Horizontal	409547	3723295	3.7	4.6	533	18	0.127

Huntington Beach Energy Project
Attachment DR104-2R Table 2
Detailed Exhaust Stack Parameters
October 2013

Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
E62	Horizontal	409547	3723276	3.7	4.6	533	18	0.127
E63	Horizontal	409547	3723258	3.7	4.6	533	18	0.127
E64	Horizontal	409547	3723240	3.7	4.6	533	18	0.127
E65	Horizontal	409547	3723221	3.7	4.6	533	18	0.127
E66	Horizontal	409547	3723203	3.7	4.6	533	18	0.127
E67	Horizontal	409547	3723185	3.7	4.6	533	18	0.127
E68	Horizontal	409547	3723166	3.7	4.6	533	18	0.127
E69	Horizontal	409547	3723148	3.7	4.6	533	18	0.127
E70	Horizontal	409509	3723130	3.7	4.6	533	18	0.127
W01	Horizontal	409086	3723188	3.7	4.6	533	18	0.127
W02	Horizontal	409103	3723177	3.7	4.6	533	18	0.127
W03	Horizontal	409120	3723165	3.7	4.6	533	18	0.127
W04	Horizontal	409136	3723153	3.7	4.6	533	18	0.127
W05	Horizontal	409153	3723142	3.7	4.6	533	18	0.127
W06	Horizontal	409169	3723130	3.7	4.6	533	18	0.127
W07	Horizontal	409186	3723119	3.7	4.6	533	18	0.127
W08	Horizontal	409203	3723107	3.7	4.6	533	18	0.127
W09	Horizontal	409099	3723207	3.7	4.6	533	18	0.127
W10	Horizontal	409116	3723195	3.7	4.6	533	18	0.127
W11	Horizontal	409132	3723184	3.7	4.6	533	18	0.127
W12	Horizontal	409149	3723172	3.7	4.6	533	18	0.127
W13	Horizontal	409165	3723160	3.7	4.6	533	18	0.127
W14	Horizontal	409182	3723149	3.7	4.6	533	18	0.127
W15	Horizontal	409199	3723137	3.7	4.6	533	18	0.127
W16	Horizontal	409215	3723126	3.7	4.6	533	18	0.127
W17	Horizontal	409112	3723226	3.7	4.6	533	18	0.127
W18	Horizontal	409128	3723214	3.7	4.6	533	18	0.127
W19	Horizontal	409145	3723202	3.7	4.6	533	18	0.127
W20	Horizontal	409162	3723191	3.7	4.6	533	18	0.127
W21	Horizontal	409178	3723179	3.7	4.6	533	18	0.127
W22	Horizontal	409195	3723168	3.7	4.6	533	18	0.127
W23	Horizontal	409211	3723156	3.7	4.6	533	18	0.127
W24	Horizontal	409228	3723144	3.7	4.6	533	18	0.127
W25	Horizontal	409124	3723244	3.7	4.6	533	18	0.127
W26	Horizontal	409141	3723233	3.7	4.6	533	18	0.127
W27	Horizontal	409158	3723221	3.7	4.6	533	18	0.127
W28	Horizontal	409174	3723209	3.7	4.6	533	18	0.127
W29	Horizontal	409191	3723198	3.7	4.6	533	18	0.127
W30	Horizontal	409207	3723186	3.7	4.6	533	18	0.127
W31	Horizontal	409224	3723175	3.7	4.6	533	18	0.127
W32	Horizontal	409241	3723163	3.7	4.6	533	18	0.127
W33	Horizontal	409137	3723263	3.7	4.6	533	18	0.127
W34	Horizontal	409154	3723251	3.7	4.6	533	18	0.127
W35	Horizontal	409170	3723240	3.7	4.6	533	18	0.127
W36	Horizontal	409187	3723228	3.7	4.6	533	18	0.127
W37	Horizontal	409204	3723217	3.7	4.6	533	18	0.127
W38	Horizontal	409220	3723205	3.7	4.6	533	18	0.127
W39	Horizontal	409237	3723193	3.7	4.6	533	18	0.127
W40	Horizontal	409253	3723182	3.7	4.6	533	18	0.127
W41	Horizontal	409150	3723282	3.7	4.6	533	18	0.127
W42	Horizontal	409166	3723270	3.7	4.6	533	18	0.127
W43	Horizontal	409183	3723258	3.7	4.6	533	18	0.127
W44	Horizontal	409200	3723247	3.7	4.6	533	18	0.127
W45	Horizontal	409216	3723235	3.7	4.6	533	18	0.127
W46	Horizontal	409233	3723224	3.7	4.6	533	18	0.127
W47	Horizontal	409249	3723212	3.7	4.6	533	18	0.127
W48	Horizontal	409266	3723200	3.7	4.6	533	18	0.127
W49	Horizontal	409163	3723300	3.7	4.6	533	18	0.127
W50	Horizontal	409179	3723289	3.7	4.6	533	18	0.127
W51	Horizontal	409196	3723277	3.7	4.6	533	18	0.127

Huntington Beach Energy Project
Attachment DR104-2R Table 2
Detailed Exhaust Stack Parameters
October 2013

Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
W52	Horizontal	409212	3723266	3.7	4.6	533	18	0.127
W53	Horizontal	409229	3723254	3.7	4.6	533	18	0.127
W54	Horizontal	409246	3723242	3.7	4.6	533	18	0.127
W55	Horizontal	409262	3723231	3.7	4.6	533	18	0.127
W56	Horizontal	409279	3723219	3.7	4.6	533	18	0.127
W57	Horizontal	409175	3723319	3.7	4.6	533	18	0.127
W58	Horizontal	409192	3723307	3.7	4.6	533	18	0.127
W59	Horizontal	409208	3723296	3.7	4.6	533	18	0.127
W60	Horizontal	409225	3723284	3.7	4.6	533	18	0.127
W61	Horizontal	409242	3723273	3.7	4.6	533	18	0.127
W62	Horizontal	409258	3723261	3.7	4.6	533	18	0.127
W63	Horizontal	409275	3723249	3.7	4.6	533	18	0.127
W64	Horizontal	409291	3723238	3.7	4.6	533	18	0.127
W65	Horizontal	409188	3723338	3.7	4.6	533	18	0.127
W66	Horizontal	409205	3723326	3.7	4.6	533	18	0.127
W67	Horizontal	409221	3723315	3.7	4.6	533	18	0.127
W68	Horizontal	409238	3723303	3.7	4.6	533	18	0.127
W69	Horizontal	409254	3723291	3.7	4.6	533	18	0.127
W70	Horizontal	409271	3723280	3.7	4.6	533	18	0.127
W71	Horizontal	409288	3723268	3.7	4.6	533	18	0.127
W72	Horizontal	409304	3723257	3.7	4.6	533	18	0.127

Huntington Beach Energy Project
Attachment DR104-2R Table 3
Construction Modeling Parameters - Emission Rates
October 2013

Emission Rates for 1-hr, 3-hr, 8-hr, and 24-hr Modeling [a]

	1-hr NO_2		1-hr CO		8-hr CO		1-hr SO_2		3-hr SO_2		24-hr SO_2		24-hr PM_{10}		24-hr $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
FUGE	-	-	-	-	-	-	-	-	-	-	-	-	0.031	0.25	0.003	0.025
FUGW	-	-	-	-	-	-	-	-	-	-	-	-	0.16	1.23	0.031	0.25
E(1-70)	0.24	1.90	0.17	1.33	0.168	1.33	4.9E-04	3.9E-03	4.9E-04	3.9E-03	2.1E-04	1.6E-03	0.0045	0.035	0.0044	0.035
W(1-72)	0.70	5.52	0.70	5.57	0.702	5.57	1.3E-03	1.0E-02	1.3E-03	1.0E-02	5.4E-04	4.2E-03	0.018	0.14	0.018	0.14
Maximum Month	37		37		37		37		37		37		37		37	

Emission Rates for Annual Modeling [a]

	Annual NO_2		Annual PM_{10}		Annual $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
FUGE	-	-	0.02	0.142	0.010	0.08
FUGW	-	-	0.06	0.462	-	-
E(1-70)	0.24	1.88	0.00	0.020	0.014	0.11
W(1-72)	-	-	0.01	0.068	-	-
Maximum Months	8-19		36-47		9-20	

[a] Emission rates for exhaust point sources (E and W source groups) are presented as the sum total for all sources in the respective group.

0.00338 0.02683 0.00012 0.00094 0.0002 0.00159

Huntington Beach Energy Project
Attachment DR104-2R Table 4
Construction Modeling Results
October 2013

		NO_2 ($\mu g/m^3$)			CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Source	Year	1-hr [a]	Federal 1-hr [b]	Annual [a]	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
ALL		91.7	181	7.33	112	93.2	0.22	0.20	0.037	72.8	14.6	15.5	3.60
FUG		-	-	-	-	-	-	-	-	71.8	14.2	14.5	3.27
EXH	2008	91.7	91.7	7.33	112	93.2	0.22	0.20	0.037	1.22	0.36	1.22	0.58
EAST		29.0	29.0	7.33	25.5	20.0	0.075	0.071	0.015	16.6	5.98	1.89	3.60
WEST		84.4	84.4	-	106	92.7	0.19	0.18	0.036	72.8	14.2	15.5	-
ALL		90.7	182	7.06	110	86.6	0.21	0.21	0.038	70.1	14.1	14.9	3.62
FUG		-	-	-	-	-	-	-	-	69.1	13.7	13.9	3.28
EXH	2009	90.7	90.7	7.06	110	86.6	0.21	0.21	0.038	1.26	0.36	1.26	0.56
EAST		29.1	29.1	7.06	25.5	18.9	0.075	0.070	0.015	16.2	6.01	1.83	3.62
WEST		84.2	106	-	106	85.7	0.19	0.19	0.037	69.6	13.7	14.8	-
ALL		90.5	182	7.07	110	92.0	0.21	0.20	0.040	72.6	14.1	15.5	3.66
FUG		-	-	-	-	-	-	-	-	71.5	13.7	14.4	3.33
EXH	2010	90.5	90.5	7.07	110	92.0	0.21	0.20	0.040	1.26	0.36	1.26	0.56
EAST		29.4	29.4	7.07	25.8	19.6	0.076	0.070	0.015	16.9	6.09	1.85	3.66
WEST		83.9	83.9	-	106	90.5	0.19	0.18	0.037	72.6	13.7	15.5	-
ALL		90.4	181	7.08	109	90.6	0.21	0.20	0.037	67.0	14.0	14.4	3.67
FUG		-	-	-	-	-	-	-	-	65.8	13.6	13.3	3.33
EXH	2011	90.4	90.4	7.08	109	90.6	0.21	0.20	0.037	1.22	0.36	1.22	0.56
EAST		29.3	29.3	7.08	25.7	20.8	0.075	0.070	0.015	16.5	6.10	1.77	3.67
WEST		84.2	84.2	-	106	90.1	0.19	0.18	0.036	66.9	13.7	14.4	-
ALL		91.0	183	7.28	110	87.1	0.21	0.20	0.038	69.7	14.5	14.8	3.72
FUG		-	-	-	-	-	-	-	-	68.9	14.2	13.8	3.38
EXH	2012	91.0	91.0	7.28	110	87.1	0.21	0.20	0.038	1.27	0.37	1.27	0.58
EAST		29.3	29.3	7.28	25.7	19.2	0.076	0.069	0.016	17.0	6.19	1.91	3.72
WEST		84.2	84.2	-	106	86.2	0.19	0.19	0.037	69.4	14.2	14.7	-

[a] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 (EPA, 2011) and 0.75 (EPA, 2005), respectively.
[b] Total predicted concentration for the Federal 1-hour NO_2 standard (source ALL) is the maximum modeled concentration paired with the three-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.

Attachment DR104-3R
Supporting Documentation for Cumulative Impacts Analysis

Huntington Beach Energy Project
Attachment DR104-3R Table 1
Cumulative Modeling Parameters - Stack Parameters
October 2013

Point Sources

Facility	Source ID	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
HBEP (1-hr NO_2, CO)	Stack 1	409185	3723252	3.7	36.6	461	15.4	5.49
	Stack 2	409216	3723231	3.7	36.6	461	15.4	5.49
	Stack 3	409245	3723210	3.7	36.6	461	15.4	5.49
	Stack 4	409522	3723157	3.7	36.6	461	15.4	5.49
	Stack 5	409522	3723194	3.7	36.6	461	15.4	5.49
	Stack 6	409522	3723230	3.7	36.6	461	15.4	5.49
HBEP (SO_2, 24-hr PM_{10}, 24-hr $PM_{2.5}$)	Stack 1	409185	3723252	3.7	36.6	455	21.8	5.49
	Stack 2	409216	3723231	3.7	36.6	455	21.8	5.49
	Stack 3	409245	3723210	3.7	36.6	455	21.8	5.49
	Stack 4	409522	3723157	3.7	36.6	455	21.8	5.49
	Stack 5	409522	3723194	3.7	36.6	455	21.8	5.49
	Stack 6	409522	3723230	3.7	36.6	455	21.8	5.49
HBEP (annual NOx, annual PM_{10}, annual $PM_{2.5}$)	Stack 1	409185	3723252	3.7	36.6	460	16.7	5.49
	Stack 2	409216	3723231	3.7	36.6	460	16.7	5.49
	Stack 3	409245	3723210	3.7	36.6	460	16.7	5.49
	Stack 4	409522	3723157	3.7	36.6	460	16.7	5.49
	Stack 5	409522	3723194	3.7	36.6	460	16.7	5.49
	Stack 6	409522	3723230	3.7	36.6	460	16.7	5.49
OC Sanitation 1	OC11	412725	3728250	7.7	18.9	533	17.9	0.76
	OC12	412725	3728250	7.7	12.8	455	9.3	0.46
OC Sanitation 2	OC22	411100	3722400	1.6	8.5	587	33.9	0.39
Arlon Graphics	AG	414875	3730325	13.5	7.6	364	24.5	1.32

Huntington Beach Energy Project
Attachment DR104-3R Table 2
Cumulative Modeling Parameters - Emission Rates
October 2013

Emission Rates for 1-hr, 3-hr, 8-hr, and 24-hr Modeling

	1-hr NO_2		1-hr CO		8-hr CO		1-hr SO_2		3-hr SO_2		24-hr SO_2		24-hr PM_{10}		24-hr $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
Stack 1	3.21	25.5	14.5	115	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 2	3.21	25.5	14.5	115	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 3	3.21	25.5	14.5	115	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 4	3.21	25.5	14.5	115	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 5	3.21	25.5	14.5	115	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 6	3.21	25.5	14.5	115	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
OC11	2.90	23.01	6.94	55.1	6.94	55.1	0.28	2.25	0.28	2.25	0.28	2.25	0.28	2.25	0.28	2.25
OC12	0.03	0.22	0.11	0.90	0.11	0.90	0.016	0.13	0.016	0.13	0.016	0.13	0.007	0.056	0.0071	0.056
OC22	-	-	-	-	2.60	20.6	-	-	0.15	1.19	0.019	0.15	0.041	0.32	0.041	0.32
AG	-	-	0.042	0.34	0.042	0.34	0.00026	0.0021	0.00026	0.0021	0.00026	0.0021	0.0021	0.017	0.0021	0.017

Emission Rates for Annual Modeling

	Annual NO_2		Annual PM_{10}		Annual $PM_{2.5}$	
Source ID	(g/s)	(tpy)	(g/s)	(tpy)	(g/s)	(tpy)
Stack 1	1.18	40.9	0.52	18.0	0.52	18.0
Stack 2	1.18	40.9	0.52	18.0	0.52	18.0
Stack 3	1.18	40.9	0.52	18.0	0.52	18.0
Stack 4	1.18	40.9	0.52	18.0	0.52	18.0
Stack 5	1.18	40.9	0.52	18.0	0.52	18.0
Stack 6	1.18	40.9	0.52	18.0	0.52	18.0
OC11	1.93	67.2	0.19	6.57	0.19	6.57
OC12	0.046	1.60	0.017	0.60	0.017	0.60
OC22	0.15	5.38	0.0049	0.17	0.0049	0.17
AG	-	-	0.0021	0.073	0.0021	0.073

Huntington Beach Energy Project
Attachment DR104-3R Table 3
Cumulative Modeling Results Summary
October 2013

		NO_2 ($\mu g/m^3$)			CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Source Group	Year	1-hr [a]	Federal 1-hr [b]	Annual [a]	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
ALL	2005	54.1	137	0.73	302	78.4	4.57	4.08	1.22	4.73	0.28	4.73	0.28
	2006	41.4	133	0.69	231	36.3	2.53	3.13	0.58	1.97	0.27	1.97	0.27
	2007	58.6	142	0.69	328	71.9	4.95	3.70	0.98	3.76	0.23	3.76	0.23
	2008	56.1	148	0.69	314	60.6	4.34	3.53	0.83	3.21	0.26	3.21	0.26
	2009	51.4	110	0.71	287	59.9	3.55	3.70	0.76	2.95	0.27	2.95	0.27
HBEP	2005	54.1	54.1	0.40	302	78.4	4.57	3.43	1.22	4.72	0.27	4.72	0.27
	2006	41.4	41.4	0.38	231	36.2	2.53	1.85	0.49	1.90	0.26	1.90	0.26
	2007	58.6	58.6	0.33	328	71.9	4.95	3.70	0.97	3.74	0.22	3.74	0.22
	2008	56.1	56.1	0.37	314	54.9	4.34	2.98	0.82	3.19	0.25	3.19	0.25
	2009	51.4	51.4	0.38	287	59.7	3.55	2.41	0.76	2.95	0.26	2.95	0.26
OC1	2005	18.2	18.2	0.63	54.9	38.9	2.38	2.12	0.69	0.65	0.11	0.65	0.11
	2006	17.0	17.0	0.60	51.5	18.2	2.27	1.74	0.57	0.52	0.10	0.52	0.10
	2007	18.0	18.0	0.60	54.5	38.3	2.36	1.83	0.66	0.60	0.10	0.60	0.10
	2008	17.3	17.3	0.60	52.4	24.8	2.30	1.65	0.46	0.43	0.10	0.43	0.10
	2009	17.4	17.4	0.62	52.6	26.3	2.28	1.26	0.46	0.44	0.10	0.44	0.10
OC2	2005	-	-	0.21	-	61.5	-	4.08	0.211	0.460	0.0089	0.460	0.0089
	2006	-	-	0.22	-	32.5	-	3.13	0.175	0.380	0.0090	0.380	0.0090
	2007	-	-	0.22	-	54.5	-	3.67	0.199	0.432	0.0091	0.432	0.0091
	2008	-	-	0.22	-	60.5	-	3.53	0.225	0.491	0.0091	0.491	0.0091
	2009	-	-	0.22	-	51.2	-	3.70	0.170	0.371	0.0092	0.371	0.0092
AG	2005	-	-	-	0.99	0.49	0.0061	0.0036	0.0017	0.0134	0.0046	0.0134	0.0046
	2006	-	-	-	1.22	0.55	0.0075	0.0036	0.0018	0.0146	0.0044	0.0146	0.0044
	2007	-	-	-	1.14	0.57	0.0070	0.0061	0.0016	0.0128	0.0042	0.0128	0.0042
	2008	-	-	-	0.61	0.53	0.0038	0.0037	0.0016	0.0124	0.0043	0.0124	0.0043
	2009	-	-	-	0.62	0.53	0.0038	0.0036	0.0018	0.0144	0.0044	0.0144	0.0044

[a] The maximum 1-hour and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 and 0.75, respectively.

[b] Total predicted concentration for the Federal 1-hour NO_2 standard (source ALL) is the maximum modeled concentration paired with the three-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.

Attachment DR104-4R
Supporting Documentation for
Construction Overlap Impacts Analysis

Huntington Beach Energy Project
Attachment DR104-4R Table 1
Block 1 Operation and Block 2 Construction Source Parameters for AERMOD Input
October 2013

Point Sources

Pollutant	Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
1-hr NO_2, CO	Stack 4	Default	409522	3723157	3.66	36.6	461	15.4	5.49
	Stack 5	Default	409522	3723194	3.66	36.6	461	15.4	5.49
	Stack 6	Default	409522	3723230	3.66	36.6	461	15.4	5.49
SO_2, 24-hr PM_{10}, 24-hr $PM_{2.5}$	Stack 4	Default	409522	3723157	3.66	36.6	455	21.8	5.49
	Stack 5	Default	409522	3723194	3.66	36.6	455	21.8	5.49
	Stack 6	Default	409522	3723230	3.66	36.6	455	21.8	5.49
Annual NO_2, Annual PM_{10}, Annual $PM_{2.5}$	Stack 4	Default	409522	3723157	3.66	36.6	460	16.7	5.49
	Stack 5	Default	409522	3723194	3.66	36.6	460	16.7	5.49
	Stack 6	Default	409522	3723230	3.66	36.6	460	16.7	5.49
All	W01	Horizontal	409086	3723188	3.7	4.6	533	18	0.127
All	W02	Horizontal	409103	3723177	3.7	4.6	533	18	0.127
All	W03	Horizontal	409120	3723165	3.7	4.6	533	18	0.127
All	W04	Horizontal	409136	3723153	3.7	4.6	533	18	0.127
All	W05	Horizontal	409153	3723142	3.7	4.6	533	18	0.127
All	W06	Horizontal	409169	3723130	3.7	4.6	533	18	0.127
All	W07	Horizontal	409186	3723119	3.7	4.6	533	18	0.127
All	W08	Horizontal	409203	3723107	3.7	4.6	533	18	0.127
All	W09	Horizontal	409099	3723207	3.7	4.6	533	18	0.127
All	W10	Horizontal	409116	3723195	3.7	4.6	533	18	0.127
All	W11	Horizontal	409132	3723184	3.7	4.6	533	18	0.127
All	W12	Horizontal	409149	3723172	3.7	4.6	533	18	0.127
All	W13	Horizontal	409165	3723160	3.7	4.6	533	18	0.127
All	W14	Horizontal	409182	3723149	3.7	4.6	533	18	0.127
All	W15	Horizontal	409199	3723137	3.7	4.6	533	18	0.127
All	W16	Horizontal	409215	3723126	3.7	4.6	533	18	0.127
All	W17	Horizontal	409112	3723226	3.7	4.6	533	18	0.127
All	W18	Horizontal	409128	3723214	3.7	4.6	533	18	0.127
All	W19	Horizontal	409145	3723202	3.7	4.6	533	18	0.127
All	W20	Horizontal	409162	3723191	3.7	4.6	533	18	0.127
All	W21	Horizontal	409178	3723179	3.7	4.6	533	18	0.127
All	W22	Horizontal	409195	3723168	3.7	4.6	533	18	0.127
All	W23	Horizontal	409211	3723156	3.7	4.6	533	18	0.127
All	W24	Horizontal	409228	3723144	3.7	4.6	533	18	0.127
All	W25	Horizontal	409124	3723244	3.7	4.6	533	18	0.127
All	W26	Horizontal	409141	3723233	3.7	4.6	533	18	0.127
All	W27	Horizontal	409158	3723221	3.7	4.6	533	18	0.127
All	W28	Horizontal	409174	3723209	3.7	4.6	533	18	0.127
All	W29	Horizontal	409191	3723198	3.7	4.6	533	18	0.127
All	W30	Horizontal	409207	3723186	3.7	4.6	533	18	0.127
All	W31	Horizontal	409224	3723175	3.7	4.6	533	18	0.127
All	W32	Horizontal	409241	3723163	3.7	4.6	533	18	0.127
All	W33	Horizontal	409137	3723263	3.7	4.6	533	18	0.127
All	W34	Horizontal	409154	3723251	3.7	4.6	533	18	0.127
All	W35	Horizontal	409170	3723240	3.7	4.6	533	18	0.127
All	W36	Horizontal	409187	3723228	3.7	4.6	533	18	0.127
All	W37	Horizontal	409204	3723217	3.7	4.6	533	18	0.127
All	W38	Horizontal	409220	3723205	3.7	4.6	533	18	0.127
All	W39	Horizontal	409237	3723193	3.7	4.6	533	18	0.127
All	W40	Horizontal	409253	3723182	3.7	4.6	533	18	0.127
All	W41	Horizontal	409150	3723282	3.7	4.6	533	18	0.127
All	W42	Horizontal	409166	3723270	3.7	4.6	533	18	0.127
All	W43	Horizontal	409183	3723258	3.7	4.6	533	18	0.127
All	W44	Horizontal	409200	3723247	3.7	4.6	533	18	0.127
All	W45	Horizontal	409216	3723235	3.7	4.6	533	18	0.127
All	W46	Horizontal	409233	3723224	3.7	4.6	533	18	0.127
All	W47	Horizontal	409249	3723212	3.7	4.6	533	18	0.127
All	W48	Horizontal	409266	3723200	3.7	4.6	533	18	0.127
All	W49	Horizontal	409163	3723300	3.7	4.6	533	18	0.127
All	W50	Horizontal	409179	3723289	3.7	4.6	533	18	0.127
All	W51	Horizontal	409196	3723277	3.7	4.6	533	18	0.127
All	W52	Horizontal	409212	3723266	3.7	4.6	533	18	0.127
All	W53	Horizontal	409229	3723254	3.7	4.6	533	18	0.127
All	W54	Horizontal	409246	3723242	3.7	4.6	533	18	0.127
All	W55	Horizontal	409262	3723231	3.7	4.6	533	18	0.127
All	W56	Horizontal	409279	3723219	3.7	4.6	533	18	0.127

Huntington Beach Energy Project
Attachment DR104-4R Table 1
Block 1 Operation and Block 2 Construction Source Parameters for AERMOD Input
October 2013

Point Sources

Pollutant	Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
All	W57	Horizontal	409175	3723319	3.7	4.6	533	18	0.127
All	W58	Horizontal	409192	3723307	3.7	4.6	533	18	0.127
All	W59	Horizontal	409208	3723296	3.7	4.6	533	18	0.127
All	W60	Horizontal	409225	3723284	3.7	4.6	533	18	0.127
All	W61	Horizontal	409242	3723273	3.7	4.6	533	18	0.127
All	W62	Horizontal	409258	3723261	3.7	4.6	533	18	0.127
All	W63	Horizontal	409275	3723249	3.7	4.6	533	18	0.127
All	W64	Horizontal	409291	3723238	3.7	4.6	533	18	0.127
All	W65	Horizontal	409188	3723338	3.7	4.6	533	18	0.127
All	W66	Horizontal	409205	3723326	3.7	4.6	533	18	0.127
All	W67	Horizontal	409221	3723315	3.7	4.6	533	18	0.127
All	W68	Horizontal	409238	3723303	3.7	4.6	533	18	0.127
All	W69	Horizontal	409254	3723291	3.7	4.6	533	18	0.127
All	W70	Horizontal	409271	3723280	3.7	4.6	533	18	0.127
All	W71	Horizontal	409288	3723268	3.7	4.6	533	18	0.127
All	W72	Horizontal	409304	3723257	3.7	4.6	533	18	0.127

Area Sources

Source ID	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North	Vertical Dimension (m)
FUGW	409066	3723183	3.7	0.0	165	215	35	1.0

Huntington Beach Energy Project
Attachment DR104-4R Table 2
Block 1 Operation and Block 2 Construction Modeling Parameters - Emission Rates
October 2013

Emission Rates for 1-hr, 3-hr, 8-hr, and 24-hr Modeling [a, b]

	1-hr NO_2		1-hr CO		8-hr CO		1-hr SO_2		3-hr SO_2		24-hr SO_2		24-hr PM_{10}		24-hr $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
Stack 4	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 5	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 6	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
W(1-72)	0.52	4.12	0.41	3.23	0.41	3.23	1.16E-03	9.17E-03	1.16E-03	9.17E-03	4.82E-04	3.82E-03	0.008	0.066	0.010	0.076
FUGW	-	-	-	-	-	-	-	-	-	-	-	-	0.040	0.317	0.0031	0.025
Maximum Month	48		48		48		48		48		48		46		48	

Emission Rates for Annual Modeling [a, b]

	Annual NO_2		Annual PM_{10}		Annual $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
Stack 4	0.94	7.47	0.48	3.78	0.48	3.78
Stack 5	0.94	7.47	0.48	3.78	0.48	3.78
Stack 6	0.94	7.47	0.48	3.78	0.48	3.78
W(1-72)	0.11	0.90	0.005	0.041	0.005	0.041
FUGW	-	-	0.024	0.19	0.002	0.019
Maximum Months	46 - 57		46 - 57		46 - 57	

[a] Emission rates for construction exhaust point sources, W(1-72) source group, are presented as the sum total for all sources in the group.

[b] Block 1 operation emissions were obtained from AFC Table 5.1-24, submitted June 2012. Block 2 construction emissions were obtained from Table 5.1A.46R from Appendix 5.1AR, which is included with this submission as Attachment DR104-5.

Huntington Beach Energy Project
Attachment DR104-4R Table 3
Block 1 Operation and Block 2 Construction Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 1 North (Y) (m)	Corner 2 East (X) (m)	Corner 2 North (Y) (m)
ACC1	1	1	3.66	31.7	4	409474	3723311	409536	3723311
STG1	1	1	3.66	12.2	4	409538	3723247	409556	3723247
CTG4	1	1	3.66	28.0	4	409500	3723162	409517	3723162
CTG5	1	1	3.66	28.0	4	409500	3723198	409517	3723198
CTG6	1	1	3.66	28.0	4	409499	3723236	409517	3723236
AIRIN6	1	1	3.66	11.6	6	409470	3723211	409470	3723215
AIRIN5	1	1	3.66	11.6	6	409471	3723174	409471	3723178
AIRIN4	1	1	3.66	11.6	6	409471	3723136	409471	3723141
B1	2	1	3.66	23.2	4	409293	3723102	409312	3723128
B1	*	2	*	37.6	4	409301	3723114	409312	3723128
B2	2	1	3.66	23.2	4	409252	3723127	409272	3723153
B2	*	2	*	37.6	4	409261	3723139	409272	3723153

Tank Name	Base Elevation (m)	Center East (X) (m)	Center North (Y) (m)	Tank Height (m)	Tank Diameter (m)
Stack12	3.66	409274	3723095	61.0	6.27

Huntington Beach Energy Project
Attachment DR104-4R Table 3
Block 1 Operation and Block 2 Construction Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Corner 3 East (X) (m)	Corner 3 North (Y) (m)	Corner 4 East (X) (m)	Corner 4 North (Y) (m)	Corner 5 East (X) (m)	Corner 5 North (Y) (m)
ACC1	1	1	3.66	31.7	409537	3723274	409474	3723274		
STG1	1	1	3.66	12.2	409556	3723231	409538	3723231		
CTG4	1	1	3.66	28.0	409517	3723149	409500	3723150		
CTG5	1	1	3.66	28.0	409517	3723186	409500	3723186		
CTG6	1	1	3.66	28.0	409517	3723223	409499	3723224		
AIRIN6	1	1	3.66	11.6	409475	3723225	409477	3723225	409482	3723215
AIRIN5	1	1	3.66	11.6	409476	3723188	409478	3723188	409483	3723178
AIRIN4	1	1	3.66	11.6	409476	3723151	409478	3723151	409483	3723140
B1	2	1	3.66	23.2	409335	3723112	409317	3723086		
B1	*	2	*	37.6	409335	3723112	409326	3723098		
B2	2	1	3.66	23.2	409295	3723137	409277	3723111		
B2	*	2	*	37.6	409295	3723137	409285	3723123		

Tank Name	Base Elevation (m)	Center East (X) (m)	Center North (Y) (m)	Tank Height (m)
Stack12	3.66	409274	3723095	61.0

Huntington Beach Energy Project
Attachment DR104-4R Table 3
Block 1 Operation and Block 2 Construction Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Corner 6 East (X) (m)	Corner 6 North (Y) (m)
ACC1	1	1	3.66	31.7		
STG1	1	1	3.66	12.2		
CTG4	1	1	3.66	28.0		
CTG5	1	1	3.66	28.0		
CTG6	1	1	3.66	28.0		
AIRIN6	1	1	3.66	11.6	409482	3723210
AIRIN5	1	1	3.66	11.6	409483	3723174
AIRIN4	1	1	3.66	11.6	409483	3723136
B1	2	1	3.66	23.2		
B1	*	2	*	37.6		
B2	2	1	3.66	23.2		
B2	*	2	*	37.6		

Tank Name	Base Elevation (m)	Center East (X) (m)	Center North (Y) (m)	Tank Height (m)
Stack12	3.66	409274	3723095	61.0

Huntington Beach Energy Project
Attachment DR104-4R Table 4
Block 1 Operation and Block 2 Construction Modeling Results
October 2013

		NO_2 ($\mu g/m^3$)		CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Source	Year	1-hr	Annual	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
ALL		63.0	3.38	97.9	53.8	1.32	0.83	0.24	18.9	5.96	2.08	0.79
CONSTRUCTION	2008	62.9	3.37	61.8	53.8	0.18	0.16	0.032	18.9	5.95	2.06	0.78
OPERATION		17.5	0.24	97.9	17.4	1.32	0.83	0.24	0.91	0.16	0.91	0.16
ALL		62.8	3.30	72.5	49.7	1.05	0.84	0.30	18.1	5.75	1.98	0.76
CONSTRUCTION	2009	62.8	3.28	61.6	49.7	0.17	0.17	0.034	18.1	5.74	1.97	0.75
OPERATION		12.9	0.22	72.4	15.2	1.05	0.84	0.30	1.15	0.15	1.15	0.15
ALL		62.6	3.31	87.8	52.5	1.09	0.85	0.24	18.9	5.73	2.04	0.76
CONSTRUCTION	2010	62.6	3.29	61.5	52.5	0.17	0.16	0.033	18.9	5.72	2.03	0.75
OPERATION		15.7	0.18	87.7	15.7	1.09	0.85	0.23	0.90	0.12	0.90	0.12
ALL		62.9	3.30	85.5	52.3	1.08	1.01	0.29	17.5	5.72	1.97	0.76
CONSTRUCTION	2011	62.8	3.28	61.6	52.3	0.17	0.17	0.032	17.5	5.71	1.95	0.75
OPERATION		15.3	0.22	85.5	22.5	1.08	1.01	0.29	1.12	0.15	1.12	0.15
ALL		62.8	3.38	71.0	50.1	1.00	0.81	0.36	18.0	5.95	1.95	0.79
CONSTRUCTION	2012	62.8	3.37	61.6	50.0	0.17	0.17	0.034	18.0	5.94	1.94	0.78
OPERATION		12.7	0.22	70.9	18.5	1.00	0.81	0.36	1.40	0.15	1.40	0.15

The maximum 1-hr and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 and 0.75, respectively.

Huntington Beach Energy Project
Attachment DR104-4R Table 5
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Source Parameters for AERMOD Input
October 2013

Point Sources

Pollutant	Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
1-hr NO_2, CO	Stack 1	Default	409185	3723252	3.66	36.6	461	15.4	5.49
	Stack 2	Default	409216	3723231	3.66	36.6	461	15.4	5.49
	Stack 3	Default	409245	3723210	3.66	36.6	461	15.4	5.49
	Stack 4	Default	409522	3723157	3.66	36.6	461	15.4	5.49
	Stack 5	Default	409522	3723194	3.66	36.6	461	15.4	5.49
	Stack 6	Default	409522	3723230	3.66	36.6	461	15.4	5.49
SO_2, 24-hr PM_{10}, 24-hr $PM_{2.5}$	Stack 1	Default	409185	3723252	3.66	36.6	455	21.8	5.49
	Stack 2	Default	409216	3723231	3.66	36.6	455	21.8	5.49
	Stack 3	Default	409245	3723210	3.66	36.6	455	21.8	5.49
	Stack 4	Default	409522	3723157	3.66	36.6	455	21.8	5.49
	Stack 5	Default	409522	3723194	3.66	36.6	455	21.8	5.49
	Stack 6	Default	409522	3723230	3.66	36.6	455	21.8	5.49
Annual NO_2, Annual PM_{10}, Annual $PM_{2.5}$	Stack 1	Default	409185	3723252	3.66	36.6	460	16.7	5.49
	Stack 2	Default	409216	3723231	3.66	36.6	460	16.7	5.49
	Stack 3	Default	409245	3723210	3.66	36.6	460	16.7	5.49
	Stack 4	Default	409522	3723157	3.66	36.6	460	16.7	5.49
	Stack 5	Default	409522	3723194	3.66	36.6	460	16.7	5.49
	Stack 6	Default	409522	3723230	3.66	36.6	460	16.7	5.49
All	S01	Horizontal	409219	3723095	3.66	4.60	533	18.0	0.127
All	S02	Horizontal	409236	3723084	3.66	4.60	533	18.0	0.127
All	S03	Horizontal	409252	3723072	3.66	4.60	533	18.0	0.127
All	S04	Horizontal	409269	3723061	3.66	4.60	533	18.0	0.127
All	S05	Horizontal	409286	3723049	3.66	4.60	533	18.0	0.127
All	S06	Horizontal	409302	3723037	3.66	4.60	533	18.0	0.127
All	S07	Horizontal	409232	3723114	3.66	4.60	533	18.0	0.127
All	S08	Horizontal	409248	3723102	3.66	4.60	533	18.0	0.127
All	S09	Horizontal	409265	3723091	3.66	4.60	533	18.0	0.127
All	S10	Horizontal	409282	3723079	3.66	4.60	533	18.0	0.127
All	S11	Horizontal	409298	3723068	3.66	4.60	533	18.0	0.127
All	S12	Horizontal	409315	3723056	3.66	4.60	533	18.0	0.127
All	S13	Horizontal	409245	3723133	3.66	4.60	533	18.0	0.127
All	S14	Horizontal	409261	3723121	3.66	4.60	533	18.0	0.127
All	S15	Horizontal	409278	3723110	3.66	4.60	533	18.0	0.127
All	S16	Horizontal	409294	3723098	3.66	4.60	533	18.0	0.127
All	S17	Horizontal	409311	3723086	3.66	4.60	533	18.0	0.127
All	S18	Horizontal	409328	3723075	3.66	4.60	533	18.0	0.127
All	S19	Horizontal	409257	3723151	3.66	4.60	533	18.0	0.127
All	S20	Horizontal	409274	3723140	3.66	4.60	533	18.0	0.127
All	S21	Horizontal	409290	3723128	3.66	4.60	533	18.0	0.127
All	S22	Horizontal	409307	3723117	3.66	4.60	533	18.0	0.127
All	S23	Horizontal	409324	3723105	3.66	4.60	533	18.0	0.127
All	S24	Horizontal	409340	3723093	3.66	4.60	533	18.0	0.127
All	S25	Horizontal	409270	3723170	3.66	4.60	533	18.0	0.127
All	S26	Horizontal	409287	3723159	3.66	4.60	533	18.0	0.127
All	S27	Horizontal	409303	3723147	3.66	4.60	533	18.0	0.127
All	S28	Horizontal	409320	3723135	3.66	4.60	533	18.0	0.127
All	S29	Horizontal	409336	3723124	3.66	4.60	533	18.0	0.127
All	S30	Horizontal	409353	3723112	3.66	4.60	533	18.0	0.127
All	S31	Horizontal	409283	3723189	3.66	4.60	533	18.0	0.127
All	S32	Horizontal	409299	3723177	3.66	4.60	533	18.0	0.127
All	S33	Horizontal	409316	3723166	3.66	4.60	533	18.0	0.127
All	S34	Horizontal	409332	3723154	3.66	4.60	533	18.0	0.127
All	S35	Horizontal	409349	3723142	3.66	4.60	533	18.0	0.127
All	S36	Horizontal	409366	3723131	3.66	4.60	533	18.0	0.127
All	S37	Horizontal	409331	3723044	3.66	4.60	533	18.0	0.127
All	S38	Horizontal	409344	3723063	3.66	4.60	533	18.0	0.127
All	S39	Horizontal	409357	3723082	3.66	4.60	533	18.0	0.127
All	S40	Horizontal	409373	3723070	3.66	4.60	533	18.0	0.127
All	S41	Horizontal	409370	3723101	3.66	4.60	533	18.0	0.127
All	S42	Horizontal	409386	3723089	3.66	4.60	533	18.0	0.127
All	S43	Horizontal	409403	3723077	3.66	4.60	533	18.0	0.127
All	S44	Horizontal	409382	3723119	3.66	4.60	533	18.0	0.127
All	S45	Horizontal	409399	3723108	3.66	4.60	533	18.0	0.127
All	S46	Horizontal	409415	3723096	3.66	4.60	533	18.0	0.127

Area Poly Sources

Source ID	Base Elevation (m)	Release Height (m)	Number of Vertices	Vertical Dimension (m)	Easting (X1) (m)	Northing (Y1) (m)	Easting (X2) (m)	Northing (Y2) (m)	Easting (X3) (m)	Northing (Y3) (m)	Easting (X4) (m)	Northing (Y4) (m)
FUGS	3.66	0.0	4.0	1.0	409199	3723086	409281	3723203	409449	3723089	409304	3723012

Huntington Beach Energy Project
Attachment DR104-4R Table 6
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Modeling Parameters - Emission Rates
October 2013

Emission Rates for 1-hr, 3-hr, 8-hr, and 24-hr Modeling [a, b]

	1-hr NO_2		1-hr CO		8-hr CO		1-hr SO_2		3-hr SO_2		24-hr SO_2		24-hr PM_{10}		24-hr $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
Stack 1	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 2	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 3	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 4	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 5	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
Stack 6	3.21	25.5	14.4	114	5.72	45.4	0.31	2.45	0.31	2.45	0.31	2.45	1.20	9.50	1.20	9.50
S(1-46)	0.59	4.64	0.76	6.04	0.76	6.04	1.59E-03	1.26E-02	1.59E-03	1.26E-02	6.63E-04	5.26E-03	0.012	0.099	0.012	0.099
FUGS	-	-	-	-	-	-	-	-	-	-	-	-	0.14	1.09	0.024	0.187
Maximum Month	80		80		80		80		80		80		80		80	

Emission Rates for Annual Modeling [a, b]

	Annual NO_2		Annual PM_{10}		Annual $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
Stack 1	0.94	7.47	0.48	3.78	0.48	3.78
Stack 2	0.94	7.47	0.48	3.78	0.48	3.78
Stack 3	0.94	7.47	0.48	3.78	0.48	3.78
Stack 4	0.94	7.47	0.48	3.78	0.48	3.78
Stack 5	0.94	7.47	0.48	3.78	0.48	3.78
Stack 6	0.94	7.47	0.48	3.78	0.48	3.78
S(1-46)	0.15	1.19	0.007	0.058	0.007	0.058
FUGS	-	-	0.08	0.61	0.012	0.092
Maximum Months	78-89		77-88		77-88	

[a] Emission rates for construction exhaust point sources, S(1-46) source group, are presented as the sum total for all sources in the group.

[b] Block 1 and 2 operation emissions were obtained from AFC Table 5.1-24, submitted in June 2012, and Units 1 and 2 demolition emissions were obtained from Table 5.1A.46R from Appendix 5.1AR, which is included with this submission as Attachment DR104-5.

Huntington Beach Energy Project
Attachment DR104-4R Table 7
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 1 North (Y) (m)	Corner 2 East (X) (m)	Corner 2 North (Y) (m)	Corner 3 East (X) (m)	Corner 3 North (Y) (m)
ACC1	1	1	3.66	31.70	4	409474	3723311	409536	3723311	409537	3723274
STG1	1	1	3.66	12.19	4	409538	3723247	409556	3723247	409556	3723231
CTG4	1	1	3.66	28.04	4	409500	3723162	409517	3723162	409517	3723149
CTG5	1	1	3.66	28.04	4	409500	3723198	409517	3723198	409517	3723186
CTG6	1	1	3.66	28.04	4	409499	3723236	409517	3723236	409517	3723223
AIRIN6	1	1	3.66	11.61	6	409470	3723211	409470	3723215	409475	3723225
AIRIN5	1	1	3.66	11.61	6	409471	3723174	409471	3723178	409476	3723188
AIRIN4	1	1	3.66	11.61	6	409471	3723136	409471	3723141	409476	3723151
CTG1	1	1	3.66	28.04	4	409166	3723235	409176	3723252	409188	3723244
CTG2	1	1	3.66	28.04	4	409197	3723216	409207	3723232	409219	3723224
CTG3	1	1	3.66	28.04	4	409226	3723194	409236	3723210	409247	3723203
AIRIN1	1	1	3.66	11.61	6	409172	3723196	409169	3723199	409163	3723209
AIRIN2	1	1	3.66	11.61	6	409202	3723175	409199	3723178	409194	3723188
AIRIN3	1	1	3.66	11.61	6	409232	3723154	409229	3723157	409224	3723167
STG2	1	1	3.66	12.19	4	409165	3723276	409180	3723266	409170	3723252
ACC2	1	1	3.66	31.70	4	409212	3723305	409263	3723269	409241	3723237
Admin	2	1	3.66	3.35	16	409290	3723286	409355	3723240	409351	3723235
Admin	*	2	*	5.18	14	409287	3723281	409348	3723237	409338	3723223

Huntington Beach Energy Project
Attachment DR104-4R Table 7
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 4 East (X) (m)	Corner 4 North (Y) (m)	Corner 5 East (X) (m)	Corner 5 North (Y) (m)	Corner 6 East (X) (m)	Corner 6 North (Y) (m)
ACC1	1	1	3.66	31.70	4	409474	409474	3723274				
STG1	1	1	3.66	12.19	4	409538	409538	3723231				
CTG4	1	1	3.66	28.04	4	409500	409500	3723150				
CTG5	1	1	3.66	28.04	4	409500	409500	3723186				
CTG6	1	1	3.66	28.04	4	409499	409499	3723224				
AIRIN6	1	1	3.66	11.61	6	409470	409477	3723225	409482	3723215	409482	3723210
AIRIN5	1	1	3.66	11.61	6	409471	409478	3723188	409483	3723178	409483	3723174
AIRIN4	1	1	3.66	11.61	6	409471	409478	3723151	409483	3723140	409483	3723136
CTG1	1	1	3.66	28.04	4	409166	409178	3723228				
CTG2	1	1	3.66	28.04	4	409197	409209	3723208				
CTG3	1	1	3.66	28.04	4	409226	409237	3723187				
AIRIN1	1	1	3.66	11.61	6	409172	409164	3723211	409176	3723208	409179	3723206
AIRIN2	1	1	3.66	11.61	6	409202	409195	3723190	409206	3723187	409209	3723185
AIRIN3	1	1	3.66	11.61	6	409232	409225	3723169	409236	3723166	409239	3723164
STG2	1	1	3.66	12.19	4	409165	409156	3723262				
ACC2	1	1	3.66	31.70	4	409212	409189	3723274				
Admin	2	1	3.66	3.35	16	409290	409348	3723237	409338	3723223	409343	3723219
Admin	*	2	*	5.18	14	409287	409343	3723219	409333	3723205	409321	3723213

Huntington Beach Energy Project
Attachment DR104-4R Table 7
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 7 East (X) (m)	Corner 7 North (Y) (m)	Corner 8 East (X) (m)	Corner 8 North (Y) (m)	Corner 9 East (X) (m)	Corner 9 North (Y) (m)
ACC1	1	1	3.66	31.70	4	409474						
STG1	1	1	3.66	12.19	4	409538						
CTG4	1	1	3.66	28.04	4	409500						
CTG5	1	1	3.66	28.04	4	409500						
CTG6	1	1	3.66	28.04	4	409499						
AIRIN6	1	1	3.66	11.61	6	409470						
AIRIN5	1	1	3.66	11.61	6	409471						
AIRIN4	1	1	3.66	11.61	6	409471						
CTG1	1	1	3.66	28.04	4	409166						
CTG2	1	1	3.66	28.04	4	409197						
CTG3	1	1	3.66	28.04	4	409226						
AIRIN1	1	1	3.66	11.61	6	409172						
AIRIN2	1	1	3.66	11.61	6	409202						
AIRIN3	1	1	3.66	11.61	6	409232						
STG2	1	1	3.66	12.19	4	409165						
ACC2	1	1	3.66	31.70	4	409212						
Admin	2	1	3.66	3.35	16	409290	409333	3723205	409321	3723213	409323	3723216
Admin	*	2	*	5.18	14	409287	409323	3723216	409296	3723237	409296	3723237

Huntington Beach Energy Project
Attachment DR104-4R Table 7
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 10 East (X) (m)	Corner 10 North (Y) (m)	Corner 11 East (X) (m)	Corner 11 North (Y) (m)	Corner 12 East (X) (m)	Corner 12 North (Y) (m)
ACC1	1	1	3.66	31.70	4	409474						
STG1	1	1	3.66	12.19	4	409538						
CTG4	1	1	3.66	28.04	4	409500						
CTG5	1	1	3.66	28.04	4	409500						
CTG6	1	1	3.66	28.04	4	409499						
AIRIN6	1	1	3.66	11.61	6	409470						
AIRIN5	1	1	3.66	11.61	6	409471						
AIRIN4	1	1	3.66	11.61	6	409471						
CTG1	1	1	3.66	28.04	4	409166						
CTG2	1	1	3.66	28.04	4	409197						
CTG3	1	1	3.66	28.04	4	409226						
AIRIN1	1	1	3.66	11.61	6	409172						
AIRIN2	1	1	3.66	11.61	6	409202						
AIRIN3	1	1	3.66	11.61	6	409232						
STG2	1	1	3.66	12.19	4	409165						
ACC2	1	1	3.66	31.70	4	409212						
Admin	2	1	3.66	3.35	16	409290	409296	3723237	409296	3723237	409292	3723241
Admin	*	2	*	5.18	14	409287	409292	3723241	409293	3723243	409279	3723252

Huntington Beach Energy Project
Attachment DR104-4R Table 7
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 13 East (X) (m)	Corner 13 North (Y) (m)	Corner 14 East (X) (m)	Corner 14 North (Y) (m)	Corner 15 East (X) (m)	Corner 15 North (Y) (m)
ACC1	1	1	3.66	31.70	4	409474						
STG1	1	1	3.66	12.19	4	409538						
CTG4	1	1	3.66	28.04	4	409500						
CTG5	1	1	3.66	28.04	4	409500						
CTG6	1	1	3.66	28.04	4	409499						
AIRIN6	1	1	3.66	11.61	6	409470						
AIRIN5	1	1	3.66	11.61	6	409471						
AIRIN4	1	1	3.66	11.61	6	409471						
CTG1	1	1	3.66	28.04	4	409166						
CTG2	1	1	3.66	28.04	4	409197						
CTG3	1	1	3.66	28.04	4	409226						
AIRIN1	1	1	3.66	11.61	6	409172						
AIRIN2	1	1	3.66	11.61	6	409202						
AIRIN3	1	1	3.66	11.61	6	409232						
STG2	1	1	3.66	12.19	4	409165						
ACC2	1	1	3.66	31.70	4	409212						
Admin	2	1	3.66	3.35	16	409290	409293	3723243	409279	3723252	409292	3723270
Admin	*	2	*	5.18	14	409287	409292	3723270	409283	3723276		

Huntington Beach Energy Project
Attachment DR104-4R Table 7
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Building Parameters for AERMOD Input
October 2013

Building Name	Number of Tiers	Tier Number	Base Elevation (m)	Tier Height (m)	Number of Corners	Corner 1 East (X) (m)	Corner 16 East (X) (m)	Corner 16 North (Y) (m)
ACC1	1	1	3.66	31.70	4	409474		
STG1	1	1	3.66	12.19	4	409538		
CTG4	1	1	3.66	28.04	4	409500		
CTG5	1	1	3.66	28.04	4	409500		
CTG6	1	1	3.66	28.04	4	409499		
AIRIN6	1	1	3.66	11.61	6	409470		
AIRIN5	1	1	3.66	11.61	6	409471		
AIRIN4	1	1	3.66	11.61	6	409471		
CTG1	1	1	3.66	28.04	4	409166		
CTG2	1	1	3.66	28.04	4	409197		
CTG3	1	1	3.66	28.04	4	409226		
AIRIN1	1	1	3.66	11.61	6	409172		
AIRIN2	1	1	3.66	11.61	6	409202		
AIRIN3	1	1	3.66	11.61	6	409232		
STG2	1	1	3.66	12.19	4	409165		
ACC2	1	1	3.66	31.70	4	409212		
Admin	2	1	3.66	3.35	16	409290	409283	3723276
Admin	*	2	*	5.18	14	409287		

Huntington Beach Energy Project
Attachment DR104-4R Table 8
Operation of Blocks 1 and 2 and Demolition of Units 1 and 2 Modeling Results
October 2013

		NO_2 ($\mu g/m^3$)			CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Source	Year	1-hr [a]	Federal 1-hr [b]	Annual [a]	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
ALL	2008	82.5	172	4.59	317	106	4.60	3.46	1.23	74.6	11.0	13.2	1.77
CONSTRUCTION		82.3	82.3	4.55	134	106	0.28	0.26	0.05	74.6	11.0	13.2	1.75
OPERATION		54.1	54.1	0.40	302	78.4	4.57	3.43	1.22	4.72	0.27	4.72	0.27
ALL	2009	81.2	174	4.44	239	97.2	2.55	1.87	0.44	70.0	12.2	12.4	1.96
CONSTRUCTION		81.1	81.1	4.40	132	97.0	0.28	0.27	0.05	69.9	12.2	12.3	1.94
OPERATION		41.4	41.4	0.38	231	36.2	2.53	1.85	0.44	1.71	0.26	1.71	0.26
ALL	2010	81.2	173	4.43	338	106	4.97	3.72	0.97	74.4	11.9	13.2	1.90
CONSTRUCTION		81.1	81.1	4.40	132	106	0.28	0.26	0.05	74.3	11.9	13.1	1.89
OPERATION		58.6	58.6	0.32	328	71.9	4.95	3.70	0.97	3.74	0.22	3.74	0.22
ALL	2011	81.5	172	4.46	328	105	4.37	2.99	0.83	78.3	12.2	13.8	1.94
CONSTRUCTION		81.3	81.3	4.42	132	104	0.28	0.25	0.05	78.2	12.1	13.7	1.92
OPERATION		56.1	56.1	0.37	314	54.9	4.34	2.98	0.82	3.19	0.25	3.19	0.25
ALL	2012	81.8	174	4.59	294	96.8	3.56	2.44	0.76	74.3	12.1	13.2	1.94
CONSTRUCTION		81.7	81.7	4.54	133	96.4	0.28	0.25	0.05	74.3	12.1	13.0	1.92
OPERATION		51.4	51.4	0.38	287	59.7	3.55	2.41	0.76	2.95	0.26	2.95	0.26

[a] The maximum 1-hr and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 and 0.75, respectively.

[b] Total predicted concentration for the Federal 1-hr NO_2 standard (source ALL) is the maximum modeled concentration paired with the three-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.

Huntington Beach Energy Project
Attachment DR104-4R Table 9
HBEP Construction and Demolition of Units 3 and 4 Source Parameters for AERMOD Input
October 2013

Point Sources

Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
E01	Horizontal	409329	3723184	3.66	4.60	533	18.0	0.127
E02	Horizontal	409345	3723173	3.66	4.60	533	18.0	0.127
E03	Horizontal	409362	3723161	3.66	4.60	533	18.0	0.127
E04	Horizontal	409378	3723150	3.66	4.60	533	18.0	0.127
E05	Horizontal	409341	3723203	3.66	4.60	533	18.0	0.127
E06	Horizontal	409358	3723191	3.66	4.60	533	18.0	0.127
E07	Horizontal	409374	3723180	3.66	4.60	533	18.0	0.127
E08	Horizontal	409391	3723168	3.66	4.60	533	18.0	0.127
E09	Horizontal	409354	3723222	3.66	4.60	533	18.0	0.127
E10	Horizontal	409371	3723210	3.66	4.60	533	18.0	0.127
E11	Horizontal	409387	3723199	3.66	4.60	533	18.0	0.127
E12	Horizontal	409404	3723187	3.66	4.60	533	18.0	0.127
E13	Horizontal	409395	3723138	3.66	4.60	533	18.0	0.127
E14	Horizontal	409412	3723126	3.66	4.60	533	18.0	0.127
E15	Horizontal	409428	3723115	3.66	4.60	533	18.0	0.127
E16	Horizontal	409445	3723103	3.66	4.60	533	18.0	0.127
E17	Horizontal	409408	3723157	3.66	4.60	533	18.0	0.127
E18	Horizontal	409424	3723145	3.66	4.60	533	18.0	0.127
E19	Horizontal	409441	3723133	3.66	4.60	533	18.0	0.127
E20	Horizontal	409457	3723122	3.66	4.60	533	18.0	0.127
E21	Horizontal	409420	3723175	3.66	4.60	533	18.0	0.127
E22	Horizontal	409437	3723164	3.66	4.60	533	18.0	0.127
E23	Horizontal	409454	3723152	3.66	4.60	533	18.0	0.127
E24	Horizontal	409470	3723141	3.66	4.60	533	18.0	0.127
E25	Horizontal	409487	3723129	3.66	4.60	533	18.0	0.127
E26	Horizontal	409469	3723294	3.66	4.60	533	18.0	0.127
E27	Horizontal	409469	3723276	3.66	4.60	533	18.0	0.127
E28	Horizontal	409469	3723257	3.66	4.60	533	18.0	0.127
E29	Horizontal	409469	3723239	3.66	4.60	533	18.0	0.127
E30	Horizontal	409469	3723221	3.66	4.60	533	18.0	0.127
E31	Horizontal	409469	3723202	3.66	4.60	533	18.0	0.127
E32	Horizontal	409469	3723184	3.66	4.60	533	18.0	0.127
E33	Horizontal	409469	3723166	3.66	4.60	533	18.0	0.127
E34	Horizontal	409488	3723294	3.66	4.60	533	18.0	0.127
E35	Horizontal	409488	3723276	3.66	4.60	533	18.0	0.127
E36	Horizontal	409488	3723257	3.66	4.60	533	18.0	0.127
E37	Horizontal	409488	3723239	3.66	4.60	533	18.0	0.127
E38	Horizontal	409489	3723221	3.66	4.60	533	18.0	0.127
E39	Horizontal	409489	3723203	3.66	4.60	533	18.0	0.127
E40	Horizontal	409489	3723184	3.66	4.60	533	18.0	0.127
E41	Horizontal	409489	3723166	3.66	4.60	533	18.0	0.127
E42	Horizontal	409489	3723148	3.66	4.60	533	18.0	0.127
E43	Horizontal	409508	3723294	3.66	4.60	533	18.0	0.127
E44	Horizontal	409508	3723276	3.66	4.60	533	18.0	0.127
E45	Horizontal	409508	3723258	3.66	4.60	533	18.0	0.127
E46	Horizontal	409508	3723239	3.66	4.60	533	18.0	0.127
E47	Horizontal	409508	3723221	3.66	4.60	533	18.0	0.127
E48	Horizontal	409508	3723203	3.66	4.60	533	18.0	0.127
E49	Horizontal	409508	3723184	3.66	4.60	533	18.0	0.127
E50	Horizontal	409508	3723166	3.66	4.60	533	18.0	0.127
E51	Horizontal	409508	3723148	3.66	4.60	533	18.0	0.127
E52	Horizontal	409527	3723294	3.66	4.60	533	18.0	0.127
E53	Horizontal	409527	3723276	3.66	4.60	533	18.0	0.127
E54	Horizontal	409527	3723258	3.66	4.60	533	18.0	0.127
E55	Horizontal	409527	3723239	3.66	4.60	533	18.0	0.127
E56	Horizontal	409528	3723221	3.66	4.60	533	18.0	0.127
E57	Horizontal	409528	3723203	3.66	4.60	533	18.0	0.127
E58	Horizontal	409528	3723185	3.66	4.60	533	18.0	0.127
E59	Horizontal	409528	3723166	3.66	4.60	533	18.0	0.13
E60	Horizontal	409528	3723148	3.66	4.60	533	18.0	0.13
E61	Horizontal	409547	3723295	3.66	4.60	533	18.0	0.13
E62	Horizontal	409547	3723276	3.66	4.60	533	18.0	0.13
E63	Horizontal	409547	3723258	3.66	4.60	533	18.0	0.13
E64	Horizontal	409547	3723240	3.66	4.60	533	18.0	0.13
E65	Horizontal	409547	3723221	3.66	4.60	533	18.0	0.13
E66	Horizontal	409547	3723203	3.66	4.60	533	18.0	0.13
E67	Horizontal	409547	3723185	3.66	4.60	533	18.0	0.13
E68	Horizontal	409547	3723166	3.66	4.60	533	18.0	0.13
E69	Horizontal	409547	3723148	3.66	4.60	533	18.0	0.13
E70	Horizontal	409509	3723130	3.66	4.60	533	18.0	0.13
W01	Horizontal	409086	3723188	3.66	4.60	533	18.0	0.127
W02	Horizontal	409103	3723177	3.66	4.60	533	18.0	0.127
W03	Horizontal	409120	3723165	3.66	4.60	533	18.0	0.127
W04	Horizontal	409136	3723153	3.66	4.60	533	18.0	0.127
W05	Horizontal	409153	3723142	3.66	4.60	533	18.0	0.127
W06	Horizontal	409169	3723130	3.66	4.60	533	18.0	0.127
W07	Horizontal	409186	3723119	3.66	4.60	533	18.0	0.127
W08	Horizontal	409203	3723107	3.66	4.60	533	18.0	0.127
W09	Horizontal	409099	3723207	3.66	4.60	533	18.0	0.127
W10	Horizontal	409116	3723195	3.66	4.60	533	18.0	0.127
W11	Horizontal	409132	3723184	3.66	4.60	533	18.0	0.127
W12	Horizontal	409149	3723172	3.66	4.60	533	18.0	0.127
W13	Horizontal	409165	3723160	3.66	4.60	533	18.0	0.127
W14	Horizontal	409182	3723149	3.66	4.60	533	18.0	0.127
W15	Horizontal	409199	3723137	3.66	4.60	533	18.0	0.127
W16	Horizontal	409215	3723126	3.66	4.60	533	18.0	0.127
W17	Horizontal	409112	3723226	3.66	4.60	533	18.0	0.127
W18	Horizontal	409128	3723214	3.66	4.60	533	18.0	0.127
W19	Horizontal	409145	3723202	3.66	4.60	533	18.0	0.127
W20	Horizontal	409162	3723191	3.66	4.60	533	18.0	0.127
W21	Horizontal	409178	3723179	3.66	4.60	533	18.0	0.127
W22	Horizontal	409195	3723168	3.66	4.60	533	18.0	0.127

Huntington Beach Energy Project
Attachment DR104-4R Table 9
HBEP Construction and Demolition of Units 3 and 4 Source Parameters for AERMOD Input
October 2013

Point Sources

Source ID	Stack Release Type (Beta)	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
W23	Horizontal	409211	3723156	3.66	4.60	533	18.0	0.127
W24	Horizontal	409228	3723144	3.66	4.60	533	18.0	0.127
W25	Horizontal	409124	3723244	3.66	4.60	533	18.0	0.127
W26	Horizontal	409141	3723233	3.66	4.60	533	18.0	0.127
W27	Horizontal	409158	3723221	3.66	4.60	533	18.0	0.127
W28	Horizontal	409174	3723209	3.66	4.60	533	18.0	0.127
W29	Horizontal	409191	3723198	3.66	4.60	533	18.0	0.127
W30	Horizontal	409207	3723186	3.66	4.60	533	18.0	0.127
W31	Horizontal	409224	3723175	3.66	4.60	533	18.0	0.127
W32	Horizontal	409241	3723163	3.66	4.60	533	18.0	0.127
W33	Horizontal	409137	3723263	3.66	4.60	533	18.0	0.127
W34	Horizontal	409154	3723251	3.66	4.60	533	18.0	0.127
W35	Horizontal	409170	3723240	3.66	4.60	533	18.0	0.127
W36	Horizontal	409187	3723228	3.66	4.60	533	18.0	0.127
W37	Horizontal	409204	3723217	3.66	4.60	533	18.0	0.127
W38	Horizontal	409220	3723205	3.66	4.60	533	18.0	0.127
W39	Horizontal	409237	3723193	3.66	4.60	533	18.0	0.127
W40	Horizontal	409253	3723182	3.66	4.60	533	18.0	0.127
W41	Horizontal	409150	3723282	3.66	4.60	533	18.0	0.127
W42	Horizontal	409166	3723270	3.66	4.60	533	18.0	0.127
W43	Horizontal	409183	3723258	3.66	4.60	533	18.0	0.127
W44	Horizontal	409200	3723247	3.66	4.60	533	18.0	0.127
W45	Horizontal	409216	3723235	3.66	4.60	533	18.0	0.127
W46	Horizontal	409233	3723224	3.66	4.60	533	18.0	0.127
W47	Horizontal	409249	3723212	3.66	4.60	533	18.0	0.127
W48	Horizontal	409266	3723200	3.66	4.60	533	18.0	0.127
W49	Horizontal	409163	3723300	3.66	4.60	533	18.0	0.127
W50	Horizontal	409179	3723289	3.66	4.60	533	18.0	0.127
W51	Horizontal	409196	3723277	3.66	4.60	533	18.0	0.127
W52	Horizontal	409212	3723266	3.66	4.60	533	18.0	0.127
W53	Horizontal	409229	3723254	3.66	4.60	533	18.0	0.127
W54	Horizontal	409246	3723242	3.66	4.60	533	18.0	0.127
W55	Horizontal	409262	3723231	3.66	4.60	533	18.0	0.127
W56	Horizontal	409279	3723219	3.66	4.60	533	18.0	0.127
W57	Horizontal	409175	3723319	3.66	4.60	533	18.0	0.127
W58	Horizontal	409192	3723307	3.66	4.60	533	18.0	0.127
W59	Horizontal	409208	3723296	3.66	4.60	533	18.0	0.127
W60	Horizontal	409225	3723284	3.66	4.60	533	18.0	0.127
W61	Horizontal	409242	3723273	3.66	4.60	533	18.0	0.127
W62	Horizontal	409258	3723261	3.66	4.60	533	18.0	0.127
W63	Horizontal	409275	3723249	3.66	4.60	533	18.0	0.127
W64	Horizontal	409291	3723238	3.66	4.60	533	18.0	0.127
W65	Horizontal	409188	3723338	3.66	4.60	533	18.0	0.127
W66	Horizontal	409205	3723326	3.66	4.60	533	18.0	0.127
W67	Horizontal	409221	3723315	3.66	4.60	533	18.0	0.127
W68	Horizontal	409238	3723303	3.66	4.60	533	18.0	0.127
W69	Horizontal	409254	3723291	3.66	4.60	533	18.0	0.127
W70	Horizontal	409271	3723280	3.66	4.60	533	18.0	0.127
W71	Horizontal	409288	3723268	3.66	4.60	533	18.0	0.127
W72	Horizontal	409304	3723257	3.66	4.60	533	18.0	0.127

Area Sources

Source ID	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North	Vertical Dimension (m)
FUGW	409066	3723183	3.7	0.0	165	215	35	1.0

Area Poly Sources

Source ID	Base Elevation (m)	Release Height (m)	Number of Vertices	Vertical Dimension (m)	Easting (X1) (m)	Northing (Y1) (m)	Easting (X2) (m)	Northing (Y2) (m)	Easting (X3) (m)	Northing (Y3) (m)	Easting (X4) (m)	Northing (Y4) (m)
	3.66	0.0	9.0	1.0	409452	3723309	409563	3723310	409565	3723115	409537	3723136

	Easting (X5) (m)	Northing (Y5) (m)	Easting (X6) (m)	Northing (Y6) (m)	Easting (X7) (m)	Northing (Y7) (m)	Easting (X8) (m)	Northing (Y8) (m)	Easting (X9) (m)	Northing (Y9) (m)
FUGE	409449.06	3723088.78	409315.11	3723180.26	409358.4	3723244.58	409372	3723242	409453	3723187

Huntington Beach Energy Project
Attachment DR104-4R Table 10
HBEP Construction and Demolition of Units 3 and 4 Modeling Parameters - Emission Rates
October 2013

Emission Rates for 1-hr, 3-hr, 8-hr, and 24-hr Modeling [a, b]

	1-hr NO_2		Federal 1-hr NO_2 [c]		1-hr CO		8-hr CO		1-hr SO_2		3-hr SO_2		24-hr SO_2		24-hr PM_{10}		24-hr $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
E(1-70)	0.82	6.47	0.54	4.26	0.20	1.55	0.20	1.55	5.36E-04	4.25E-03	5.36E-04	4.25E-03	2.23E-04	1.77E-03	0.023	0.18	0.023	0.179
FUGE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16	1.23	0.031	0.25
W(1-72)	0.49	3.86	0.60	4.80	0.83	6.56	0.83	6.56	1.78E-03	1.41E-02	1.78E-03	1.41E-02	7.42E-04	5.89E-03	0.004	0.033	0.004	0.032
FUGW	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.049	0.389	0.007	0.052
Maximum Month	19		18-29		36		36		36		36		36		16		16	

Emission Rates for Annual Modeling [a, b]

	Annual NO_2		Annual PM_{10}		Annual $PM_{2.5}$	
Source ID	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
E(1-70)	0.18	1.46	0.014	0.11	0.012	0.10
FUGE	-	-	0.06	0.48	0.009	0.07
W(1-72)	0.19	1.47	0.0051	0.041	0.0074	0.059
FUGW	-	-	0.038	0.30305	0.0051	0.040844
Maximum Months	18-29		10-21		14-25	

[a] Emission rates for construction exhaust point sources, W(1-72) and E(1-70) source groups, are presented as the sum total for all sources in each respective group.

[b] Units 3 and 4 demolition emissions, as well as construction emissions that overlap in time with the demolition of Units 3 and 4, were obtained from Table 5.1A.58R from Appendix 5.1AR, which is included with this submission as Attachment DR104-5.

[c] Federal 1-hour NO_2 emission rates were calculated as the annual average over the maximum overlap period.

Huntington Beach Energy Project
Attachment DR104-4R Table 11
HBEP Construction and Demolition of Units 3 and 4 Modeling Results
October 2013

		NO_2 ($\mu g/m^3$)			CO ($\mu g/m^3$)		SO_2 ($\mu g/m^3$)			PM_{10} ($\mu g/m^3$)		$PM_{2.5}$ ($\mu g/m^3$)	
Source	Year	1-hr [a]	Federal 1-hr [b]	Annual [a]	1-hr	8-hr	1-hr	3-hr	24-hr	24-hr	Annual	24-hr	Annual
ALL		115	193	7.05	131	110	0.29	0.27	0.051	83.7	20.9	17.9	3.50
CONSTRUCTION	2008	99.0	70.9	5.70	29.7	23.3	0.081	0.077	0.016	83.0	20.3	17.7	3.36
DEMOLITION		58.9	71.3	5.48	125	109	0.27	0.25	0.050	22.9	9.33	3.26	1.52
ALL		116	193	7.04	130	102	0.29	0.28	0.053	85.0	21.1	17.4	3.54
CONSTRUCTION	2009	99.2	71.1	5.50	29.8	22.0	0.081	0.076	0.016	81.1	20.4	17.2	3.38
DEMOLITION		58.8	71.1	5.35	125	101	0.27	0.26	0.052	21.9	9.00	3.11	1.47
ALL		115	192	7.12	129	108	0.28	0.27	0.054	84.9	21.3	17.5	3.58
CONSTRUCTION	2010	100.3	71.9	5.51	30.1	22.9	0.082	0.077	0.017	84.3	20.7	17.4	3.42
DEMOLITION		58.6	70.9	5.36	125	106	0.27	0.25	0.051	22.8	8.97	3.27	1.47
ALL		117	196	6.99	128	107	0.28	0.26	0.051	82.8	21.4	17.2	3.58
CONSTRUCTION	2011	99.8	71.5	5.51	30.0	24.3	0.082	0.076	0.016	82.8	20.7	17.2	3.42
DEMOLITION		58.8	71.1	5.34	125	106	0.27	0.26	0.050	21.0	8.95	3.04	1.46
ALL		117	193	7.14	130	102	0.29	0.26	0.053	86.7	21.7	18.4	3.64
CONSTRUCTION	2012	100	71.7	5.66	30.0	22.4	0.082	0.075	0.017	85.3	21.0	18.1	3.47
DEMOLITION		58.8	71.1	5.48	125	101	0.27	0.26	0.052	21.8	9.31	3.10	1.52

[a] The maximum 1-hr and annual NO_2 concentrations include ambient NO_2 ratios of 0.80 and 0.75, respectively.

[b] Total predicted concentration for the Federal 1-hr NO_2 standard (source ALL) is the maximum modeled concentration paired with the three-year average of 98th percentile seasonal hourly background concentrations, as provided by the SCAQMD.

Attachment DR104-5
Revised Appendix 5.1A, Construction Emission Calculations

APPENDIX 5.1A-R

Construction Emission Estimates

(Criteria and Greenhouse Gas)

Tables 5.1A.1R through 5.1A.9R summarize the construction emissions from the demolition of the existing Peaker 5 unit and storage tank and stack 3 and 4.

Table 5.1A.1R	Onsite Construction Equipment Exhaust Emissions
Table 5.1A.2R	Onsite Motor Vehicle Exhaust Emissions
Table 5.1A.3R	Onsite Demolition Fugitive Dust Emissions
Table 5.1A.4R	Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions
Table 5.1A.5R	Equations Used to Calculate Criteria Pollutant and GHG Emissions
Table 5.1A.6R	Number of Onsite Construction Equipment and Motor Vehicles
Table 5.1A.7R	Construction Equipment Exhaust Criteria Pollutant Emission Factors
Table 5.1A.8R	Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors
Table 5.1A.9R	Onsite and Offsite Greenhouse Gas Emission Factors

Tables 5.1A.10R through 5.1A.18R summarize the construction emissions from the construction of Block 1.

Table 5.1A.10R	Onsite Construction Equipment Exhaust Emissions
Table 5.1A.11R	Onsite Motor Vehicle Exhaust Emissions
Table 5.1A.12R	Onsite Construction Fugitive Dust Emissions
Table 5.1A.13R	Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions
Table 5.1A.14R	Equations Used to Calculate Criteria Pollutant and GHG Emissions
Table 5.1A.15R	Number of Onsite Construction Equipment and Motor Vehicles
Table 5.1A.16R	Construction Equipment Exhaust Criteria Pollutant Emission Factors
Table 5.1A.17R	Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors
Table 5.1A.18R	Onsite and Offsite Greenhouse Gas Emission Factors

Tables 5.1A.19R through 5.1A.27R summarize the construction emissions from the construction of Block 2.

Table 5.1A.19R	Onsite Construction Equipment Exhaust Emissions
Table 5.1A.20R	Onsite Motor Vehicle Exhaust Emissions
Table 5.1A.21R	Onsite Construction Fugitive Dust Emissions
Table 5.1A.22R	Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions
Table 5.1A.23R	Equations Used to Calculate Criteria Pollutant and GHG Emissions
Table 5.1A.24R	Number of Onsite Construction Equipment and Motor Vehicles
Table 5.1A.25R	Construction Equipment Exhaust Criteria Pollutant Emission Factors
Table 5.1A.26R	Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors
Table 5.1A.27R	Onsite and Offsite Greenhouse Gas Emission Factors

Tables 5.1A.28R through 5.1A.36R summarize the construction emissions from the demolition of existing Units 1 and 2.

Table 5.1A.28R	Onsite Construction Equipment Exhaust Emissions

Tables 5.1A.37R through 5.1A.45R summarize the construction emissions from the construction of Buildings 33 and 34.

Tables 5.1A.46R through 5.1A.48R summarize the construction emissions from all stages of the project.

Tables 5.1A.49R through 5.1A.57R summarize the construction emissions from the demolition of existing Units 3 and 4.

Tables 5.1A.58R through 5.1A.60R summarize the construction emissions from all stages of the project and cumulative projects.

Huntington Beach Energy Project
Construction Emission Estimates - Peaker and Tank Area and Stack 3 and 4 Demolition
October 2013

Table 5.1A.1R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CO Emisisons (lbs/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33	68.33
Excavator	129.94	129.94	129.94	259.88	259.88	259.88	259.88	259.88	389.83	389.83	389.83	389.83	389.83	389.83	389.83
Grader	134.53	134.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	134.53	134.53	134.53
Cranes	0.00	0.00	81.01	121.51	121.51	121.51	121.51	121.51	121.51	81.01	81.01	81.01	81.01	81.01	81.01
Tractor/Loader/Backhoe	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98	43.98
Rubber Tired Loader	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69	51.69
Crawler Tractor	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75	87.75
Air Compressor	58.32	58.32	116.64	116.64	116.64	116.64	116.64	116.64	116.64	116.64	116.64	116.64	116.64	116.64	116.64
Forklift	0.00	0.00	57.07	57.07	114.13	114.13	114.13	114.13	114.13	114.13	114.13	57.07	57.07	57.07	57.07
Roller	64.33	64.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64.33	64.33	64.33	64.33
Onsite Total (lbs/month)	**638.86**	**638.86**	**636.40**	**806.84**	**863.91**	**863.91**	**863.91**	**863.91**	**993.85**	**953.34**	**953.34**	**960.61**	**1,095.14**	**1,095.14**	**1,095.14**
Onsite Total (lbs/day) [a]	**27.78**	**27.78**	**27.67**	**35.08**	**37.56**	**37.56**	**37.56**	**37.56**	**43.21**	**41.45**	**41.45**	**41.77**	**47.61**	**47.61**	**47.61**
Onsite Total (tons/year)	**5.70**														

Construction Equipment VOC Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	VOC Emisisons (lbs/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46	22.46
Excavator	20.52	20.52	20.52	41.04	41.04	41.04	41.04	41.04	61.56	61.56	61.56	61.56	61.56	61.56	61.56
Grader	23.85	23.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23.85	23.85	23.85
Cranes	0.00	0.00	27.59	41.39	41.39	41.39	41.39	41.39	41.39	27.59	27.59	27.59	27.59	27.59	27.59
Tractor/Loader/Backhoe	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28
Rubber Tired Loader	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55	10.55
Crawler Tractor	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01	21.01
Air Compressor	12.47	12.47	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94	24.94
Forklift	0.00	0.00	8.28	8.28	16.56	16.56	16.56	16.56	16.56	16.56	16.56	8.28	8.28	8.28	8.28
Roller	13.77	13.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.77	13.77	13.77	13.77
Onsite Total (lbs/month)	**131.92**	**131.92**	**142.63**	**176.95**	**185.22**	**185.22**	**185.22**	**185.22**	**205.74**	**191.95**	**191.95**	**197.44**	**221.29**	**221.29**	**221.29**
Onsite Total (lbs/day) [a]	**5.74**	**5.74**	**6.20**	**7.69**	**8.05**	**8.05**	**8.05**	**8.05**	**8.95**	**8.35**	**8.35**	**8.58**	**9.62**	**9.62**	**9.62**
Onsite Total (tons/year)	**1.18**														

Construction Equipment NOx Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	NOx Emissions (lbs/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	162.75	162.75	162.75	162.75	162.75	162.75	162.75	162.75	162.75	143.87	143.87	143.87	143.87	143.87	143.87
Excavator	144.68	144.68	144.68	289.35	289.35	289.35	289.35	289.35	434.03	384.50	384.50	384.50	384.50	384.50	384.50
Grader	175.25	175.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	158.54	158.54	158.54
Cranes	0.00	0.00	247.44	371.16	371.16	371.16	371.16	371.16	371.16	225.10	225.10	225.10	225.10	225.10	225.10
Tractor/Loader/Backhoe	48.91	48.91	48.91	48.91	48.91	48.91	48.91	48.91	48.91	44.57	44.57	44.57	44.57	44.57	44.57
Rubber Tired Loader	66.05	66.05	66.05	66.05	66.05	66.05	66.05	66.05	66.05	61.02	61.02	61.02	61.02	61.02	61.02
Crawler Tractor	125.28	125.28	125.28	125.28	125.28	125.28	125.28	125.28	125.28	117.26	117.26	117.26	117.26	117.26	117.26
Air Compressor	78.82	78.82	157.64	157.64	157.64	157.64	157.64	157.64	157.64	145.49	145.49	145.49	145.49	145.49	145.49
Forklift	0.00	0.00	58.75	58.75	117.50	117.50	117.50	117.50	117.50	104.10	104.10	52.05	52.05	52.05	52.05
Roller	88.42	88.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	82.23	82.23	82.23	82.23
Onsite Total (lbs/month)	**890.17**	**890.17**	**1,011.50**	**1,279.90**	**1,338.65**	**1,338.65**	**1,338.65**	**1,338.65**	**1,483.32**	**1,225.90**	**1,225.90**	**1,256.08**	**1,414.62**	**1,414.62**	**1,414.62**
Onsite Total (lbs/day) [a]	**38.70**	**38.70**	**43.98**	**55.65**	**58.20**	**58.20**	**58.20**	**58.20**	**64.49**	**53.30**	**53.30**	**54.61**	**61.51**	**61.51**	**61.51**
Onsite Total (tons/year)	**8.03**														

Table 5.1A.1R Onsite Construction Equipment Exhaust Emissions

Construction Equipment SOx Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	SOx Emissions (lbs/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Excavator	0.23	0.23	0.23	0.46	0.46	0.46	0.46	0.46	0.69	0.69	0.69	0.69	0.69	0.69	0.69
Grader	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24	0.24
Cranes	0.00	0.00	0.35	0.53	0.53	0.53	0.53	0.53	0.53	0.35	0.35	0.35	0.35	0.35	0.35
Tractor/Loader/Backhoe	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Rubber Tired Loader	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Crawler Tractor	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Air Compressor	0.09	0.09	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Forklift	0.00	0.00	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.10	0.10	0.10
Roller	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.10	0.10	0.10
Onsite Total (lbs/month)	**1.21**	**1.21**	**1.42**	**1.83**	**1.93**	**1.93**	**1.93**	**1.93**	**2.16**	**1.98**	**1.98**	**1.98**	**2.22**	**2.22**	**2.22**
Onsite Total (lbs/day) [a]	**0.05**	**0.05**	**0.06**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.09**	**0.09**	**0.09**	**0.09**	**0.10**	**0.10**	**0.10**
Onsite Total (tons/year)	**0.01**														

Construction Equipment PM_{10} Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	PM_{10} Emissions (lbs/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.12	5.12	5.12	5.12	5.12	5.12
Excavator	7.87	7.87	7.87	15.74	15.74	15.74	15.74	15.74	23.60	20.71	20.71	20.71	20.71	20.71	20.71
Grader	9.66	9.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.74	8.74	8.74
Cranes	0.00	0.00	8.55	12.82	12.82	12.82	12.82	12.82	12.82	7.72	7.72	7.72	7.72	7.72	7.72
Tractor/Loader/Backhoe	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.20	3.20	3.20	3.20	3.20	3.20
Rubber Tired Loader	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	4.89	4.89	4.89	4.89	4.89	4.89
Crawler Tractor	10.64	10.64	10.64	10.64	10.64	10.64	10.64	10.64	10.64	9.79	9.79	9.79	9.79	9.79	9.79
Air Compressor	6.77	6.77	13.55	13.55	13.55	13.55	13.55	13.55	13.55	12.06	12.06	12.06	12.06	12.06	12.06
Forklift	0.00	0.00	3.20	3.20	6.39	6.39	6.39	6.39	6.39	5.64	5.64	2.82	2.82	2.82	2.82
Roller	7.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.68	6.68	6.68	6.68
Onsite Total (lbs/month)	**57.17**	**57.17**	**58.73**	**70.87**	**74.06**	**74.06**	**74.06**	**74.06**	**81.93**	**69.14**	**69.14**	**72.99**	**81.73**	**81.73**	**81.73**
Onsite Total (lbs/day) [a]	**2.49**	**2.49**	**2.55**	**3.08**	**3.22**	**3.22**	**3.22**	**3.22**	**3.56**	**3.01**	**3.01**	**3.17**	**3.55**	**3.55**	**3.55**
Onsite Total (tons/year)	**0.45**														

Construction Equipment $PM_{2.5}$ Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	$PM_{2.5}$ Emissions (lbs/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.12	5.12	5.12	5.12	5.12	5.12
Excavator	7.87	7.87	7.87	15.74	15.74	15.74	15.74	15.74	23.60	20.71	20.71	20.71	20.71	20.71	20.71
Grader	9.66	9.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.74	8.74	8.74
Cranes	0.00	0.00	8.55	12.82	12.82	12.82	12.82	12.82	12.82	7.72	7.72	7.72	7.72	7.72	7.72
Tractor/Loader/Backhoe	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.20	3.20	3.20	3.20	3.20	3.20
Rubber Tired Loader	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	5.44	4.89	4.89	4.89	4.89	4.89	4.89
Crawler Tractor	10.64	10.64	10.64	10.64	10.64	10.64	10.64	10.64	10.64	9.79	9.79	9.79	9.79	9.79	9.79
Air Compressor	6.77	6.77	13.55	13.55	13.55	13.55	13.55	13.55	13.55	12.06	12.06	12.06	12.06	12.06	12.06
Forklift	0.00	0.00	3.20	3.20	6.39	6.39	6.39	6.39	6.39	5.64	5.64	2.82	2.82	2.82	2.82
Roller	7.30	7.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.68	6.68	6.68	6.68
Onsite Total (lbs/month)	**57.17**	**57.17**	**58.73**	**70.87**	**74.06**	**74.06**	**74.06**	**74.06**	**81.93**	**69.14**	**69.14**	**72.99**	**81.73**	**81.73**	**81.73**
Onsite Total (lbs/day) [a]	**2.49**	**2.49**	**2.55**	**3.08**	**3.22**	**3.22**	**3.22**	**3.22**	**3.56**	**3.01**	**3.01**	**3.17**	**3.55**	**3.55**	**3.55**
Onsite Total (tons/year)	**0.45**														

Table 5.1A.1R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO_2 Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CO_2 Emissions (metric tons/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48
Excavator	10.20	10.20	10.20	20.40	20.40	20.40	20.40	20.40	30.60	30.60	30.60	30.60	30.60	30.60	30.60
Grader	10.61	10.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.61	10.61	10.61
Cranes	0.00	0.00	15.51	23.26	23.26	23.26	23.26	23.26	23.26	15.51	15.51	15.51	15.51	15.51	15.51
Tractor/Loader/Backhoe	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05
Rubber Tired Loader	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47
Crawler Tractor	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67	5.67
Air Compressor	4.04	4.04	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08
Forklift	0.00	0.00	4.49	4.49	8.98	8.98	8.98	8.98	8.98	8.98	8.98	4.49	4.49	4.49	4.49
Roller	4.44	4.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.44	4.44	4.44	4.44
Onsite Total (metric tons/month)	**55.96**	**55.96**	**64.95**	**82.90**	**87.40**	**87.40**	**87.40**	**87.40**	**97.60**	**89.84**	**89.84**	**89.79**	**100.40**	**100.40**	**100.40**
Onsite Total (metric tons/day) [a]	**2.43**	**2.43**	**2.82**	**3.60**	**3.80**	**3.80**	**3.80**	**3.80**	**4.24**	**3.91**	**3.91**	**3.90**	**4.37**	**4.37**	**4.37**
Onsite Total (metric tons/year)	**1,100.76**														

Construction Equipment N_2O Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	N_2O Emissions (metric tons/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Excavator	0.0003	0.0003	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Grader	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0003	0.0003
Cranes	0.0000	0.0000	0.0004	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Tractor/Loader/Backhoe	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Rubber Tired Loader	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Crawler Tractor	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Air Compressor	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Forklift	0.0000	0.0000	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001
Roller	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001
Onsite Total (metric tons/month)	**0.0014**	**0.0014**	**0.0017**	**0.0021**	**0.0022**	**0.0022**	**0.0022**	**0.0022**	**0.0025**	**0.0023**	**0.0023**	**0.0023**	**0.0026**	**0.0026**	**0.0026**
Onsite Total (metric tons/day) [a]	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
Onsite Total (metric tons/year)	**0.0280**														

Construction Equipment CH_4 Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CH_4 Emissions (metric tons/month)														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Excavator	0.0006	0.0006	0.0006	0.0012	0.0012	0.0012	0.0012	0.0012	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017
Grader	0.0006	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0006	0.0006
Cranes	0.0000	0.0000	0.0009	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
Tractor/Loader/Backhoe	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Rubber Tired Loader	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Crawler Tractor	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Air Compressor	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Forklift	0.0000	0.0000	0.0003	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0003	0.0003	0.0003
Roller	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0003	0.0003	0.0003
Onsite Total (metric tons/month)	**0.0032**	**0.0032**	**0.0037**	**0.0047**	**0.0050**	**0.0050**	**0.0050**	**0.0050**	**0.0055**	**0.0051**	**0.0051**	**0.0051**	**0.0057**	**0.0057**	**0.0057**
Onsite Total (metric tons/day) [a]	**0.0001**	**0.0001**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**
Onsite Total (metric tons/year)	**0.0625**														

Notes:

[a] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', the days per month are as follows: 23

Table 5.1A.2R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CO Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Stake Truck	0.05	0.05	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.05	0.05	0.05	0.05
Onsite Dump Truck	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Total (lbs/day)	**0.14**	**0.14**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.19**	**0.14**	**0.14**	**0.14**	**0.14**
	CO Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Onsite Stake Truck	1.21	1.21	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	1.21	1.21	1.21	1.21
Onsite Dump Truck	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Onsite Total (lbs/month)	**3.19**	**3.19**	**4.40**	**4.40**	**4.40**	**4.40**	**4.40**	**4.40**	**4.40**	**4.40**	**4.40**	**3.19**	**3.19**	**3.19**	**3.19**
Onsite Total (tons/year)	**0.02**														

Onsite Construction Vehicle VOC Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	VOC Emisisons (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.03	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.03	0.03	0.03	0.03
Onsite Dump Truck	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Total (lbs/day)	**0.064**	**0.064**	**0.095**	**0.095**	**0.095**	**0.095**	**0.095**	**0.095**	**0.095**	**0.095**	**0.095**	**0.064**	**0.064**	**0.064**	**0.064**
	VOC Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Stake Truck	0.71	0.71	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	0.71	0.71	0.71	0.71
Onsite Dump Truck	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Onsite Total (lbs/month)	**1.48**	**1.48**	**2.19**	**2.19**	**2.19**	**2.19**	**2.19**	**2.19**	**2.19**	**2.19**	**2.19**	**1.48**	**1.48**	**1.48**	**1.48**
Onsite Total (tons/year)	**0.01**														

Onsite Construction Vehicle SOx Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	SOx Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
Onsite Stake Truck	0.00016	0.00016	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00016	0.00016	0.00016	0.00016
Onsite Dump Truck	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Onsite Total (lbs/day)	**0.00042**	**0.00042**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00042**	**0.00042**	**0.00042**	**0.00042**
	SOx Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223	0.00223
Onsite Stake Truck	0.00375	0.00375	0.00750	0.00750	0.00750	0.00750	0.00750	0.00750	0.00750	0.00750	0.00750	0.00375	0.00375	0.00375	0.00375
Onsite Dump Truck	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375	0.00375
Onsite Total (lbs/month)	**0.00974**	**0.00974**	**0.01349**	**0.01349**	**0.01349**	**0.01349**	**0.01349**	**0.01349**	**0.01349**	**0.01349**	**0.01349**	**0.00974**	**0.00974**	**0.00974**	**0.00974**
Onsite Total (tons/year)	**0.00008**														

Onsite Construction Vehicle NOx Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	NOx Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Onsite Stake Truck	0.093	0.093	0.187	0.187	0.187	0.187	0.187	0.187	0.187	0.16	0.16	0.08	0.08	0.08	0.08
Onsite Dump Truck	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.093	0.08	0.08	0.08	0.08	0.08	0.08
Onsite Total (lbs/day)	**0.19**	**0.19**	**0.28**	**0.28**	**0.28**	**0.28**	**0.28**	**0.28**	**0.28**	**0.25**	**0.25**	**0.17**	**0.17**	**0.17**	**0.17**
	NOx Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Onsite Stake Truck	2.15	2.15	4.29	4.29	4.29	4.29	4.29	4.29	4.29	3.79	3.79	1.90	1.90	1.90	1.90
Onsite Dump Truck	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	1.90	1.90	1.90	1.90	1.90	1.90
Onsite Total (lbs/month)	**4.36**	**4.36**	**6.51**	**6.51**	**6.51**	**6.51**	**6.51**	**6.51**	**6.51**	**5.75**	**5.75**	**3.86**	**3.86**	**3.86**	**3.86**
Onsite Total (tons/year)	**0.03**														

Table 5.1A.2R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle PM_{10} Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	PM_{10} Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.009	0.009	0.004	0.004	0.004	0.004
Onsite Dump Truck	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.004	0.004	0.004	0.004	0.004	0.004
Onsite Total (lbs/day)	**0.01**	**0.01**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
	PM_{10} Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	0.12	0.12	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.20	0.20	0.10	0.10	0.10	0.10
Onsite Dump Truck	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.10	0.10	0.10	0.10	0.10	0.10
Onsite Total (lbs/month)	**0.27**	**0.27**	**0.39**	**0.39**	**0.39**	**0.39**	**0.39**	**0.39**	**0.39**	**0.33**	**0.33**	**0.23**	**0.23**	**0.23**	**0.23**
Onsite Total (tons/year)	**0.00**														

Onsite Construction Vehicle $PM_{2.5}$ Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	$PM_{2.5}$ Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.01**	**0.01**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
	$PM_{2.5}$ Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	0.11	0.11	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.18	0.18	0.09	0.09	0.09	0.09
Onsite Dump Truck	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.09	0.09	0.09	0.09	0.09	0.09
Onsite Total (lbs/month)	**0.24**	**0.24**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.29**	**0.29**	**0.20**	**0.20**	**0.20**	**0.20**
Onsite Total (tons/year)	**0.00**														

Onsite Construction Vehicle CO_2 Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CO_2 Emissions (metric tons/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Onsite Dump Truck	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Onsite Total (metric tons/day)	**0.02**	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.02**	**0.02**	**0.02**	**0.02**
	CO_2 Emissions (metric tons/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Onsite Stake Truck	0.18	0.18	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.18	0.18	0.18	0.18
Onsite Dump Truck	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Onsite Total (metric tons/month)	**0.47**	**0.47**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.47**	**0.47**	**0.47**	**0.47**
Onsite Total (metric tons/year)	**7.22**														

Onsite Construction Vehicle N_2O Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	N_2O Emissions (metric tons/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026
Onsite Stake Truck	0.000000010	0.000000010	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Total (metric tons/day)	**0.000000046**	**0.000000046**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000046**	**0.000000046**	**0.000000046**	**0.000000046**
	N_2O Emissions (metric tons/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061
Onsite Stake Truck	0.00000022	0.00000022	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000022	0.00000022	0.00000022	0.00000022
Onsite Dump Truck	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022
Onsite Total (metric tons/month)	**0.0000010**	**0.0000010**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000010**
Onsite Total (metric tons/year)	**0.000015**														

Table 5.1A.2R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CH_4 Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CH_4 Emissions (metric tons/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007
Onsite Stake Truck	0.00000001	0.00000001	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000001	0.00000001	0.00000001	0.00000001
Onsite Dump Truck	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001	0.00000001
Onsite Total (metric tons/day)	**0.00000009**	**0.00000009**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000010**	**0.00000009**	**0.00000009**	**0.00000009**	**0.00000009**
	CH_4 Emissions (metric tons/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150	0.00000150
Onsite Stake Truck	0.00000023	0.00000023	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000023	0.00000023	0.00000023	0.00000023
Onsite Dump Truck	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023
Onsite Total (metric tons/month)	**0.0000020**	**0.0000020**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000020**	**0.0000020**	**0.0000020**	**0.0000020**
Onsite Total (metric tons/year)	**0.000026**														

Notes:

[a] The days per month are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', as presented on the 'Onsite Fugitive Dust' tab.

Table 5.1A.3R Onsite Demolition Fugitive Dust Emissions

Demolition Activity Levels for Peaker and Tank Area and Stack 3 & 4 Demolition

	Monthly Activity Levels														
Source	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Debris Generated from Mechanical Dismemberment (tons) [a]	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33	321.33

[a] Debris generated from Table 5.14-3, Wastes Generated during Demolition of Peaker and Tank Area. Concrete quantities for Stack 3&4 Demolition also included (Table 5.14-3 Units 3 & 4). Only materials generated from demolition that may generate fugitive dust were included. The monthly quantities were determined as follows:

Scrap Materials	8,000	lbs/week	which equals	16.00	tons/month
Scrap Metals	2,000	tons	which equals	133.33	tons/month
Concrete	2,350	tons	which equals	156.67	tons/month
Asphalt	30	tons	which equals	2.00	tons/month
Asbestos Waste	200	tons	which equals	13.33	tons/month
The above calculations are based on the following assumptions:					
Demolition will last	15	months			
The construction schedule allows for	4	weeks/month			

Onsite Construction Vehicle Fugitive PM_{10} Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	Fugitive PM_{10} Emissions (lbs/day) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Onsite Stake Truck	1.69	1.69	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	1.69	1.69	1.69	1.69
Onsite Dump Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Total (lbs/day)	**6.76**	**6.76**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**6.76**	**6.76**	**6.76**	**6.76**
	Fugitive PM_{10} Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Onsite Stake Truck	38.88	38.88	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	38.88	38.88	38.88	38.88
Onsite Dump Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Total (lbs/month)	**155.53**	**155.53**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**155.53**	**155.53**	**155.53**	**155.53**
Onsite Total (tons/year)	**1.11**														

Notes:
[a] Emissions based on highest (controlled) unpaved road emission factor for PM_{10}.

Onsite Construction Vehicle Fugitive $PM_{2.5}$ Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Onsite Stake Truck	0.17	0.17	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.17	0.17	0.17	0.17
Onsite Dump Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Total (lbs/day)	**0.68**	**0.68**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.68**	**0.68**	**0.68**	**0.68**
	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78
Onsite Stake Truck	3.89	3.89	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	3.89	3.89	3.89	3.89
Onsite Dump Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Total (lbs/month)	**15.55**	**15.55**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**15.55**	**15.55**	**15.55**	**15.55**
Onsite Total (tons/year)	**0.11**														

Notes:
[a] Emissions based on the highest (controlled) unpaved road emission factor for $PM_{2.5}$.

Onsite Demolition Fugitive PM_{10} Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	Fugitive PM_{10} Emissions (lbs/day) [a, b]														
Demolition Activity	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Dismemberment	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17	2.17
Debris Loading [c]	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Onsite Total (lbs/day)	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**
	Fugitive PM_{10} Emissions (lbs/month) [a, b]														
Demolition Activity	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Dismemberment	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99	49.99
Debris Loading [c]	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17
Onsite Total (lbs/month)	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**	**54.16**
Onsite Total (tons/year)	**0.32**														

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factors for PM_{10}.
[c] Assume that all debris generated per month from dismemberment is loaded in the same month that it is generated.

Table 5.1A.3R Onsite Demolition Fugitive Dust Emissions

Onsite Demolition Fugitive $PM_{2.5}$ Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a, b]														
Demolition Activity	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Dismemberment	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Debris Loading [c]	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Total (lbs/day)	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**	**0.36**
	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a, b]														
Demolition Activity	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Dismemberment	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57
Debris Loading [c]	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Onsite Total (lbs/month)	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**	**8.20**
Onsite Total (tons/year)	**0.05**														

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factors for $PM_{2.5}$.
[c] Assume that all debris generated per month from dismemberment is loaded in the same month that it is generated.

Onsite Construction Vehicle Activity for Peaker and Tank Area and Stack 3 & 4 Demolition

Vehicle Type	Miles/Day [a]	Working Days per Month [b]
Onsite Pick-up Truck	2	23
Onsite Stake Truck	2	23
Onsite Dump Truck	1	23

Notes:
[a] Estimated based on dimensions of the project site.
[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Fugitive Dust Emission Factors for Unpaved Roads

Vehicles on Unpaved Surfaces at Industrial Sites

Parameter	PM_{10}	$PM_{2.5}$
Mean Vehicle Weight [a]	16.5	16.5
Silt Content [b]	8.5	8.5
k [c]	1.5	0.15
a [c]	0.9	0.9
b [c]	0.45	0.45
P [d]	31	31
Emission Factor (Uncontrolled, lbs/mile) [e]	2.17	0.22
Reduction from Watering 3x per Day [f]	61%	61%
Emission Factor (Controlled, lbs/mile)	0.85	0.08

Notes:
[a] Mean vehicle weight assumes that medium/heavy duty trucks weigh 16.5 tons.
[b] Silt content taken from Table 13.2.2-1 of Section 13.2.2 of AP-42 for a Construction Site, Scraper Route; this value is consistent with the CalEEMod defaults for the South Coast Air Basin.
[c] k, a, and b taken from Table 13.2.2-2 of Section 13.2.2 of AP-42 for industrial roads.
[d] P taken as the CalEEMod default for the Huntington Beach climate region of the South Coast Air Basin.
[e] Emission factor calculated using Equations 1a and 2 from Section 13.2.2 of AP-42:

Emission Factor (lbs/mile) = {k (lbs/mile) x [Silt Content (%) / 12]^{a} x [Mean Vehicle Weight (tons) / 3]^{b}} x [(365 - P) / 365]

[f] Control efficiency taken from the URBEMIS default mitigation measures for unpaved roads.

Fugitive Dust Emission Factors for Dismemberment

Dismemberment and Collapse of Structures

Parameter	PM_{10}	$PM_{2.5}$
k [a]	0.35	0.053
U [b]	2.2	2.2
M [c]	2%	2%
Emission Factor (lbs/ton) [d]	0.243	0.037
Reduction from Watering Every 4 Hours [e]	36%	36%
Emission Factor (Controlled, lbs/ton)	0.156	0.024

Notes:
[a] k, the particle size multiplier, taken from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide.
[b] U, the mean wind speed, taken as the CalEEMod default for the South Coast Air Basin.
[c] M, the material moisture content, taken from Section 4.4 of Appendix A of the CalEEMod User's Guide.
[d] Emission factor calculated using the following equation from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide:

Emission Factor (lbs/ton) = k x 0.0032 x [U (m/s) / 5]$^{1.3}$ x [M (%) / 2]$^{1.4}$

[e] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Active Demolition and Debris Removal.

Table 5.1A.3R Onsite Demolition Fugitive Dust Emissions

Fugitive Dust Emission Factors for Debris Loading

Loading of Debris/Building Waste

Parameter	PM_{10}	$PM_{2.5}$
k [a]	0.35	0.053
$EF_{L\text{-}TSP}$ [b]	0.058	0.058
Emission Factor (lbs/ton) [c]	0.020	0.003
Reduction from Watering Every 4 Hours [d]	36%	36%
Emission Factor (Controlled, lbs/ton)	0.013	0.002

Notes:

[a] k taken from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide.

[b] $EF_{L\text{-}TSP}$ taken from Section 4.4 of Appendix A of the CalEEMod User's Guide.

[c] Emission factor calculated using the following equation from Section 4.4 of Appendix A of the CalEEMod User's Guide:
Emission Factor (lbs/ton) = k x $EF_{L\text{-}TSP}$ (lbs/ton)

[d] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Active Demolition and Debris Removal.

Huntington Beach Energy Project
Construction Emission Estimates - Peaker and Tank Area and Stack 3 and 4 Demolition
October 2013

Table 5.1A.4R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle Usage During Peaker and Tank Area and Stack 3 & 4 Demolition

	Number per Day														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks [a]	0.00	0.00	0.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Material Hauling Trucks [b]	0.25	0.50	0.50	0.00	1.00	1.13	6.13	6.13	6.13	6.13	6.13	6.13	6.13	0.63	0.63
Waste Hauling Trucks [c]	0.00	0.00	0.00	0.00	1.25	1.25	1.50	1.75	1.75	2.00	2.25	2.50	2.25	1.25	1.25
Construction Worker Commute [d]	0.00	10.00	12.00	25.00	33.00	37.00	43.00	46.00	51.00	49.00	44.00	23.00	20.00	18.00	12.00

Notes:

[a] Offsite Delivery Trucks include trucks transporting "Consumables & Supplies", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[b] Material Hauling Trucks include trucks transporting "Fill Material", "Contractor Mobilization", "Contractor Demobilization", and "Demo Equipment", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[c] Waste Hauling Trucks include trucks transporting "Mechanical Equipment", "Electrical Equip. & Mtrls", "Concrete and Rebar", "Steel/Architectural", and "Piping, Supports, & Valves", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[d] Assumed 1 commute per 1 worker; number of workers taken from 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Offsite Vehicle CO Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CO Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Material Hauling Trucks	0.04	0.08	0.08	0.00	0.16	0.18	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.10	0.10
Waste Hauling Trucks	0.00	0.00	0.00	0.00	0.31	0.31	0.37	0.43	0.43	0.49	0.55	0.61	0.55	0.31	0.31
Construction Worker Commute	0.00	0.74	0.88	1.84	2.43	2.73	3.17	3.39	3.76	3.61	3.24	1.69	1.47	1.33	0.88
Offsite Total (lbs/day)	**0.04**	**0.82**	**0.97**	**1.86**	**2.92**	**3.24**	**4.55**	**4.84**	**5.20**	**5.12**	**4.81**	**3.33**	**3.04**	**1.75**	**1.31**
	CO Emissions (lbs/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Material Hauling Trucks	0.94	1.88	1.88	0.00	3.75	4.22	22.98	22.98	22.98	22.98	22.98	22.98	22.98	2.34	2.34
Waste Hauling Trucks	0.00	0.00	0.00	0.00	7.03	7.03	8.44	9.85	9.85	11.25	12.66	14.07	12.66	7.03	7.03
Construction Worker Commute	0.00	16.95	20.34	42.37	55.92	62.70	72.87	77.95	86.42	83.04	74.56	38.98	33.89	30.50	20.34
Offsite Total (lbs/month)	**0.94**	**18.82**	**22.21**	**42.82**	**67.17**	**74.41**	**104.74**	**111.23**	**119.71**	**117.72**	**110.66**	**76.48**	**69.99**	**40.34**	**30.17**
Offsite Total (tons/year)	**0.48**														

Offsite Vehicle VOC Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	VOC Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material Hauling Trucks	0.01	0.01	0.01	0.00	0.03	0.03	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.02	0.02
Waste Hauling Trucks	0.00	0.00	0.00	0.00	0.05	0.05	0.06	0.07	0.07	0.08	0.09	0.10	0.09	0.05	0.05
Construction Worker Commute	0.00	0.02	0.02	0.04	0.05	0.06	0.07	0.07	0.08	0.08	0.07	0.04	0.03	0.03	0.02
Offsite Total (lbs/day)	**0.01**	**0.03**	**0.03**	**0.04**	**0.14**	**0.15**	**0.30**	**0.32**	**0.33**	**0.33**	**0.34**	**0.31**	**0.30**	**0.10**	**0.09**
	VOC Emissions (lbs/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Material Hauling Trucks	0.16	0.32	0.32	0.00	0.64	0.72	3.92	3.92	3.92	3.92	3.92	3.92	3.92	0.40	0.40
Waste Hauling Trucks	0.00	0.00	0.00	0.00	1.20	1.20	1.44	1.68	1.68	1.92	2.16	2.40	2.16	1.20	1.20
Construction Worker Commute	0.00	0.36	0.43	0.90	1.19	1.34	1.55	1.66	1.84	1.77	1.59	0.83	0.72	0.65	0.43
Offsite Total (lbs/month)	**0.16**	**0.68**	**0.75**	**1.00**	**3.12**	**3.35**	**7.01**	**7.35**	**7.53**	**7.70**	**7.76**	**7.24**	**6.89**	**2.34**	**2.13**
Offsite Total (tons/year)	**0.03**														

Table 5.1A.4R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle SOx Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	SOx Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Material Hauling Trucks	0.000	0.001	0.001	0.000	0.001	0.002	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.001	0.001
Waste Hauling Trucks	0.000	0.000	0.000	0.000	0.003	0.003	0.003	0.004	0.004	0.004	0.005	0.005	0.005	0.003	0.003
Construction Worker Commute	0.000	0.002	0.002	0.004	0.006	0.006	0.007	0.008	0.009	0.008	0.007	0.004	0.003	0.003	0.002
Offsite Total (lbs/day)	**0.000**	**0.002**	**0.003**	**0.004**	**0.010**	**0.010**	**0.019**	**0.020**	**0.021**	**0.021**	**0.020**	**0.017**	**0.016**	**0.007**	**0.006**
	SOx Emissions (lbs/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.000	0.000	0.000	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Material Hauling Trucks	0.008	0.016	0.016	0.000	0.031	0.035	0.193	0.193	0.193	0.193	0.193	0.193	0.193	0.020	0.020
Waste Hauling Trucks	0.000	0.000	0.000	0.000	0.059	0.059	0.071	0.083	0.083	0.094	0.106	0.118	0.106	0.059	0.059
Construction Worker Commute	0.000	0.038	0.046	0.096	0.127	0.142	0.165	0.176	0.196	0.188	0.169	0.088	0.077	0.069	0.046
Offsite Total (lbs/month)	**0.008**	**0.054**	**0.062**	**0.099**	**0.220**	**0.239**	**0.431**	**0.455**	**0.474**	**0.478**	**0.470**	**0.402**	**0.378**	**0.151**	**0.128**
Offsite Total (tons/year)	**0.002**														

Offsite Vehicle NOx Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	NOx Emissions (lbs/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Material Hauling Trucks	0.13	0.25	0.25	0.00	0.51	0.57	3.11	3.11	3.11	2.75	2.75	2.75	2.75	0.28	0.28
Waste Hauling Trucks	0.00	0.00	0.00	0.00	0.95	0.95	1.14	1.33	1.33	1.35	1.51	1.68	1.51	0.84	0.84
Construction Worker Commute	0.00	0.07	0.09	0.18	0.23	0.26	0.31	0.33	0.36	0.32	0.29	0.15	0.13	0.12	0.08
Offsite Total (lbs/day)	**0.13**	**0.32**	**0.34**	**0.24**	**1.75**	**1.85**	**4.62**	**4.83**	**4.86**	**4.47**	**4.60**	**4.63**	**4.45**	**1.29**	**1.25**
	NOx Emissions (lbs/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	1.40	1.40	1.40	1.40	1.40	1.40	1.23	1.23	1.23	1.23	1.23	1.23
Material Hauling Trucks	2.92	5.84	5.84	0.00	11.67	13.13	71.50	71.50	71.50	63.23	63.23	63.23	63.23	6.45	6.45
Waste Hauling Trucks	0.00	0.00	0.00	0.00	21.89	21.89	26.27	30.64	30.64	30.97	34.84	38.71	34.84	19.36	19.36
Construction Worker Commute	0.00	1.63	1.96	4.08	5.39	6.04	7.02	7.51	8.32	7.31	6.57	3.43	2.98	2.69	1.79
Offsite Total (lbs/month)	**2.92**	**7.47**	**7.79**	**5.48**	**40.35**	**42.46**	**106.18**	**111.05**	**111.87**	**102.74**	**105.87**	**106.60**	**102.28**	**29.72**	**28.83**
Offsite Total (tons/year)	**0.45**														

Offsite Vehicle PM_{10} Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	PM_{10} Emissions (lbs/day) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Material Hauling Trucks	0.01	0.02	0.02	0.00	0.05	0.06	0.30	0.30	0.30	0.29	0.29	0.29	0.29	0.03	0.03
Waste Hauling Trucks	0.00	0.00	0.00	0.00	0.09	0.09	0.11	0.13	0.13	0.14	0.16	0.18	0.16	0.09	0.09
Construction Worker Commute	0.00	0.16	0.19	0.40	0.52	0.59	0.68	0.73	0.81	0.78	0.70	0.36	0.32	0.29	0.19
Offsite Total (lbs/day)	**0.01**	**0.18**	**0.21**	**0.40**	**0.67**	**0.74**	**1.10**	**1.16**	**1.24**	**1.21**	**1.15**	**0.84**	**0.77**	**0.41**	**0.31**
	PM_{10} Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Material Hauling Trucks	0.28	0.56	0.56	0.00	1.13	1.27	6.90	6.90	6.90	6.66	6.66	6.66	6.66	0.68	0.68
Waste Hauling Trucks	0.00	0.00	0.00	0.00	2.11	2.11	2.53	2.96	2.96	3.26	3.67	4.08	3.67	2.04	2.04
Construction Worker Commute	0.00	3.65	4.38	9.12	12.03	13.49	15.68	16.78	18.60	17.87	16.05	8.39	7.29	6.56	4.38
Offsite Total (lbs/month)	**0.28**	**4.21**	**4.94**	**9.23**	**15.39**	**16.99**	**25.23**	**26.75**	**28.57**	**27.91**	**26.49**	**19.24**	**17.74**	**9.40**	**7.21**
Offsite Total (tons/year)	**0.12**														

Notes:
[a] PM_{10} Emissions include emissions from exhaust and paved roads.

Table 5.1A.4R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle $PM_{2.5}$ Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	$PM_{2.5}$ Emissions (lbs/day) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material Hauling Trucks	0.01	0.01	0.01	0.00	0.02	0.03	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.01	0.01
Waste Hauling Trucks	0.00	0.00	0.00	0.00	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.09	0.08	0.04	0.04
Construction Worker Commute	0.00	0.04	0.05	0.11	0.15	0.16	0.19	0.20	0.22	0.22	0.20	0.10	0.09	0.08	0.05
Offsite Total (lbs/day)	**0.01**	**0.06**	**0.07**	**0.11**	**0.22**	**0.24**	**0.40**	**0.42**	**0.45**	**0.43**	**0.42**	**0.34**	**0.31**	**0.14**	**0.11**
	$PM_{2.5}$ Emissions (lbs/month) [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Material Hauling Trucks	0.14	0.29	0.29	0.00	0.57	0.65	3.52	3.52	3.52	3.30	3.30	3.30	3.30	0.34	0.34
Waste Hauling Trucks	0.00	0.00	0.00	0.00	1.08	1.08	1.29	1.51	1.51	1.62	1.82	2.02	1.82	1.01	1.01
Construction Worker Commute	0.00	1.01	1.22	2.54	3.35	3.75	4.36	4.67	5.17	5.00	4.49	2.35	2.04	1.84	1.22
Offsite Total (lbs/month)	**0.14**	**1.30**	**1.50**	**2.60**	**5.06**	**5.54**	**9.23**	**9.75**	**10.26**	**9.97**	**9.66**	**7.72**	**7.22**	**3.24**	**2.63**
Offsite Total (tons/year)	**0.04**														

Notes:
[a] $PM_{2.5}$ Emissions include emissions from exhaust and paved roads.

Offsite Vehicle CO_2 Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CO_2 Emissions (metric tons/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Material Hauling Trucks	0.02	0.03	0.03	0.00	0.07	0.07	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.04	0.04
Waste Hauling Trucks	0.00	0.00	0.00	0.00	0.12	0.12	0.15	0.17	0.17	0.20	0.22	0.25	0.22	0.12	0.12
Construction Worker Commute	0.00	0.07	0.08	0.17	0.23	0.26	0.30	0.32	0.35	0.34	0.31	0.16	0.14	0.13	0.08
Offsite Total (metric tons/day)	**0.02**	**0.10**	**0.12**	**0.18**	**0.42**	**0.46**	**0.86**	**0.90**	**0.94**	**0.95**	**0.94**	**0.81**	**0.77**	**0.30**	**0.25**
	CO_2 Emissions (metric tons/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.00	0.00	0.00	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Material Hauling Trucks	0.38	0.75	0.75	0.00	1.51	1.70	9.24	9.24	9.24	9.24	9.24	9.24	9.24	0.94	0.94
Waste Hauling Trucks	0.00	0.00	0.00	0.00	2.83	2.83	3.40	3.96	3.96	4.53	5.09	5.66	5.09	2.83	2.83
Construction Worker Commute	0.00	1.60	1.92	4.00	5.28	5.92	6.88	7.36	8.16	7.84	7.04	3.68	3.20	2.88	1.92
Offsite Total (metric tons/month)	**0.38**	**2.35**	**2.67**	**4.15**	**9.77**	**10.59**	**19.67**	**20.71**	**21.51**	**21.76**	**21.52**	**18.73**	**17.69**	**6.80**	**5.84**
Offsite Total (metric tons/year)	**178.73**														

Offsite Vehicle N_2O Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	N_2O Emissions (metric tons/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Material Hauling Trucks	0.0000000	0.0000001	0.0000001	0.0000000	0.0000002	0.0000002	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000001	0.0000001
Waste Hauling Trucks	0.0000000	0.0000000	0.0000000	0.0000000	0.0000004	0.0000004	0.0000004	0.0000005	0.0000005	0.0000006	0.0000006	0.0000007	0.0000006	0.0000004	0.0000004
Construction Worker Commute	0.0000000	0.0000008	0.0000009	0.0000019	0.0000026	0.0000029	0.0000033	0.0000036	0.0000040	0.0000038	0.0000034	0.0000018	0.0000016	0.0000014	0.0000009
Offsite Total (metric tons/day)	**0.0000000**	**0.0000009**	**0.0000010**	**0.0000020**	**0.0000031**	**0.0000035**	**0.0000050**	**0.0000053**	**0.0000057**	**0.0000056**	**0.0000053**	**0.0000037**	**0.0000034**	**0.0000019**	**0.0000014**
	N_2O Emissions (metric tons/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Material Hauling Trucks	0.000001	0.000002	0.000002	0.000000	0.000004	0.000005	0.000027	0.000027	0.000027	0.000027	0.000027	0.000027	0.000027	0.000003	0.000003
Waste Hauling Trucks	0.000000	0.000000	0.000000	0.000000	0.000008	0.000008	0.000010	0.000012	0.000012	0.000013	0.000015	0.000017	0.000015	0.000008	0.000008
Construction Worker Commute	0.000000	0.000018	0.000021	0.000045	0.000059	0.000066	0.000077	0.000082	0.000091	0.000088	0.000079	0.000041	0.000036	0.000032	0.000021
Offsite Total (metric tons/month)	**0.000001**	**0.000020**	**0.000024**	**0.000045**	**0.000072**	**0.000080**	**0.000114**	**0.000121**	**0.000130**	**0.000128**	**0.000121**	**0.000085**	**0.000078**	**0.000044**	**0.000033**
Offsite Total (metric tons/year)	**0.001052**														

Table 5.1A.4R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle CH_4 Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

	CH_4 Emissions (metric tons/day)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Material Hauling Trucks	0.0000001	0.0000001	0.0000001	0.0000000	0.0000002	0.0000002	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000001	0.0000001
Waste Hauling Trucks	0.0000000	0.0000000	0.0000000	0.0000000	0.0000004	0.0000004	0.0000005	0.0000005	0.0000005	0.0000006	0.0000007	0.0000008	0.0000007	0.0000004	0.0000004
Construction Worker Commute	0.0000000	0.0000037	0.0000045	0.0000093	0.0000123	0.0000138	0.0000161	0.0000172	0.0000191	0.0000183	0.0000164	0.0000086	0.0000075	0.0000067	0.0000045
Offsite Total (metric tons/day)	**0.0000001**	**0.0000038**	**0.0000046**	**0.0000094**	**0.0000129**	**0.0000145**	**0.0000178**	**0.0000190**	**0.0000209**	**0.0000202**	**0.0000184**	**0.0000106**	**0.0000094**	**0.0000073**	**0.0000050**
	CH_4 Emissions (metric tons/month)														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Offsite Delivery Trucks	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Material Hauling Trucks	0.000001	0.000002	0.000002	0.000000	0.000005	0.000005	0.000029	0.000029	0.000029	0.000029	0.000029	0.000029	0.000029	0.000003	0.000003
Waste Hauling Trucks	0.000000	0.000000	0.000000	0.000000	0.000009	0.000009	0.000011	0.000012	0.000012	0.000014	0.000016	0.000018	0.000016	0.000009	0.000009
Construction Worker Commute	0.000000	0.000086	0.000103	0.000215	0.000284	0.000318	0.000370	0.000395	0.000438	0.000421	0.000378	0.000198	0.000172	0.000155	0.000103
Offsite Total (metric tons/month)	**0.000001**	**0.000088**	**0.000105**	**0.000215**	**0.000298**	**0.000333**	**0.000409**	**0.000437**	**0.000480**	**0.000464**	**0.000423**	**0.000244**	**0.000217**	**0.000167**	**0.000115**
Offsite Total (metric tons/year)	**0.003802**														

Offsite Construction Vehicle Activity for Peaker and Tank Area and Stack 3 & 4 Demolition

Vehicle Type	**Roundtrip Miles/Day** [a]	**Working Days per Month** [b]
Offsite Delivery Trucks	14.6	23
Material Hauling Trucks	40.0	23
Waste Hauling Trucks	60.0	23
Construction Worker Commute	21.6	23

Notes:

[a] Roundtrip miles/day taken as the CalEEMod defaults for the South Coast Air Basin except for Waste Hauling Trucks, which were assumed to travel directly to the the landfill for offsite waste disposal.

[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Table 5.1A.5R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_m = EF * N * Hp * L * H / 453.6$	E_m = Emissions (lbs/month)
			EF = Emission factor (g/bhp-hr)
			N = Number of pieces of equipment
			Hp = Average horsepower
			L = Average load factor
			H = Hours per month
			453.6 = Conversion from g to lbs
		$E_d = E_m / D$	E_d = Emissions (lbs/day)
			E_m = Emissions (lbs/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
	CO_2	$E_m = N * FC * EF * H * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (kg/gallon)
			H = Hours per month
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_m = N * FC * EF * H / 1{,}000 * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (g/gallon)
			H = Hours per month
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Vehicle Exhaust and Paved and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_d = N * VMT * EF / 453.6$	E_d = Emissions (lbs/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = EMFAC2007 emission factor (g/mile). Paved and unpaved road fugitive PM_{10} and $PM_{2.5}$ emission factors calculated per Sections 13.2.1 and 13.2.2 of AP-42, respectively.
			453.6 = Conversion from g to lbs
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.5R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Peaker and Tank Area and Stack 3 & 4 Demolition

Emission Source	Pollutant(s)	Equation	Variables
Onsite and Offsite Vehicle Exhaust	CO_2	$E_d = N * VMT / FE * EF * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			FE = Fuel economy (mpg)
			EF = Emission factor (kg/gallon)
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_d = N * VMT * EF / 1{,}000 * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = Emission factor (g/mile)
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Dismemberment and Debris Loading	PM_{10} and $PM_{2.5}$	$E_d = T * EF / D$	E_d = Emissions (lbs/day)
			T = Tons of material dismembered or loaded
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/ton), calculated per Section 13.2.4.3 of AP-42 for dismemberment and Section 4.4 of Appendix A of the CalEEMod User's Guide for debris loading.
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

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Table 5.1A.6R Number of Onsite Construction Equipment and Motor Vehicles

Number of Onsite Equipment for Peaker and Tank Area and Stack 3 & 4 Demolition

	Number per Month [a]														
Onsite Equipment	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Water Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Excavator	1	1	1	2	2	2	2	2	3	3	3	3	3	3	3
Grader	1	1	0	0	0	0	0	0	0	0	0	0	1	1	1
Cranes [b]	0	0	2	3	3	3	3	3	3	2	2	2	2	2	2
Tractor/Loader/Backhoe [c]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rubber Tired Loader [d]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Crawler Tractor [e]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Air Compressor	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2
Forklift	0	0	1	1	2	2	2	2	2	2	2	1	1	1	1
Roller [f]	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1

Notes:

[a] Equipment counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

[b] Numbers presented for Cranes includes the equipment counts for the 50 Ton Hydraulic Crane and the 35 Ton Hydraulic Crane.

[c] Numbers presented for Tractor/Loader/Backhoe includes the equipment counts for the Backhoe.

[d] Numbers presented for Rubber Tired Loader includes the equipment counts for the Front End Loader.

[e] Numbers presented for Crawler Tractor includes the equipment counts for the Dozer

[f] Numbers presented for Roller includes the equipment counts for the Compactor.

Number of Onsite Motor Vehicles for Peaker and Tank Area and Stack 3 & 4 Demolition

	Number per Month [a]														
Vehicle Type	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Onsite Pick-up Truck	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Onsite Stake Truck	1	1	2	2	2	2	2	2	2	2	2	1	1	1	1
Onsite Dump Truck	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Notes:

[a] Vehicle counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

Table 5.1A.7R Construction Equipment Exhaust Criteria Pollutant Emission Factors

Construction Equipment Emission Factors for Peaker and Tank Area and Stack 3 & 4 Demolition

Equipment [a]	Percent Usage [b]	Hours per Month [c]	Horsepower [d]	Load Factor [d]	Emission Factors (g/bhp-hr) [e]									Fuel Consumption (gallons/hour) [f]
					CO	VOC	NO_X 2015	NO_X 2016	SO_X	PM_{10} 2015	PM_{10} 2016	$PM_{2.5}$ 2015	$PM_{2.5}$ 2016	
Water Truck [g]	50%	115	381	0.57	1.241	0.408	2.956	2.613	0.005	0.105	0.093	0.105	0.093	12.33
Excavator	85%	196	157	0.57	3.369	0.532	3.751	3.323	0.006	0.204	0.179	0.204	0.179	5.11
Grader	80%	184	162	0.61	3.356	0.595	4.372	3.955	0.006	0.241	0.218	0.241	0.218	5.65
Cranes	65%	150	208	0.43	1.374	0.468	4.197	3.818	0.006	0.145	0.131	0.145	0.131	5.08
Tractor/Loader/Backhoe	55%	127	75	0.55	3.823	0.633	4.252	3.874	0.006	0.322	0.278	0.322	0.278	2.36
Rubber Tired Loader	55%	127	87	0.54	3.945	0.805	5.041	4.657	0.006	0.415	0.373	0.415	0.373	2.69
Crawler Tractor	80%	184	82	0.64	4.122	0.987	5.885	5.508	0.006	0.500	0.460	0.500	0.460	3.02
Air Compressor	80%	184	78	0.48	3.840	0.821	5.190	4.790	0.006	0.446	0.397	0.446	0.397	2.15
Forklift	75%	173	149	0.30	3.357	0.487	3.456	3.062	0.006	0.188	0.166	0.188	0.166	2.55
Roller	70%	161	84	0.56	3.853	0.825	5.296	4.925	0.006	0.437	0.400	0.437	0.400	2.70

Notes:

[a] Assumed all equipment is fired with diesel fuel, per Section 4.2 of Appendix A of the CalEEMod User's Guide.

[b] Percent Usage assumed typical of power plant construction.

[c] Hours per month calculated based on the following schedule, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Work hours per day: 10

Work days per month: 23

[d] Construction equipment horsepower and load factor taken from Table 3.3 of Appendix D of the CalEEMod User's Guide.

[e] Construction equipment emission factors taken from Table 3.4 of Appendix D of the CalEEMod User's Guide. The emission factors for the year 2015 were used for the construction equipment exhaust emission calculations for CO, VOC, and SOx. The emission factors for year 2015 and 2016 were used for NOx, PM10, and PM2.5.

[f] Fuel consumption based on consumption in the OFFROAD2007 model for the SCAB in the year 2015; value estimated by dividing the reported consumption (gallons/day) by the reported activity (hours/day).

[g] Horsepower, load factor, and emission factors for Off-Highway Trucks were assumed representative of Water Trucks.

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Table 5.1A.8R Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors

Vehicle Emission Factors for Peaker and Tank Area and Stack 3 & 4 Demolition

Vehicle Type	Vehicle Class [a]	Exhaust Emission Factors (g/mile) [b]									Paved Road Emission Factors (g/mile) [c]		Fuel Economy (mpg) [b]
		CO	VOC	SO_X	NO_X 2015	NO_X 2016	PM_{10} 2015	PM_{10} 2016	$PM_{2.5}$ 2015	$PM_{2.5}$ 2016	PM_{10}	$PM_{2.5}$	
Onsite Pick-up Truck	Light-duty Truck	3.823	0.264	0.011	0.354	0.327	0.121	0.123	0.099	0.101	N/A	N/A	7.433
Onsite Stake Truck	Heavy-duty Diesel	11.918	7.032	0.037	21.152	18.687	1.207	1.007	1.073	0.889	N/A	N/A	2.621
Onsite Dump Truck	Heavy-duty Diesel	11.918	7.032	0.037	21.152	18.687	1.207	1.007	1.073	0.889	N/A	N/A	2.621
Offsite Delivery Trucks	Heavy-duty Diesel	2.483	0.498	0.017	7.565	6.621	0.328	0.297	0.264	0.235	0.300	0.075	5.749
Material Hauling Trucks	Heavy/Medium-duty Diesel	1.850	0.316	0.016	5.756	5.090	0.255	0.236	0.208	0.191	0.300	0.075	6.224
Waste Hauling Trucks	Heavy/Medium-duty Diesel	1.850	0.316	0.016	5.756	5.090	0.255	0.236	0.208	0.191	0.300	0.075	6.224
Construction Worker Commute	Light-duty Auto/Truck	1.547	0.033	0.004	0.149	0.136	0.033	0.033	0.018	0.018	0.300	0.075	27.278

Notes:

[a] The vehicle classes are represented as follows:

Light-duty Truck: Assumed to be an average of LDT1, All and LDT2, All values.
Heavy-duty Diesel: Assumed to be 100% HHD DSL values, as confirmed in Section 4.5 of Appendix A of the CalEEMod User's Guide.
Heavy/Medium-duty Diesel: 50% HHD DSL and 50% MHD DSL values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.
Light-duty Auto/Truck: 50% LDA, All; 25% LDT1, All; and 25% LDT2, All values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.

[b] Exhaust emission factors and fuel economy from EMFAC2007 for the South Coast Air Basin, calendar year 2015 for CO, VOC, and SOx. The emission factors for year 2015 and 2016 were used for NOx, PM10, and PM2.5. A speed of 5 mph was assumed for onsite vehicles; a speed of 40 mph was assumed for offsite vehicles and worker commutes, which is consistent with the CalEEMod defaults. An average temperature of 68°F and humidity of 55% were used per Table B-1 of CT-EMFAC: A Computer Model to Estimate Transportation Project Emissions.

[c] Paved road emission factors calculated using CalEEMod methodology, as described below.

Derivation of Paved Road Emission Factors

Vehicles on Paved Roads

Parameter	PM_{10}	$PM_{2.5}$
Average Weight [a]	2.4	2.4
k [b]	1.0	0.25
sL [a]	0.1	0.1
Emission Factor (g/mile) [c]	0.300	0.075

Notes:

[a] Average Weight and sL taken as the default value from CalEEMod.

[b] k taken from Table 13.2.1-1 of Section 13.2.1 of AP-42.

[c] Emission factor calculated using Equation 1 from Section 13.2.1 of AP-42:

Emission Factor (g/mile) = k (g/mile) x $[sL\ (g/m^2)]^{0.91}$ x $[\text{Average Weight (tons)}]^{1.02}$

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Table 5.1A.9R Onsite and Offsite Greenhouse Gas Emission Factors

Greenhouse Gas Emission Factors for Peaker and Tank Area and Stack 3 & 4 Demolition

Fuel / Category Type	Emission Factor	Emission Factor Units	Emission Factor Source
CO_2 Emission Factors			
Gasoline	8.78	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
Diesel	10.21	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
N_2O Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0036	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0066	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0048	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.26	g N_2O/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.
CH_4 Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0173	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0163	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0051	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.58	g CH_4/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.

Notes:

[a] Model Year 2009 was the most recent year of emission factors available. As a result, it was assumed representative of vehicles used for this project.

Table 5.1A.10R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO Emissions from Block 1 Construction

	CO Emisisons (lbs/month)																														
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57
Excavator	259.65	259.65	259.65	259.65	259.65	129.83	129.83	129.83	129.83	129.83	129.83	129.83	129.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	268.73	268.73	268.73	268.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	134.37	134.37
Cranes	0.00	0.00	0.00	78.65	78.65	78.65	157.30	157.30	196.62	196.62	157.30	157.30	196.62	196.62	157.30	157.30	157.30	157.30	78.65	78.65	78.65	78.65	78.65	78.65	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	43.71	0.00	0.00	0.00	0.00
Rubber Tired Loader	102.69	102.69	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	174.22	174.22	87.11	87.11	87.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	57.77	57.77	57.77	57.77	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	57.77	57.77	57.77	57.77	57.77	57.77	57.77	57.77	57.77	57.77
Forklift	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	57.15	57.15	57.15	57.15	57.15	57.15	57.15	57.15	57.15	57.15
Roller	109.48	109.48	109.48	109.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.74	54.74
Other General Industrial Equipment	91.10	91.10	91.10	91.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**1,288.23**	**1,288.23**	**1,149.78**	**1,228.42**	**816.88**	**599.95**	**678.59**	**678.59**	**717.92**	**717.92**	**678.59**	**678.59**	**717.92**	**588.09**	**548.77**	**548.77**	**548.77**	**548.77**	**470.12**	**470.12**	**355.20**	**303.85**	**303.85**	**303.85**	**225.20**	**225.20**	**181.49**	**181.49**	**370.60**	**370.60**
Onsite Total (lbs/day) [a]	**56.01**	**56.01**	**49.99**	**53.41**	**35.52**	**26.08**	**29.50**	**29.50**	**31.21**	**31.21**	**29.50**	**29.50**	**31.21**	**25.57**	**23.86**	**23.86**	**23.86**	**23.86**	**20.44**	**20.44**	**15.44**	**13.21**	**13.21**	**13.21**	**9.79**	**9.79**	**7.89**	**7.89**	**16.11**	**16.11**
Onsite Total (tons/year)	**5.26**																													

Construction Equipment VOC Emissions from Block 1 Construction

	VOC Emisisons (lbs/month)																														
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31
Excavator	37.95	37.95	37.95	37.95	37.95	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	44.66	44.66	44.66	44.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	22.33	22.33
Cranes	0.00	0.00	0.00	26.12	26.12	26.12	52.24	52.24	65.29	65.29	52.24	52.24	65.29	65.29	52.24	52.24	52.24	52.24	26.12	26.12	26.12	26.12	26.12	26.12	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	6.63	0.00	0.00	0.00	0.00
Rubber Tired Loader	19.52	19.52	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	39.43	39.43	19.71	19.71	19.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	11.30	11.30	11.30	11.30	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30
Forklift	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
Roller	21.92	21.92	21.92	21.92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.96	10.96
Other General Industrial Equipment	15.75	15.75	15.75	15.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**233.97**	**233.97**	**204.49**	**230.61**	**159.58**	**120.89**	**147.01**	**147.01**	**160.07**	**160.07**	**147.01**	**147.01**	**160.07**	**141.09**	**128.03**	**128.03**	**128.03**	**128.03**	**101.91**	**101.91**	**82.86**	**73.10**	**73.10**	**73.10**	**46.98**	**46.98**	**40.36**	**40.36**	**73.65**	**73.65**
Onsite Total (lbs/day) [a]	**10.17**	**10.17**	**8.89**	**10.03**	**6.94**	**5.26**	**6.39**	**6.39**	**6.96**	**6.96**	**6.39**	**6.39**	**6.96**	**6.13**	**5.57**	**5.57**	**5.57**	**5.57**	**4.43**	**4.43**	**3.60**	**3.18**	**3.18**	**3.18**	**2.04**	**2.04**	**1.75**	**1.75**	**3.20**	**3.20**
Onsite Total (tons/year)	**1.05**																													

Construction Equipment NOx Emissions from Block 1 Construction

	NOx Emissions (lbs/month)																														
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	143.87	143.87	143.87	143.87	143.87	143.87	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49
Excavator	256.34	256.34	256.34	256.34	256.34	128.17	112.93	112.93	112.93	112.93	112.93	112.93	112.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	317.08	317.08	317.08	317.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128.72	128.72
Cranes	0.00	0.00	0.00	225.10	225.10	225.10	408.21	408.21	510.27	510.27	408.21	408.21	510.27	510.27	408.21	408.21	408.21	408.21	184.24	184.24	184.24	184.24	184.24	184.24	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	44.57	44.57	44.57	44.57	44.57	44.57	40.64	40.64	40.64	40.64	40.64	40.64	40.64	40.64	40.64	40.64	40.64	40.64	37.11	37.11	37.11	37.11	37.11	37.11	37.11	37.11	0.00	0.00	0.00	0.00
Rubber Tired Loader	122.03	122.03	61.02	61.02	61.02	61.02	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	52.08	52.08	52.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	234.51	234.51	117.26	117.26	117.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	72.75	72.75	72.75	72.75	145.49	145.49	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	123.02	123.02	61.51	61.51	61.51	61.51	61.51	61.51	61.51	61.51	61.51	61.51
Forklift	104.10	104.10	104.10	104.10	104.10	104.10	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	79.49	79.49	39.74	39.74	39.74	39.74	39.74	39.74	39.74	39.74	39.74	39.74
Roller	140.96	140.96	140.96	140.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	60.81	60.81
Other General Industrial Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**1,436.20**	**1,436.20**	**1,257.93**	**1,483.03**	**1,097.73**	**852.31**	**970.57**	**970.57**	**1,072.62**	**1,072.62**	**970.57**	**970.57**	**1,072.62**	**959.69**	**857.64**	**857.64**	**857.64**	**857.64**	**587.43**	**587.43**	**486.17**	**434.10**	**434.10**	**434.10**	**249.86**	**249.86**	**212.75**	**212.75**	**402.27**	**402.27**
Onsite Total (lbs/day) [a]	**62.44**	**62.44**	**54.69**	**64.48**	**47.73**	**37.06**	**42.20**	**42.20**	**46.64**	**46.64**	**42.20**	**42.20**	**46.64**	**41.73**	**37.29**	**37.29**	**37.29**	**37.29**	**25.54**	**25.54**	**21.14**	**18.87**	**18.87**	**18.87**	**10.86**	**10.86**	**9.25**	**9.25**	**17.49**	**17.49**
Onsite Total (tons/year)	**6.80**																													

Construction Equipment SOx Emissions from Block 1 Construction

	SOx Emissions (lbs/month)																														
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Excavator	0.46	0.46	0.46	0.46	0.46	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	0.48	0.48	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
Cranes	0.00	0.00	0.00	0.35	0.35	0.35	0.71	0.71	0.88	0.88	0.71	0.71	0.88	0.88	0.71	0.71	0.71	0.71	0.35	0.35	0.35	0.35	0.35	0.35	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.00
Rubber Tired Loader	0.16	0.16	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	0.26	0.26	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.09	0.09	0.09	0.09	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Forklift	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Roller	0.17	0.17	0.17	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09
Other General Industrial Equipment	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**2.33**	**2.33**	**2.12**	**2.48**	**1.75**	**1.39**	**1.75**	**1.75**	**1.92**	**1.92**	**1.75**	**1.75**	**1.92**	**1.69**	**1.52**	**1.52**	**1.52**	**1.52**	**1.16**	**1.16**	**0.97**	**0.89**	**0.89**	**0.89**	**0.54**	**0.54**	**0.47**	**0.47**	**0.79**	**0.79**
Onsite Total (lbs/day) [a]	**0.10**	**0.10**	**0.09**	**0.11**	**0.08**	**0.06**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.05**	**0.05**	**0.04**	**0.04**	**0.04**	**0.04**	**0.02**	**0.02**	**0.02**	**0.02**	**0.03**	**0.03**
Onsite Total (tons/year)	**0.01**																													

Table 5.1A.10R Onsite Construction Equipment Exhaust Emissions

Construction Equipment PM_{10} Emissions from Block 1 Construction

	PM_{10} Emissions (lbs/month)																												
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	5.12	5.12	5.12	5.12	5.12	5.12	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02
Excavator	13.81	13.81	13.81	13.81	13.81	6.90	5.98	5.98	5.98	5.98	5.98	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	17.48	17.48	17.48	17.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	7.06
Cranes	0.00	0.00	0.00	7.72	7.72	7.72	13.91	13.91	17.39	17.39	13.91	13.91	17.39	17.39	13.91	13.91	13.91	13.91	6.31	6.31	6.31	6.31	6.31	6.31	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	3.20	3.20	3.20	3.20	3.20	3.20	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	0.00	0.00	0.00	0.00
Rubber Tired Loader	9.77	9.77	4.89	4.89	4.89	4.89	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	3.88	3.88	3.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	19.59	19.59	9.79	9.79	9.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	6.03	6.03	6.03	6.03	12.06	12.06	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	9.23	9.23	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62
Forklift	5.64	5.64	5.64	5.64	5.64	5.64	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.22	4.22	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11
Roller	11.45	11.45	11.45	11.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.69	4.69
Other General Industrial Equipment	6.27	6.27	6.27	6.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**98.36**	**98.36**	**83.68**	**91.40**	**62.23**	**45.54**	**47.06**	**47.06**	**50.54**	**50.54**	**47.06**	**47.06**	**50.54**	**44.56**	**41.08**	**41.08**	**41.08**	**41.08**	**29.97**	**29.97**	**23.24**	**19.36**	**19.36**	**19.36**	**13.06**	**13.06**	**10.74**	**10.74**	**22.49**	**22.49**
Onsite Total (lbs/day) [a]	**4.28**	**4.28**	**3.64**	**3.97**	**2.71**	**1.98**	**2.05**	**2.05**	**2.20**	**2.20**	**2.05**	**2.05**	**2.20**	**1.94**	**1.79**	**1.79**	**1.79**	**1.79**	**1.30**	**1.30**	**1.01**	**0.84**	**0.84**	**0.84**	**0.57**	**0.57**	**0.47**	**0.47**	**0.98**	**0.98**
Onsite Total (tons/year)	**0.38**																													

Construction Equipment $PM_{2.5}$ Emissions from Block 1 Construction

	$PM_{2.5}$ Emissions (lbs/month)																												
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	5.12	5.12	5.12	5.12	5.12	5.12	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02
Excavator	13.81	13.81	13.81	13.81	13.81	6.90	5.98	5.98	5.98	5.98	5.98	5.98	5.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	17.48	17.48	17.48	17.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	7.06
Cranes	0.00	0.00	0.00	7.72	7.72	7.72	13.91	13.91	17.39	17.39	13.91	13.91	17.39	17.39	13.91	13.91	13.91	13.91	6.31	6.31	6.31	6.31	6.31	6.31	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	3.20	3.20	3.20	3.20	3.20	3.20	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.73	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	0.00	0.00	0.00	0.00
Rubber Tired Loader	9.77	9.77	4.89	4.89	4.89	4.89	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	3.88	3.88	3.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	19.59	19.59	9.79	9.79	9.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	6.03	6.03	6.03	6.03	12.06	12.06	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	9.23	9.23	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62
Forklift	5.64	5.64	5.64	5.64	5.64	5.64	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.22	4.22	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11
Roller	11.45	11.45	11.45	11.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.69	4.69
Other General Industrial Equipment	6.27	6.27	6.27	6.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**98.36**	**98.36**	**83.68**	**91.40**	**62.23**	**45.54**	**47.06**	**47.06**	**50.54**	**50.54**	**47.06**	**47.06**	**50.54**	**44.56**	**41.08**	**41.08**	**41.08**	**41.08**	**29.97**	**29.97**	**23.24**	**19.36**	**19.36**	**19.36**	**13.06**	**13.06**	**10.74**	**10.74**	**22.49**	**22.49**
Onsite Total (lbs/day) [a]	**4.28**	**4.28**	**3.64**	**3.97**	**2.71**	**1.98**	**2.05**	**2.05**	**2.20**	**2.20**	**2.05**	**2.05**	**2.20**	**1.94**	**1.79**	**1.79**	**1.79**	**1.79**	**1.30**	**1.30**	**1.01**	**0.84**	**0.84**	**0.84**	**0.57**	**0.57**	**0.47**	**0.47**	**0.98**	**0.98**
Onsite Total (tons/year)	**0.38**																													

Construction Equipment CO_2 Emissions from Block 1 Construction

	CO_2 Emissions (metric tons/month)																												
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48
Excavator	20.40	20.40	20.40	20.40	20.40	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	21.23	21.23	21.23	21.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.61	10.61
Cranes	0.00	0.00	0.00	15.51	15.51	15.51	31.02	31.02	38.77	38.77	31.02	31.02	38.77	38.77	31.02	31.02	31.02	31.02	15.51	15.51	15.51	15.51	15.51	15.51	0.00	0.00	0.00	0.00	0.00	0.00
Tractor/Loader/Backhoe	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	0.00	0.00	0.00	0.00
Rubber Tired Loader	6.95	6.95	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	11.31	11.31	5.65	5.65	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	4.04	4.04	4.04	4.04	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	4.04	4.04	4.04	4.04	4.04	4.04	4.04	4.04	4.04	4.04
Forklift	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49
Roller	7.61	7.61	7.61	7.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.80	3.80
Other General Industrial Equipment	7.18	7.18	7.18	7.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (metric tons/month)	**105.22**	**105.22**	**96.10**	**111.60**	**79.62**	**63.77**	**79.28**	**79.28**	**87.03**	**87.03**	**79.28**	**79.28**	**87.03**	**76.83**	**69.08**	**69.08**	**69.08**	**69.08**	**53.57**	**53.57**	**45.04**	**41.56**	**41.56**	**41.56**	**26.06**	**26.06**	**23.01**	**23.01**	**37.43**	**37.43**
Onsite Total (metric tons/day) [a]	**4.57**	**4.57**	**4.18**	**4.85**	**3.46**	**2.77**	**3.45**	**3.45**	**3.78**	**3.78**	**3.45**	**3.45**	**3.78**	**3.34**	**3.00**	**3.00**	**3.00**	**3.00**	**2.33**	**2.33**	**1.96**	**1.81**	**1.81**	**1.81**	**1.13**	**1.13**	**1.00**	**1.00**	**1.63**	**1.63**
Onsite Total (metric tons/year)	**1052.71**																													

Construction Equipment N_2O Emissions from Block 1 Construction

	N_2O Emissions (metric tons/month)																												
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Excavator	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Grader	0.0005	0.0005	0.0005	0.0005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0003
Cranes	0.0000	0.0000	0.0000	0.0004	0.0004	0.0004	0.0008	0.0008	0.0010	0.0010	0.0008	0.0008	0.0010	0.0010	0.0008	0.0008	0.0008	0.0008	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tractor/Loader/Backhoe	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000
Rubber Tired Loader	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Crawler Tractor	0.0003	0.0003	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Air Compressor	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Forklift	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Roller	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
Other General Industrial Equipment	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (metric tons/month)	**0.0027**	**0.0027**	**0.0024**	**0.0028**	**0.0020**	**0.0016**	**0.0020**	**0.0020**	**0.0022**	**0.0022**	**0.0020**	**0.0020**	**0.0022**	**0.0020**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0014**	**0.0014**	**0.0011**	**0.0011**	**0.0011**	**0.0011**	**0.0007**	**0.0007**	**0.0006**	**0.0006**	**0.0010**	**0.0010**
Onsite Total (metric tons/day) [a]	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Onsite Total (metric tons/year)	**0.03**																													

Table 5.1A.10R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CH_4 Emissions from Block 1 Construction

	CH_4 Emissions (metric tons/month)																														
Onsite Equipment	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Water Truck	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Excavator	0.0012	0.0012	0.0012	0.0012	0.0012	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Grader	0.0012	0.0012	0.0012	0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0006
Cranes	0.0000	0.0000	0.0000	0.0009	0.0009	0.0009	0.0018	0.0018	0.0022	0.0022	0.0018	0.0018	0.0022	0.0022	0.0018	0.0018	0.0018	0.0018	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tractor/Loader/Backhoe	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000
Rubber Tired Loader	0.0004	0.0004	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Crawler Tractor	0.0006	0.0006	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Air Compressor	0.0002	0.0002	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Forklift	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Roller	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002
Other General Industrial Equipment	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (metric tons/month)	**0.0060**	**0.0060**	**0.0055**	**0.0063**	**0.0045**	**0.0036**	**0.0045**	**0.0045**	**0.0049**	**0.0049**	**0.0045**	**0.0045**	**0.0049**	**0.0044**	**0.0039**	**0.0039**	**0.0039**	**0.0039**	**0.0030**	**0.0030**	**0.0026**	**0.0024**	**0.0024**	**0.0024**	**0.0015**	**0.0015**	**0.0013**	**0.0013**	**0.0021**	**0.0021**
Onsite Total (metric tons/day) [a]	**0.0003**	**0.0003**	**0.0002**	**0.0003**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
Onsite Total (metric tons/year)	**0.06**																													

Notes:

[a] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', the days per month are as fo 23

Table 5.1A.11R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO Emissions from Block 1 Construction

	CO Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Stake Truck	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Dump Truck	0.05	0.05	0.05	0.05	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.17**	**0.17**	**0.17**	**0.17**	**0.17**	**0.17**	**0.15**	**0.15**	**0.15**	**0.15**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**
	CO Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Onsite Stake Truck	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Onsite Dump Truck	1.09	1.09	1.09	1.09	1.09	1.09	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**3.99**	**3.99**	**3.99**	**3.99**	**3.99**	**3.99**	**3.45**	**3.45**	**3.45**	**3.45**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**2.35**	**1.81**	**1.81**	**1.81**	**1.81**	**1.81**	**1.81**
Onsite Total (tons/year)	**0.02**																													

Onsite Construction Vehicle VOC Emissions from Block 1 Construction

	VOC Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Dump Truck	0.03	0.03	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.085**	**0.085**	**0.085**	**0.085**	**0.085**	**0.085**	**0.071**	**0.071**	**0.071**	**0.071**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.044**	**0.030**	**0.030**	**0.030**	**0.030**	**0.030**	**0.030**
	VOC Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Stake Truck	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Onsite Dump Truck	0.64	0.64	0.64	0.64	0.64	0.64	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**1.96**	**1.96**	**1.96**	**1.96**	**1.96**	**1.96**	**1.64**	**1.64**	**1.64**	**1.64**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**1.00**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**	**0.68**
Onsite Total (tons/year)	**0.01**																													

Onsite Construction Vehicle SOx Emissions from Block 1 Construction

	SOx Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
Onsite Stake Truck	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Onsite Dump Truck	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Onsite Total (lbs/day)	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00050**	**0.00050**	**0.00050**	**0.00050**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00026**	**0.00026**	**0.00026**	**0.00026**	**0.00026**	**0.00026**
	SOx Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
Onsite Stake Truck	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
Onsite Dump Truck	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (lbs/month)	**0.0135**	**0.0135**	**0.0135**	**0.0135**	**0.0135**	**0.0135**	**0.0116**	**0.0116**	**0.0116**	**0.0116**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0060**	**0.0060**	**0.0060**	**0.0060**	**0.0060**	**0.0060**
Onsite Total (tons/year)	**0.00**																													

Onsite Construction Vehicle NOx Emissions from Block 1 Construction

	NOx Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Onsite Stake Truck	0.165	0.165	0.165	0.165	0.165	0.165	0.147	0.147	0.147	0.147	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066	0.066
Onsite Dump Truck	0.082	0.082	0.082	0.082	0.082	0.082	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.033	0.033	0.033	0.033	0.033	0.033	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (lbs/day)	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.25**	**0.19**	**0.19**	**0.19**	**0.19**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**	**0.07**
	NOx Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Onsite Stake Truck	3.79	3.79	3.79	3.79	3.79	3.79	3.38	3.38	3.38	3.38	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51	1.51
Onsite Dump Truck	1.90	1.90	1.90	1.90	1.90	1.90	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.76	0.76	0.76	0.76	0.76	0.76	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**5.75**	**5.75**	**5.75**	**5.75**	**5.75**	**5.75**	**4.28**	**4.28**	**4.28**	**4.28**	**2.59**	**2.59**	**2.59**	**2.59**	**2.59**	**2.59**	**2.59**	**2.59**	**2.33**	**2.33**	**2.33**	**2.33**	**2.33**	**2.33**	**1.57**	**1.57**	**1.57**	**1.57**	**1.57**	**1.57**
Onsite Total (tons/year)	**0.03**																													

Onsite Construction Vehicle PM_{10} Emissions from Block 1 Construction

	PM_{10} Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.009	0.009	0.009	0.009	0.009	0.009	0.007	0.007	0.007	0.007	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Onsite Dump Truck	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (lbs/day)	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.010**	**0.010**	**0.010**	**0.010**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.007**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.004**	**0.004**	**0.004**	**0.004**	**0.004**	**0.004**
	PM_{10} Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Stake Truck	0.20	0.20	0.20	0.20	0.20	0.20	0.17	0.17	0.17	0.17	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Onsite Dump Truck	0.10	0.10	0.10	0.10	0.10	0.10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.33**	**0.33**	**0.33**	**0.33**	**0.33**	**0.33**	**0.24**	**0.24**	**0.24**	**0.24**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**
Onsite Total (tons/year)	**0.00**																													

Onsite Construction Vehicle $PM_{2.5}$ Emissions from Block 1 Construction

	$PM_{2.5}$ Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.008	0.008	0.008	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Onsite Dump Truck	0.004	0.004	0.004	0.004	0.004	0.004	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (lbs/day)	**0.013**	**0.013**	**0.013**	**0.013**	**0.013**	**0.013**	**0.009**	**0.009**	**0.009**	**0.009**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.006**	**0.005**	**0.005**	**0.005**	**0.005**	**0.005**	**0.005**	**0.004**	**0.004**	**0.004**	**0.004**	**0.004**	**0.004**
	$PM_{2.5}$ Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	0.18	0.18	0.18	0.18	0.18	0.18	0.15	0.15	0.15	0.15	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Onsite Dump Truck	0.09	0.09	0.09	0.09	0.09	0.09	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.29**	**0.29**	**0.29**	**0.29**	**0.29**	**0.29**	**0.21**	**0.21**	**0.21**	**0.21**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.13**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**
Onsite Total (tons/year)	**0.00**																													

Table 5.1A.11R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO_2 Emissions from Block 1 Construction

	CO_2 Emissions (metric tons/day)																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Onsite Stake Truck	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Onsite Dump Truck	0.008	0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (metric tons/day)	**0.028**	**0.028**	**0.028**	**0.028**	**0.028**	**0.028**	**0.024**	**0.024**	**0.024**	**0.024**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.013**	**0.013**	**0.013**	**0.013**	**0.013**	**0.013**
	CO_2 Emissions (metric tons/month) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Onsite Stake Truck	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Onsite Dump Truck	0.18	0.18	0.18	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (metric tons/month)	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.56**	**0.56**	**0.56**	**0.56**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.29**	**0.29**	**0.29**	**0.29**	**0.29**	**0.29**
Onsite Total (metric tons/year)	**6.86**																													

Onsite Construction Vehicle N_2O Emissions from Block 1 Construction

	N_2O Emissions (metric tons/day)																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026
Onsite Stake Truck	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Onsite Total (metric tons/day)	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000050**	**0.000000050**	**0.000000050**	**0.000000050**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000036**	**0.000000036**	**0.000000036**	**0.000000036**	**0.000000036**	**0.000000036**
	N_2O Emissions (metric tons/month) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061	0.00000061
Onsite Stake Truck	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000044	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022
Onsite Dump Truck	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.0000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Onsite Total (metric tons/month)	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000012**	**0.0000012**	**0.0000012**	**0.0000012**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000008**	**0.0000008**	**0.0000008**	**0.0000008**	**0.0000008**	**0.0000008**
Onsite Total (metric tons/year)	**0.000014**																													

Onsite Construction Vehicle CH_4 Emissions from Block 1 Construction

	CH_4 Emissions (metric tons/day)																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065
Onsite Stake Truck	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Onsite Total (metric tons/day)	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000091**	**0.000000091**	**0.000000091**	**0.000000091**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000075**	**0.000000075**	**0.000000075**	**0.000000075**	**0.000000075**	**0.000000075**
	CH_4 Emissions (metric tons/month) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015
Onsite Stake Truck	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002
Onsite Dump Truck	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Onsite Total (metric tons/month)	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000021**	**0.0000021**	**0.0000021**	**0.0000021**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000017**	**0.0000017**	**0.0000017**	**0.0000017**	**0.0000017**	**0.0000017**
Onsite Total (metric tons/year)	**0.00003**																													

Notes:

[a] The days per month are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', as presented on the 'Fugitive Dust' tab.

Table 5.1A.12R Onsite Construction Fugitive Dust Emissions

Grading and Bulldozing Activity Levels for Block 1 Construction

	Monthly Activity Levels																													
Source	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Disturbance (acres) [a]	1.33	1.33	1.33	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.33	1.33
Bulldozer Operation (hours) [b]	460.00	460.00	230.00	230.00	230.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite Disturbance (acres) [c]	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33

Notes:
[a] A total of 8 acres is disturbed during Block 1 Construction as estimated by H. Larios/PEC on 3/23/12; assumed this disturbance was equally distributed amongst the months in which graders are utilized.
[b] Bulldozer Operation calculated based on the number of equipment and the hours of operation per month, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls':
Hours per Day: 10
Days per Month: 23
[c] Estimated a total of 16 acres is disturbed at Alamitos for a laydown area during Block 1 and Block 2 Construction and assumed this disturbance was equally distributed amongst the construction activity (48 months total). Also assumed only fugitive dust from grading would occur in this location (i.e., not bulldozing).

Onsite Construction Vehicle Fugitive PM_{10} Emissions from Block 1 Construction

	Fugitive PM_{10} Emissions (lbs/day) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Onsite Stake Truck	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Dump Truck	1.69	1.69	1.69	1.69	1.69	1.69	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**7.61**	**7.61**	**7.61**	**7.61**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.07**	**5.07**	**5.07**	**5.07**	**5.07**	**5.07**

	Fugitive PM_{10} Emissions (lbs/month) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Onsite Stake Truck	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Dump Truck	38.88	38.88	38.88	38.88	38.88	38.88	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**174.97**	**174.97**	**174.97**	**174.97**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**116.64**	**116.64**	**116.64**	**116.64**	**116.64**	**116.64**
Onsite Total (tons/year)	**1.07**																													

Notes:
[a] Emissions based on highest (controlled) unpaved road emission factor for PM_{10}.

Onsite Construction Vehicle Fugitive $PM_{2.5}$ Emissions from Block 1 Construction

	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Onsite Stake Truck	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Dump Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.76**	**0.76**	**0.76**	**0.76**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.51**	**0.51**	**0.51**	**0.51**	**0.51**	**0.51**

	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]																													
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Onsite Pick-up Truck	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78
Onsite Stake Truck	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Dump Truck	3.89	3.89	3.89	3.89	3.89	3.89	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**17.50**	**17.50**	**17.50**	**17.50**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**11.66**	**11.66**	**11.66**	**11.66**	**11.66**	**11.66**
Onsite Total (tons/year)	**0.11**																													

Notes:
[a] Emissions based on the highest (controlled) unpaved road emission factor for $PM_{2.5}$.

Onsite Grading and Bulldozing Fugitive PM_{10} Emissions from Block 1 Construction

	Fugitive PM_{10} Emissions (lbs/day) [a, b]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading [c]	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
Bulldozing	21.12	21.12	10.56	10.56	10.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**21.14**	**21.14**	**10.58**	**10.58**	**10.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.02**

	Fugitive PM_{10} Emissions (lbs/month) [a, b]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading	0.55	0.55	0.55	0.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.55
Bulldozing	485.68	485.68	242.84	242.84	242.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**486.24**	**486.24**	**243.39**	**243.39**	**242.84**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.55**	**0.55**
Onsite Total (tons/year)	**0.85**																													

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for PM_{10}.
[c] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Onsite Grading and Bulldozing Fugitive $PM_{2.5}$ Emissions from Block 1 Construction

	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a, b]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading [c]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	5.12	5.12	2.56	2.56	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**5.12**	**5.12**	**2.56**	**2.56**	**2.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a, b]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading	0.06	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.06
Bulldozing	117.65	117.65	58.82	58.82	58.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**117.71**	**117.71**	**58.88**	**58.88**	**58.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.06**
Onsite Total (tons/year)	**0.21**																													

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for $PM_{2.5}$.
[c] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Offsite Grading Fugitive PM_{10} Emissions from Block 1 Construction

	Fugitive PM_{10} Emissions (lbs/day) [a]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading [b]	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Offsite Total (lbs/day)	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**

	Fugitive PM_{10} Emissions (lbs/month) [a]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Offsite Total (lbs/month)	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**
Offsite Total (tons/year)	**0.00**																													

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Offsite Grading Fugitive $PM_{2.5}$ Emissions from Block 1 Construction

	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading [b]	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017
Offsite Total (lbs/day)	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**

	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]																													
Construction Activity	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Grading	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038
Offsite Total (lbs/month)	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**
Offsite Total (tons/year)	**0.00**																													

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Table 5.1A.12R Onsite Construction Fugitive Dust Emissions

Onsite Construction Vehicle Activity for Block 1 Construction

Vehicle Type	Miles/Day [a]	Working Days per Month [b]
Onsite Pick-up Truck	2	23
Onsite Stake Truck	2	23
Onsite Dump Truck	1	23

Notes:
[a] Estimated based on the dimensions of the project site.
[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Fugitive Dust Emission Factors for Unpaved Roads

Vehicles on Unpaved Surfaces at Industrial Sites

Parameter	PM_{10}	$PM_{2.5}$
Mean Vehicle Weight [a]	16.5	16.5
Silt Content [b]	8.5	8.5
k [c]	1.5	0.15
a [c]	0.9	0.9
b [c]	0.45	0.45
P [d]	31	31
Emission Factor (Uncontrolled, lbs/mile) [e]	2.17	0.22
Reduction from Watering 3x per Day [f]	61%	61%
Emission Factor (Controlled, lbs/mile)	0.85	0.08

Notes:
[a] Mean vehicle weight assumes that medium/heavy duty trucks weigh 16.5 tons.
[b] Silt content taken from Table 13.2.2-1 of Section 13.2.2 of AP-42 for a Construction Site, Scraper Route; this value is consistent with the CalEEMod defaults for the South Coast Air Basin.
[c] k, a, and b taken from Table 13.2.2-2 of Section 13.2.2 of AP-42 for industrial roads.
[d] P taken as the CalEEMod default for the Huntington Beach climate region of the South Coast Air Basin.
[e] Emission factor calculated using Equations 1a and 2 from Section 13.2.2 of AP-42:

Emission Factor (lbs/mile) = {k (lbs/mile) x [Silt Content (%) / 12][a] x [Mean Vehicle Weight (tons) / 3][b]} x [(365 - P) / 365]

[f] Control efficiency taken from the URBEMIS default mitigation measures for unpaved roads.

Fugitive Dust Emission Factors for Grading

Grading Equipment Passes

Parameter	PM_{10}	$PM_{2.5}$
S (mph) [a]	7.1	7.1
F [a]	0.6	0.031
Emission Factor (lbs/VMT) [b]	1.543	0.167
Reduction from Watering Every 3 Hours [c]	61%	61%
Emission Factor (Controlled, lbs/VMT)	0.602	0.065

Notes:
[a] The mean vehicle speed (S) and the particulate matter scaling factor (F) taken from Section 11.9 of AP-42 per Section 4.3 of Appendix A of the CalEEMod User's Guide.
[b] Emission factor calculated using the following equation from Section 4.3 of Appendix A of the CalEEMod User's Guide:

PM_{10} Emission Factor (lbs/VMT) = $0.051 \times (S)^{2.0} \times F_{PM10}$

$PM_{2.5}$ Emission Factor (lbs/VMT) = $0.04 \times (S)^{2.5} \times F_{PM2.5}$

[c] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Construction Activities.

Fugitive Dust Emission Factors for Bulldozing

Bulldozing Equipment Passes

Parameter	PM_{10}	$PM_{2.5}$
C [a]	5.7	5.7
M (%) [a]	7.9%	7.9%
s (%) [a]	6.9%	6.9%
F [a]	0.75	0.105
Emission Factor (lbs/hr) [b]	2.707	0.656
Reduction from Watering Every 3 Hours [c]	61%	61%
Emission Factor (Controlled, lbs/hr)	1.056	0.256

Notes:
[a] The arbitrary coefficient (C), material moisture content (M), material silt content (s), and particulate matter scaling factor (F) taken from Section 11.9 of AP-42 per Section 4.3 of Appendix A of the CalEEMod User's Guide. These values are consistent with the CalEEMod defaults for the South Coast Air Basin.
[b] Emission factor calculated using the following equation from Section 4.3 of Appendix A of the CalEEMod User's Guide:

PM_{10} Emission Factor (lbs/hr) = $[(C \times s^{1.5}) / M^{1.4}] \times F_{PM10}$

$PM_{2.5}$ Emission Factor (lbs/hr) = $[(C \times s^{1.5}) / M^{1.4}] \times F_{PM2.5}$

[c] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Construction Activities.

Huntington Beach Energy Project
Construction Emission Estimates - Block 1 Construction
October 2013

Table 5.1A.13R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle Usage During Block 1 Construction

	Number per Day																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks [a]	0.00	0.00	0.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Material Hauling Trucks [b, c]	0.40	0.63	1.38	1.38	2.88	2.88	3.25	4.75	5.75	5.75	7.25	8.75	10.75	11.35	11.25	11.10	10.50	8.70	7.70	7.70	7.20	7.20	3.50	2.50	2.50	2.50	2.50	0.50	0.50	0.50
Directly to HBEP	0.16	0.25	0.55	0.55	1.15	1.15	1.30	1.90	2.30	2.30	2.90	3.50	4.30	4.54	4.50	4.44	4.20	3.48	3.08	3.08	2.88	2.88	1.40	1.00	1.00	1.00	1.00	0.20	0.20	0.20
Directly to Alamitos	0.24	0.38	0.83	0.83	1.73	1.73	1.95	2.85	3.45	3.45	4.35	5.25	6.45	6.81	6.75	6.66	6.30	5.22	4.62	4.62	4.32	4.32	2.10	1.50	1.50	1.50	1.50	0.30	0.30	0.30
To HBEP from Alamitos	0.24	0.38	0.83	0.83	1.73	1.73	1.95	2.85	3.45	3.45	4.35	5.25	6.45	6.81	6.75	6.66	6.30	5.22	4.62	4.62	4.32	4.32	2.10	1.50	1.50	1.50	1.50	0.30	0.30	0.30
Construction Worker Commute [d]	2.00	38.00	41.00	49.00	65.00	69.00	73.00	73.00	86.00	98.00	115.00	109.00	123.00	125.00	131.00	135.00	160.00	176.00	180.00	194.00	197.00	209.00	207.00	220.00	220.00	226.00	226.00	230.00	200.00	195.00

Notes:

[a] Offsite Delivery Trucks include trucks transporting "Consumables & Supplies", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. It was assumed that these trucks travel directly to HBEP. Due to the revised, shortened construction duration and in the absence of updated engineering data, the last 6 months of delivery data provided in 'Huntington Beach Truck Deliveries 032112.xls' were not utilized.

[b] Material Hauling Trucks include trucks transporting "Mechanical Equipment", "Electrical Equip. & Mtrls", "Piping, Supports, & Valves", "Concrete and Rebar", "Steel/Architectural", "Contractor Mobilization", "Contractor Demobilization", "Construction Equipment", "HRSGs", "CGTs", "CTGs", "STGs", and "Main Transformers", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. Due to the revised, shortened construction duration and in the absence of updated engineering data, the last 6 months of hauling data provided in 'Huntington Beach Truck Deliveries 032112.xls' were not utilized.

[c] Per "Huntington Beach Truck Deliveries 032112.xls", assumed that 40% of the material haul trucks travel directly to HBEP, that the remaining 60% travel directly to Alamitos, and that all of the materials delivered to Alamitos will later be delivered to HBEP.

[d] Assumed 1 commute per 1 worker; number of workers taken from 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'. Due to the revised, shortened construction duration and in the absence of updated engineering data, the last 12 months of manhour data provided in 'Manpower_Schedule_Huntington_Beach 03.13.12.xls' were not utilized.

Offsite Vehicle CO Emissions from Block 1 Construction

	CO Emissions (lbs/day)																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.072	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Material Hauling Trucks																														
Directly to HBEP	0.024	0.038	0.083	0.083	0.174	0.174	0.197	0.288	0.349	0.349	0.439	0.530	0.652	0.688	0.682	0.673	0.636	0.527	0.467	0.467	0.436	0.436	0.212	0.152	0.152	0.152	0.152	0.030	0.030	0.030
Directly to Alamitos	0.036	0.057	0.125	0.125	0.261	0.261	0.296	0.432	0.523	0.523	0.659	0.796	0.977	1.032	1.023	1.009	0.955	0.791	0.700	0.700	0.655	0.655	0.318	0.227	0.227	0.227	0.227	0.045	0.045	0.045
To HBEP from Alamitos	0.024	0.037	0.081	0.081	0.170	0.170	0.192	0.281	0.340	0.340	0.428	0.517	0.635	0.671	0.665	0.656	0.621	0.514	0.455	0.455	0.426	0.426	0.207	0.148	0.148	0.148	0.148	0.030	0.030	0.030
Construction Worker Commute	0.137	2.596	2.801	3.347	4.440	4.713	4.987	4.987	5.875	6.694	7.856	7.446	8.402	8.539	8.949	9.222	10.930	12.022	12.296	13.252	13.457	14.277	14.140	15.028	15.028	15.438	15.438	15.711	13.662	13.320
Offsite Total (lbs/day)	**0.221**	**2.727**	**3.090**	**3.691**	**5.100**	**5.373**	**5.725**	**6.041**	**7.140**	**7.960**	**9.455**	**9.361**	**10.739**	**11.002**	**11.391**	**11.632**	**13.214**	**13.927**	**13.990**	**14.946**	**15.046**	**15.866**	**14.895**	**15.573**	**15.573**	**15.983**	**15.983**	**15.835**	**13.785**	**13.444**
	CO Emissions (lbs/month)																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	1.249	1.249	1.249	1.249	1.249	1.249	1.249	1.665	1.665	1.665	1.665	1.665	1.665	1.665	1.665	1.665	1.665	1.665	1.665	0.416	0.416	0.416	0.416	0.416	0.416	0.416	0.416
Material Hauling Trucks																														
Directly to HBEP	0.558	0.871	1.917	1.917	4.008	4.008	4.531	6.622	8.017	8.017	10.108	12.199	14.988	15.824	15.685	15.476	14.639	12.130	10.735	10.735	10.038	10.038	4.880	3.485	3.485	3.485	3.485	0.697	0.697	0.697
Directly to Alamitos	0.837	1.307	2.876	2.876	6.012	6.012	6.797	9.934	12.025	12.025	15.162	18.299	22.481	23.736	23.527	23.213	21.959	18.194	16.103	16.103	15.057	15.057	7.320	5.228	5.228	5.228	5.228	1.046	1.046	1.046
To HBEP from Alamitos	0.544	0.850	1.869	1.869	3.908	3.908	4.418	6.457	7.816	7.816	9.855	11.894	14.613	15.429	15.293	15.089	14.273	11.826	10.467	10.467	9.787	9.787	4.758	3.398	3.398	3.398	3.398	0.680	0.680	0.680
Construction Worker Commute	3.142	59.703	64.416	76.985	102.123	108.407	114.692	114.692	135.116	153.970	180.679	171.252	193.248	196.390	205.817	212.101	251.379	276.517	282.801	304.797	309.510	328.364	325.222	345.646	345.646	355.073	355.073	361.357	314.224	306.368
Offsite Total (lbs/month)	**5.08**	**62.73**	**71.08**	**84.90**	**117.30**	**123.58**	**131.69**	**138.95**	**164.22**	**183.08**	**217.47**	**215.31**	**246.99**	**253.04**	**261.99**	**267.54**	**303.91**	**320.33**	**321.77**	**343.77**	**346.06**	**364.91**	**342.59**	**358.17**	**358.17**	**367.60**	**367.60**	**364.20**	**317.06**	**309.21**
Offsite Total (tons/year)	**2.09**																													

Offsite Vehicle VOC Emissions from Block 1 Construction

	VOC Emissions (lbs/day)																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Material Hauling Trucks																														
Directly to HBEP	0.004	0.006	0.014	0.014	0.029	0.029	0.033	0.049	0.059	0.059	0.074	0.090	0.110	0.116	0.115	0.114	0.107	0.089	0.079	0.079	0.074	0.074	0.036	0.026	0.026	0.026	0.026	0.005	0.005	0.005
Directly to Alamitos	0.006	0.010	0.021	0.021	0.044	0.044	0.050	0.073	0.088	0.088	0.111	0.134	0.165	0.174	0.173	0.170	0.161	0.133	0.118	0.118	0.110	0.110	0.054	0.038	0.038	0.038	0.038	0.008	0.008	0.008
To HBEP from Alamitos	0.004	0.006	0.014	0.014	0.029	0.029	0.032	0.047	0.057	0.057	0.072	0.087	0.107	0.113	0.112	0.111	0.105	0.087	0.077	0.077	0.072	0.072	0.035	0.025	0.025	0.025	0.025	0.005	0.005	0.005
Construction Worker Commute	0.003	0.052	0.056	0.067	0.088	0.094	0.099	0.099	0.117	0.133	0.156	0.148	0.167	0.170	0.178	0.183	0.217	0.239	0.244	0.263	0.267	0.284	0.281	0.299	0.299	0.307	0.307	0.312	0.271	0.265
Offsite Total (lbs/day)	**0.017**	**0.074**	**0.105**	**0.126**	**0.201**	**0.207**	**0.226**	**0.279**	**0.332**	**0.348**	**0.428**	**0.474**	**0.564**	**0.588**	**0.592**	**0.592**	**0.605**	**0.563**	**0.533**	**0.552**	**0.538**	**0.554**	**0.409**	**0.391**	**0.391**	**0.399**	**0.399**	**0.334**	**0.293**	**0.286**
	VOC Emissions (lbs/month)																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.252	0.252	0.252	0.252	0.252	0.252	0.252	0.335	0.335	0.335	0.335	0.335	0.335	0.335	0.335	0.335	0.335	0.335	0.335	0.084	0.084	0.084	0.084	0.084	0.084	0.084	0.084
Material Hauling Trucks																														
Directly to HBEP	0.094	0.147	0.324	0.324	0.676	0.676	0.765	1.118	1.353	1.353	1.706	2.059	2.529	2.670	2.647	2.612	2.470	2.047	1.812	1.812	1.694	1.694	0.823	0.588	0.588	0.588	0.588	0.118	0.118	0.118
Directly to Alamitos	0.141	0.221	0.485	0.485	1.015	1.015	1.147	1.676	2.029	2.029	2.559	3.088	3.794	4.006	3.970	3.917	3.706	3.070	2.717	2.717	2.541	2.541	1.235	0.882	0.882	0.882	0.882	0.176	0.176	0.176
To HBEP from Alamitos	0.092	0.143	0.315	0.315	0.660	0.660	0.746	1.090	1.319	1.319	1.663	2.007	2.466	2.604	2.581	2.546	2.409	1.996	1.766	1.766	1.652	1.652	0.803	0.573	0.573	0.573	0.573	0.115	0.115	0.115
Construction Worker Commute	0.062	1.186	1.280	1.530	2.029	2.154	2.279	2.279	2.684	3.059	3.590	3.402	3.839	3.902	4.089	4.214	4.994	5.494	5.619	6.056	6.149	6.524	6.461	6.867	6.867	7.054	7.054	7.179	6.243	6.087
Offsite Total (lbs/month)	**0.389**	**1.697**	**2.404**	**2.905**	**4.631**	**4.756**	**5.187**	**6.414**	**7.637**	**8.012**	**9.852**	**10.891**	**12.964**	**13.517**	**13.622**	**13.624**	**13.914**	**12.942**	**12.249**	**12.686**	**12.371**	**12.746**	**9.407**	**8.995**	**8.995**	**9.182**	**9.182**	**7.672**	**6.735**	**6.579**
Offsite Total (tons/year)	**0.076**																													

Offsite Vehicle SOx Emissions from Block 1 Construction

	SOx Emissions (lbs/day)																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.0000	0.0000	0.0000	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Material Hauling Trucks																														
Directly to HBEP	0.0002	0.0003	0.0008	0.0008	0.0016	0.0016	0.0018	0.0026	0.0031	0.0031	0.0040	0.0048	0.0059	0.0062	0.0062	0.0061	0.0057	0.0048	0.0042	0.0042	0.0039	0.0039	0.0019	0.0014	0.0014	0.0014	0.0014	0.0003	0.0003	0.0003
Directly to Alamitos	0.0003	0.0005	0.0011	0.0011	0.0024	0.0024	0.0027	0.0039	0.0047	0.0047	0.0059	0.0072	0.0088	0.0093	0.0092	0.0091	0.0086	0.0071	0.0063	0.0063	0.0059	0.0059	0.0029	0.0021	0.0021	0.0021	0.0021	0.0004	0.0004	0.0004
To HBEP from Alamitos	0.0002	0.0003	0.0007	0.0007	0.0015	0.0015	0.0017	0.0025	0.0031	0.0031	0.0039	0.0047	0.0057	0.0061	0.0060	0.0059	0.0056	0.0046	0.0041	0.0041	0.0038	0.0038	0.0019	0.0013	0.0013	0.0013	0.0013	0.0003	0.0003	0.0003
Construction Worker Commute	0.0003	0.0063	0.0068	0.0082	0.0108	0.0115	0.0122	0.0122	0.0143	0.0163	0.0192	0.0182	0.0205	0.0208	0.0218	0.0225	0.0267	0.0293	0.0300	0.0323	0.0328	0.0348	0.0345	0.0367	0.0367	0.0377	0.0377	0.0383	0.0333	0.0325
Offsite Total (lbs/day)	**0.0011**	**0.0075**	**0.0094**	**0.0112**	**0.0167**	**0.0174**	**0.0188**	**0.0216**	**0.0257**	**0.0277**	**0.0335**	**0.0353**	**0.0415**	**0.0429**	**0.0438**	**0.0441**	**0.0472**	**0.0464**	**0.0452**	**0.0475**	**0.0471**	**0.0491**	**0.0413**	**0.0416**	**0.0416**	**0.0426**	**0.0426**	**0.0394**	**0.0344**	**0.0336**
	SOx Emissions (lbs/month)																														
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.0000	0.0000	0.0000	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0126	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031
Material Hauling Trucks																														
Directly to HBEP	0.0050	0.0079	0.0173	0.0173	0.0362	0.0362	0.0409	0.0597	0.0723	0.0723	0.0912	0.1100	0.1352	0.1427	0.1415	0.1396	0.1320	0.1094	0.0968	0.0968	0.0905	0.0905	0.0440	0.0314	0.0314	0.0314	0.0314	0.0063	0.0063	0.0063
Directly to Alamitos	0.0075	0.0118	0.0259	0.0259	0.0542	0.0542	0.0613	0.0896	0.1085	0.1085	0.1368	0.1650	0.2028	0.2141	0.2122	0.2094	0.1981	0.1641	0.1452	0.1452	0.1358	0.1358	0.0660	0.0472	0.0472	0.0472	0.0472	0.0094	0.0094	0.0094
To HBEP from Alamitos	0.0049	0.0077	0.0169	0.0169	0.0352	0.0352	0.0398	0.0582	0.0705	0.0705	0.0889	0.1073	0.1318	0.1392	0.1379	0.1361	0.1287	0.1067	0.0944	0.0944	0.0883	0.0883	0.0429	0.0307	0.0307	0.0307	0.0307	0.0061	0.0061	0.0061
Construction Worker Commute	0.0077	0.1457	0.1572	0.1878	0.2492	0.2645	0.2798	0.2798	0.3297	0.3757	0.4408	0.4178	0.4715	0.4792	0.5022	0.5175	0.6133	0.6747	0.6900	0.7437	0.7552	0.8012	0.7935	0.8433	0.8433	0.8663	0.8663	0.8817	0.7667	0.7475
Offsite Total (lbs/month)	**0.0251**	**0.1730**	**0.2173**	**0.2574**	**0.3842**	**0.3996**	**0.4313**	**0.4968**	**0.5904**	**0.6364**	**0.7702**	**0.8128**	**0.9538**	**0.9877**	**1.0064**	**1.0151**	**1.0847**	**1.0674**	**1.0391**	**1.0927**	**1.0824**	**1.1284**	**0.9496**	**0.9557**	**0.9557**	**0.9787**	**0.9787**	**0.9067**	**0.7917**	**0.7725**
Offsite Total (tons/year)	**0.006**																													

Table 5.1A.13R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle NOx Emissions from Block 1 Construction

	NOx Emissions (lbs/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.00	0.00	0.00	0.16	0.16	0.16	0.14	0.14	0.14	0.14	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.17	0.17	0.17	0.17	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Material Hauling Trucks																														
Directly to HBEP	0.07	0.11	0.25	0.25	0.52	0.52	0.52	0.76	0.92	0.92	1.16	1.40	1.72	1.81	1.80	1.77	1.68	1.39	1.10	1.10	1.03	1.03	0.50	0.36	0.36	0.36	0.36	0.07	0.07	0.07
Directly to Alamitos	0.11	0.17	0.37	0.37	0.77	0.77	0.78	1.14	1.38	1.38	1.74	2.10	2.58	2.72	2.69	2.66	2.52	2.08	1.65	1.65	1.54	1.54	0.75	0.54	0.54	0.54	0.54	0.11	0.11	0.11
To HBEP from Alamitos	0.07	0.11	0.24	0.24	0.50	0.50	0.51	0.74	0.90	0.90	1.13	1.36	1.67	1.77	1.75	1.73	1.63	1.35	1.07	1.07	1.00	1.00	0.49	0.35	0.35	0.35	0.35	0.07	0.07	0.07
Construction Worker Commute	0.01	0.25	0.27	0.32	0.42	0.45	0.43	0.43	0.51	0.58	0.68	0.65	0.73	0.74	0.78	0.80	0.95	1.04	0.97	1.05	1.06	1.13	1.12	1.19	1.19	1.22	1.22	1.24	1.08	1.05
Offsite Total (lbs/day)	**0.26**	**0.64**	**1.12**	**1.34**	**2.38**	**2.40**	**2.38**	**3.21**	**3.84**	**3.91**	**4.89**	**5.69**	**6.88**	**7.23**	**7.21**	**7.15**	**6.96**	**6.06**	**4.96**	**5.03**	**4.80**	**4.87**	**2.90**	**2.47**	**2.47**	**2.50**	**2.50**	**1.53**	**1.37**	**1.34**
	NOx Emissions (lbs/month)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.00	0.00	0.00	3.68	3.68	3.68	3.24	3.24	3.24	3.24	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	3.84	3.84	3.84	3.84	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Material Hauling Trucks																														
Directly to HBEP	1.65	2.58	5.68	5.68	11.87	11.87	11.94	17.45	21.12	21.12	26.63	32.14	39.49	41.69	41.32	40.77	38.57	31.96	25.27	25.27	23.63	23.63	11.49	8.21	8.21	8.21	8.21	1.64	1.64	1.64
Directly to Alamitos	2.48	3.87	8.52	8.52	17.81	17.81	17.91	26.17	31.68	31.68	39.95	48.21	59.23	62.53	61.98	61.16	57.85	47.93	37.91	37.91	35.45	35.45	17.23	12.31	12.31	12.31	12.31	2.46	2.46	2.46
To HBEP from Alamitos	1.61	2.52	5.54	5.54	11.58	11.58	11.64	17.01	20.59	20.59	25.96	31.34	38.50	40.65	40.29	39.75	37.60	31.16	24.64	24.64	23.04	23.04	11.20	8.00	8.00	8.00	8.00	1.60	1.60	1.60
Construction Worker Commute	0.30	5.67	6.12	7.31	9.70	10.30	9.95	9.95	11.73	13.36	15.68	14.86	16.77	17.04	17.86	18.41	21.82	24.00	22.38	24.12	24.49	25.98	25.73	27.35	27.35	28.09	28.09	28.59	24.86	24.24
Offsite Total (lbs/month)	**6.04**	**14.64**	**25.85**	**30.72**	**54.63**	**55.23**	**54.68**	**73.83**	**88.36**	**90.00**	**112.55**	**130.87**	**158.31**	**166.24**	**165.78**	**164.41**	**160.16**	**139.37**	**114.04**	**115.78**	**110.45**	**111.94**	**66.61**	**56.82**	**56.82**	**57.57**	**57.57**	**35.25**	**31.53**	**30.90**
Offsite Total (tons/year)	**0.825**																													

Offsite Vehicle PM_{10} Emissions from Block 1 Construction

	PM_{10} Emissions (lbs/day) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Material Hauling Trucks																														
Directly to HBEP	0.008	0.012	0.026	0.026	0.054	0.054	0.060	0.087	0.105	0.105	0.133	0.160	0.197	0.208	0.206	0.204	0.193	0.160	0.137	0.137	0.129	0.129	0.062	0.045	0.045	0.045	0.045	0.009	0.009	0.009
Directly to Alamitos	0.011	0.018	0.039	0.039	0.082	0.082	0.089	0.131	0.158	0.158	0.199	0.241	0.296	0.312	0.310	0.305	0.289	0.239	0.206	0.206	0.193	0.193	0.094	0.067	0.067	0.067	0.067	0.013	0.013	0.013
To HBEP from Alamitos	0.007	0.012	0.025	0.025	0.053	0.053	0.058	0.085	0.103	0.103	0.130	0.156	0.192	0.203	0.201	0.199	0.188	0.156	0.134	0.134	0.125	0.125	0.061	0.044	0.044	0.044	0.044	0.009	0.009	0.009
Construction Worker Commute	0.032	0.603	0.650	0.777	1.031	1.094	1.158	1.158	1.365	1.555	1.825	1.730	1.952	1.984	2.079	2.142	2.539	2.793	2.856	3.078	3.126	3.316	3.285	3.491	3.491	3.586	3.586	3.650	3.174	3.094
Offsite Total (lbs/day)	**0.058**	**0.644**	**0.741**	**0.882**	**1.234**	**1.298**	**1.379**	**1.475**	**1.745**	**1.935**	**2.305**	**2.306**	**2.655**	**2.725**	**2.814**	**2.868**	**3.226**	**3.366**	**3.351**	**3.574**	**3.590**	**3.781**	**3.506**	**3.650**	**3.650**	**3.746**	**3.746**	**3.685**	**3.209**	**3.130**
	PM_{10} Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.332	0.332	0.332	0.317	0.317	0.317	0.317	0.422	0.422	0.422	0.422	0.422	0.422	0.422	0.422	0.406	0.406	0.406	0.406	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102
Material Hauling Trucks																														
Directly to HBEP	0.174	0.272	0.598	0.598	1.251	1.251	1.371	2.004	2.426	2.426	3.058	3.691	4.535	4.788	4.746	4.683	4.429	3.670	3.161	3.161	2.956	2.956	1.437	1.026	1.026	1.026	1.026	0.205	0.205	0.205
Directly to Alamitos	0.261	0.408	0.898	0.898	1.877	1.877	2.057	3.006	3.638	3.638	4.588	5.537	6.802	7.182	7.119	7.024	6.644	5.505	4.741	4.741	4.433	4.433	2.155	1.539	1.539	1.539	1.539	0.308	0.308	0.308
To HBEP from Alamitos	0.170	0.265	0.583	0.583	1.220	1.220	1.337	1.954	2.365	2.365	2.982	3.599	4.422	4.668	4.627	4.566	4.319	3.578	3.082	3.082	2.882	2.882	1.401	1.001	1.001	1.001	1.001	0.200	0.200	0.200
Construction Worker Commute	0.729	13.858	14.952	17.870	23.705	25.164	26.643	26.643	31.387	35.767	41.971	39.781	44.891	45.621	47.811	49.270	58.395	64.234	65.694	70.803	71.898	76.278	75.548	80.293	80.293	82.482	82.482	83.942	72.993	71.168
Offsite Total (lbs/month)	**1.334**	**14.804**	**17.032**	**20.281**	**28.385**	**29.844**	**31.724**	**33.922**	**40.133**	**44.513**	**53.021**	**53.031**	**61.072**	**62.682**	**64.725**	**65.965**	**74.209**	**77.410**	**77.084**	**82.193**	**82.575**	**86.955**	**80.642**	**83.960**	**83.960**	**86.150**	**86.150**	**84.757**	**73.808**	**71.983**
Offsite Total (tons/year)	**0.493**																													

Notes:
[a] PM_{10} Emissions include emissions from exhaust and paved roads.

Offsite Vehicle $PM_{2.5}$ Emissions from Block 1 Construction

	$PM_{2.5}$ Emissions (lbs/day) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Material Hauling Trucks																														
Directly to HBEP	0.004	0.006	0.013	0.013	0.027	0.027	0.029	0.042	0.051	0.051	0.064	0.077	0.095	0.100	0.099	0.098	0.093	0.077	0.065	0.065	0.060	0.060	0.029	0.021	0.021	0.021	0.021	0.004	0.004	0.004
Directly to Alamitos	0.006	0.009	0.019	0.019	0.040	0.040	0.043	0.063	0.076	0.076	0.096	0.116	0.143	0.151	0.149	0.147	0.139	0.115	0.097	0.097	0.091	0.091	0.044	0.031	0.031	0.031	0.031	0.006	0.006	0.006
To HBEP from Alamitos	0.004	0.006	0.013	0.013	0.026	0.026	0.028	0.041	0.050	0.050	0.062	0.075	0.093	0.098	0.097	0.096	0.091	0.075	0.063	0.063	0.059	0.059	0.029	0.020	0.020	0.020	0.020	0.004	0.004	0.004
Construction Worker Commute	0.009	0.169	0.182	0.217	0.288	0.306	0.324	0.324	0.381	0.435	0.510	0.483	0.545	0.554	0.581	0.599	0.709	0.780	0.798	0.860	0.874	0.927	0.918	0.976	0.976	1.002	1.002	1.020	0.887	0.865
Offsite Total (lbs/day)	**0.022**	**0.189**	**0.227**	**0.270**	**0.389**	**0.407**	**0.430**	**0.477**	**0.565**	**0.618**	**0.742**	**0.761**	**0.885**	**0.912**	**0.936**	**0.949**	**1.041**	**1.057**	**1.031**	**1.093**	**1.092**	**1.145**	**1.022**	**1.050**	**1.050**	**1.077**	**1.077**	**1.037**	**0.904**	**0.881**
	$PM_{2.5}$ Emissions (lbs/month) [a]																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.172	0.172	0.172	0.159	0.159	0.159	0.159	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.212	0.196	0.196	0.196	0.196	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049
Material Hauling Trucks																														
Directly to HBEP	0.086	0.135	0.296	0.296	0.620	0.620	0.661	0.966	1.169	1.169	1.474	1.779	2.186	2.308	2.287	2.257	2.135	1.769	1.484	1.484	1.388	1.388	0.675	0.482	0.482	0.482	0.482	0.096	0.096	0.096
Directly to Alamitos	0.129	0.202	0.444	0.444	0.929	0.929	0.991	1.449	1.754	1.754	2.211	2.669	3.279	3.462	3.431	3.385	3.202	2.653	2.227	2.227	2.082	2.082	1.012	0.723	0.723	0.723	0.723	0.145	0.145	0.145
To HBEP from Alamitos	0.084	0.131	0.289	0.289	0.604	0.604	0.644	0.942	1.140	1.140	1.437	1.735	2.131	2.250	2.230	2.200	2.082	1.725	1.447	1.447	1.353	1.353	0.658	0.470	0.470	0.470	0.470	0.094	0.094	0.094
Construction Worker Commute	0.204	3.876	4.182	4.997	6.629	7.037	7.445	7.445	8.771	9.995	11.729	11.117	12.545	12.749	13.361	13.768	16.318	17.950	18.358	19.786	20.092	21.316	21.112	22.437	22.437	23.049	23.049	23.457	20.398	19.888
Offsite Total (lbs/month)	**0.504**	**4.344**	**5.211**	**6.199**	**8.954**	**9.362**	**9.900**	**10.960**	**12.993**	**14.216**	**17.063**	**17.511**	**20.352**	**20.980**	**21.521**	**21.823**	**23.949**	**24.309**	**23.712**	**25.140**	**25.111**	**26.335**	**23.505**	**24.161**	**24.161**	**24.773**	**24.773**	**23.841**	**20.782**	**20.272**
Offsite Total (tons/year)	**0.147**																													

Notes:
[a] $PM_{2.5}$ Emissions include emissions from exhaust and paved roads.

Offsite Vehicle CO_2 Emissions from Block 1 Construction

	CO_2 Emissions (metric tons/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Material Hauling Trucks																														
Directly to HBEP	0.010	0.016	0.036	0.036	0.075	0.075	0.085	0.125	0.151	0.151	0.190	0.230	0.282	0.298	0.295	0.291	0.276	0.228	0.202	0.202	0.189	0.189	0.092	0.066	0.066	0.066	0.066	0.013	0.013	0.013
Directly to Alamitos	0.016	0.025	0.054	0.054	0.113	0.113	0.128	0.187	0.226	0.226	0.285	0.345	0.423	0.447	0.443	0.437	0.413	0.343	0.303	0.303	0.283	0.283	0.138	0.098	0.098	0.098	0.098	0.020	0.020	0.020
To HBEP from Alamitos	0.010	0.016	0.035	0.035	0.074	0.074	0.083	0.122	0.147	0.147	0.186	0.224	0.275	0.290	0.288	0.284	0.269	0.223	0.197	0.197	0.184	0.184	0.090	0.064	0.064	0.064	0.064	0.013	0.013	0.013
Construction Worker Commute	0.014	0.264	0.285	0.340	0.451	0.479	0.507	0.507	0.597	0.680	0.798	0.757	0.854	0.868	0.909	0.937	1.110	1.222	1.249	1.346	1.367	1.451	1.437	1.527	1.527	1.569	1.569	1.596	1.388	1.353
Offsite Total (metric tons/day)	**0.050**	**0.321**	**0.410**	**0.485**	**0.733**	**0.761**	**0.823**	**0.959**	**1.141**	**1.224**	**1.485**	**1.581**	**1.860**	**1.929**	**1.961**	**1.975**	**2.094**	**2.041**	**1.978**	**2.075**	**2.050**	**2.133**	**1.762**	**1.761**	**1.761**	**1.803**	**1.803**	**1.648**	**1.440**	**1.405**
	CO_2 Emissions (metric tons/month)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.000	0.000	0.000	0.447	0.447	0.447	0.447	0.447	0.447	0.447	0.596	0.596	0.596	0.596	0.596	0.596	0.596	0.596	0.596	0.596	0.596	0.596	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149
Material Hauling Trucks																														
Directly to HBEP	0.241	0.377	0.830	0.830	1.736	1.736	1.962	2.868	3.471	3.471	4.377	5.283	6.490	6.852	6.792	6.701	6.339	5.252	4.649	4.649	4.347	4.347	2.113	1.509	1.509	1.509	1.509	0.302	0.302	0.302
Directly to Alamitos	0.362	0.566	1.245	1.245	2.604	2.604	2.943	4.302	5.207	5.207	6.566	7.924	9.735	10.278	10.188	10.052	9.509	7.879	6.973	6.973	6.520	6.520	3.170	2.264	2.264	2.264	2.264	0.453	0.453	0.453
To HBEP from Alamitos	0.235	0.368	0.809	0.809	1.692	1.692	1.913	2.796	3.385	3.385	4.268	5.151	6.328	6.681	6.622	6.534	6.181	5.121	4.532	4.532	4.238	4.238	2.060	1.472	1.472	1.472	1.472	0.294	0.294	0.294
Construction Worker Commute	0.319	6.066	6.545	7.822	10.376	11.015	11.653	11.653	13.728	15.644	18.358	17.400	19.635	19.954	20.912	21.550	25.541	28.095	28.734	30.969	31.448	33.363	33.044	35.119	35.119	36.077	36.077	36.715	31.926	31.128
Offsite Total (metric tons/month)	**1.16**	**7.38**	**9.43**	**11.15**	**16.85**	**17.49**	**18.92**	**22.07**	**26.24**	**28.15**	**34.16**	**36.35**	**42.78**	**44.36**	**45.11**	**45.43**	**48.17**	**46.94**	**45.48**	**47.72**	**47.15**	**49.06**	**40.54**	**40.51**	**40.51**	**41.47**	**41.47**	**37.91**	**33.12**	**32.33**
Offsite Total (metric tons/year)	**543.27**																													

Table 5.1A.13R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle N_2O Emissions from Block 1 Construction

	N_2O Emissions (metric tons/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.00000000	0.00000000	0.00000000	0.00000005	0.00000005	0.00000005	0.00000005	0.00000005	0.00000005	0.00000005	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002
Material Hauling Trucks																														
Directly to HBEP	0.00000003	0.00000005	0.00000011	0.00000011	0.00000022	0.00000022	0.00000025	0.00000036	0.00000044	0.00000044	0.00000056	0.00000067	0.00000083	0.00000087	0.00000086	0.00000085	0.00000081	0.00000067	0.00000059	0.00000059	0.00000055	0.00000055	0.00000027	0.00000019	0.00000019	0.00000019	0.00000019	0.00000004	0.00000004	0.00000004
Directly to Alamitos	0.00000005	0.00000007	0.00000016	0.00000016	0.00000033	0.00000033	0.00000037	0.00000055	0.00000066	0.00000066	0.00000084	0.00000101	0.00000124	0.00000131	0.00000130	0.00000128	0.00000121	0.00000100	0.00000089	0.00000089	0.00000083	0.00000083	0.00000040	0.00000029	0.00000029	0.00000029	0.00000029	0.00000006	0.00000006	0.00000006
To HBEP from Alamitos	0.00000003	0.00000005	0.00000010	0.00000010	0.00000022	0.00000022	0.00000024	0.00000036	0.00000043	0.00000043	0.00000054	0.00000066	0.00000080	0.00000085	0.00000084	0.00000083	0.00000079	0.00000065	0.00000058	0.00000058	0.00000054	0.00000054	0.00000026	0.00000019	0.00000019	0.00000019	0.00000019	0.00000004	0.00000004	0.00000004
Construction Worker Commute	0.00000016	0.00000295	0.00000319	0.00000381	0.00000505	0.00000537	0.00000568	0.00000568	0.00000669	0.00000762	0.00000894	0.00000848	0.00000956	0.00000972	0.00001019	0.00001050	0.00001244	0.00001369	0.00001400	0.00001509	0.00001532	0.00001625	0.00001610	0.00001711	0.00001711	0.00001757	0.00001757	0.00001788	0.00001555	0.00001516
Offsite Total (metric tons/day)	**0.0000003**	**0.0000031**	**0.0000036**	**0.0000042**	**0.0000059**	**0.0000062**	**0.0000066**	**0.0000070**	**0.0000083**	**0.0000092**	**0.0000109**	**0.0000109**	**0.0000125**	**0.0000128**	**0.0000133**	**0.0000135**	**0.0000153**	**0.0000161**	**0.0000161**	**0.0000172**	**0.0000173**	**0.0000182**	**0.0000170**	**0.0000178**	**0.0000178**	**0.0000183**	**0.0000183**	**0.0000180**	**0.0000157**	**0.0000153**

	N_2O Emissions (metric tons/month)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.0000000	0.0000000	0.0000000	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004
Material Hauling Trucks																														
Directly to HBEP	0.0000007	0.0000011	0.0000024	0.0000024	0.0000051	0.0000051	0.0000057	0.0000084	0.0000102	0.0000102	0.0000128	0.0000155	0.0000190	0.0000200	0.0000199	0.0000196	0.0000185	0.0000154	0.0000136	0.0000136	0.0000127	0.0000127	0.0000062	0.0000044	0.0000044	0.0000044	0.0000044	0.0000009	0.0000009	0.0000009
Directly to Alamitos	0.0000011	0.0000017	0.0000036	0.0000036	0.0000076	0.0000076	0.0000086	0.0000126	0.0000152	0.0000152	0.0000192	0.0000232	0.0000285	0.0000301	0.0000298	0.0000294	0.0000278	0.0000231	0.0000204	0.0000204	0.0000191	0.0000191	0.0000093	0.0000066	0.0000066	0.0000066	0.0000066	0.0000013	0.0000013	0.0000013
To HBEP from Alamitos	0.0000007	0.0000011	0.0000024	0.0000024	0.0000050	0.0000050	0.0000056	0.0000082	0.0000099	0.0000099	0.0000125	0.0000151	0.0000185	0.0000195	0.0000194	0.0000191	0.0000181	0.0000150	0.0000133	0.0000133	0.0000124	0.0000124	0.0000060	0.0000043	0.0000043	0.0000043	0.0000043	0.0000009	0.0000009	0.0000009
Construction Worker Commute	0.0000036	0.0000680	0.0000733	0.0000876	0.0001163	0.0001234	0.0001306	0.0001306	0.0001538	0.0001753	0.0002057	0.0001949	0.0002200	0.0002236	0.0002343	0.0002414	0.0002862	0.0003148	0.0003219	0.0003470	0.0003523	0.0003738	0.0003702	0.0003935	0.0003935	0.0004042	0.0004042	0.0004114	0.0003577	0.0003488
Offsite Total (metric tons/month)	**0.000006**	**0.000072**	**0.000082**	**0.000097**	**0.000135**	**0.000142**	**0.000152**	**0.000161**	**0.000190**	**0.000212**	**0.000252**	**0.000250**	**0.000288**	**0.000295**	**0.000305**	**0.000311**	**0.000352**	**0.000370**	**0.000371**	**0.000396**	**0.000398**	**0.000420**	**0.000392**	**0.000409**	**0.000409**	**0.000420**	**0.000420**	**0.000415**	**0.000361**	**0.000352**
Offsite Total (metric tons/year)	**0.0048**																													

Offsite Vehicle CH_4 Emissions from Block 1 Construction

	CH_4 Emissions (metric tons/day)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.00000000	0.00000000	0.00000000	0.00000006	0.00000006	0.00000006	0.00000006	0.00000006	0.00000006	0.00000006	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002	0.00000002
Material Hauling Trucks																														
Directly to HBEP	0.00000003	0.00000005	0.00000011	0.00000011	0.00000023	0.00000023	0.00000027	0.00000039	0.00000047	0.00000047	0.00000059	0.00000071	0.00000088	0.00000093	0.00000092	0.00000091	0.00000086	0.00000071	0.00000063	0.00000063	0.00000059	0.00000059	0.00000029	0.00000020	0.00000020	0.00000020	0.00000020	0.00000004	0.00000004	0.00000004
Directly to Alamitos	0.00000005	0.00000008	0.00000017	0.00000017	0.00000035	0.00000035	0.00000040	0.00000058	0.00000070	0.00000070	0.00000089	0.00000107	0.00000132	0.00000139	0.00000138	0.00000136	0.00000129	0.00000106	0.00000094	0.00000094	0.00000088	0.00000088	0.00000043	0.00000031	0.00000031	0.00000031	0.00000031	0.00000006	0.00000006	0.00000006
To HBEP from Alamitos	0.00000003	0.00000005	0.00000011	0.00000011	0.00000023	0.00000023	0.00000026	0.00000038	0.00000046	0.00000046	0.00000058	0.00000070	0.00000086	0.00000090	0.00000090	0.00000088	0.00000084	0.00000069	0.00000061	0.00000061	0.00000057	0.00000057	0.00000028	0.00000020	0.00000020	0.00000020	0.00000020	0.00000004	0.00000004	0.00000004
Construction Worker Commute	0.00000075	0.00001420	0.00001532	0.00001831	0.00002429	0.00002578	0.00002728	0.00002728	0.00003214	0.00003662	0.00004297	0.00004073	0.00004596	0.00004671	0.00004895	0.00005045	0.00005979	0.00006577	0.00006726	0.00007249	0.00007361	0.00007810	0.00007735	0.00008221	0.00008221	0.00008445	0.00008445	0.00008595	0.00007474	0.00007287
Offsite Total (metric tons/day)	**0.0000009**	**0.0000144**	**0.0000157**	**0.0000188**	**0.0000252**	**0.0000267**	**0.0000283**	**0.0000287**	**0.0000338**	**0.0000383**	**0.0000451**	**0.0000433**	**0.0000491**	**0.0000500**	**0.0000522**	**0.0000537**	**0.0000628**	**0.0000683**	**0.0000695**	**0.0000748**	**0.0000757**	**0.0000802**	**0.0000784**	**0.0000829**	**0.0000829**	**0.0000852**	**0.0000852**	**0.0000861**	**0.0000749**	**0.0000730**

	CH_4 Emissions (metric tons/month)																												
Vehicle Type	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Offsite Delivery Trucks	0.0000000	0.0000000	0.0000000	0.0000013	0.0000013	0.0000013	0.0000013	0.0000013	0.0000013	0.0000013	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004
Material Hauling Trucks																														
Directly to HBEP	0.0000008	0.0000012	0.0000026	0.0000026	0.0000054	0.0000054	0.0000061	0.0000089	0.0000108	0.0000108	0.0000136	0.0000164	0.0000202	0.0000213	0.0000211	0.0000208	0.0000197	0.0000163	0.0000145	0.0000145	0.0000135	0.0000135	0.0000066	0.0000047	0.0000047	0.0000047	0.0000047	0.0000009	0.0000009	0.0000009
Directly to Alamitos	0.0000011	0.0000018	0.0000039	0.0000039	0.0000081	0.0000081	0.0000091	0.0000134	0.0000162	0.0000162	0.0000204	0.0000246	0.0000303	0.0000320	0.0000317	0.0000312	0.0000296	0.0000245	0.0000217	0.0000217	0.0000203	0.0000203	0.0000099	0.0000070	0.0000070	0.0000070	0.0000070	0.0000014	0.0000014	0.0000014
To HBEP from Alamitos	0.0000007	0.0000011	0.0000025	0.0000025	0.0000053	0.0000053	0.0000059	0.0000087	0.0000105	0.0000105	0.0000133	0.0000160	0.0000197	0.0000208	0.0000206	0.0000203	0.0000192	0.0000159	0.0000141	0.0000141	0.0000132	0.0000132	0.0000064	0.0000046	0.0000046	0.0000046	0.0000046	0.0000009	0.0000009	0.0000009
Construction Worker Commute	0.0000172	0.0003266	0.0003524	0.0004211	0.0005587	0.0005930	0.0006274	0.0006274	0.0007391	0.0008423	0.0009884	0.0009368	0.0010571	0.0010743	0.0011259	0.0011603	0.0013751	0.0015127	0.0015470	0.0016674	0.0016931	0.0017963	0.0017791	0.0018908	0.0018908	0.0019424	0.0019424	0.0019768	0.0017189	0.0016760
Offsite Total (metric tons/month)	**0.00002**	**0.00033**	**0.00036**	**0.00043**	**0.00058**	**0.00061**	**0.00065**	**0.00066**	**0.00078**	**0.00088**	**0.00104**	**0.00100**	**0.00113**	**0.00115**	**0.00120**	**0.00123**	**0.00145**	**0.00157**	**0.00160**	**0.00172**	**0.00174**	**0.00184**	**0.00180**	**0.00191**	**0.00191**	**0.00196**	**0.00196**	**0.00198**	**0.00172**	**0.00168**
Offsite Total (metric tons/year)	**0.0218**																													

Offsite Construction Vehicle Activity for Block 1 Construction

Vehicle Type	**Roundtrip Miles/Day** [a]	**Working Days per Month** [b]
Offsite Delivery Trucks	14.6	23
Material Hauling Trucks	40.0	23
Directly to HBEP	40.0	23
Directly to Alamitos	40.0	23
To HBEP from Alamitos	26.0	23
Construction Worker Commute	21.6	23

Notes:

[a] Roundtrip miles/day taken as the CalEEMod defaults for the South Coast Air Basin except for "To HBEP from Alamitos", which was measured using Google Earth.

[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Table 5.1A.14R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Block 1 Construction

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_m = EF * N * Hp * L * H / 453.6$	E_m = Emissions (lbs/month)
			EF = Emission factor (g/bhp-hr)
			N = Number of pieces of equipment
			Hp = Average horsepower
			L = Average load factor
			H = Hours per month
			453.6 = Conversion from g to lbs
		$E_d = E_m / D$	E_d = Emissions (lbs/day)
			E_m = Emissions (lbs/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
	CO_2	$E_m = N * FC * EF * H * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (kg/gallon)
			H = Hours per month
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_m = N * FC * EF * H / 1{,}000 * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (g/gallon)
			H = Hours per month
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Vehicle Exhaust and Paved and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_d = N * VMT * EF / 453.6$	E_d = Emissions (lbs/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = EMFAC2007 emission factor (g/mile). Paved and unpaved road fugitive PM_{10} and $PM_{2.5}$ emission factors calculated per Sections 13.2.1 and 13.2.2 of AP-42, respectively.
			453.6 = Conversion from g to lbs
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.14R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Block 1 Construction

Emission Source	Pollutant(s)	Equation	Variables
Onsite and Offsite Vehicle Exhaust	CO_2	$E_d = N * VMT / FE * EF * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			FE = Fuel economy (mpg)
			EF = Emission factor (kg/gallon)
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_d = N * VMT * EF / 1{,}000 * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = Emission factor (g/mile)
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Fugitive PM_{10} and $PM_{2.5}$ from Grading	PM_{10} and $PM_{2.5}$	$E_d = EF$ x A / W x 43,560 / 5,280 / D	E_d = Emissions (lbs/day)
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/mile), calculated per Section 4.3 of Appendix A of the CalEEMod User's Guide.
			A = Site disturbed (acres/month)
			W = Grading equipment blade width (ft)
			43,560 = Conversion factor from square feet to acres
			5,280 = Conversion factor from feet to miles
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Bulldozing	PM_{10} and $PM_{2.5}$	$E_d = EF$ x H / D	E_d = Emissions (lbs/day)
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/mile), calculated per Section 4.3 of Appendix A of the CalEEMod User's Guide.
			H = Hours per month for all bulldozers
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.15R Number of Onsite Construction Equipment and Motor Vehicles

Number of Onsite Equipment for Block 1 Construction

Onsite Equipment	Number per Month [a]																														
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Water Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Excavator	2	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grader	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Cranes [b]	0	0	0	2	2	2	4	4	5	5	4	4	5	5	4	4	4	4	2	2	2	2	2	2	0	0	0	0	0	0
Tractor/Loader/Backhoe [c]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
Rubber Tired Loader [d]	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
Crawler Tractor [e]	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
Forklift	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1
Roller [f]	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Other General Industrial Equipment [g]	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

[a] Equipment counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

[b] Numbers presented for Cranes includes the equipment counts for the 75 Ton Hydraulic Crane, the 35 Ton Hydraulic Crane, the Heavy Lift Lattice Boom Main Crane, the Heavy Lift Lattice Boom Tail Crane, and the Heavy Lift Gantry Crane.

[c] Numbers presented for Tractor/Loader/Backhoe includes the equipment counts for the Backhoe.

[d] Numbers presented for Rubber Tired Loader includes the equipment counts for the Front End Loader.

[e] Numbers presented for Crawler Tractor includes the equipment counts for the Dozer

[f] Numbers presented for Roller includes the equipment counts for the Compactor.

[g] Numbers presented for Other General Industrial Equipment includes the equipment counts for the Pile Driver.

Number of Onsite Motor Vehicles for Block 1 Construction

Vehicle Type	Number per Month [a]																														
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Onsite Pick-up Truck	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Onsite Stake Truck	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Dump Truck	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0

Notes:

[a] Vehicle counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

Table 5.1A.16R Construction Equipment Exhaust Criteria Pollutant Emission Factors

Construction Equipment Emission Factors for Block 1 Construction

Equipment [a]	Percent Usage [b]	Hours per Month [c]	Horsepower [d]	Load Factor [d]	Emission Factors (g/bhp-hr) [e]												Fuel Consumption (gallons/hour) [f]
					CO	VOC	NO_X 2016	NO_X 2017	NO_X 2018	SO_X	PM_{10} 2016	PM_{10} 2017	PM_{10} 2018	$PM_{2.5}$ 2016	$PM_{2.5}$ 2017	$PM_{2.5}$ 2018	
Water Truck [g]	50%	115	381	0.57	1.209	0.387	2.613	2.302	2.025	0.005	0.093	0.082	0.073	0.093	0.082	0.073	12.33
Excavator	85%	196	157	0.57	3.366	0.492	3.323	2.928	2.567	0.006	0.179	0.155	0.133	0.179	0.155	0.133	5.11
Grader	80%	184	162	0.61	3.352	0.557	3.955	3.568	3.211	0.006	0.218	0.196	0.176	0.218	0.196	0.176	5.65
Cranes	65%	150	208	0.43	1.334	0.443	3.818	3.462	3.125	0.006	0.131	0.118	0.107	0.131	0.118	0.107	5.08
Tractor/Loader/Backhoe	55%	127	75	0.55	3.800	0.576	3.874	3.533	3.226	0.006	0.278	0.237	0.201	0.278	0.237	0.201	2.36
Rubber Tired Loader	55%	127	87	0.54	3.919	0.745	4.657	4.302	3.975	0.006	0.373	0.333	0.296	0.373	0.333	0.296	2.69
Crawler Tractor	80%	184	82	0.64	4.092	0.926	5.508	5.156	4.826	0.006	0.460	0.422	0.386	0.460	0.422	0.386	3.01
Air Compressor	80%	184	78	0.48	3.804	0.744	4.790	4.412	4.050	0.006	0.397	0.350	0.304	0.397	0.350	0.304	2.15
Forklift	75%	173	149	0.30	3.362	0.456	3.062	2.696	2.338	0.006	0.166	0.145	0.124	0.166	0.145	0.124	2.55
Roller	60%	138	84	0.56	3.825	0.766	4.925	4.576	4.249	0.006	0.400	0.364	0.328	0.400	0.364	0.328	2.70
Other General Industrial Equipment	70%	161	150	0.51	3.355	0.580	4.126	3.686	3.277	0.006	0.231	0.204	0.178	0.231	0.204	0.178	4.37

Notes:

[a] Assumed all equipment is fired with diesel fuel, per Section 4.2 of Appendix A of the CalEEMod User's Guide.

[b] Percent Usage assumed typical of power plant construction.

[c] Hours per month calculated based on the following schedule, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Work hours per day: 10

Work days per month: 23

[d] Construction equipment horsepower and load factor taken from Table 3.3 of Appendix D of the CalEEMod User's Guide.

[e] Construction equipment emission factors taken from Table 3.4 of Appendix D of the CalEEMod User's Guide. The emission factors for the year 2016 were used for the construction equipment exhaust emission calculations for CO, VOC, and SOx. The emission factors for year 2016, 2017 and 2018 were used for NOx, PM10, and PM2.5.

[f] Fuel consumption based on consumption in the OFFROAD2007 model for the SCAB in the year 2016; value estimated by dividing the reported consumption (gallons/day) by the reported activity (hours/day).

[g] Horsepower, load factor, and emission factors for Off-Highway Trucks were assumed representative of Water Trucks.

Table 5.1A.17R Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors

Vehicle Emission Factors for Block 1 Construction

Vehicle Type	Vehicle Class [a]	Exhaust Emission Factors (g/mile) [b]												Paved Road Emission Factors (g/mile) [c]		Fuel Economy (mpg) [b]
		CO	VOC	SO_X	NO_X 2016	NO_X 2017	NO_X 2018	PM_{10} 2016	PM_{10} 2017	PM_{10} 2018	$PM_{2.5}$ 2016	$PM_{2.5}$ 2017	$PM_{2.5}$ 2018	PM_{10}	$PM_{2.5}$	
Onsite Pick-up Truck	Light-duty Truck	3.508	0.235	0.011	0.327	0.301	0.278	0.123	0.124	0.126	0.101	0.103	0.104	N/A	N/A	7.440
Onsite Stake Truck	Heavy-duty Diesel	10.786	6.276	0.037	18.687	16.645	14.934	1.007	0.843	0.709	0.889	0.738	0.614	N/A	N/A	2.621
Onsite Dump Truck	Heavy-duty Diesel	10.786	6.276	0.037	18.687	16.645	14.934	1.007	0.843	0.709	0.889	0.738	0.614	N/A	N/A	2.621
Offsite Delivery Trucks	Heavy-duty Diesel	2.249	0.453	0.017	6.621	5.842	5.193	0.297	0.270	0.248	0.235	0.211	0.190	0.300	0.075	5.749
Material Hauling Trucks	Heavy/Medium-duty Diesel	1.719	0.290	0.016	5.090	4.528	4.046	0.236	0.220	0.206	0.191	0.176	0.163	0.300	0.075	6.224
Construction Worker Commute	Light-duty Auto/Truck	1.435	0.029	0.004	0.136	0.125	0.114	0.033	0.033	0.033	0.018	0.018	0.018	0.300	0.075	27.325

Notes:

[a] The vehicle classes are represented as follows:

Light-duty Truck: Assumed to be an average of LDT1, All and LDT2, All values.
Heavy-duty Diesel: Assumed to be 100% HHD DSL values, as confirmed in Section 4.5 of Appendix A of the CalEEMod User's Guide.
Heavy/Medium-duty Diesel: 50% HHD DSL and 50% MHD DSL values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.
Light-duty Auto/Truck: 50% LDA, All; 25% LDT1, All; and 25% LDT2, All values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.

[b] Exhaust emission factors and fuel economy from EMFAC2007 for the South Coast Air Basin, calendar year 2016 for CO, VOC, and SOx. Calendar year 2016, 2017 and 2018 were used for NOx, PM10, and PM2.5. A speed of 5 mph was assumed for onsite vehicles; a speed of 40 mph was assumed for offsite vehicles and worker commutes, which is consistent with the CalEEMod defaults. An average temperature of 68°F and humidity of 55% were used per Table B-1 of CT-EMFAC: A Computer Model to Estimate Transportation Project Emissions.

[c] Paved road emission factors calculated using CalEEMod methodology, as described below.

Derivation of Paved Road Emission Factors

Vehicles on Paved Roads

Parameter	PM_{10}	$PM_{2.5}$
Average Weight [a]	2.4	2.4
k [b]	1.0	0.25
sL [a]	0.1	0.1
Emission Factor (g/mile) [c]	0.300	0.075

Notes:

[a] Average Weight and sL taken as the default value from CalEEMod.

[b] k taken from Table 13.2.1-1 of Section 13.2.1 of AP-42.

[c] Emission factor calculated using Equation 1 from Section 13.2.1 of AP-42:

Emission Factor (g/mile) = k (g/mile) x [sL (g/m^2)]$^{0.91}$ x [Average Weight (tons)]$^{1.02}$

Huntington Beach Energy Project
Construction Emission Estimates - Block 1 Construction
October 2013

Table 5.1A.18R Onsite and Offsite Greenhouse Gas Emission Factors

Greenhouse Gas Emission Factors for Block 1 Construction

Fuel / Category Type	Emission Factor	Emission Factor Units	Emission Factor Source
CO_2 Emission Factors			
Gasoline	8.78	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
Diesel	10.21	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
N_2O Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0036	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0066	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0048	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.26	g N_2O/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.
CH_4 Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0173	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0163	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0051	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.58	g CH_4/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.

Notes:

[a] Model Year 2009 was the most recent year of emission factors available. As a result, it was assumed representative of vehicles used for this project.

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.19R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO Emissions from Block 2 Construction

	CO Emisisons (lbs/month)																											
Onsite Equipment	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Water Truck	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09	64.09
Excavator	129.67	259.34	259.34	259.34	259.34	259.34	129.67	129.67	129.67	129.67	129.67	129.67	129.67	129.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	134.09	268.17	268.17	134.09	134.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	134.09	134.09
Cranes	0.00	0.00	0.00	0.00	75.29	75.29	150.57	150.57	150.57	188.22	150.57	150.57	225.86	188.22	150.57	150.57	150.57	150.57	75.29	75.29	75.29	75.29	75.29	75.29	75.29	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30	43.30
Rubber Tired Loader	0.00	101.49	101.49	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	50.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	86.00	172.01	172.01	86.00	86.00	86.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	56.86	56.86	56.86	56.86	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	113.72	56.86	56.86	56.86	56.86	56.86	56.86	56.86	56.86	56.86
Forklift	0.00	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	114.40	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20
Roller	54.02	108.05	108.05	54.02	54.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	54.02	54.02
Other General Industrial Equipment	0.00	91.04	91.04	91.04	91.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**467.88**	**1,278.76**	**1,278.76**	**953.90**	**1,029.19**	**806.89**	**666.50**	**666.50**	**666.50**	**704.15**	**666.50**	**666.50**	**741.79**	**704.15**	**536.83**	**536.83**	**536.83**	**536.83**	**461.54**	**347.48**	**296.74**	**296.74**	**296.74**	**296.74**	**296.74**	**221.45**	**409.56**	**409.56**
Onsite Total (lbs/day) [a]	**20.34**	**55.60**	**55.60**	**41.47**	**44.75**	**35.08**	**28.98**	**28.98**	**28.98**	**30.62**	**28.98**	**28.98**	**32.25**	**30.62**	**23.34**	**23.34**	**23.34**	**23.34**	**20.07**	**15.11**	**12.90**	**12.90**	**12.90**	**12.90**	**12.90**	**9.63**	**17.81**	**17.81**
Offsite Total (tons/year)	**5.06**																											

Construction Equipment VOC Emissions from Block 2 Construction

	VOC Emisisons (lbs/month)																											
Onsite Equipment	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Water Truck	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Excavator	16.08	32.17	32.17	32.17	32.17	32.17	16.08	16.08	16.08	16.08	16.08	16.08	16.08	16.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	19.44	38.88	38.88	19.44	19.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.44	19.44
Cranes	0.00	0.00	0.00	0.00	23.46	23.46	46.93	46.93	46.93	58.66	46.93	46.93	70.39	58.66	46.93	46.93	46.93	46.93	23.46	23.46	23.46	23.46	23.46	23.46	23.46	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49	5.49
Rubber Tired Loader	0.00	16.67	16.67	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	8.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	17.37	34.74	34.74	17.37	17.37	17.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	9.16	9.16	9.16	9.16	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	18.32	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16	9.16
Forklift	0.00	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	13.46	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73	6.73
Roller	9.37	18.75	18.75	9.37	9.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.37	9.37
Other General Industrial Equipment	0.00	13.25	13.25	13.25	13.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**81.27**	**201.56**	**201.56**	**147.04**	**170.51**	**137.60**	**127.61**	**127.61**	**127.61**	**139.34**	**127.61**	**127.61**	**151.07**	**139.34**	**111.52**	**111.52**	**111.52**	**111.52**	**88.06**	**72.17**	**63.84**	**63.84**	**63.84**	**63.84**	**63.84**	**40.37**	**69.19**	**69.19**
Onsite Total (lbs/day) [a]	**3.53**	**8.76**	**8.76**	**6.39**	**7.41**	**5.98**	**5.55**	**5.55**	**5.55**	**6.06**	**5.55**	**5.55**	**6.57**	**6.06**	**4.85**	**4.85**	**4.85**	**4.85**	**3.83**	**3.14**	**2.78**	**2.78**	**2.78**	**2.78**	**2.78**	**1.76**	**3.01**	**3.01**
Offsite Total (tons/year)	**0.89**																											

Construction Equipment NOx Emissions from Block 2 Construction

	NOx Emissions (lbs/month)																											
Onsite Equipment	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Water Truck	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	111.49	97.95	97.95	97.95	97.95	97.95	97.95	97.95	97.95	97.95	97.95	97.95	97.95	85.95	85.95	85.95	85.95	85.95	85.95
Excavator	99.01	198.02	198.02	198.02	198.02	198.02	99.01	99.01	99.01	99.01	86.47	86.47	86.47	86.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	128.72	257.43	257.43	128.72	128.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	103.34	103.34
Cranes	0.00	0.00	0.00	0.00	184.24	184.24	368.48	368.48	368.48	460.60	330.98	330.98	496.47	413.73	330.98	330.98	330.98	330.98	165.49	165.49	165.49	165.49	147.80	147.80	147.80	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	37.11	37.11	37.11	37.11	37.11	37.11	37.11	37.11	37.11	33.95	33.95	33.95	33.95	33.95	33.95	33.95	33.95	33.95	33.95	33.95	33.95	31.16	31.16	31.16	31.16	31.16	31.16
Rubber Tired Loader	0.00	104.16	104.16	52.08	52.08	52.08	52.08	52.08	52.08	52.08	48.18	48.18	48.18	48.18	48.18	48.18	48.18	48.18	48.18	48.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	102.74	205.47	205.47	102.74	102.74	102.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	61.51	61.51	61.51	61.51	123.02	123.02	123.02	123.02	123.02	112.57	112.57	112.57	112.57	112.57	112.57	112.57	112.57	112.57	56.28	56.28	56.28	51.64	51.64	51.64	51.64	51.64	51.64
Forklift	0.00	79.49	79.49	79.49	79.49	79.49	79.49	79.49	79.49	79.49	69.56	69.56	69.56	69.56	69.56	69.56	69.56	69.56	69.56	34.78	34.78	34.78	30.29	30.29	30.29	30.29	30.29	30.29
Roller	60.81	121.62	121.62	60.81	60.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.38	52.38
Other General Industrial Equipment	0.00	88.98	88.98	88.98	88.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**502.76**	**1,265.28**	**1,265.28**	**920.94**	**1,105.18**	**888.18**	**870.67**	**870.67**	**870.67**	**962.79**	**779.65**	**779.65**	**945.14**	**862.40**	**693.18**	**693.18**	**693.18**	**693.18**	**527.69**	**436.63**	**388.45**	**388.45**	**346.84**	**346.84**	**346.84**	**199.04**	**354.76**	**354.76**
Onsite Total (lbs/day) [a]	**21.86**	**55.01**	**55.01**	**40.04**	**48.05**	**38.62**	**37.86**	**37.86**	**37.86**	**41.86**	**33.90**	**33.90**	**41.09**	**37.50**	**30.14**	**30.14**	**30.14**	**30.14**	**22.94**	**18.98**	**16.89**	**16.89**	**15.08**	**15.08**	**15.08**	**8.65**	**15.42**	**15.42**
Offsite Total (tons/year)	**5.76**																											

Table 5.1A.19R Onsite Construction Equipment Exhaust Emissions

Construction Equipment SOx Emissions from Block 2 Construction

	SOx Emissions (lbs/month)																											
Onsite Equipment	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Water Truck	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Excavator	0.23	0.46	0.46	0.46	0.46	0.46	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	0.24	0.48	0.48	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.24
Cranes	0.00	0.00	0.00	0.00	0.35	0.35	0.71	0.71	0.71	0.88	0.71	0.71	1.06	0.88	0.71	0.71	0.71	0.71	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Rubber Tired Loader	0.00	0.16	0.16	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	0.13	0.26	0.26	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	0.09	0.09	0.09	0.09	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Forklift	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Roller	0.09	0.17	0.17	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.09
Other General Industrial Equipment	0.00	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.96**	**2.33**	**2.33**	**1.80**	**2.15**	**1.75**	**1.75**	**1.75**	**1.75**	**1.92**	**1.75**	**1.75**	**2.10**	**1.92**	**1.52**	**1.52**	**1.52**	**1.52**	**1.16**	**0.97**	**0.89**	**0.89**	**0.89**	**0.89**	**0.89**	**0.54**	**0.86**	**0.86**
Onsite Total (lbs/day) [a]	**0.04**	**0.10**	**0.10**	**0.08**	**0.09**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.09**	**0.08**	**0.07**	**0.07**	**0.07**	**0.07**	**0.05**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.02**	**0.04**	**0.04**
Offsite Total (tons/year)	**0.01**																											

Construction Equipment PM_{10} Emissions from Block 2 Construction

	PM_{10} Emissions (lbs/month)																											
Onsite Equipment	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Water Truck	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.14	3.14	3.14	3.14	3.14	3.14
Excavator	5.13	10.26	10.26	10.26	10.26	10.26	5.13	5.13	5.13	5.13	4.40	4.40	4.40	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	7.06	14.11	14.11	7.06	7.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	5.57
Cranes	0.00	0.00	0.00	0.00	6.31	6.31	12.62	12.62	12.62	15.77	11.32	11.32	16.98	14.15	11.32	11.32	11.32	11.32	5.66	5.66	5.66	5.66	5.07	5.07	5.07	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.62	1.62	1.62	1.62	1.62	1.62
Rubber Tired Loader	0.00	7.76	7.76	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	8.22	16.43	16.43	8.22	8.22	8.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	4.62	4.62	4.62	4.62	9.23	9.23	9.23	9.23	9.23	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	3.95	3.95	3.95	3.40	3.40	3.40	3.40	3.40	3.40
Forklift	0.00	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	1.78	1.78	1.78	1.48	1.48	1.48	1.48	1.48	1.48
Roller	4.69	9.39	9.39	4.69	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72	3.72
Other General Industrial Equipment	0.00	4.83	4.83	4.83	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**29.12**	**77.95**	**77.95**	**54.10**	**60.41**	**48.44**	**41.41**	**41.41**	**41.41**	**44.56**	**36.07**	**36.07**	**41.73**	**38.90**	**31.67**	**31.67**	**31.67**	**31.67**	**26.01**	**20.28**	**16.86**	**16.86**	**14.71**	**14.71**	**14.71**	**9.64**	**18.93**	**18.93**
Onsite Total (lbs/day) [a]	**1.27**	**3.39**	**3.39**	**2.35**	**2.63**	**2.11**	**1.80**	**1.80**	**1.80**	**1.94**	**1.57**	**1.57**	**1.81**	**1.69**	**1.38**	**1.38**	**1.38**	**1.38**	**1.13**	**0.88**	**0.73**	**0.73**	**0.64**	**0.64**	**0.64**	**0.42**	**0.82**	**0.82**
Offsite Total (tons/year)	**0.30**																											

Construction Equipment $PM_{2.5}$ Emissions from Block 2 Construction

	$PM_{2.5}$ Emissions (lbs/month)																											
Onsite Equipment	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Water Truck	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.52	3.14	3.14	3.14	3.14	3.14	3.14
Excavator	5.13	10.26	10.26	10.26	10.26	10.26	5.13	5.13	5.13	5.13	4.40	4.40	4.40	4.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	7.06	14.11	14.11	7.06	7.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.57	5.57
Cranes	0.00	0.00	0.00	0.00	6.31	6.31	12.62	12.62	12.62	15.77	11.32	11.32	16.98	14.15	11.32	11.32	11.32	11.32	5.66	5.66	5.66	5.66	5.07	5.07	5.07	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.62	1.62	1.62	1.62	1.62	1.62
Rubber Tired Loader	0.00	7.76	7.76	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	3.42	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	8.22	16.43	16.43	8.22	8.22	8.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	4.62	4.62	4.62	4.62	9.23	9.23	9.23	9.23	9.23	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	7.90	3.95	3.95	3.95	3.40	3.40	3.40	3.40	3.40	3.40
Forklift	0.00	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	4.22	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	1.78	1.78	1.78	1.48	1.48	1.48	1.48	1.48	1.48
Roller	4.69	9.39	9.39	4.69	4.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.72	3.72
Other General Industrial Equipment	0.00	4.83	4.83	4.83	4.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**29.12**	**77.95**	**77.95**	**54.10**	**60.41**	**48.44**	**41.41**	**41.41**	**41.41**	**44.56**	**36.07**	**36.07**	**41.73**	**38.90**	**31.67**	**31.67**	**31.67**	**31.67**	**26.01**	**20.28**	**16.86**	**16.86**	**14.71**	**14.71**	**14.71**	**9.64**	**18.93**	**18.93**
Onsite Total (lbs/day) [a]	**1.27**	**3.39**	**3.39**	**2.35**	**2.63**	**2.11**	**1.80**	**1.80**	**1.80**	**1.94**	**1.57**	**1.57**	**1.81**	**1.69**	**1.38**	**1.38**	**1.38**	**1.38**	**1.13**	**0.88**	**0.73**	**0.73**	**0.64**	**0.64**	**0.64**	**0.42**	**0.82**	**0.82**
Offsite Total (tons/year)	**0.30**																											

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.19R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO_2 Emissions from Block 2 Construction

Onsite Equipment	CO_2 Emissions (metric tons/month)																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Water Truck	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47
Excavator	10.20	20.40	20.40	20.40	20.40	20.40	10.20	10.20	10.20	10.20	10.20	10.20	10.20	10.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grader	10.61	21.23	21.23	10.61	10.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.61	10.61
Cranes	0.00	0.00	0.00	0.00	15.51	15.51	31.02	31.02	31.02	38.77	31.02	31.02	46.52	38.77	31.02	31.02	31.02	31.02	15.51	15.51	15.51	15.51	15.51	15.51	15.51	0.00	0.00	0.00
Tractor/Loader/Backhoe	0.00	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05
Rubber Tired Loader	0.00	6.95	6.95	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crawler Tractor	5.65	11.31	11.31	5.65	5.65	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.00	4.02	4.02	4.02	4.02	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02	4.02
Forklift	0.00	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49
Roller	3.79	7.58	7.58	3.79	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.79	3.79
Other General Industrial Equipment	0.00	7.18	7.18	7.18	7.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (metric tons/month)	**44.72**	**105.17**	**105.17**	**81.63**	**97.14**	**79.57**	**79.23**	**79.23**	**79.23**	**86.98**	**79.23**	**79.23**	**94.74**	**86.98**	**69.03**	**69.03**	**69.03**	**69.03**	**53.52**	**45.01**	**41.53**	**41.53**	**41.53**	**41.53**	**41.53**	**26.03**	**40.43**	**40.43**
Onsite Total (metric tons/day) [a]	**1.94**	**4.57**	**4.57**	**3.55**	**4.22**	**3.46**	**3.44**	**3.44**	**3.44**	**3.78**	**3.44**	**3.44**	**4.12**	**3.78**	**3.00**	**3.00**	**3.00**	**3.00**	**2.33**	**1.96**	**1.81**	**1.81**	**1.81**	**1.81**	**1.81**	**1.13**	**1.76**	**1.76**
Onsite Total (metric tons/year)	**1,046.53**																											

Construction Equipment N_2O Emissions from Block 2 Construction

Onsite Equipment	N_2O Emissions (metric tons/month)																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Water Truck	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Excavator	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Grader	0.0003	0.0005	0.0005	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0003	0.0003
Cranes	0.0000	0.0000	0.0000	0.0000	0.0004	0.0004	0.0008	0.0008	0.0008	0.0010	0.0008	0.0008	0.0012	0.0010	0.0008	0.0008	0.0008	0.0008	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000
Tractor/Loader/Backhoe	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Rubber Tired Loader	0.0000	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Crawler Tractor	0.0001	0.0003	0.0003	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Air Compressor	0.0000	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Forklift	0.0000	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Roller	0.0001	0.0002	0.0002	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
Other General Industrial Equipment	0.0000	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (metric tons/month)	**0.0011**	**0.0027**	**0.0027**	**0.0021**	**0.0025**	**0.0020**	**0.0020**	**0.0020**	**0.0020**	**0.0022**	**0.0020**	**0.0020**	**0.0024**	**0.0022**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0014**	**0.0011**	**0.0011**	**0.0011**	**0.0011**	**0.0011**	**0.0011**	**0.0007**	**0.0010**	**0.0010**
Onsite Total (metric tons/day) [a]	**0.0000**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**
Onsite Total (metric tons/year)	**0.0267**																											

Construction Equipment CH_4 Emissions from Block 2 Construction

Onsite Equipment	CH_4 Emissions (metric tons/month)																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Water Truck	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Excavator	0.0006	0.0012	0.0012	0.0012	0.0012	0.0012	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Grader	0.0006	0.0012	0.0012	0.0006	0.0006	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0006
Cranes	0.0000	0.0000	0.0000	0.0000	0.0009	0.0009	0.0018	0.0018	0.0018	0.0022	0.0018	0.0018	0.0026	0.0022	0.0018	0.0018	0.0018	0.0018	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0000	0.0000	0.0000
Tractor/Loader/Backhoe	0.0000	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Rubber Tired Loader	0.0000	0.0004	0.0004	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Crawler Tractor	0.0003	0.0006	0.0006	0.0003	0.0003	0.0003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Air Compressor	0.0000	0.0002	0.0002	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Forklift	0.0000	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003
Roller	0.0002	0.0004	0.0004	0.0002	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002
Other General Industrial Equipment	0.0000	0.0004	0.0004	0.0004	0.0004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (metric tons/month)	**0.0025**	**0.0060**	**0.0060**	**0.0046**	**0.0055**	**0.0045**	**0.0045**	**0.0045**	**0.0045**	**0.0049**	**0.0045**	**0.0045**	**0.0054**	**0.0049**	**0.0039**	**0.0039**	**0.0039**	**0.0039**	**0.0030**	**0.0026**	**0.0024**	**0.0024**	**0.0024**	**0.0024**	**0.0024**	**0.0015**	**0.0023**	**0.0023**
Onsite Total (metric tons/day) [a]	**0.0001**	**0.0003**	**0.0003**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
Onsite Total (metric tons/year)	**0.0595**																											

Notes:
[a] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', the days per month are as follows: 23

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.20R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO Emissions from Block 2 Construction

	CO Emissions (lbs/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Stake Truck	0.04	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Onsite Dump Truck	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.07**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.15**	**0.13**	**0.13**	**0.13**	**0.13**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.07**	**0.07**	**0.07**
	CO Emissions (lbs/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.30	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Onsite Stake Truck	0.91	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Onsite Dump Truck	0.46	0.91	0.91	0.91	0.91	0.91	0.91	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.00	0.00	0.00
Onsite Total (lbs/month)	**1.67**	**3.34**	**3.34**	**3.34**	**3.34**	**3.34**	**3.34**	**2.88**	**2.88**	**2.88**	**2.88**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.97**	**1.51**	**1.51**	**1.51**
Offsite Total (tons/year)	**0.02**																											

Onsite Construction Vehicle VOC Emissions from Block 2 Construction

	VOC Emisisons (lbs/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Dump Truck	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.035**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**	**0.058**	**0.058**	**0.058**	**0.058**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.035**	**0.024**	**0.024**	**0.024**	
	VOC Emissions (lbs/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Onsite Stake Truck	0.52	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Onsite Dump Truck	0.26	0.52	0.52	0.52	0.52	0.52	0.52	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.79**	**1.59**	**1.59**	**1.59**	**1.59**	**1.59**	**1.59**	**1.33**	**1.33**	**1.33**	**1.33**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.81**	**0.55**	**0.55**	**0.55**
Offsite Total (tons/year)	**0.01**																											

Onsite Construction Vehicle SOx Emissions from Block 2 Construction

	SOx Emissions (lbs/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.00005	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
Onsite Stake Truck	0.00016	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Onsite Dump Truck	0.00008	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00000	0.00000	0.00000
Onsite Total (lbs/day)	**0.00029**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00059**	**0.00050**	**0.00050**	**0.00050**	**0.00050**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00034**	**0.00026**	**0.00026**	**0.00026**
	SOx Emissions (lbs/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.0011	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
Onsite Stake Truck	0.0038	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
Onsite Dump Truck	0.0019	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0000	0.0000	0.0000
Onsite Total (lbs/month)	**0.0067**	**0.0135**	**0.0135**	**0.0135**	**0.0135**	**0.0135**	**0.0135**	**0.0116**	**0.0116**	**0.0116**	**0.0116**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0079**	**0.0060**	**0.0060**	**0.0060**
Offsite Total (tons/year)	**0.0001**																											

Onsite Construction Vehicle NOx Emissions from Block 2 Construction

	NOx Emissions (lbs/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.07	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Dump Truck	0.03	0.07	0.07	0.07	0.07	0.07	0.07	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.10**	**0.20**	**0.20**	**0.20**	**0.20**	**0.20**	**0.20**	**0.17**	**0.17**	**0.17**	**0.15**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.08**	**0.08**	**0.08**	**0.06**	**0.06**	**0.06**
	NOx Emissions (lbs/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Stake Truck	1.51	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	2.74	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.25	1.25	1.25	1.25	1.25	1.25
Onsite Dump Truck	0.76	1.51	1.51	1.51	1.51	1.51	1.51	0.76	0.76	0.76	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.62	0.62	0.62	0.00	0.00	0.00
Onsite Total (lbs/month)	**2.30**	**4.60**	**4.60**	**4.60**	**4.60**	**4.60**	**4.60**	**3.84**	**3.84**	**3.84**	**3.47**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**2.11**	**1.92**	**1.92**	**1.92**	**1.29**	**1.29**	**1.29**
Offsite Total (tons/year)	**0.02**																											

Onsite Construction Vehicle PM_{10} Emissions from Block 2 Construction

	PM_{10} Emissions (lbs/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.0006	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
Onsite Stake Truck	0.0031	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0063	0.0053	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0022	0.0022	0.0022	0.0022	0.0022	0.0022
Onsite Dump Truck	0.0016	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0016	0.0016	0.0016	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0011	0.0011	0.0011	0.0000	0.0000	0.0000
Onsite Total (lbs/day)	**0.0052**	**0.0105**	**0.0105**	**0.0105**	**0.0105**	**0.0105**	**0.0105**	**0.0089**	**0.0089**	**0.0089**	**0.0077**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0051**	**0.0045**	**0.0045**	**0.0045**	**0.0034**	**0.0034**	**0.0034**
	PM_{10} Emissions (lbs/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Stake Truck	0.07	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Dump Truck	0.04	0.07	0.07	0.07	0.07	0.07	0.07	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.12**	**0.24**	**0.24**	**0.24**	**0.24**	**0.24**	**0.24**	**0.21**	**0.21**	**0.21**	**0.18**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.12**	**0.10**	**0.10**	**0.10**	**0.08**	**0.08**	**0.08**
Offsite Total (tons/year)	**0.00**																											

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.20R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle $PM_{2.5}$ Emissions from Block 2 Construction

	$PM_{2.5}$ Emissions (lbs/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.0005	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
Onsite Stake Truck	0.0027	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0054	0.0045	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
Onsite Dump Truck	0.0014	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0014	0.0014	0.0014	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0009	0.0009	0.0009	0.0000	0.0000	0.0000
Onsite Total (lbs/day)	**0.0045**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0090**	**0.0077**	**0.0077**	**0.0077**	**0.0066**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0043**	**0.0038**	**0.0038**	**0.0038**	**0.0028**	**0.0028**	**0.0028**
	$PM_{2.5}$ Emissions (lbs/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.010	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
Onsite Stake Truck	0.062	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.104	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0.043	0.043	0.043	0.043	0.043	0.043
Onsite Dump Truck	0.031	0.062	0.062	0.062	0.062	0.062	0.062	0.031	0.031	0.031	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.022	0.022	0.022	0.000	0.000	0.000
Onsite Total (lbs/month)	**0.104**	**0.208**	**0.208**	**0.208**	**0.208**	**0.208**	**0.208**	**0.177**	**0.177**	**0.177**	**0.151**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.099**	**0.086**	**0.086**	**0.086**	**0.065**	**0.065**	**0.065**
Offsite Total (tons/year)	**0.001**																											

Onsite Construction Vehicle CO_2 Emissions from Block 2 Construction

	CO_2 Emissions (metric tons/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.002	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Onsite Stake Truck	0.008	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Onsite Dump Truck	0.004	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.000	0.000	0.000
Onsite Total (metric tons/day)	**0.014**	**0.028**	**0.028**	**0.028**	**0.028**	**0.028**	**0.028**	**0.028**	**0.024**	**0.024**	**0.024**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.016**	**0.013**	**0.013**	**0.013**
	CO_2 Emissions (metric tons/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.05	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Onsite Stake Truck	0.18	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Onsite Dump Truck	0.09	0.18	0.18	0.18	0.18	0.18	0.18	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.00
Onsite Total (metric tons/month)	**0.32**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.56**	**0.56**	**0.56**	**0.56**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.38**	**0.29**	**0.29**	**0.29**
Onsite Total (metric tons/year)	**6.86**																											

Onsite Construction Vehicle N_2O Emissions from Block 2 Construction

	N_2O Emissions (metric tons/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.000000013	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026	0.000000026
Onsite Stake Truck	0.000000010	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000005	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000000	0.000000000	0.000000000
Onsite Total (metric tons/day)	**0.000000028**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000055**	**0.000000050**	**0.000000050**	**0.000000050**	**0.000000050**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000041**	**0.000000036**	**0.000000036**	**0.000000036**
	N_2O Emissions (metric tons/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.0000003	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006	0.0000006
Onsite Stake Truck	0.0000002	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002
Onsite Dump Truck	0.0000001	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000000	0.0000000	0.0000000
Onsite Total (metric tons/month)	**0.0000006**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000013**	**0.0000012**	**0.0000012**	**0.0000012**	**0.0000012**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000009**	**0.0000008**	**0.0000008**	**0.0000008**
Onsite Total (metric tons/year)	**0.0000141**																											

Onsite Construction Vehicle CH_4 Emissions from Block 2 Construction

	CH_4 Emissions (metric tons/day)																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.000000033	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065	0.000000065
Onsite Stake Truck	0.000000010	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000005	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000000	0.000000000	0.000000000
Onsite Total (metric tons/day)	**0.000000048**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000096**	**0.000000091**	**0.000000091**	**0.000000091**	**0.000000091**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000081**	**0.000000075**	**0.000000075**	**0.000000075**
	CH_4 Emissions (metric tons/month) [a]																										
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Onsite Pick-up Truck	0.0000007	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015	0.0000015
Onsite Stake Truck	0.0000002	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000005	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002
Onsite Dump Truck	0.0000001	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000000	0.0000000	0.0000000
Onsite Total (metric tons/month)	**0.0000011**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000022**	**0.0000021**	**0.0000021**	**0.0000021**	**0.0000021**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000019**	**0.0000017**	**0.0000017**	**0.0000017**
Onsite Total (metric tons/year)	**0.0000253**																											

Notes:

[a] The days per month are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', as presented on the 'Fugitive Dust' tab.

Table 5.1A.21R Onsite Construction Fugitive Dust Emissions

Grading and Bulldozing Activity Levels for Block 2 Construction

Source	Monthly Activity Levels																												
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Onsite Disturbance (acres) [a]	0.66	0.66	0.66	0.66	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0.66	0.66
Bulldozer Operation (hours) [b]	230	460	460	230	230	230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Offsite Disturbance (acres) [c]	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33

Notes:
[a] Estimated a total of 4.6 acres is disturbed during Block 2 Construction as estimated based on data provided by H. Larios/PEC on 3/23/12; assumed this disturbance was equally distributed amongst the months in which graders are utilized.
[b] Bulldozer Operation calculated based on the number of equipment and the hours of operation per month, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls':
Hours per Day: 10
Days per Month: 23
[c] Estimated a total of 16 acres is disturbed at Alamitos for a laydown area during Block 1 and Block 2 Construction and assumed this disturbance was equally distributed amongst the construction activity (48 months total). Also assumed only fugitive dust from grading would occur in this location (i.e., not bulldozing).

Onsite Construction Vehicle Fugitive PM_{10} Emissions from Block 2 Construction

Vehicle Type	Fugitive PM_{10} Emissions (lbs/day) [a]																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Onsite Pick-up Truck	1.69	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Onsite Stake Truck	1.69	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Dump Truck	0.85	1.69	1.69	1.69	1.69	1.69	1.69	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.00	0.00	0.00
Onsite Total (lbs/day)	**4.23**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**8.45**	**7.61**	**7.61**	**7.61**	**7.61**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.07**	**5.07**	**5.07**
Vehicle Type	**Fugitive PM_{10} Emissions (lbs/month) [a]**																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Onsite Pick-up Truck	38.88	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Onsite Stake Truck	38.88	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Dump Truck	19.44	38.88	38.88	38.88	38.88	38.88	38.88	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	0.00	0.00	0.00
Onsite Total (lbs/month)	**97.20**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**194.41**	**174.97**	**174.97**	**174.97**	**174.97**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**116.64**	**116.64**	**116.64**
Offsite Total (tons/year)	**1.07**																											

Notes:
[a] Emissions based on highest (controlled) unpaved road emission factor for PM_{10}.

Onsite Construction Vehicle Fugitive $PM_{2.5}$ Emissions from Block 2 Construction

Vehicle Type	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Onsite Pick-up Truck	0.17	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Onsite Stake Truck	0.17	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Dump Truck	0.08	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.42**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.85**	**0.76**	**0.76**	**0.76**	**0.76**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.51**	**0.51**	**0.51**
Vehicle Type	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]**																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Onsite Pick-up Truck	3.89	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78
Onsite Stake Truck	3.89	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Dump Truck	1.94	3.89	3.89	3.89	3.89	3.89	3.89	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	0.00	0.00	0.00
Onsite Total (lbs/month)	**9.72**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**19.44**	**17.50**	**17.50**	**17.50**	**17.50**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**13.61**	**11.66**	**11.66**	**11.66**
Offsite Total (tons/year)	**0.11**																											

Notes:
[a] Emissions based on the highest (controlled) unpaved road emission factor for $PM_{2.5}$.

Onsite Grading and Bulldozing Fugitive PM_{10} Emissions from Block 2 Construction

Construction Activity	Fugitive PM_{10} Emissions (lbs/day) [a, b]																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading [c]	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Bulldozing	10.56	21.12	21.12	10.56	10.56	10.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**10.57**	**21.13**	**21.13**	**10.57**	**10.57**	**10.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
Construction Activity	**Fugitive PM_{10} Emissions (lbs/month) [a, b]**																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading	0.27	0.27	0.27	0.27	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.27
Bulldozing	242.84	485.68	485.68	242.84	242.84	242.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**243.11**	**485.96**	**485.96**	**243.11**	**243.11**	**242.84**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.27**	**0.27**
Offsite Total (tons/year)	**0.97**																											

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for PM_{10}.
[c] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Onsite Grading and Bulldozing Fugitive $PM_{2.5}$ Emissions from Block 2 Construction

Construction Activity	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a, b]																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading [c]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	2.56	5.12	5.12	2.56	2.56	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**2.56**	**5.12**	**5.12**	**2.56**	**2.56**	**2.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Construction Activity	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a, b]**																											
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading	0.03	0.03	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03
Bulldozing	58.82	117.65	117.65	58.82	58.82	58.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**58.85**	**117.68**	**117.68**	**58.85**	**58.85**	**58.82**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.03**
Offsite Total (tons/year)	**0.24**																											

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for $PM_{2.5}$.
[c] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Table 5.1A.21R Onsite Construction Fugitive Dust Emissions

Offsite Grading Fugitive PM_{10} Emissions from Block 2 Construction

Construction Activity	Fugitive PM_{10} Emissions (lbs/day) [a]																								
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading [b]	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Offsite Total (lbs/day)	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**	**0.015**

Construction Activity	Fugitive PM_{10} Emissions (lbs/month) [a]																								
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Offsite Total (lbs/month)	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**
Offsite Total (tons/year)	**0.00**																								

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Offsite Grading Fugitive $PM_{2.5}$ Emissions from Block 2 Construction

Construction Activity	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]																								
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017
Offsite Total (lbs/day)	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**

Construction Activity	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]																								
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Grading	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038
Offsite Total (lbs/month)	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**	**0.038**
Offsite Total (tons/year)	**0.000**																								

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment: 12 ft

Onsite Construction Vehicle Activity for Block 2 Construction

Vehicle Type	Miles/Day [a]	Working Days per
Onsite Pick-up Truck	2	23
Onsite Stake Truck	2	23
Onsite Dump Truck	1	23

Notes:
[a] Estimated based on the dimensions of the project site.
[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Fugitive Dust Emission Factors for Unpaved Roads

Vehicles on Unpaved Surfaces at Industrial Sites

Parameter	PM_{10}	$PM_{2.5}$
Mean Vehicle Weight [a]	16.5	16.5
Silt Content [b]	8.5	8.5
k [c]	1.5	0.15
a [c]	0.9	0.9
b [c]	0.45	0.45
P [d]	31	31
Emission Factor (Uncontrolled, lbs/mile) [e]	2.17	0.22
Reduction from Watering 3x per Day [f]	61%	61%
Emission Factor (Controlled, lbs/mile)	0.85	0.08

Notes:
[a] Mean vehicle weight assumes that medium/heavy duty trucks weigh 16.5 tons.
[b] Silt content taken from Table 13.2.2-1 of Section 13.2.2 of AP-42 for a Construction Site, Scraper Route; this value is consistent with the CalEEMod defaults for the South Coast Air Basin.
[c] k, a, and b taken from Table 13.2.2-2 of Section 13.2.2 of AP-42 for industrial roads.
[d] P taken as the CalEEMod default for the Huntington Beach climate region of the South Coast Air Basin.
[e] Emission factor calculated using Equations 1a and 2 from Section 13.2.2 of AP-42:

Emission Factor (lbs/mile) = (k (lbs/mile) x [Silt Content (%) / 12][a] x [Mean Vehicle Weight (tons) / 3][b]) x [(365 - P) / 365]

[f] Control efficiency taken from the URBEMIS default mitigation measures for unpaved roads.

Fugitive Dust Emission Factors for Grading

Grading Equipment Passes

Parameter	PM_{10}	$PM_{2.5}$
S (mph) [a]	7.1	7.1
F [a]	0.6	0.031
Emission Factor (lbs/VMT) [b]	1.543	0.167
Reduction from Watering Every 3 Hours [c]	61%	61%
Emission Factor (Controlled, lbs/VMT)	0.602	0.065

Notes:
[a] The mean vehicle speed (S) and the particulate matter scaling factor (F) taken from Section 11.9 of AP-42 per Section 4.3 of Appendix A of the CalEEMod User's Guide.
[b] Emission factor calculated using the following equation from Section 4.3 of Appendix A of the CalEEMod User's Guide:

PM_{10} Emission Factor (lbs/VMT) = $0.051 \times (S)^{2.0} \times F_{PM10}$

$PM_{2.5}$ Emission Factor (lbs/VMT) = $0.04 \times (S)^{2.5} \times F_{PM2.5}$

[c] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Construction Activities.

Fugitive Dust Emission Factors for Bulldozing

Bulldozing Equipment Passes

Parameter	PM_{10}	$PM_{2.5}$
C [a]	5.7	5.7
M (%) [a]	7.9%	7.9%
s (%) [a]	6.9%	6.9%
F [a]	0.75	0.105
Emission Factor (lbs/hr) [b]	2.707	0.656
Reduction from Watering Every 3 Hours [c]	61%	61%
Emission Factor (Controlled, lbs/hr)	1.056	0.256

Notes:
[a] The arbitrary coefficient (C), material moisture content (M), material silt content (s), and particulate matter scaling factor (F) taken from Section 11.9 of AP-42 per Section 4.3 of Appendix A of the CalEEMod User's Guide. These values are consistent with the CalEEMod defaults for the South Coast Air Basin.
[b] Emission factor calculated using the following equation from Section 4.3 of Appendix A of the CalEEMod User's Guide:

PM_{10} Emission Factor (lbs/hr) = $[(C \times s^{1.5}) / M^{1.4}] \times F_{PM10}$

$PM_{2.5}$ Emission Factor (lbs/hr) = $[(C \times s^{1.2}) / M^{1.3}] \times F_{PM2.5}$

[c] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Construction Activities.

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.22R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle Usage During Block 2 Construction

	Number per Day																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks [a]	0.00	0.00	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Material Hauling Trucks [b, c]	0.38	0.38	0.38	4.88	5.13	6.25	6.75	4.75	6.75	9.25	12.85	11.75	11.85	12.25	11.50	10.50	8.70	7.70	8.70	5.70	8.70	4.70	3.70	3.70	2.70	2.70	3.70	2.70
Directly to HBEP	0.15	0.15	0.15	1.95	2.05	2.50	2.70	1.90	2.70	3.70	5.14	4.70	4.74	4.90	4.60	4.20	3.48	3.08	3.48	2.28	3.48	1.88	1.48	1.48	1.08	1.08	1.48	1.08
Directly to Alamitos	0.23	0.23	0.23	2.93	3.08	3.75	4.05	2.85	4.05	5.55	7.71	7.05	7.11	7.35	6.90	6.30	5.22	4.62	5.22	3.42	5.22	2.82	2.22	2.22	1.62	1.62	2.22	1.62
To HBEP from Alamitos	0.23	0.23	0.23	2.93	3.08	3.75	4.05	2.85	4.05	5.55	7.71	7.05	7.11	7.35	6.90	6.30	5.22	4.62	5.22	3.42	5.22	2.82	2.22	2.22	1.62	1.62	2.22	1.62
Construction Worker Commute [d]	37.00	49.00	69.00	79.00	99.00	111.00	110.00	132.00	134.00	142.00	146.00	176.00	230.00	230.00	230.00	230.00	235.00	236.00	236.00	231.00	231.00	231.00	231.00	175.00	141.00	90.00	86.00	86.00

Notes:

[a] Offsite Delivery Trucks include trucks transporting "Consumables & Supplies", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. It was assumed that these trucks travel directly to HBEP.

[b] Material Hauling Trucks include trucks transporting "Fill Material", "Mechanical Equipment", "Electrical Equip. & Mtrls", "Piping, Supports, & Valves", "Concrete and Rebar", "Steel/Architectural", "Contractor Mobilization", "Contractor Demobilization", "Construction Equipment", "HRSGs", "CGTs", "CTGs", "STGs", and "Main Transformers", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[c] Per "Huntington Beach Truck Deliveries 032112.xls", assumed that 40% of the material haul trucks travel directly to HBEP, that the remaining 60% travel directly to Alamitos, and that all of the materials delivered to Alamitos will later be delivered to HBEP.

[d] Assumed 1 commute per 1 worker; number of workers taken from 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Offsite Vehicle CO Emissions from Block 2 Construction

	CO Emissions (lbs/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Material Hauling Trucks																												
Directly to HBEP	0.02	0.02	0.02	0.26	0.27	0.33	0.36	0.25	0.36	0.49	0.69	0.63	0.63	0.65	0.61	0.56	0.46	0.41	0.46	0.30	0.46	0.25	0.20	0.20	0.14	0.14	0.20	0.14
Directly to Alamitos	0.03	0.03	0.03	0.39	0.41	0.50	0.54	0.38	0.54	0.74	1.03	0.94	0.95	0.98	0.92	0.84	0.70	0.62	0.70	0.46	0.70	0.38	0.30	0.30	0.22	0.22	0.30	0.22
To HBEP from Alamitos	0.02	0.02	0.02	0.25	0.27	0.33	0.35	0.25	0.35	0.48	0.67	0.61	0.62	0.64	0.60	0.55	0.45	0.40	0.45	0.30	0.45	0.24	0.19	0.19	0.14	0.14	0.19	0.14
Construction Worker Commute	2.17	2.87	4.04	4.62	5.79	6.50	6.44	7.73	7.84	8.31	8.54	10.30	13.46	13.46	13.46	13.46	13.75	13.81	13.81	13.52	13.52	13.52	13.52	10.24	8.25	5.27	5.03	5.03
Offsite Total (lbs/day)	**2.23**	**2.94**	**4.15**	**5.57**	**6.79**	**7.70**	**7.73**	**8.65**	**9.14**	**10.09**	**10.99**	**12.54**	**15.72**	**15.79**	**15.65**	**15.47**	**15.43**	**15.30**	**15.49**	**14.64**	**15.19**	**14.45**	**14.27**	**10.99**	**8.81**	**5.83**	**5.78**	**5.59**
	CO Emissions (lbs/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Material Hauling Trucks																												
Directly to HBEP	0.46	0.46	0.46	5.98	6.29	7.67	8.29	5.83	8.29	11.35	15.77	14.42	14.55	15.04	14.12	12.89	10.68	9.45	10.68	7.00	10.68	5.77	4.54	4.54	3.31	3.31	4.54	3.31
Directly to Alamitos	0.69	0.69	0.69	8.98	9.44	11.51	12.43	8.75	12.43	17.03	23.66	21.63	21.82	22.55	21.17	19.33	16.02	14.18	16.02	10.49	16.02	8.65	6.81	6.81	4.97	4.97	6.81	4.97
To HBEP from Alamitos	0.45	0.45	0.45	5.83	6.13	7.48	8.08	5.68	8.08	11.07	15.38	14.06	14.18	14.66	13.76	12.57	10.41	9.22	10.41	6.82	10.41	5.62	4.43	4.43	3.23	3.23	4.43	3.23
Construction Worker Commute	49.80	65.96	92.88	106.34	133.26	149.41	148.07	177.68	180.37	191.14	196.52	236.90	309.59	309.59	309.59	309.59	316.32	317.67	317.67	310.94	310.94	310.94	310.94	235.56	189.79	121.14	115.76	115.76
Offsite Total (lbs/month)	**51.40**	**67.56**	**95.52**	**128.18**	**156.17**	**177.12**	**177.90**	**198.99**	**210.21**	**231.99**	**252.73**	**288.42**	**361.53**	**363.24**	**360.04**	**355.77**	**354.83**	**351.91**	**356.17**	**336.65**	**349.44**	**332.38**	**328.12**	**252.74**	**202.71**	**134.06**	**132.94**	**128.67**
Offsite Total (tons/year)	**2.07**																											

Offsite Vehicle VOC Emissions from Block 2 Construction

	VOC Emissions (lbs/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.000	0.000	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Material Hauling Trucks																												
Directly to HBEP	0.003	0.003	0.003	0.043	0.045	0.055	0.060	0.042	0.060	0.082	0.114	0.104	0.105	0.108	0.102	0.093	0.077	0.068	0.077	0.050	0.077	0.042	0.033	0.033	0.024	0.024	0.033	0.024
Directly to Alamitos	0.005	0.005	0.005	0.065	0.068	0.083	0.090	0.063	0.090	0.123	0.171	0.156	0.157	0.163	0.153	0.139	0.116	0.102	0.116	0.076	0.116	0.062	0.049	0.049	0.036	0.036	0.049	0.036
To HBEP from Alamitos	0.003	0.003	0.003	0.042	0.044	0.054	0.058	0.041	0.058	0.080	0.111	0.101	0.102	0.106	0.099	0.091	0.075	0.066	0.075	0.049	0.075	0.041	0.032	0.032	0.023	0.023	0.032	0.023
Construction Worker Commute	0.037	0.049	0.069	0.079	0.099	0.111	0.110	0.132	0.134	0.142	0.146	0.176	0.230	0.230	0.230	0.230	0.235	0.236	0.236	0.231	0.231	0.231	0.231	0.175	0.141	0.090	0.086	0.086
Offsite Total (lbs/day)	**0.049**	**0.061**	**0.090**	**0.238**	**0.266**	**0.313**	**0.327**	**0.287**	**0.351**	**0.439**	**0.554**	**0.550**	**0.607**	**0.619**	**0.596**	**0.565**	**0.515**	**0.485**	**0.516**	**0.419**	**0.511**	**0.388**	**0.357**	**0.301**	**0.236**	**0.185**	**0.212**	**0.181**
	VOC Emissions (lbs/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Material Hauling Trucks																												
Directly to HBEP	0.08	0.08	0.08	0.99	1.04	1.27	1.37	0.97	1.37	1.88	2.62	2.39	2.41	2.49	2.34	2.14	1.77	1.57	1.77	1.16	1.77	0.96	0.75	0.75	0.55	0.55	0.75	0.55
Directly to Alamitos	0.11	0.11	0.11	1.49	1.57	1.91	2.06	1.45	2.06	2.83	3.93	3.59	3.62	3.74	3.51	3.21	2.66	2.35	2.66	1.74	2.66	1.44	1.13	1.13	0.82	0.82	1.13	0.82
To HBEP from Alamitos	0.07	0.07	0.07	0.97	1.02	1.24	1.34	0.94	1.34	1.84	2.55	2.33	2.35	2.43	2.28	2.08	1.73	1.53	1.73	1.13	1.73	0.93	0.73	0.73	0.54	0.54	0.73	0.54
Construction Worker Commute	0.85	1.13	1.59	1.82	2.28	2.55	2.53	3.04	3.08	3.27	3.36	4.05	5.29	5.29	5.29	5.29	5.41	5.43	5.43	5.31	5.31	5.31	5.31	4.03	3.24	2.07	1.98	1.98
Offsite Total (lbs/month)	**1.12**	**1.39**	**2.07**	**5.48**	**6.12**	**7.19**	**7.52**	**6.61**	**8.07**	**10.10**	**12.74**	**12.65**	**13.96**	**14.24**	**13.71**	**13.00**	**11.85**	**11.16**	**11.87**	**9.63**	**11.75**	**8.92**	**8.22**	**6.93**	**5.44**	**4.26**	**4.88**	**4.17**
Offsite Total (tons/year)	**0.07**																											

Offsite Vehicle SOx Emissions from Block 2 Construction

	SOx Emissions (lbs/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.0000	0.0000	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Material Hauling Trucks																												
Directly to HBEP	0.0002	0.0002	0.0002	0.0027	0.0028	0.0034	0.0037	0.0026	0.0037	0.0051	0.0070	0.0064	0.0065	0.0067	0.0063	0.0057	0.0048	0.0042	0.0048	0.0031	0.0048	0.0026	0.0020	0.0020	0.0015	0.0015	0.0020	0.0015
Directly to Alamitos	0.0003	0.0003	0.0003	0.0040	0.0042	0.0051	0.0055	0.0039	0.0055	0.0076	0.0105	0.0096	0.0097	0.0100	0.0094	0.0086	0.0071	0.0063	0.0071	0.0047	0.0071	0.0039	0.0030	0.0030	0.0022	0.0022	0.0030	0.0022
To HBEP from Alamitos	0.0002	0.0002	0.0002	0.0026	0.0027	0.0033	0.0036	0.0025	0.0036	0.0049	0.0068	0.0063	0.0063	0.0065	0.0061	0.0056	0.0046	0.0041	0.0046	0.0030	0.0046	0.0025	0.0020	0.0020	0.0014	0.0014	0.0020	0.0014
Construction Worker Commute	0.0057	0.0076	0.0107	0.0122	0.0153	0.0172	0.0170	0.0204	0.0207	0.0220	0.0226	0.0272	0.0356	0.0356	0.0356	0.0356	0.0364	0.0365	0.0365	0.0358	0.0358	0.0358	0.0358	0.0271	0.0218	0.0139	0.0133	0.0133
Offsite Total (lbs/day)	**0.0064**	**0.0083**	**0.0118**	**0.0219**	**0.0255**	**0.0295**	**0.0303**	**0.0299**	**0.0340**	**0.0401**	**0.0476**	**0.0501**	**0.0587**	**0.0594**	**0.0580**	**0.0561**	**0.0534**	**0.0517**	**0.0536**	**0.0471**	**0.0528**	**0.0452**	**0.0433**	**0.0347**	**0.0275**	**0.0196**	**0.0209**	**0.0190**
	SOx Emissions (lbs/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.000	0.000	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Material Hauling Trucks																												
Directly to HBEP	0.005	0.005	0.005	0.061	0.064	0.079	0.085	0.060	0.085	0.116	0.162	0.148	0.149	0.154	0.145	0.132	0.109	0.097	0.109	0.072	0.109	0.059	0.047	0.047	0.034	0.034	0.047	0.034
Directly to Alamitos	0.007	0.007	0.007	0.092	0.097	0.118	0.127	0.090	0.127	0.174	0.242	0.222	0.224	0.231	0.217	0.198	0.164	0.145	0.164	0.108	0.164	0.089	0.070	0.070	0.051	0.051	0.070	0.051
To HBEP from Alamitos	0.005	0.005	0.005	0.060	0.063	0.077	0.083	0.058	0.083	0.113	0.158	0.144	0.145	0.150	0.141	0.129	0.107	0.094	0.107	0.070	0.107	0.058	0.045	0.045	0.033	0.033	0.045	0.033
Construction Worker Commute	0.132	0.174	0.246	0.281	0.352	0.395	0.392	0.470	0.477	0.505	0.520	0.626	0.819	0.819	0.819	0.819	0.836	0.840	0.840	0.822	0.822	0.822	0.822	0.623	0.502	0.320	0.306	0.306
Offsite Total (lbs/month)	**0.148**	**0.191**	**0.271**	**0.504**	**0.586**	**0.678**	**0.696**	**0.687**	**0.781**	**0.922**	**1.094**	**1.153**	**1.349**	**1.367**	**1.334**	**1.290**	**1.229**	**1.189**	**1.233**	**1.084**	**1.215**	**1.040**	**0.997**	**0.797**	**0.632**	**0.451**	**0.480**	**0.437**
Offsite Total (tons/year)	**0.007**																											

Table 5.1A.22R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle NOx Emissions from Block 2 Construction

	NOx Emissions (lbs/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.17	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.13	0.13	0.13	0.13	0.13	0.13
Material Hauling Trucks																												
Directly to HBEP	0.05	0.05	0.05	0.70	0.73	0.89	0.96	0.68	0.96	1.32	1.65	1.51	1.52	1.57	1.47	1.35	1.11	0.99	1.11	0.73	1.11	0.60	0.43	0.43	0.31	0.31	0.43	0.31
Directly to Alamitos	0.08	0.08	0.08	1.04	1.10	1.34	1.44	1.02	1.44	1.98	2.47	2.26	2.28	2.35	2.21	2.02	1.67	1.48	1.67	1.10	1.67	0.90	0.64	0.64	0.47	0.47	0.64	0.47
To HBEP from Alamitos	0.05	0.05	0.05	0.68	0.71	0.87	0.94	0.66	0.94	1.29	1.60	1.47	1.48	1.53	1.44	1.31	1.09	0.96	1.09	0.71	1.09	0.59	0.42	0.42	0.30	0.30	0.42	0.30
Construction Worker Commute	0.20	0.26	0.37	0.43	0.54	0.60	0.59	0.71	0.72	0.77	0.72	0.87	1.14	1.14	1.14	1.14	1.17	1.17	1.17	1.15	1.15	1.15	1.06	0.81	0.65	0.41	0.40	0.40
Offsite Total (lbs/day)	**0.39**	**0.45**	**0.68**	**2.97**	**3.20**	**3.82**	**4.07**	**3.19**	**4.20**	**5.52**	**6.59**	**6.25**	**6.57**	**6.74**	**6.41**	**5.97**	**5.19**	**4.75**	**5.19**	**3.83**	**5.17**	**3.39**	**2.69**	**2.43**	**1.87**	**1.63**	**2.02**	**1.62**
	NOx Emissions (lbs/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	2.88	2.88	2.88	2.88	2.88	2.88	2.88	3.84	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.10	3.10	3.10	3.10	3.10	3.10
Material Hauling Trucks																												
Directly to HBEP	1.23	1.23	1.23	16.00	16.82	20.51	22.15	15.59	22.15	30.36	37.86	34.62	34.91	36.09	33.88	30.94	25.63	22.69	25.63	16.79	25.63	13.85	9.84	9.84	7.18	7.18	9.84	7.18
Directly to Alamitos	1.85	1.85	1.85	24.00	25.23	30.77	33.23	23.38	33.23	45.54	56.79	51.93	52.37	54.14	50.82	46.40	38.45	34.03	38.45	25.19	38.45	20.77	14.76	14.76	10.77	10.77	14.76	10.77
To HBEP from Alamitos	1.20	1.20	1.20	15.60	16.40	20.00	21.60	15.20	21.60	29.60	36.91	33.75	34.04	35.19	33.03	30.16	24.99	22.12	24.99	16.37	24.99	13.50	9.59	9.59	7.00	7.00	9.59	7.00
Construction Worker Commute	4.60	6.09	8.58	9.82	12.31	13.80	13.67	16.41	16.66	17.65	16.67	20.10	26.26	26.26	26.26	26.26	26.83	26.95	26.95	26.38	26.38	26.38	24.48	18.54	14.94	9.54	9.11	9.11
Offsite Total (lbs/month)	**8.88**	**10.37**	**15.74**	**68.30**	**73.64**	**87.96**	**93.54**	**73.47**	**96.53**	**126.99**	**151.67**	**143.83**	**151.02**	**155.12**	**147.44**	**137.20**	**119.34**	**109.22**	**119.46**	**88.17**	**118.89**	**77.93**	**61.78**	**55.84**	**43.00**	**37.59**	**46.41**	**37.17**
Offsite Total (tons/year)	**0.78**																											

Offsite Vehicle PM_{10} Emissions from Block 2 Construction

	PM_{10} Emissions (lbs/day) [a]																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.000	0.000	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
Material Hauling Trucks																												
Directly to HBEP	0.007	0.007	0.007	0.087	0.091	0.112	0.120	0.085	0.120	0.165	0.224	0.205	0.206	0.213	0.200	0.183	0.152	0.134	0.152	0.099	0.152	0.082	0.063	0.063	0.046	0.046	0.063	0.046
Directly to Alamitos	0.010	0.010	0.010	0.131	0.137	0.167	0.181	0.127	0.181	0.248	0.336	0.307	0.310	0.320	0.301	0.274	0.227	0.201	0.227	0.149	0.227	0.123	0.095	0.095	0.069	0.069	0.095	0.069
To HBEP from Alamitos	0.007	0.007	0.007	0.085	0.089	0.109	0.117	0.083	0.117	0.161	0.218	0.200	0.201	0.208	0.195	0.178	0.148	0.131	0.148	0.097	0.148	0.080	0.062	0.062	0.045	0.045	0.062	0.045
Construction Worker Commute	0.587	0.778	1.095	1.254	1.571	1.761	1.745	2.095	2.126	2.253	2.317	2.793	3.650	3.650	3.650	3.650	3.729	3.745	3.745	3.666	3.666	3.666	3.666	2.777	2.237	1.428	1.365	1.365
Offsite Total (lbs/day)	**0.610**	**0.801**	**1.131**	**1.569**	**1.902**	**2.162**	**2.177**	**2.402**	**2.558**	**2.845**	**3.112**	**3.521**	**4.384**	**4.408**	**4.363**	**4.302**	**4.273**	**4.228**	**4.289**	**4.028**	**4.209**	**3.967**	**3.902**	**3.013**	**2.414**	**1.605**	**1.601**	**1.541**
	PM_{10} Emissions (lbs/month) [a]																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.41	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.38	0.38	0.38	0.38	0.38	0.38
Material Hauling Trucks																												
Directly to HBEP	0.15	0.15	0.15	2.00	2.10	2.57	2.77	1.95	2.77	3.80	5.15	4.71	4.75	4.91	4.61	4.21	3.49	3.09	3.49	2.28	3.49	1.88	1.45	1.45	1.06	1.06	1.45	1.06
Directly to Alamitos	0.23	0.23	0.23	3.00	3.16	3.85	4.16	2.92	4.16	5.70	7.72	7.06	7.12	7.36	6.91	6.31	5.23	4.63	5.23	3.43	5.23	2.83	2.18	2.18	1.59	1.59	2.18	1.59
To HBEP from Alamitos	0.15	0.15	0.15	1.95	2.05	2.50	2.70	1.90	2.70	3.70	5.02	4.59	4.63	4.79	4.49	4.10	3.40	3.01	3.40	2.23	3.40	1.84	1.42	1.42	1.03	1.03	1.42	1.03
Construction Worker Commute	13.50	17.88	25.18	28.83	36.13	40.51	40.15	48.18	48.91	51.83	53.29	64.23	83.94	83.94	83.94	83.94	85.77	86.13	86.13	84.31	84.31	84.31	84.31	63.87	51.46	32.85	31.39	31.39
Offsite Total (lbs/month)	**14.04**	**18.42**	**26.02**	**36.09**	**43.75**	**49.73**	**50.08**	**55.26**	**58.84**	**65.43**	**71.57**	**80.99**	**100.84**	**101.39**	**100.35**	**98.96**	**98.27**	**97.25**	**98.64**	**92.64**	**96.82**	**91.24**	**89.74**	**69.30**	**55.53**	**36.91**	**36.82**	**35.45**
Offsite Total (tons/year)	**0.57**																											

Notes:
[a] PM_{10} Emissions include emissions from exhaust and paved roads.

Offsite Vehicle $PM_{2.5}$ Emissions from Block 2 Construction

	$PM_{2.5}$ Emissions (lbs/day) [a]																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.000	0.000	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Material Hauling Trucks																												
Directly to HBEP	0.003	0.003	0.003	0.041	0.043	0.052	0.057	0.040	0.057	0.078	0.098	0.090	0.091	0.094	0.088	0.080	0.066	0.059	0.066	0.044	0.066	0.036	0.028	0.028	0.021	0.021	0.028	0.021
Directly to Alamitos	0.005	0.005	0.005	0.061	0.064	0.079	0.085	0.060	0.085	0.116	0.147	0.135	0.136	0.140	0.132	0.120	0.100	0.088	0.100	0.065	0.100	0.054	0.043	0.043	0.031	0.031	0.043	0.031
To HBEP from Alamitos	0.003	0.003	0.003	0.040	0.042	0.051	0.055	0.039	0.055	0.076	0.096	0.088	0.088	0.091	0.086	0.078	0.065	0.057	0.065	0.042	0.065	0.035	0.028	0.028	0.020	0.020	0.028	0.020
Construction Worker Commute	0.164	0.217	0.306	0.350	0.439	0.492	0.488	0.585	0.594	0.630	0.649	0.783	1.023	1.023	1.023	1.023	1.045	1.049	1.049	1.027	1.027	1.027	1.027	0.778	0.627	0.400	0.382	0.382
Offsite Total (lbs/day)	**0.175**	**0.228**	**0.323**	**0.499**	**0.595**	**0.681**	**0.691**	**0.730**	**0.797**	**0.908**	**0.998**	**1.103**	**1.345**	**1.356**	**1.336**	**1.309**	**1.284**	**1.262**	**1.288**	**1.186**	**1.266**	**1.160**	**1.133**	**0.884**	**0.706**	**0.480**	**0.489**	**0.462**
	$PM_{2.5}$ Emissions (lbs/month) [a]																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.20	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.17	0.17
Material Hauling Trucks																												
Directly to HBEP	0.07	0.07	0.07	0.94	0.99	1.20	1.30	0.92	1.30	1.78	2.26	2.06	2.08	2.15	2.02	1.85	1.53	1.35	1.53	1.00	1.53	0.83	0.65	0.65	0.48	0.48	0.65	0.48
Directly to Alamitos	0.11	0.11	0.11	1.41	1.48	1.81	1.95	1.37	1.95	2.67	3.39	3.10	3.12	3.23	3.03	2.77	2.29	2.03	2.29	1.50	2.29	1.24	0.98	0.98	0.72	0.72	0.98	0.72
To HBEP from Alamitos	0.07	0.07	0.07	0.92	0.96	1.17	1.27	0.89	1.27	1.74	2.20	2.01	2.03	2.10	1.97	1.80	1.49	1.32	1.49	0.98	1.49	0.81	0.64	0.64	0.46	0.46	0.64	0.46
Construction Worker Commute	3.77	5.00	7.04	8.06	10.10	11.32	11.22	13.46	13.67	14.48	14.93	18.00	23.52	23.52	23.52	23.52	24.03	24.13	24.13	23.62	23.62	23.62	23.62	17.90	14.42	9.20	8.79	8.79
Offsite Total (lbs/month)	**4.02**	**5.25**	**7.44**	**11.47**	**13.68**	**15.65**	**15.89**	**16.79**	**18.34**	**20.88**	**22.96**	**25.36**	**30.94**	**31.19**	**30.73**	**30.12**	**29.53**	**29.02**	**29.63**	**27.29**	**29.12**	**26.68**	**26.07**	**20.34**	**16.25**	**11.03**	**11.24**	**10.62**
Offsite Total (tons/year)	**0.17**																											

Notes:
[a] $PM_{2.5}$ Emissions include emissions from exhaust and paved roads.

Offsite Vehicle CO_2 Emissions from Block 2 Construction

	CO_2 Emissions (metric tons/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.000	0.000	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026
Material Hauling Trucks																												
Directly to HBEP	0.010	0.010	0.010	0.128	0.135	0.164	0.177	0.125	0.177	0.243	0.337	0.308	0.311	0.322	0.302	0.276	0.228	0.202	0.228	0.150	0.228	0.123	0.097	0.097	0.071	0.071	0.097	0.071
Directly to Alamitos	0.015	0.015	0.015	0.192	0.202	0.246	0.266	0.187	0.266	0.364	0.506	0.463	0.467	0.482	0.453	0.413	0.343	0.303	0.343	0.224	0.343	0.185	0.146	0.146	0.106	0.106	0.146	0.106
To HBEP from Alamitos	0.010	0.010	0.010	0.125	0.131	0.160	0.173	0.122	0.173	0.237	0.329	0.301	0.303	0.314	0.294	0.269	0.223	0.197	0.223	0.146	0.223	0.120	0.095	0.095	0.069	0.069	0.095	0.069
Construction Worker Commute	0.256	0.339	0.477	0.546	0.685	0.768	0.761	0.913	0.927	0.982	1.010	1.217	1.591	1.591	1.591	1.591	1.625	1.632	1.632	1.598	1.598	1.598	1.598	1.210	0.975	0.622	0.595	0.595
Offsite Total (metric tons/day)	**0.290**	**0.373**	**0.531**	**1.011**	**1.172**	**1.357**	**1.396**	**1.366**	**1.562**	**1.852**	**2.208**	**2.315**	**2.698**	**2.734**	**2.666**	**2.575**	**2.445**	**2.361**	**2.452**	**2.144**	**2.417**	**2.052**	**1.961**	**1.574**	**1.247**	**0.895**	**0.958**	**0.867**
	CO_2 Emissions (metric tons/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00	0.00	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Material Hauling Trucks																												
Directly to HBEP	0.23	0.23	0.23	2.94	3.09	3.77	4.08	2.87	4.08	5.58	7.76	7.09	7.15	7.40	6.94	6.34	5.25	4.65	5.25	3.44	5.25	2.84	2.23	2.23	1.63	1.63	2.23	1.63
Directly to Alamitos	0.34	0.34	0.34	4.41	4.64	5.66	6.11	4.30	6.11	8.38	11.64	10.64	10.73	11.09	10.41	9.51	7.88	6.97	7.88	5.16	7.88	4.26	3.35	3.35	2.45	2.45	3.35	2.45
To HBEP from Alamitos	0.22	0.22	0.22	2.87	3.02	3.68	3.97	2.80	3.97	5.44	7.56	6.92	6.98	7.21	6.77	6.18	5.12	4.53	5.12	3.36	5.12	2.77	2.18	2.18	1.59	1.59	2.18	1.59
Construction Worker Commute	5.89	7.80	10.98	12.57	15.75	17.66	17.50	21.00	21.32	22.59	23.23	28.00	36.59	36.59	36.59	36.59	37.38	37.54	37.54	36.75	36.75	36.75	36.75	27.84	22.43	14.32	13.68	13.68
Offsite Total (metric tons/month)	**6.67**	**8.58**	**12.21**	**23.24**	**26.95**	**31.22**	**32.11**	**31.41**	**35.93**	**42.59**	**50.78**	**53.25**	**62.05**	**62.89**	**61.31**	**59.21**	**56.23**	**54.29**	**56.39**	**49.30**	**55.60**	**47.20**	**45.11**	**36.20**	**28.69**	**20.58**	**22.04**	**19.94**
Offsite Total (metric tons/year)	**668.51**																											

Table 5.1A.22R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle N_2O Emissions from Block 2 Construction

	N_2O Emissions (metric tons/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00000000	0.00000000	0.00000005	0.00000005	0.00000005	0.00000005	0.00000005	0.00000005	0.00000005	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007
Material Hauling Trucks																												
Directly to HBEP	0.00000003	0.00000003	0.00000003	0.00000037	0.00000039	0.00000048	0.00000052	0.00000036	0.00000052	0.00000071	0.00000099	0.00000090	0.00000091	0.00000094	0.00000088	0.00000081	0.00000067	0.00000059	0.00000067	0.00000044	0.00000067	0.00000036	0.00000028	0.00000028	0.00000021	0.00000021	0.00000028	0.00000021
Directly to Alamitos	0.00000004	0.00000004	0.00000004	0.00000056	0.00000059	0.00000072	0.00000078	0.00000055	0.00000078	0.00000107	0.00000148	0.00000135	0.00000137	0.00000141	0.00000132	0.00000121	0.00000100	0.00000089	0.00000100	0.00000066	0.00000100	0.00000054	0.00000043	0.00000043	0.00000031	0.00000031	0.00000043	0.00000031
To HBEP from Alamitos	0.00000003	0.00000003	0.00000003	0.00000037	0.00000038	0.00000047	0.00000051	0.00000036	0.00000051	0.00000069	0.00000096	0.00000088	0.00000089	0.00000092	0.00000086	0.00000079	0.00000065	0.00000058	0.00000065	0.00000043	0.00000065	0.00000035	0.00000028	0.00000028	0.00000020	0.00000020	0.00000028	0.00000020
Construction Worker Commute	0.00000288	0.00000381	0.00000537	0.00000614	0.00000770	0.00000863	0.00000855	0.00001026	0.00001042	0.00001104	0.00001135	0.00001369	0.00001788	0.00001788	0.00001788	0.00001788	0.00001827	0.00001835	0.00001835	0.00001796	0.00001796	0.00001796	0.00001796	0.00001796	0.00001361	0.00001096	0.00000700	0.00000669	0.00000669
Offsite Total (metric tons/day)	**0.0000030**	**0.0000039**	**0.0000055**	**0.0000075**	**0.0000091**	**0.0000104**	**0.0000104**	**0.0000116**	**0.0000123**	**0.0000136**	**0.0000149**	**0.0000169**	**0.0000211**	**0.0000212**	**0.0000210**	**0.0000208**	**0.0000207**	**0.0000205**	**0.0000207**	**0.0000196**	**0.0000204**	**0.0000193**	**0.0000190**	**0.0000147**	**0.0000118**	**0.0000078**	**0.0000077**	**0.0000075**

	N_2O Emissions (metric tons/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.0000000	0.0000000	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000012	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016
Material Hauling Trucks																												
Directly to HBEP	0.0000007	0.0000007	0.0000007	0.0000086	0.0000091	0.0000110	0.0000119	0.0000084	0.0000119	0.0000163	0.0000227	0.0000208	0.0000209	0.0000216	0.0000203	0.0000185	0.0000154	0.0000136	0.0000154	0.0000101	0.0000154	0.0000083	0.0000065	0.0000065	0.0000048	0.0000048	0.0000065	0.0000048
Directly to Alamitos	0.0000010	0.0000010	0.0000010	0.0000129	0.0000136	0.0000166	0.0000179	0.0000126	0.0000179	0.0000245	0.0000340	0.0000311	0.0000314	0.0000325	0.0000305	0.0000278	0.0000231	0.0000204	0.0000231	0.0000151	0.0000231	0.0000125	0.0000098	0.0000098	0.0000072	0.0000072	0.0000098	0.0000072
To HBEP from Alamitos	0.0000006	0.0000006	0.0000006	0.0000084	0.0000088	0.0000108	0.0000116	0.0000082	0.0000116	0.0000159	0.0000221	0.0000202	0.0000204	0.0000211	0.0000198	0.0000181	0.0000150	0.0000133	0.0000150	0.0000098	0.0000150	0.0000081	0.0000064	0.0000064	0.0000047	0.0000047	0.0000064	0.0000047
Construction Worker Commute	0.0000662	0.0000876	0.0001234	0.0001413	0.0001771	0.0001985	0.0001967	0.0002361	0.0002397	0.0002540	0.0002611	0.0003148	0.0004114	0.0004114	0.0004114	0.0004114	0.0004203	0.0004221	0.0004221	0.0004131	0.0004131	0.0004131	0.0004131	0.0003130	0.0002522	0.0001610	0.0001538	0.0001538
Offsite Total (metric tons/month)	**0.000068**	**0.000090**	**0.000127**	**0.000172**	**0.000210**	**0.000238**	**0.000239**	**0.000266**	**0.000282**	**0.000312**	**0.000342**	**0.000389**	**0.000486**	**0.000488**	**0.000484**	**0.000477**	**0.000475**	**0.000471**	**0.000477**	**0.000450**	**0.000468**	**0.000444**	**0.000437**	**0.000337**	**0.000270**	**0.000179**	**0.000178**	**0.000172**
Offsite Total (metric tons/year)	**0.00555**																											

Offsite Vehicle CH_4 Emissions from Block 2 Construction

	CH_4 Emissions (metric tons/day)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.00000000	0.00000000	0.00000006	0.00000006	0.00000006	0.00000006	0.00000006	0.00000006	0.00000006	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007
Material Hauling Trucks																												
Directly to HBEP	0.00000003	0.00000003	0.00000003	0.00000040	0.00000042	0.00000051	0.00000055	0.00000039	0.00000055	0.00000075	0.00000105	0.00000096	0.00000097	0.00000100	0.00000094	0.00000086	0.00000071	0.00000063	0.00000071	0.00000047	0.00000071	0.00000038	0.00000030	0.00000030	0.00000022	0.00000022	0.00000030	0.00000022
Directly to Alamitos	0.00000005	0.00000005	0.00000005	0.00000060	0.00000063	0.00000077	0.00000083	0.00000058	0.00000083	0.00000113	0.00000157	0.00000144	0.00000145	0.00000150	0.00000141	0.00000129	0.00000106	0.00000094	0.00000106	0.00000070	0.00000106	0.00000058	0.00000045	0.00000045	0.00000033	0.00000033	0.00000045	0.00000033
To HBEP from Alamitos	0.00000003	0.00000003	0.00000003	0.00000039	0.00000041	0.00000050	0.00000054	0.00000038	0.00000054	0.00000074	0.00000102	0.00000093	0.00000094	0.00000097	0.00000091	0.00000084	0.00000069	0.00000061	0.00000069	0.00000045	0.00000069	0.00000037	0.00000029	0.00000029	0.00000021	0.00000021	0.00000029	0.00000021
Construction Worker Commute	0.00001383	0.00001831	0.00002578	0.00002952	0.00003699	0.00004148	0.00004110	0.00004933	0.00005007	0.00005306	0.00005456	0.00006577	0.00008595	0.00008595	0.00008595	0.00008595	0.00008781	0.00008819	0.00008819	0.00008632	0.00008632	0.00008632	0.00008632	0.00006539	0.00005269	0.00003363	0.00003214	0.00003214
Offsite Total (metric tons/day)	**0.000014**	**0.000018**	**0.000026**	**0.000031**	**0.000039**	**0.000043**	**0.000043**	**0.000051**	**0.000052**	**0.000056**	**0.000058**	**0.000069**	**0.000089**	**0.000089**	**0.000089**	**0.000089**	**0.000090**	**0.000090**	**0.000091**	**0.000088**	**0.000089**	**0.000088**	**0.000087**	**0.000067**	**0.000054**	**0.000034**	**0.000033**	**0.000033**

	CH_4 Emissions (metric tons/month)																											
Vehicle Type	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**
Offsite Delivery Trucks	0.0000000	0.0000000	0.0000013	0.0000013	0.0000013	0.0000013	0.0000013	0.0000013	0.0000013	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017
Material Hauling Trucks																												
Directly to HBEP	0.0000007	0.0000007	0.0000007	0.0000091	0.0000096	0.0000117	0.0000127	0.0000089	0.0000127	0.0000174	0.0000241	0.0000221	0.0000222	0.0000230	0.0000216	0.0000197	0.0000163	0.0000145	0.0000163	0.0000107	0.0000163	0.0000088	0.0000069	0.0000069	0.0000051	0.0000051	0.0000069	0.0000051
Directly to Alamitos	0.0000011	0.0000011	0.0000011	0.0000137	0.0000144	0.0000176	0.0000190	0.0000134	0.0000190	0.0000260	0.0000362	0.0000331	0.0000334	0.0000345	0.0000324	0.0000296	0.0000245	0.0000217	0.0000245	0.0000160	0.0000245	0.0000132	0.0000104	0.0000104	0.0000076	0.0000076	0.0000104	0.0000076
To HBEP from Alamitos	0.0000007	0.0000007	0.0000007	0.0000089	0.0000094	0.0000114	0.0000124	0.0000087	0.0000124	0.0000169	0.0000235	0.0000215	0.0000217	0.0000224	0.0000210	0.0000192	0.0000159	0.0000141	0.0000159	0.0000104	0.0000159	0.0000086	0.0000068	0.0000068	0.0000049	0.0000049	0.0000068	0.0000049
Construction Worker Commute	0.0003180	0.0004211	0.0005930	0.0006790	0.0008509	0.0009540	0.0009454	0.0011345	0.0011517	0.0012204	0.0012548	0.0015127	0.0019768	0.0019768	0.0019768	0.0019768	0.0020197	0.0020283	0.0020283	0.0019854	0.0019854	0.0019854	0.0019854	0.0015041	0.0012118	0.0007735	0.0007391	0.0007391
Offsite Total (metric tons/month)	**0.000320**	**0.000424**	**0.000597**	**0.000712**	**0.000886**	**0.000996**	**0.000991**	**0.001167**	**0.001197**	**0.001282**	**0.001340**	**0.001591**	**0.002056**	**0.002058**	**0.002053**	**0.002047**	**0.002078**	**0.002080**	**0.002087**	**0.002024**	**0.002044**	**0.002018**	**0.002011**	**0.001530**	**0.001231**	**0.000793**	**0.000765**	**0.000758**
Offsite Total (metric tons/year)	**0.02415**																											

Offsite Construction Vehicle Activity for Block 2 Construction

Vehicle Type	Roundtrip Miles/Day [a]	Working Days per Month [b]
Offsite Delivery Trucks	14.6	23
Material Hauling Trucks	40.0	23
Directly to HBEP	40.0	23
Directly to Alamitos	40.0	23
To HBEP from Alamitos	26.0	23
Construction Worker Commute	21.6	23

Notes:

[a] Roundtrip miles/day taken as the CalEEMod defaults for the South Coast Air Basin except for "To HBEP from Alamitos", which was measured using Google Earth.

[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Table 5.1A.23R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Block 2 Construction

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_m = EF * N * Hp * L * H / 453.6$	E_m = Emissions (lbs/month)
			EF = Emission factor (g/bhp-hr)
			N = Number of pieces of equipment
			Hp = Average horsepower
			L = Average load factor
			H = Hours per month
			453.6 = Conversion from g to lbs
		$E_d = E_m / D$	E_d = Emissions (lbs/day)
			E_m = Emissions (lbs/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2,000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
	CO_2	$E_m = N * FC * EF * H * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (kg/gallon)
			H = Hours per month
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_m = N * FC * EF * H / 1,000 * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (g/gallon)
			H = Hours per month
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Vehicle Exhaust and Paved and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_d = N * VMT * EF / 453.6$	E_d = Emissions (lbs/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = EMFAC2007 emission factor (g/mile). Paved and unpaved road fugitive PM_{10} and $PM_{2.5}$ emission factors calculated per Sections 13.2.1 and 13.2.2 of AP-42, respectively.
			453.6 = Conversion from g to lbs
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2,000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.23R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Block 2 Construction

Emission Source	Pollutant(s)	Equation	Variables
Onsite and Offsite Vehicle Exhaust	CO_2	$E_d = N * VMT / FE * EF * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			FE = Fuel economy (mpg)
			EF = Emission factor (kg/gallon)
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_d = N * VMT * EF / 1{,}000 * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = Emission factor (g/mile)
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Fugitive PM_{10} and $PM_{2.5}$ from Grading	PM_{10} and $PM_{2.5}$	$E_d = EF \times A / W \times 43{,}560 / 5{,}280 / D$	E_d = Emissions (lbs/day)
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/mile), calculated per Section 4.3 of Appendix A of the CalEEMod User's Guide.
			A = Site disturbed (acres/month)
			W = Grading equipment blade width (ft)
			43,560 = Conversion factor from square feet to acres
			5,280 = Conversion factor from feet to miles
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Bulldozing	PM_{10} and $PM_{2.5}$	$E_d = EF \times H / D$	E_d = Emissions (lbs/day)
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/mile), calculated per Section 4.3 of Appendix A of the CalEEMod User's Guide.
			H = Hours per month for all bulldozers
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.24R Number of Onsite Construction Equipment and Motor Vehicles

Number of Onsite Equipment for Block 2 Construction

Onsite Equipment	Number per Month [a]																										
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Water Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Excavator	1	2	2	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grader	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Cranes [b]	0	0	0	0	2	2	4	4	4	5	4	4	6	5	4	4	4	4	2	2	2	2	2	2	2	0	0	0
Tractor/Loader/Backhoe [c]	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rubber Tired Loader [d]	0	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
Crawler Tractor [e]	1	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressor	0	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1
Forklift	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1
Roller [f]	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Other General Industrial Equipment [g]	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

[a] Equipment counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

[b] Numbers presented for Cranes includes the equipment counts for the 75 Ton Hydraulic Crane, the 35 Ton Hydraulic Crane, the Heavy Lift Lattice Boom Main Crane, the Heavy Lift Lattice Boom Tail Crane, and the Heavy Lift Gantry Crane.

[c] Numbers presented for Tractor/Loader/Backhoe includes the equipment counts for the Backhoe.

[d] Numbers presented for Rubber Tired Loader includes the equipment counts for the Front End Loader.

[e] Numbers presented for Crawler Tractor includes the equipment counts for the Dozer

[f] Numbers presented for Rollder includes the equipment counts for the Compactor.

[g] Numbers presented for Other General Industrial Equipment includes the equipment counts for the Pile Driver.

Number of Onsite Motor Vehicles for Block 2 Construction

Vehicle Type	Number per Month [a]																										
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Onsite Pick-up Truck	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Onsite Stake Truck	1	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Dump Truck	1	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0

Notes:

[a] Vehicle counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.25R Construction Equipment Exhaust Criteria Pollutant Emission Factors

Construction Equipment Emission Factors for Block 2 Construction

Equipment [a]	Percent Usage [b]	Hours per Month [c]	Horsepower [d]	Load Factor [d]	Emission Factors (g/bhp-hr) [e]												Fuel Consumption (gallons/hour) [f]
					CO	VOC	NO_X 2018	NO_X 2019	NO_X 2020	SO_X	PM_{10} 2018	PM_{10} 2019	PM_{10} 2020	$PM_{2.5}$ 2018	$PM_{2.5}$ 2019	$PM_{2.5}$ 2020	
Water Truck [g]	50%	115	381	0.57	1.164	0.345	2.025	1.779	1.561	0.005	0.073	0.064	0.057	0.073	0.064	0.057	12.32
Excavator	85%	196	157	0.57	3.362	0.417	2.567	2.242	1.958	0.006	0.133	0.114	0.098	0.133	0.114	0.098	5.11
Grader	80%	184	162	0.61	3.345	0.485	3.211	2.881	2.578	0.006	0.176	0.157	0.139	0.176	0.157	0.139	5.65
Cranes	65%	150	208	0.43	1.277	0.398	3.125	2.807	2.507	0.006	0.107	0.096	0.086	0.107	0.096	0.086	5.08
Tractor/Loader/Backhoe	55%	127	75	0.55	3.764	0.477	3.226	2.951	2.709	0.006	0.201	0.169	0.141	0.201	0.169	0.141	2.36
Rubber Tired Loader	55%	127	87	0.54	3.873	0.636	3.975	3.677	3.404	0.006	0.296	0.261	0.228	0.296	0.261	0.228	2.69
Crawler Tractor	80%	184	82	0.64	4.040	0.816	4.826	4.517	4.228	0.006	0.386	0.352	0.320	0.386	0.352	0.320	3.01
Air Compressor	80%	184	78	0.48	3.744	0.603	4.050	3.706	3.400	0.006	0.304	0.260	0.224	0.304	0.260	0.224	2.14
Forklift	75%	173	149	0.30	3.365	0.396	2.338	2.046	1.782	0.006	0.124	0.105	0.087	0.124	0.105	0.087	2.55
Roller	60%	138	84	0.56	3.775	0.655	4.249	3.944	3.66	0.006	0.328	0.293	0.260	0.328	0.293	0.260	2.69
Other General Industrial Equipment	70%	161	150	0.51	3.353	0.488	3.277	2.915	2.591	0.006	0.178	0.156	0.138	0.178	0.156	0.138	4.37

Notes:

[a] Assumed all equipment is fired with diesel fuel, per Section 4.2 of Appendix A of the CalEEMod User's Guide.

[b] Percent Usage assumed typical of power plant construction.

[c] Hours per month calculated based on the following schedule, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Work hours per day: 10

Work days per month: 23

[d] Construction equipment horsepower and load factor taken from Table 3.3 of Appendix D of the CalEEMod User's Guide.

[e] Construction equipment emission factors taken from Table 3.4 of Appendix D of the CalEEMod User's Guide. The emission factors for the year 2018 were used for the construction equipment exhaust emission calculations for CO, VOC, and SOx. The emission factors for year 2018, 2019 and 2020 were used for NOx, PM10, and PM2.5.

[f] Fuel consumption based on consumption in the OFFROAD2007 model for the SCAB in the year 2018; value estimated by dividing the reported consumption (gallons/day) by the reported activity (hours/day).

[g] Horsepower, load factor, and emission factors for Off-Highway Trucks were assumed representative of Water Trucks.

Table 5.1A.26R Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors

Vehicle Emission Factors for Block 2 Construction

Vehicle Type	Vehicle Class [a]	Exhaust Emission Factors (g/mile) [b]												Paved Road Emission Factors (g/mile) [c]		Fuel Economy (mpg) [b]
		CO	VOC	SO_X	NO_X 2018	NO_X 2019	NO_X 2020	PM_{10} 2018	PM_{10} 2019	PM_{10} 2020	$PM_{2.5}$ 2018	$PM_{2.5}$ 2019	$PM_{2.5}$ 2020	PM_{10}	$PM_{2.5}$	
Onsite Pick-up Truck	Light-duty Truck	2.934	0.182	0.011	0.278	0.258	0.239	0.126	0.126	0.127	0.104	0.105	0.105	N/A	N/A	7.455
Onsite Stake Truck	Heavy-duty Diesel	9.010	5.097	0.037	14.934	13.495	12.285	0.709	0.597	0.506	0.614	0.512	0.427	N/A	N/A	2.621
Onsite Dump Truck	Heavy-duty Diesel	9.010	5.097	0.037	14.934	13.495	12.285	0.709	0.597	0.506	0.614	0.512	0.427	N/A	N/A	2.621
Offsite Delivery Trucks	Heavy-duty Diesel	1.886	0.384	0.017	5.193	4.648	4.193	0.248	0.229	0.214	0.190	0.173	0.159	0.300	0.075	5.749
Material Hauling Trucks	Heavy/Medium-duty Diesel	1.513	0.251	0.016	4.046	3.632	3.278	0.206	0.194	0.184	0.163	0.142	0.143	0.300	0.075	6.224
Construction Worker Commute	Light-duty Auto/Truck	1.229	0.021	0.003	0.114	0.104	0.097	0.033	0.033	0.033	0.018	0.018	0.018	0.300	0.075	27.419

Notes:

[a] The vehicle classes are represented as follows:

Light-duty Truck: Assumed to be an average of LDT1, All and LDT2, All values.
Heavy-duty Diesel: Assumed to be 100% HHD DSL values, as confirmed in Section 4.5 of Appendix A of the CalEEMod User's Guide.
Heavy/Medium-duty Diesel: 50% HHD DSL and 50% MHD DSL values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.
Light-duty Auto/Truck: 50% LDA, All; 25% LDT1, All; and 25% LDT2, All values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.

[b] Exhaust emission factors and fuel economy from EMFAC2007 for the South Coast Air Basin, calendar year 2018 for CO, VOC, and SOx. Calendar year 2018, 2019 and 2020 were used for NOx, PM10, and PM2.5. A speed of 5 mph was assumed for onsite vehicles; a speed of 40 mph was assumed for offsite vehicles and worker commutes, which is consistent with the CalEEMod defaults. An average temperature of 68°F and humidity of 55% were used per Table B-1 of CT-EMFAC: A Computer Model to Estimate Transportation Project Emissions.

[c] Paved road emission factors calculated using CalEEMod methodology, as described below.

Derivation of Paved Road Emission Factors

Vehicles on Paved Roads

Parameter	PM_{10}	$PM_{2.5}$
Average Weight [a]	2.4	2.4
k [b]	1.0	0.25
sL [a]	0.1	0.1
Emission Factor (g/mile) [c]	0.300	0.075

Notes:

[a] Average Weight and sL taken as the default value from CalEEMod.

[b] k taken from Table 13.2.1-1 of Section 13.2.1 of AP-42.

[c] Emission factor calculated using Equation 1 from Section 13.2.1 of AP-42:

Emission Factor (g/mile) = k (g/mile) x $[sL\ (g/m^2)]^{0.91}$ x $[\text{Average Weight (tons)}]^{1.02}$

Huntington Beach Energy Project
Construction Emission Estimates - Block 2 Construction
October 2013

Table 5.1A.27R Onsite and Offsite Greenhouse Gas Emission Factors

Greenhouse Gas Emission Factors for Block 2 Construction

Fuel / Category Type	Emission Factor	Emission Factor Units	Emission Factor Source
CO_2 Emission Factors			
Gasoline	8.78	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
Diesel	10.21	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
N_2O Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0036	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0066	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0048	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.26	g N_2O/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.
CH_4 Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0173	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0163	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0051	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.58	g CH_4/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.

Notes:

[a] Model Year 2009 was the most recent year of emission factors available. As a result, it was assumed representative of vehicles used for this project.

Huntington Beach Energy Project
Construction Emission Estimates - Units 1 and 2 Demolition
October 2013

Table 5.1A.28R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO Emissions from Units 1 & 2 Demolition

	CO Emisisons (lbs/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55	62.55
Cranes	109.30	109.30	109.30	109.30	109.30	109.30	72.87	72.87	72.87	72.87	72.87	72.87	72.87	72.87	72.87	72.87	109.30	109.30	109.30	109.30	109.30	109.30	109.30	109.30
Rubber Tired Loader	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	50.26	100.52	100.52	100.52	100.52	100.52	100.52	100.52	100.52
Air Compressor	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33	112.33
Forklift	57.12	57.12	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23	114.23
Excavator	259.27	259.27	388.90	388.90	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53	518.53
Onsite Total (lbs/month)	**650.82**	**650.82**	**837.57**	**837.57**	**967.20**	**967.20**	**930.77**	**930.77**	**930.77**	**930.77**	**930.77**	**930.77**	**930.77**	**930.77**	**930.77**	**930.77**	**1,017.46**	**1,017.46**	**1,017.46**	**1,017.46**	**1,017.46**	**1,017.46**	**1,017.46**	**1,017.46**
Onsite Total (lbs/day) [a]	**28.30**	**28.30**	**36.42**	**36.42**	**42.05**	**42.05**	**40.47**	**40.47**	**40.47**	**40.47**	**40.47**	**40.47**	**40.47**	**40.47**	**40.47**	**40.47**	**44.24**	**44.24**	**44.24**	**44.24**	**44.24**	**44.24**	**44.24**	**44.24**
Onsite Total (tons/year)	**5.93**																							

Construction Equipment VOC Emissions from Units 1 & 2 Demolition

	VOC Emisisons (lbs/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07	17.07
Cranes	31.48	31.48	31.48	31.48	31.48	31.48	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	20.99	31.48	31.48	31.48	31.48	31.48	31.48	31.48	31.48
Rubber Tired Loader	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10	14.20	14.20	14.20	14.20	14.20	14.20	14.20	14.20
Air Compressor	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85	14.85
Forklift	5.75	5.75	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49	11.49
Excavator	27.38	27.38	41.08	41.08	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77	54.77
Onsite Total (lbs/month)	**103.64**	**103.64**	**123.07**	**123.07**	**136.77**	**136.77**	**126.27**	**126.27**	**126.27**	**126.27**	**126.27**	**126.27**	**126.27**	**126.27**	**126.27**	**126.27**	**143.87**	**143.87**	**143.87**	**143.87**	**143.87**	**143.87**	**143.87**	**143.87**
Onsite Total (lbs/day) [a]	**4.51**	**4.51**	**5.35**	**5.35**	**5.95**	**5.95**	**5.49**	**5.49**	**5.49**	**5.49**	**5.49**	**5.49**	**5.49**	**5.49**	**5.49**	**5.49**	**6.26**	**6.26**	**6.26**	**6.26**	**6.26**	**6.26**	**6.26**	**6.26**
Onsite Total (tons/year)	**0.83**																							

Construction Equipment NOx Emissions from Units 1 & 2 Demolition

	NOx Emissions (lbs/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	85.95	85.95	85.95	75.15	75.15	75.15	75.15	75.15	75.15	75.15	75.15	75.15	75.15	75.15	75.15	65.74	65.74	65.74	65.74	65.74	65.74	65.74	65.74	65.74
Cranes	221.71	221.71	221.71	197.30	197.30	197.30	131.53	131.53	131.53	131.53	131.53	131.53	131.53	131.53	131.53	116.67	175.01	175.01	175.01	175.01	175.01	175.01	175.01	175.01
Rubber Tired Loader	44.60	44.60	44.60	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	41.34	38.38	76.75	76.75	76.75	76.75	76.75	76.75	76.75	76.75
Air Compressor	103.27	103.27	103.27	93.64	93.64	93.64	93.64	93.64	93.64	93.64	93.64	93.64	93.64	93.64	93.64	86.39	86.39	86.39	86.39	86.39	86.39	86.39	86.39	86.39
Forklift	30.29	30.29	60.58	51.27	51.27	51.27	51.27	51.27	51.27	51.27	51.27	51.27	51.27	51.27	51.27	43.55	43.55	43.55	43.55	43.55	43.55	43.55	43.55	43.55
Excavator	151.04	151.04	226.56	197.86	263.82	263.82	263.82	263.82	263.82	263.82	263.82	263.82	263.82	263.82	263.82	230.19	230.19	230.19	230.19	230.19	230.19	230.19	230.19	230.19
Onsite Total (lbs/month)	**636.86**	**636.86**	**742.67**	**656.57**	**722.52**	**722.52**	**656.75**	**656.75**	**656.75**	**656.75**	**656.75**	**656.75**	**656.75**	**656.75**	**656.75**	**580.91**	**677.62**	**677.62**	**677.62**	**677.62**	**677.62**	**677.62**	**677.62**	**677.62**
Onsite Total (lbs/day) [a]	**27.69**	**27.69**	**32.29**	**28.55**	**31.41**	**31.41**	**28.55**	**28.55**	**28.55**	**28.55**	**28.55**	**28.55**	**28.55**	**28.55**	**28.55**	**25.26**	**29.46**	**29.46**	**29.46**	**29.46**	**29.46**	**29.46**	**29.46**	**29.46**
Onsite Total (tons/year)	**4.05**																							

Construction Equipment SOx Emissions from Units 1 & 2 Demolition

	SOx Emissions (lbs/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Cranes	0.53	0.53	0.53	0.53	0.53	0.53	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.53	0.53	0.53	0.53	0.53	0.53	0.53	0.53
Rubber Tired Loader	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Air Compressor	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Forklift	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Excavator	0.46	0.46	0.69	0.69	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Onsite Total (lbs/month)	**1.63**	**1.63**	**1.97**	**1.97**	**2.20**	**2.20**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.28**	**2.28**	**2.28**	**2.28**	**2.28**	**2.28**	**2.28**	**2.28**
Onsite Total (lbs/day) [a]	**0.07**	**0.07**	**0.09**	**0.09**	**0.10**	**0.10**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**
Onsite Total (tons/year)	**0.01**																							

Table 5.1A.28R Onsite Construction Equipment Exhaust Emissions

Construction Equipment PM_{10} Emissions from Units 1 & 2 Demolition

	PM_{10} Emissions (lbs/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	3.14	3.14	3.14	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
Cranes	7.61	7.61	7.61	6.81	6.81	6.81	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01
Rubber Tired Loader	2.99	2.99	2.99	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.24	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48
Air Compressor	6.80	6.80	6.80	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01
Forklift	1.48	1.48	2.96	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Excavator	7.56	7.56	11.34	9.84	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	11.26	11.26	11.26	11.26	11.26	11.26	11.26	11.26	11.26
Onsite Total (lbs/month)	**29.57**	**29.57**	**34.83**	**30.11**	**33.39**	**33.39**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**26.73**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**
Onsite Total (lbs/day) [a]	**1.29**	**1.29**	**1.51**	**1.31**	**1.45**	**1.45**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.16**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**
Onsite Total (tons/year)	**0.19**																							

Construction Equipment $PM_{2.5}$ Emissions from Units 1 & 2 Demolition

	$PM_{2.5}$ Emissions (lbs/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	3.14	3.14	3.14	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.75	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37	2.37
Cranes	7.61	7.61	7.61	6.81	6.81	6.81	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.54	4.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01
Rubber Tired Loader	2.99	2.99	2.99	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.24	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48
Air Compressor	6.80	6.80	6.80	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.77	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01
Forklift	1.48	1.48	2.96	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Excavator	7.56	7.56	11.34	9.84	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	13.11	11.26	11.26	11.26	11.26	11.26	11.26	11.26	11.26	11.26
Onsite Total (lbs/month)	**29.57**	**29.57**	**34.83**	**30.11**	**33.39**	**33.39**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**31.12**	**26.73**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**	**30.97**
Onsite Total (lbs/day) [a]	**1.29**	**1.29**	**1.51**	**1.31**	**1.45**	**1.45**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.16**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**	**1.35**
Onsite Total (tons/year)	**0.19**																							

Construction Equipment CO_2 Emissions from Units 1 & 2 Demolition

	CO_2 Emissions (metric tons/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47	14.47
Cranes	23.26	23.26	23.26	23.26	23.26	23.26	15.51	15.51	15.51	15.51	15.51	15.51	15.51	15.51	15.51	15.51	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26
Rubber Tired Loader	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
Air Compressor	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04	8.04
Forklift	4.49	4.49	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98
Excavator	20.40	20.40	30.60	30.60	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80
Onsite Total (metric tons/month)	**74.13**	**74.13**	**88.82**	**88.82**	**99.02**	**99.02**	**91.27**	**91.27**	**91.27**	**91.27**	**91.27**	**91.27**	**91.27**	**91.27**	**91.27**	**91.27**	**102.50**	**102.50**	**102.50**	**102.50**	**102.50**	**102.50**	**102.50**	**102.50**
Onsite Total (metric tons/day) [a]	**3.22**	**3.22**	**3.86**	**3.86**	**4.31**	**4.31**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**4.46**	**4.46**	**4.46**	**4.46**	**4.46**	**4.46**	**4.46**	**4.46**
Onsite Total (metric tons/year)	**1,185.07**																							

Construction Equipment N_2O Emissions from Units 1 & 2 Demolition

	N_2O Emissions (metric tons/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Cranes	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Rubber Tired Loader	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Air Compressor	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Forklift	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Excavator	0.0005	0.0005	0.0008	0.0008	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Onsite Total (metric tons/month)	**0.0019**	**0.0019**	**0.0023**	**0.0023**	**0.0025**	**0.0025**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0026**	**0.0026**	**0.0026**	**0.0026**	**0.0026**	**0.0026**	**0.0026**	**0.0026**
Onsite Total (metric tons/day) [a]	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
Onsite Total (metric tons/year)	**0.0302**																							

Table 5.1A.28R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CH_4 Emissions from Units 1 & 2 Demolition

	CH_4 Emissions (metric tons/month)																							
Onsite Equipment	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Water Truck	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Cranes	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Rubber Tired Loader	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Air Compressor	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Forklift	0.0003	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Excavator	0.0012	0.0012	0.0017	0.0017	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023
Onsite Total (metric tons/month)	**0.0042**	**0.0042**	**0.0050**	**0.0050**	**0.0056**	**0.0056**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0058**	**0.0058**	**0.0058**	**0.0058**	**0.0058**	**0.0058**	**0.0058**	**0.0058**
Onsite Total (metric tons/day) [a]	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0003**	**0.0003**	**0.0003**	**0.0003**	**0.0003**	**0.0003**	**0.0003**	**0.0003**
Onsite Total (metric tons/year)	**0.0673**																							

Notes:

[a] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', the days per month are as follows: 23

Table 5.1A.29R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO Emissions from Units 1 & 2 Demolition

	CO Emissions (lbs/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Onsite Stake Truck	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Dump Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Total (lbs/day)	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**
	CO Emissions (lbs/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Onsite Stake Truck	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Onsite Dump Truck	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Onsite Total (lbs/month)	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**	**1.43**
Onsite Total (tons/year)	**0.01**																							

Onsite Construction Vehicle VOC Emissions from Units 1 & 2 Demolition

	VOC Emisisons (lbs/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
Onsite Dump Truck	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Onsite Total (lbs/day)	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**
	VOC Emissions (lbs/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Onsite Dump Truck	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Onsite Total (lbs/month)	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**
Onsite Total (tons/year)	**0.00**																							

Onsite Construction Vehicle SOx Emissions from Units 1 & 2 Demolition

	SOx Emissions (lbs/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Onsite Stake Truck	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Onsite Dump Truck	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
Onsite Total (lbs/day)	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**
	SOx Emissions (lbs/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
Onsite Stake Truck	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
Onsite Dump Truck	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
Onsite Total (lbs/month)	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**
Onsite Total (tons/year)	**0.0000**																							

Onsite Construction Vehicle NOx Emissions from Units 1 & 2 Demolition

	NOx Emissions (lbs/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.054	0.054	0.054	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046
Onsite Dump Truck	0.027	0.027	0.027	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Onsite Total (lbs/day)	**0.082**	**0.082**	**0.082**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.075**	**0.070**	**0.070**	**0.070**	**0.070**	**0.070**	**0.070**	**0.070**	**0.070**	**0.070**
	NOx Emissions (lbs/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.024	0.024	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021
Onsite Stake Truck	1.246	1.246	1.246	1.140	1.140	1.140	1.140	1.140	1.140	1.140	1.140	1.140	1.140	1.140	1.140	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052	1.052
Onsite Dump Truck	0.623	0.623	0.623	0.570	0.570	0.570	0.570	0.570	0.570	0.570	0.570	0.570	0.570	0.570	0.570	0.526	0.526	0.526	0.526	0.526	0.526	0.526	0.526	0.526
Onsite Total (lbs/month)	**1.893**	**1.893**	**1.893**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.733**	**1.599**	**1.599**	**1.599**	**1.599**	**1.599**	**1.599**	**1.599**	**1.599**	**1.599**
Onsite Total (tons/year)	**0.011**																							

Onsite Construction Vehicle PM_{10} Emissions from Units 1 & 2 Demolition

	PM_{10} Emissions (lbs/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Onsite Stake Truck	0.0022	0.0022	0.0022	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
Onsite Dump Truck	0.0011	0.0011	0.0011	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Onsite Total (lbs/day)	**0.0039**	**0.0039**	**0.0039**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0034**	**0.0030**	**0.0030**	**0.0030**	**0.0030**	**0.0030**	**0.0030**	**0.0030**	**0.0030**	**0.0030**
	PM_{10} Emissions (lbs/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Onsite Stake Truck	0.051	0.051	0.051	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
Onsite Dump Truck	0.026	0.026	0.026	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
Onsite Total (lbs/month)	**0.090**	**0.090**	**0.090**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.078**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**	**0.069**
Onsite Total (tons/year)	**0.000**																							

Table 5.1A.29R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle $PM_{2.5}$ Emissions from Units 1 & 2 Demolition

	$PM_{2.5}$ Emissions (lbs/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Onsite Stake Truck	0.0019	0.0019	0.0019	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Onsite Dump Truck	0.0009	0.0009	0.0009	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
Onsite Total (lbs/day)	**0.0033**	**0.0033**	**0.0033**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0028**	**0.0025**	**0.0025**	**0.0025**	**0.0025**	**0.0025**	**0.0025**	**0.0025**	**0.0025**	**0.0025**
	$PM_{2.5}$ Emissions (lbs/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Onsite Stake Truck	0.043	0.043	0.043	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Onsite Dump Truck	0.022	0.022	0.022	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
Onsite Total (lbs/month)	**0.076**	**0.076**	**0.076**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.065**	**0.057**	**0.057**	**0.057**	**0.057**	**0.057**	**0.057**	**0.057**	**0.057**	**0.057**
Onsite Total (tons/year)	**0.000**																							

Onsite Construction Vehicle CO_2 Emissions from Units 1 & 2 Demolition

	CO_2 Emissions (metric tons/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Onsite Stake Truck	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Onsite Dump Truck	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Onsite Total (metric tons/day)	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**
	CO_2 Emissions (metric tons/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054
Onsite Stake Truck	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179
Onsite Dump Truck	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Onsite Total (metric tons/month)	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**
Onsite Total (metric tons/year)	**3.875**																							

Onsite Construction Vehicle N_2O Emissions from Units 1 & 2 Demolition

	N_2O Emissions (metric tons/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013
Onsite Stake Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005
Onsite Total (metric tons/day)	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**
	N_2O Emissions (metric tons/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030
Onsite Stake Truck	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022
Onsite Dump Truck	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011
Onsite Total (metric tons/month)	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**
Onsite Total (metric tons/year)	**0.00000762**																							

Onsite Construction Vehicle CH_4 Emissions from Units 1 & 2 Demolition

	CH_4 Emissions (metric tons/day)																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033
Onsite Stake Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005
Onsite Total (metric tons/day)	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**
	CH_4 Emissions (metric tons/month) [a]																						
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007
Onsite Stake Truck	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002
Onsite Dump Truck	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001
Onsite Total (metric tons/month)	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**
Onsite Total (metric tons/year)	**0.0000132**																							

Notes:

[a] The days per month are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', as presented on the 'Onsite Fugitive Dust' tab.

Huntington Beach Energy Project
Construction Emission Estimates - Units 1 and 2 Demolition
October 2013

Table 5.1A.30R Onsite Demolition Fugitive Dust Emissions

Demolition Activity Levels for Units 1 & 2 Demolition

	Monthly Activity Levels																							
Source	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Debris Generated from Mechanical Dismemberment (tons) [a]	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83	972.83

[a] Debris generated from Table 5.14-3, Wastes Generated during Demolition of HBGS Units 1 & 2 or HBGS Units 3 & 4. Only materials generated from demolition that may generate fugitive dust were included. The monthly quantities were determined as follows:

Scrap Materials	16,000	lbs/week	which equals	32.00	tons/month
Scrap Metals	20,000	tons	which equals	833.33	tons/month
Concrete	1,500	tons	which equals	62.50	tons/month
Asphalt	80	tons	which equals	3.33	tons/month
Asbestos Waste	1,000	tons	which equals	41.67	tons/month

The above calculations are based on the following assumptions:

Demolition will last	24	months
The construction schedule allows for	4	weeks/month

Onsite Construction Vehicle Fugitive PM_{10} Emissions from Units 1 & 2 Demolition

	Fugitive PM_{10} Emissions (lbs/day) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Stake Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Dump Truck	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Onsite Total (lbs/day)	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**
	Fugitive PM_{10} Emissions (lbs/month) [a]																							
Vehicle Type	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**	**94**	**95**	**96**
Onsite Pick-up Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Stake Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Dump Truck	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44
Onsite Total (lbs/month)	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**
Onsite Total (tons/year)	**0.58**																							

Notes:
[a] Emissions based on highest (controlled) unpaved road emission factor for PM_{10}.

Onsite Construction Vehicle Fugitive $PM_{2.5}$ Emissions from Units 1 & 2 Demolition

	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Stake Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Dump Truck	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Onsite Total (lbs/day)	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**
	Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Stake Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Dump Truck	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94
Onsite Total (lbs/month)	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**
Onsite Total (tons/year)	**0.06**																							

Notes:
[a] Emissions based on the highest (controlled) unpaved road emission factor for $PM_{2.5}$.

Onsite Demolition Fugitive PM_{10} Emissions from Units 1 & 2 Demolition

	Fugitive PM_{10} Emissions (lbs/day) [a, b]																							
Demolition Activity	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Dismemberment	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58
Debris Loading [c]	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Onsite Total (lbs/day)	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**	**7.13**
	Fugitive PM_{10} Emissions (lbs/month) [a, b]																							
Demolition Activity	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Dismemberment	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33	151.33
Debris Loading [c]	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64	12.64
Onsite Total (lbs/month)	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**	**163.97**
Onsite Total (tons/year)	**0.98**																							

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for PM_{10}.
[c] Assume that all debris generated per month from dismemberment is loaded in the same month that it is generated.

Table 5.1A.30R Onsite Demolition Fugitive Dust Emissions

Onsite Demolition Fugitive $PM_{2.5}$ Emissions from Units 1 & 2 Demolition

Demolition Activity	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a, b]																							
	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Dismemberment	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Debris Loading [c]	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Onsite Total (lbs/day)	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**	**1.08**
Demolition Activity	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a, b]**																							
	67	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Dismemberment	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92	22.92
Debris Loading [c]	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91
Onsite Total (lbs/month)	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**	**24.83**
Onsite Total (tons/year)	**0.15**																							

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for $PM_{2.5}$.
[c] Assume that all debris generated per month from dismemberment is loaded in the same month that it is generated.

Onsite Construction Vehicle Activity for Units 1 & 2 Demolition

Vehicle Type	Miles/Day [a]	Working Days per Month [b]
Onsite Pick-up Truck	2	23
Onsite Stake Truck	2	23
Onsite Dump Truck	1	23

Notes:
[a] Estimated based on the dimensions of the project site.
[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Fugitive Dust Emission Factors for Unpaved Roads

Vehicles on Unpaved Surfaces at Industrial Sites

Parameter	PM_{10}	$PM_{2.5}$
Mean Vehicle Weight [a]	16.5	16.5
Silt Content [b]	8.5	8.5
k [c]	1.5	0.15
a [c]	0.9	0.9
b [c]	0.45	0.45
P [d]	31	31
Emission Factor (Uncontrolled, lbs/mile) [e]	2.17	0.22
Reduction from Watering 3x per Day [f]	61%	61%
Emission Factor (Controlled, lbs/mile)	0.85	0.08

Notes:
[a] Mean vehicle weight assumes that medium/heavy duty trucks weigh 16.5 tons.
[b] Silt content taken from Table 13.2.2-1 of Section 13.2.2 of AP-42 for a Construction Site, Scraper Route; this value is consistent with the CalEEMod defaults for the South Coast Air Basin.
[c] k, a, and b taken from Table 13.2.2-2 of Section 13.2.2 of AP-42 for industrial roads.
[d] P taken as the CalEEMod default for the Huntington Beach climate region of the South Coast Air Basin.
[e] Emission factor calculated using Equations 1a and 2 from Section 13.2.2 of AP-42:

Emission Factor (lbs/mile) = $\{k\ (lbs/mile) \times [Silt\ Content\ (\%) / 12]^{a} \times [Mean\ Vehicle\ Weight\ (tons) / 3]^{b}\} \times [(365 - P) / 365]$

[f] Control efficiency taken from the URBEMIS default mitigation measures for unpaved roads.

Fugitive Dust Emission Factors for Dismemberment

Dismemberment and Collapse of Structures

Parameter	PM_{10}	$PM_{2.5}$
k [a]	0.35	0.053
U [b]	2.2	2.2
M [c]	2%	2%
Emission Factor (lbs/ton) [d]	0.243	0.037
Reduction from Watering Every 4 Hours [e]	36%	36%
Emission Factor (Controlled, lbs/ton)	0.156	0.024

Notes:
[a] k, the particle size multiplier, taken from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide.
[b] U, the mean wind speed, taken as the CalEEMod default for the South Coast Air Basin.
[c] M, the material moisture content, taken from Section 4.4 of Appendix A of the CalEEMod User's Guide.
[d] Emission factor calculated using the following equation from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide:

Emission Factor (lbs/ton) = $k \times 0.0032 \times [U\ (m/s) / 5]^{1.3} \times [M\ (\%) / 2]^{1.4}$

[e] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Active Demolition and Debris Removal.

Fugitive Dust Emission Factors for Debris Loading

Loading of Debris/Building Waste

Parameter	PM_{10}	$PM_{2.5}$
k [a]	0.35	0.053
$EF_{L\text{-}TSP}$ [b]	0.058	0.058
Emission Factor (lbs/ton) [c]	0.020	0.003
Reduction from Watering Every 4 Hours [d]	36%	36%
Emission Factor (Controlled, lbs/ton)	0.013	0.002

Notes:
[a] k taken from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide.
[b] $EF_{L\text{-}TSP}$, taken from Section 4.4 of Appendix A of the CalEEMod User's Guide.
[c] Emission factor calculated using the following equation from Section 4.4 of Appendix A of the CalEEMod User's Guide:

Emission Factor (lbs/ton) = $k \times EF_{L\text{-}TSP}$ (lbs/ton)

[d] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Active Demolition and Debris Removal.

Table 5.1A.31R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle Usage During Units 1 & 2 Demolition

	Number per Day																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks [a]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Material Hauling Trucks [b]	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	1.50	1.50	1.50	1.00
Waste Hauling Trucks [c]	3.00	4.00	4.00	5.00	5.00	5.00	6.00	6.00	8.00	8.00	11.00	11.00	12.00	13.00	13.00	13.00	13.00	13.00	13.00	9.00	8.00	6.00	5.00	5.00
Construction Worker Commute [d]	13.00	13.00	28.00	40.00	44.00	50.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	46.00	45.00	26.00	23.00	15.00

Notes:

[a] Offsite Delivery Trucks include trucks transporting "Consumables & Supplies", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[b] Material Hauling Trucks include trucks transporting "Contractor Mobilization", "Contractor Demobilization", and "Construction Equipment", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[c] Waste Hauling Trucks include trucks transporting "Mechanical Equipment", "Electrical Equip. & Mtrls", "Concrete / Rebar / Rubble", and "Steel/Architectural", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.

[d] Assumed 1 commute per 1 worker; number of workers taken from 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Offsite Vehicle CO Emissions from Units 1 & 2 Demolition

	CO Emissions (lbs/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.00
Material Hauling Trucks	0.12	0.12	0.12	0.12	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.18	0.18	0.18	0.12
Waste Hauling Trucks	0.54	0.72	0.72	0.90	0.90	0.90	1.08	1.08	1.44	1.44	1.98	1.98	2.16	2.34	2.34	2.34	2.34	2.34	2.34	1.62	1.44	1.08	0.90	0.90
Construction Worker Commute	0.67	0.67	1.44	2.05	2.26	2.56	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.46	2.36	2.31	1.33	1.18	0.77
Offsite Total (lbs/day)	**1.38**	**1.56**	**2.33**	**3.12**	**3.27**	**3.58**	**3.65**	**3.65**	**4.01**	**4.01**	**4.55**	**4.55**	**4.73**	**4.91**	**4.91**	**4.91**	**4.91**	**4.91**	**4.91**	**4.09**	**3.98**	**2.64**	**2.31**	**1.79**
	CO Emissions (lbs/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	0.00
Material Hauling Trucks	2.76	2.76	2.76	2.76	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	1.38	4.13	4.13	4.13	2.76
Waste Hauling Trucks	12.40	16.54	16.54	20.67	20.67	20.67	24.81	24.81	33.08	33.08	45.48	45.48	49.61	53.75	53.75	53.75	53.75	53.75	53.75	37.21	33.08	24.81	20.67	20.67
Construction Worker Commute	15.33	15.33	33.03	47.18	51.90	58.98	56.62	56.62	56.62	56.62	56.62	56.62	56.62	56.62	56.62	56.62	56.62	56.62	56.62	54.26	53.08	30.67	27.13	17.69
Offsite Total (lbs/month)	**31.70**	**35.83**	**53.52**	**71.81**	**75.15**	**82.23**	**84.01**	**84.01**	**92.28**	**92.28**	**104.68**	**104.68**	**108.81**	**112.95**	**112.95**	**112.95**	**112.95**	**112.95**	**112.95**	**94.05**	**91.49**	**60.81**	**53.14**	**41.12**
Offsite Total (tons/year)	**0.64**																							

Offsite Vehicle VOC Emissions from Units 1 & 2 Demolition

	VOC Emissions (lbs/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Material Hauling Trucks	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.02
Waste Hauling Trucks	0.09	0.12	0.12	0.15	0.15	0.15	0.18	0.18	0.23	0.23	0.32	0.32	0.35	0.38	0.38	0.38	0.38	0.38	0.38	0.26	0.23	0.18	0.15	0.15
Construction Worker Commute	0.01	0.01	0.02	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.01
Offsite Total (lbs/day)	**0.13**	**0.16**	**0.17**	**0.21**	**0.20**	**0.21**	**0.23**	**0.23**	**0.29**	**0.29**	**0.38**	**0.38**	**0.41**	**0.44**	**0.44**	**0.44**	**0.44**	**0.44**	**0.44**	**0.32**	**0.31**	**0.24**	**0.20**	**0.18**
	VOC Emissions (lbs/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.00
Material Hauling Trucks	0.45	0.45	0.45	0.45	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.67	0.67	0.67	0.45
Waste Hauling Trucks	2.02	2.69	2.69	3.36	3.36	3.36	4.03	4.03	5.38	5.38	7.40	7.40	8.07	8.74	8.74	8.74	8.74	8.74	8.74	6.05	5.38	4.03	3.36	3.36
Construction Worker Commute	0.24	0.24	0.52	0.74	0.82	0.93	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.86	0.84	0.48	0.43	0.28
Offsite Total (lbs/month)	**2.95**	**3.63**	**3.91**	**4.80**	**4.65**	**4.76**	**5.40**	**5.40**	**6.74**	**6.74**	**8.76**	**8.76**	**9.43**	**10.10**	**10.10**	**10.10**	**10.10**	**10.10**	**10.10**	**7.38**	**7.14**	**5.44**	**4.71**	**4.09**
Offsite Total (tons/year)	**0.05**																							

Offsite Vehicle SOx Emissions from Units 1 & 2 Demolition

	SOx Emissions (lbs/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0000
Material Hauling Trucks	0.0014	0.0014	0.0014	0.0014	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0021	0.0021	0.0021	0.0014
Waste Hauling Trucks	0.0062	0.0082	0.0082	0.0103	0.0103	0.0103	0.0123	0.0123	0.0164	0.0164	0.0226	0.0226	0.0246	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0185	0.0164	0.0123	0.0103	0.0103
Construction Worker Commute	0.0020	0.0020	0.0043	0.0062	0.0068	0.0077	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0074	0.0071	0.0070	0.0040	0.0036	0.0023
Offsite Total (lbs/day)	**0.0101**	**0.0121**	**0.0144**	**0.0184**	**0.0183**	**0.0192**	**0.0210**	**0.0210**	**0.0251**	**0.0251**	**0.0312**	**0.0312**	**0.0333**	**0.0353**	**0.0353**	**0.0353**	**0.0353**	**0.0353**	**0.0353**	**0.0268**	**0.0260**	**0.0189**	**0.0164**	**0.0139**
	SOx Emissions (lbs/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.000
Material Hauling Trucks	0.031	0.031	0.031	0.031	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.047	0.047	0.047	0.031
Waste Hauling Trucks	0.141	0.189	0.189	0.236	0.236	0.236	0.283	0.283	0.377	0.377	0.519	0.519	0.566	0.613	0.613	0.613	0.613	0.613	0.613	0.424	0.377	0.283	0.236	0.236
Construction Worker Commute	0.046	0.046	0.100	0.142	0.157	0.178	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.171	0.164	0.160	0.093	0.082	0.053
Offsite Total (lbs/month)	**0.232**	**0.279**	**0.332**	**0.422**	**0.421**	**0.442**	**0.482**	**0.482**	**0.576**	**0.576**	**0.718**	**0.718**	**0.765**	**0.812**	**0.812**	**0.812**	**0.812**	**0.812**	**0.812**	**0.616**	**0.597**	**0.435**	**0.377**	**0.321**
Offsite Total (tons/year)	**0.004**																							

Huntington Beach Energy Project
Construction Emission Estimates - Units 1 and 2 Demolition
October 2013

Table 5.1A.31R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle NOx Emissions from Units 1 & 2 Demolition

	NOx Emissions (lbs/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.00
Material Hauling Trucks	0.29	0.29	0.29	0.26	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.36	0.36	0.36	0.24
Waste Hauling Trucks	1.30	1.73	1.73	1.97	1.97	1.97	2.36	2.36	3.15	3.15	4.33	4.33	4.72	5.11	5.11	4.67	4.67	4.67	4.67	3.23	2.87	2.15	1.79	1.79
Construction Worker Commute	0.06	0.06	0.13	0.17	0.19	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.77	0.77	0.77	0.77	0.73	0.72	0.42	0.37	0.24
Offsite Total (lbs/day)	**1.78**	**2.22**	**2.29**	**2.52**	**2.41**	**2.43**	**2.82**	**2.82**	**3.60**	**3.60**	**4.78**	**4.78**	**5.18**	**5.57**	**5.57**	**5.66**	**5.66**	**5.66**	**5.66**	**4.20**	**4.06**	**3.04**	**2.63**	**2.27**
	NOx Emissions (lbs/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	3.10	3.10	3.10	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.58	0.00
Material Hauling Trucks	6.65	6.65	6.65	6.03	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01	2.75	2.75	2.75	2.75	2.75	8.26	8.26	8.26	5.50
Waste Hauling Trucks	29.92	39.89	39.89	45.22	45.22	45.22	54.26	54.26	72.35	72.35	99.48	99.48	108.52	117.56	117.56	107.32	107.32	107.32	107.32	74.30	66.04	49.53	41.28	41.28
Construction Worker Commute	1.38	1.38	2.97	3.93	4.33	4.91	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	4.72	17.64	17.64	17.64	17.64	16.90	16.54	9.55	8.45	5.51
Offsite Total (lbs/month)	**41.05**	**51.02**	**52.61**	**57.99**	**55.37**	**55.96**	**64.81**	**64.81**	**82.90**	**82.90**	**110.03**	**110.03**	**119.07**	**128.11**	**128.11**	**130.29**	**130.29**	**130.29**	**130.29**	**96.53**	**93.41**	**69.92**	**60.56**	**52.29**
Offsite Total (tons/year)	**0.69**																							

Offsite Vehicle PM_{10} Emissions from Units 1 & 2 Demolition

	PM_{10} Emissions (lbs/day) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
Material Hauling Trucks	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.04
Waste Hauling Trucks	0.19	0.26	0.26	0.31	0.31	0.31	0.38	0.38	0.50	0.50	0.69	0.69	0.75	0.82	0.82	0.80	0.80	0.80	0.80	0.56	0.50	0.37	0.31	0.31
Construction Worker Commute	0.21	0.21	0.44	0.63	0.70	0.79	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.73	0.71	0.41	0.37	0.24
Offsite Total (lbs/day)	**0.46**	**0.52**	**0.76**	**1.01**	**1.05**	**1.14**	**1.18**	**1.18**	**1.30**	**1.30**	**1.49**	**1.49**	**1.55**	**1.62**	**1.62**	**1.60**	**1.60**	**1.60**	**1.60**	**1.32**	**1.29**	**0.86**	**0.75**	**0.59**
	PM_{10} Emissions (lbs/month) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.00
Material Hauling Trucks	0.98	0.98	0.98	0.96	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.47	0.47	1.42	1.42	1.42	0.95
Waste Hauling Trucks	4.42	5.89	5.89	7.23	7.23	7.23	8.68	8.68	11.57	11.57	15.91	15.91	17.36	18.81	18.81	18.51	18.51	18.51	18.51	12.81	11.39	8.54	7.12	7.12
Construction Worker Commute	4.74	4.74	10.22	14.60	16.06	18.25	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.52	17.53	17.53	17.53	17.53	16.80	16.44	9.50	8.40	5.48
Offsite Total (lbs/month)	**10.52**	**12.00**	**17.47**	**23.17**	**24.14**	**26.33**	**27.05**	**27.05**	**29.94**	**29.94**	**34.28**	**34.28**	**35.73**	**37.18**	**37.18**	**36.88**	**36.88**	**36.88**	**36.88**	**30.45**	**29.61**	**19.83**	**17.31**	**13.55**
Offsite Total (tons/year)	**0.21**																							

Notes:
[a] PM_{10} Emissions include emissions from exhaust and paved roads.

Offsite Vehicle $PM_{2.5}$ Emissions from Units 1 & 2 Demolition

	$PM_{2.5}$ Emissions (lbs/day) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
Material Hauling Trucks	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03	0.03	0.03	0.02
Waste Hauling Trucks	0.09	0.12	0.12	0.14	0.14	0.14	0.17	0.17	0.22	0.22	0.31	0.31	0.33	0.36	0.36	0.35	0.35	0.35	0.35	0.24	0.21	0.16	0.13	0.13
Construction Worker Commute	0.06	0.06	0.12	0.18	0.20	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.12	0.10	0.07
Offsite Total (lbs/day)	**0.17**	**0.20**	**0.27**	**0.34**	**0.35**	**0.38**	**0.40**	**0.40**	**0.45**	**0.45**	**0.53**	**0.53**	**0.56**	**0.59**	**0.59**	**0.58**	**0.58**	**0.58**	**0.58**	**0.46**	**0.45**	**0.31**	**0.27**	**0.22**
	$PM_{2.5}$ Emissions (lbs/month) [a]																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.00
Material Hauling Trucks	0.44	0.44	0.44	0.43	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.62	0.62	0.62	0.41
Waste Hauling Trucks	1.99	2.65	2.65	3.19	3.19	3.19	3.83	3.83	5.10	5.10	7.02	7.02	7.65	8.29	8.29	8.03	8.03	8.03	8.03	5.56	4.94	3.71	3.09	3.09
Construction Worker Commute	1.33	1.33	2.86	4.09	4.50	5.11	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.70	4.60	2.66	2.35	1.53
Offsite Total (lbs/month)	**3.93**	**4.59**	**6.13**	**7.87**	**8.07**	**8.68**	**9.11**	**9.11**	**10.39**	**10.39**	**12.30**	**12.30**	**12.94**	**13.58**	**13.58**	**13.31**	**13.31**	**13.31**	**13.31**	**10.63**	**10.32**	**7.14**	**6.22**	**5.04**
Offsite Total (tons/year)	**0.07**																							

Notes:
[a] $PM_{2.5}$ Emissions include emissions from exhaust and paved roads.

Offsite Vehicle CO_2 Emissions from Units 1 & 2 Demolition

	CO_2 Emissions (metric tons/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00
Material Hauling Trucks	0.07	0.07	0.07	0.07	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.10	0.10	0.10	0.07
Waste Hauling Trucks	0.30	0.39	0.39	0.49	0.49	0.49	0.59	0.59	0.79	0.79	1.08	1.08	1.18	1.28	1.28	1.28	1.28	1.28	1.28	0.89	0.79	0.59	0.49	0.49
Construction Worker Commute	0.09	0.09	0.19	0.28	0.30	0.34	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.31	0.18	0.16	0.10
Offsite Total (metric tons/day)	**0.48**	**0.57**	**0.68**	**0.86**	**0.85**	**0.90**	**0.98**	**0.98**	**1.18**	**1.18**	**1.47**	**1.47**	**1.57**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.26**	**1.22**	**0.89**	**0.78**	**0.66**
	CO_2 Emissions (metric tons/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.00
Material Hauling Trucks	1.51	1.51	1.51	1.51	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	2.26	2.26	2.26	1.51
Waste Hauling Trucks	6.79	9.06	9.06	11.32	11.32	11.32	13.58	13.58	18.11	18.11	24.90	24.90	27.17	29.43	29.43	29.43	29.43	29.43	29.43	20.38	18.11	13.58	11.32	11.32
Construction Worker Commute	2.06	2.06	4.44	6.34	6.98	7.93	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.61	7.30	7.14	4.12	3.65	2.38
Offsite Total (metric tons/month)	**10.96**	**13.22**	**15.60**	**19.77**	**19.65**	**20.60**	**22.55**	**22.55**	**27.08**	**27.08**	**33.87**	**33.87**	**36.13**	**38.40**	**38.40**	**38.40**	**38.40**	**38.40**	**38.40**	**29.02**	**28.11**	**20.57**	**17.83**	**15.21**
Offsite Total (metric tons/year)	**418.44**																							

Table 5.1A.31R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle N_2O Emissions from Units 1 & 2 Demolition

	N_2O Emissions (metric tons/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000000
Material Hauling Trucks	0.00000019	0.00000019	0.00000019	0.00000019	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000029	0.00000029	0.00000029	0.00000019
Waste Hauling Trucks	0.00000086	0.00000115	0.00000115	0.00000144	0.00000144	0.00000144	0.00000173	0.00000173	0.00000230	0.00000230	0.00000317	0.00000317	0.00000346	0.00000374	0.00000374	0.00000374	0.00000374	0.00000374	0.00000374	0.00000259	0.00000230	0.00000173	0.00000144	0.00000144
Construction Worker Commute	0.00000101	0.00000101	0.00000218	0.00000311	0.00000342	0.00000389	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000358	0.00000350	0.00000202	0.00000179	0.00000117
Offsite Total (metric tons/day)	**0.00000214**	**0.00000242**	**0.00000359**	**0.00000481**	**0.00000503**	**0.00000549**	**0.00000563**	**0.00000563**	**0.00000620**	**0.00000620**	**0.00000707**	**0.00000707**	**0.00000735**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000634**	**0.00000616**	**0.00000411**	**0.00000359**	**0.00000280**
	N_2O Emissions (metric tons/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000000
Material Hauling Trucks	0.0000044	0.0000044	0.0000044	0.0000044	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000066	0.0000066	0.0000066	0.0000044
Waste Hauling Trucks	0.0000199	0.0000265	0.0000265	0.0000331	0.0000331	0.0000331	0.0000397	0.0000397	0.0000530	0.0000530	0.0000729	0.0000729	0.0000795	0.0000861	0.0000861	0.0000861	0.0000861	0.0000861	0.0000861	0.0000596	0.0000530	0.0000397	0.0000331	0.0000331
Construction Worker Commute	0.0000233	0.0000233	0.0000501	0.0000715	0.0000787	0.0000894	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000823	0.0000805	0.0000465	0.0000411	0.0000268
Offsite Total (metric tons/month)	**0.0000492**	**0.0000558**	**0.0000826**	**0.0001107**	**0.0001156**	**0.0001264**	**0.0001294**	**0.0001294**	**0.0001427**	**0.0001427**	**0.0001625**	**0.0001625**	**0.0001692**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001457**	**0.0001417**	**0.0000945**	**0.0000825**	**0.0000644**
Offsite Total (metric tons/year)	**0.0019799**																							

Offsite Vehicle CH_4 Emissions from Units 1 & 2 Demolition

	CH_4 Emissions (metric tons/day)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000000
Material Hauling Trucks	0.00000020	0.00000020	0.00000020	0.00000020	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000031	0.00000031	0.00000031	0.00000020
Waste Hauling Trucks	0.00000092	0.00000122	0.00000122	0.00000153	0.00000153	0.00000153	0.00000184	0.00000184	0.00000245	0.00000245	0.00000337	0.00000337	0.00000367	0.00000398	0.00000398	0.00000398	0.00000398	0.00000398	0.00000398	0.00000275	0.00000245	0.00000184	0.00000153	0.00000153
Construction Worker Commute	0.00000486	0.00000486	0.00001046	0.00001495	0.00001644	0.00001868	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001719	0.00001682	0.00000972	0.00000859	0.00000561
Offsite Total (metric tons/day)	**0.00000605**	**0.00000636**	**0.00001197**	**0.00001676**	**0.00001815**	**0.00002039**	**0.00001995**	**0.00001995**	**0.00002056**	**0.00002056**	**0.00002148**	**0.00002148**	**0.00002179**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002012**	**0.00001964**	**0.00001193**	**0.00001051**	**0.00000734**
	CH_4 Emissions (metric tons/month)																							
Vehicle Type	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000000
Material Hauling Trucks	0.0000047	0.0000047	0.0000047	0.0000047	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000070	0.0000070	0.0000070	0.0000047
Waste Hauling Trucks	0.0000211	0.0000282	0.0000282	0.0000352	0.0000352	0.0000352	0.0000422	0.0000422	0.0000563	0.0000563	0.0000774	0.0000774	0.0000845	0.0000915	0.0000915	0.0000915	0.0000915	0.0000915	0.0000915	0.0000633	0.0000563	0.0000422	0.0000352	0.0000352
Construction Worker Commute	0.0001117	0.0001117	0.0002406	0.0003438	0.0003782	0.0004297	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0003954	0.0003868	0.0002235	0.0001977	0.0001289
Offsite Total (metric tons/month)	**0.0001392**	**0.0001463**	**0.0002752**	**0.0003854**	**0.0004174**	**0.0004690**	**0.0004588**	**0.0004588**	**0.0004729**	**0.0004729**	**0.0004940**	**0.0004940**	**0.0005011**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0004628**	**0.0004518**	**0.0002744**	**0.0002416**	**0.0001688**
Offsite Total (metric tons/year)	**0.0059462**																							

Offsite Construction Vehicle Activity for Units 1 & 2 Demolition

Vehicle Type	**Roundtrip Miles/Day** [a]	**Working Days per Month** [b]
Offsite Delivery Trucks	14.6	23
Material Hauling Trucks	40.0	23
Waste Hauling Trucks	60.0	23
Construction Worker Commute	21.6	23

Notes:

[a] Roundtrip miles/day taken as the CalEEMod defaults for the South Coast Air Basin except for Waste Hauling Trucks, which were assumed to travel directly to the the landfill for offsite waste disposal.

[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Table 5.1A.32R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Units 1 & 2 Demolition

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_m = EF * N * Hp * L * H / 453.6$	E_m = Emissions (lbs/month)
			EF = Emission factor (g/bhp-hr)
			N = Number of pieces of equipment
			Hp = Average horsepower
			L = Average load factor
			H = Hours per month
			453.6 = Conversion from g to lbs
		$E_d = E_m / D$	E_d = Emissions (lbs/day)
			E_m = Emissions (lbs/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
	CO_2	$E_m = N * FC * EF * H * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (kg/gallon)
			H = Hours per month
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_m = N * FC * EF * H / 1{,}000 * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (g/gallon)
			H = Hours per month
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Vehicle Exhaust and Paved and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_d = N * VMT * EF / 453.6$	E_d = Emissions (lbs/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = EMFAC2007 emission factor (g/mile). Paved and unpaved road fugitive PM_{10} and $PM_{2.5}$ emission factors calculated per Sections 13.2.1 and 13.2.2 of AP-42, respectively.
			453.6 = Conversion from g to lbs
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.32R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Units 1 & 2 Demolition

Emission Source	Pollutant(s)	Equation	Variables
Onsite and Offsite Vehicle Exhaust	CO_2	$E_d = N * VMT / FE * EF * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			FE = Fuel economy (mpg)
			EF = Emission factor (kg/gallon)
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_d = N * VMT * EF / 1,000 * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = Emission factor (g/mile)
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Dismemberment and Debris Loading	PM_{10} and $PM_{2.5}$	$E_d = T * EF / D$	E_d = Emissions (lbs/day)
			T = Tons of material dismembered or loaded
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/ton), calculated per Section 13.2.4.3 of AP-42 for dismemberment and Section 4.4 of Appendix A of the CalEEMod User's Guide for debris loading.
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2,000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Huntington Beach Energy Project
Construction Emission Estimates - Units 1 and 2 Demolition
October 2013

Table 5.1A.33R Number of Onsite Construction Equipment and Motor Vehicles

Number of Onsite Equipment for Units 1 & 2 Demolition

Onsite Equipment	Number per Month [a]																							
	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Water Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cranes [b]	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3
Rubber Tired Loader [c]	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2
Air Compressor	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Forklift	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Excavators	2	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Notes:

[a] Equipment counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

[b] Numbers presented for Cranes includes the equipment counts for the 75 Ton Hydraulic Crane and the 35 Ton Hydraulic Crane.

[c] Numbers presented for Rubber Tired Loader includes the equipment counts for the Front End Loader.

Number of Onsite Motor Vehicles for Units 1 & 2 Demolition

Vehicle Type	Number per Month [a]																							
	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Onsite Pick-up Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Stake Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Dump Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Notes:

[a] Vehicle counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

Table 5.1A.34R Construction Equipment Exhaust Criteria Pollutant Emission Factors

Construction Equipment Emission Factors for Units 1 & 2 Demolition

Equipment [a]	Percent Usage [b]	Hours per Month [c]	Horsepower [d]	Load Factor [d]	Emission Factors (g/bhp-hr) [e]												Fuel Consumption (gallons/hour) [f]
					CO	VOC	NO_X 2020	NO_X 2021	NO_X 2022	SO_x	PM_{10} 2020	PM_{10} 2021	PM_{10} 2022	$PM_{2.5}$ 2020	$PM_{2.5}$ 2021	$PM_{2.5}$ 2022	
Water Truck [g]	50%	115	381	0.57	1.136	0.310	1.561	1.365	1.194	0.005	0.057	0.050	0.043	0.057	0.050	0.043	12.32
Cranes	65%	150	208	0.43	1.236	0.356	2.507	2.231	1.979	0.006	0.086	0.077	0.068	0.086	0.077	0.068	5.08
Rubber Tired Loader	55%	127	87	0.54	3.836	0.542	3.404	3.155	2.929	0.006	0.228	0.198	0.171	0.228	0.198	0.171	2.69
Air Compressor	80%	184	78	0.48	3.698	0.489	3.400	3.083	2.844	0.006	0.224	0.190	0.165	0.224	0.190	0.165	2.14
Forklift	75%	173	149	0.30	3.360	0.338	1.782	1.508	1.281	0.006	0.087	0.069	0.054	0.087	0.069	0.054	2.55
Excavator	85%	196	157	0.57	3.361	0.355	1.958	1.710	1.492	0.006	0.098	0.085	0.073	0.098	0.085	0.073	5.11

Notes:

[a] Assumed all equipment is fired with diesel fuel, per Section 4.2 of Appendix A of the CalEEMod User's Guide.

[b] Percent Usage assumed typical of power plant construction.

[c] Hours per month calculated based on the following schedule, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Work hours per day: 10

Work days per month: 23

[d] Construction equipment horsepower and load factor taken from Table 3.3 of Appendix D of the CalEEMod User's Guide.

[e] Construction equipment emission factors taken from Table 3.4 of Appendix D of the CalEEMod User's Guide. The emission factors for the year 2020 were used for the construction equipment exhaust emission calculations for CO, VOC, and SOx. The emission factors for year 2020, 2021 and 2022 were used for NOx, PM10, and PM2.5.

[f] Fuel consumption based on consumption in the OFFROAD2007 model for the SCAB in the year 2020; value estimated by dividing the reported consumption (gallons/day) by the reported activity (hours/day).

[g] Horsepower, load factor, and emission factors for Off-Highway Trucks were assumed representative of Water Trucks.

Table 5.1A.35R Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors

Vehicle Emission Factors for Units 1 & 2 Demolition

Vehicle Type	Vehicle Class [a]	Exhaust Emission Factors (g/mile) [b]												Paved Road Emission Factors (g/mile) [c]		Fuel Economy (mpg) [b]
		CO	VOC	SO_X	NO_X 2020	NO_X 2021	NO_X 2022	PM_{10} 2020	PM_{10} 2021	PM_{10} 2022	$PM_{2.5}$ 2020	$PM_{2.5}$ 2021	$PM_{2.5}$ 2022	PM_{10}	$PM_{2.5}$	
Onsite Pick-up Truck	Light-duty Truck	2.560	0.153	0.011	0.239	0.223	0.207	0.127	0.128	0.129	0.105	0.106	0.107	N/A	N/A	7.467
Onsite Stake Truck	Heavy-duty Diesel	7.701	4.236	0.037	12.285	11.246	10.375	0.506	0.430	0.368	0.427	0.357	0.301	N/A	N/A	2.621
Onsite Dump Truck	Heavy-duty Diesel	7.701	4.236	0.037	12.285	11.246	10.375	0.506	0.430	0.368	0.427	0.357	0.301	N/A	N/A	2.621
Offsite Delivery Trucks	Heavy-duty Diesel	1.623	0.333	0.017	4.193	3.805	3.481	0.214	0.201	0.190	0.159	0.147	0.137	0.300	0.075	5.749
Material Hauling Trucks	Heavy/Medium-duty Diesel	1.359	0.221	0.016	3.278	2.973	2.714	0.184	0.175	0.168	0.143	0.135	0.128	0.300	0.075	6.224
Waste Hauling Trucks	Heavy/Medium-duty Diesel	1.359	0.221	0.016	3.278	2.973	2.714	0.184	0.175	0.168	0.143	0.135	0.128	0.300	0.075	6.224
Construction Worker Commute	Light-duty Auto/Truck	1.077	0.017	0.003	0.097	0.090	0.336	0.033	0.033	0.033	0.018	0.018	0.018	0.300	0.075	27.504

Notes:

[a] The vehicle classes are represented as follows:

Light-duty Truck: Assumed to be an average of LDT1, All and LDT2, All values.
Heavy-duty Diesel: Assumed to be 100% HHD DSL values, as confirmed in Section 4.5 of Appendix A of the CalEEMod User's Guide.
Heavy/Medium-duty Diesel: 50% HHD DSL and 50% MHD DSL values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.
Light-duty Auto/Truck: 50% LDA, All; 25% LDT1, All; and 25% LDT2, All values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.

[b] Exhaust emission factors and fuel economy from EMFAC2007 for the South Coast Air Basin, calendar year 2020 for CO, VOC, and SOx. Calendar year 2020, 2021 and 2022 were used for NOx, PM10, and PM2.5. A speed of 5 mph was assumed for onsite vehicles; a speed of 40 mph was assumed for offsite vehicles and worker commutes, which is consistent with the CalEEMod defaults. An average temperature of 68°F and humidity of 55% were used per Table B-1 of CT-EMFAC: A Computer Model to Estimate Transportation Project Emissions.

[c] Paved road emission factors calculated using CalEEMod methodology, as described below.

Derivation of Paved Road Emission Factors

Vehicles on Paved Roads

Parameter	PM_{10}	$PM_{2.5}$
Average Weight [a]	2.4	2.4
k [b]	1.0	0.25
sL [a]	0.1	0.1
Emission Factor (g/mile) [c]	0.300	0.075

Notes:

[a] Average Weight and sL taken as the default value from CalEEMod.

[b] k taken from Table 13.2.1-1 of Section 13.2.1 of AP-42.

[c] Emission factor calculated using Equation 1 from Section 13.2.1 of AP-42:

Emission Factor (g/mile) = k (g/mile) x [sL (g/m^2)]$^{0.91}$ x [Average Weight (tons)]$^{1.02}$

Huntington Beach Energy Project
Construction Emission Estimates - Units 1 and 2 Demolition
October 2013

Table 5.1A.36R Onsite and Offsite Greenhouse Gas Emission Factors

Greenhouse Gas Emission Factors for Units 1 & 2 Demolition

Fuel / Category Type	Emission Factor	Emission Factor Units	Emission Factor Source
CO_2 Emission Factors			
Gasoline	8.78	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
Diesel	10.21	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
N_2O Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0036	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0066	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0048	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.26	g N_2O/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.
CH_4 Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0173	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0163	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0051	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.58	g CH_4/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.

Notes:

[a] Model Year 2009 was the most recent year of emission factors available. As a result, it was assumed representative of vehicles used for this project.

Huntington Beach Energy Project
Construction Emission Estimates - Buildings 33 and 34 Construction
October 2013

Table 5.1A.37R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO Emissions from Bldgs. 33 & 34 Construction

	CO Emisisons (lbs/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	133.77	133.77	133.77	133.77	133.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93	35.93
Tractor/Loader/Backhoe	0.00	42.89	42.89	42.89	42.89	42.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05	50.05
Crawler Tractor	0.00	84.66	84.66	84.66	84.66	84.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	55.74	55.74	55.74	55.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	53.12	53.12	53.12	53.12	53.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**105.79**	**420.22**	**420.22**	**456.16**	**400.42**	**400.42**	**85.98**	**85.98**	**85.98**	**85.98**	**85.98**	**85.98**	**85.98**	**85.98**
Onsite Total (lbs/day) [a]	**4.60**	**18.27**	**18.27**	**19.83**	**17.41**	**17.41**	**3.74**	**3.74**	**3.74**	**3.74**	**3.74**	**3.74**	**3.74**	**3.74**
Onsite Total (tons/year)	**1.36**													

Construction Equipment VOC Emissions from Bldgs. 33 & 34 Construction

	VOC Emisisons (lbs/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	15.67	15.67	15.67	15.67	15.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93	9.93
Tractor/Loader/Backhoe	0.00	4.29	4.29	4.29	4.29	4.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56	6.56
Crawler Tractor	0.00	14.33	14.33	14.33	14.33	14.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	6.71	6.71	6.71	6.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	7.28	7.28	7.28	7.28	7.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**13.28**	**54.85**	**54.85**	**64.79**	**58.07**	**58.07**	**16.50**	**16.50**	**16.50**	**16.50**	**16.50**	**16.50**	**16.50**	**16.50**
Onsite Total (lbs/day) [a]	**0.58**	**2.38**	**2.38**	**2.82**	**2.52**	**2.52**	**0.72**	**0.72**	**0.72**	**0.72**	**0.72**	**0.72**	**0.72**	**0.72**
Onsite Total (tons/year)	**0.20**													

Construction Equipment NOx Emissions from Bldgs. 33 & 34 Construction

	NOx Emissions (lbs/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	92.20	92.20	92.20	92.20	82.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	65.77	65.77	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34	58.34
Tractor/Loader/Backhoe	0.00	28.75	28.75	28.75	28.75	26.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	41.34	41.34	41.34	41.34	41.34	38.38	38.38	38.38	38.38	38.38	38.38	38.38	38.38	38.38
Crawler Tractor	0.00	84.28	84.28	84.28	84.28	78.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	46.82	46.82	46.82	46.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	48.59	48.59	48.59	48.59	45.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**88.16**	**341.97**	**341.97**	**407.74**	**360.91**	**329.49**	**96.71**	**96.71**	**96.71**	**96.71**	**96.71**	**96.71**	**96.71**	**96.71**
Onsite Total (lbs/day) [a]	**3.83**	**14.87**	**14.87**	**17.73**	**15.69**	**14.33**	**4.20**	**4.20**	**4.20**	**4.20**	**4.20**	**4.20**	**4.20**	**4.20**
Onsite Total (tons/year)	**1.23**													

Table 5.1A.37R Onsite Construction Equipment Exhaust Emissions

Construction Equipment SOx Emissions from Bldgs. 33 & 34 Construction

	SOx Emissions (lbs/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	0.24	0.24	0.24	0.24	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Tractor/Loader/Backhoe	0.00	0.07	0.07	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Crawler Tractor	0.00	0.13	0.13	0.13	0.13	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	0.09	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	0.09	0.09	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.17**	**0.69**	**0.69**	**0.87**	**0.78**	**0.78**	**0.26**	**0.26**	**0.26**	**0.26**	**0.26**	**0.26**	**0.26**	**0.26**
Onsite Total (lbs/day) [a]	**0.01**	**0.03**	**0.03**	**0.04**	**0.03**	**0.03**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
Onsite Total (tons/year)	**0.00**													

Construction Equipment PM_{10} Emissions from Bldgs. 33 & 34 Construction

	PM_{10} Emissions (lbs/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	4.89	4.89	4.89	4.89	4.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	2.27	2.27	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Tractor/Loader/Backhoe	0.00	1.36	1.36	1.36	1.36	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	2.59	2.59	2.59	2.59	2.59	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Crawler Tractor	0.00	6.17	6.17	6.17	6.17	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	2.89	2.89	2.89	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	3.26	3.26	3.26	3.26	2.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**5.48**	**21.16**	**21.16**	**23.43**	**20.55**	**18.10**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**
Onsite Total (lbs/day) [a]	**0.24**	**0.92**	**0.92**	**1.02**	**0.89**	**0.79**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**
Onsite Total (tons/year)	**0.07**													

Construction Equipment $PM_{2.5}$ Emissions from Bldgs. 33 & 34 Construction

	$PM_{2.5}$ Emissions (lbs/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	4.89	4.89	4.89	4.89	4.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	2.27	2.27	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Tractor/Loader/Backhoe	0.00	1.36	1.36	1.36	1.36	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	2.59	2.59	2.59	2.59	2.59	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Crawler Tractor	0.00	6.17	6.17	6.17	6.17	5.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	2.89	2.89	2.89	2.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	3.26	3.26	3.26	3.26	2.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**5.48**	**21.16**	**21.16**	**23.43**	**20.55**	**18.10**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**	**4.24**
Onsite Total (lbs/day) [a]	**0.24**	**0.92**	**0.92**	**1.02**	**0.89**	**0.79**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**	**0.18**
Onsite Total (tons/year)	**0.07**													

Table 5.1A.37R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO_2 Emissions from Bldgs. 33 & 34 Construction

	CO_2 Emissions (metric tons/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00	10.60	10.60	10.60	10.60	10.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cranes	0.00	0.00	0.00	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74	7.74
Tractor/Loader/Backhoe	0.00	3.05	3.05	3.05	3.05	3.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rubber Tired Loader	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47
Crawler Tractor	0.00	5.65	5.65	5.65	5.65	5.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Compressor	4.02	4.02	4.02	4.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roller	0.00	3.79	3.79	3.79	3.79	3.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (metric tons/month)	**7.49**	**30.58**	**30.58**	**38.32**	**34.30**	**34.30**	**11.21**	**11.21**	**11.21**	**11.21**	**11.21**	**11.21**	**11.21**	**11.21**
Onsite Total (metric tons/day) [a]	**0.33**	**1.33**	**1.33**	**1.67**	**1.49**	**1.49**	**0.49**	**0.49**	**0.49**	**0.49**	**0.49**	**0.49**	**0.49**	**0.49**
Onsite Total (metric tons/year)	**246.6**													

Construction Equipment N_2O Emissions from Bldgs. 33 & 34 Construction

	N_2O Emissions (metric tons/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00000	0.00027	0.00027	0.00027	0.00027	0.00027	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Cranes	0.00000	0.00000	0.00000	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
Tractor/Loader/Backhoe	0.00000	0.00008	0.00008	0.00008	0.00008	0.00008	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Rubber Tired Loader	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
Crawler Tractor	0.00000	0.00014	0.00014	0.00014	0.00014	0.00014	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Air Compressor	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Roller	0.00000	0.00010	0.00010	0.00010	0.00010	0.00010	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Onsite Total (metric tons/month)	**0.00019**	**0.00078**	**0.00078**	**0.00098**	**0.00087**	**0.00087**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**
Onsite Total (metric tons/day) [a]	**0.00001**	**0.00003**	**0.00003**	**0.00004**	**0.00004**	**0.00004**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**
Onsite Total (metric tons/year)	**0.0063**													

Construction Equipment CH_4 Emissions from Bldgs. 33 & 34 Construction

	CH_4 Emissions (metric tons/month)													
Onsite Equipment	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grader	0.00000	0.00060	0.00060	0.00060	0.00060	0.00060	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Cranes	0.00000	0.00000	0.00000	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044
Tractor/Loader/Backhoe	0.00000	0.00017	0.00017	0.00017	0.00017	0.00017	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Rubber Tired Loader	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
Crawler Tractor	0.00000	0.00032	0.00032	0.00032	0.00032	0.00032	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Air Compressor	0.00023	0.00023	0.00023	0.00023	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Roller	0.00000	0.00022	0.00022	0.00022	0.00022	0.00022	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Onsite Total (metric tons/month)	**0.00043**	**0.00174**	**0.00174**	**0.00218**	**0.00195**	**0.00195**	**0.00064**	**0.00064**	**0.00064**	**0.00064**	**0.00064**	**0.00064**	**0.00064**	**0.00064**
Onsite Total (metric tons/day) [a]	**0.00002**	**0.00008**	**0.00008**	**0.00009**	**0.00008**	**0.00008**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**
Onsite Total (metric tons/year)	**0.0140**													

Notes:

[a] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', the days per month are as follows 23

Table 5.1A.38R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO Emissions from Bldgs. 33 & 34 Construction

	CO Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Onsite Stake Truck	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Onsite Dump Truck	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.04**	**0.06**	**0.06**	**0.06**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**
	CO Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Onsite Stake Truck	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Onsite Dump Truck	0.00	0.36	0.36	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.97**	**1.33**	**1.33**	**1.33**	**0.97**	**0.97**	**0.97**	**0.97**	**0.97**	**0.97**	**0.97**	**0.97**	**0.97**	**0.97**
Onsite Total (tons/year)	**0.01**													

Onsite Construction Vehicle VOC Emissions from Bldgs. 33 & 34 Construction

	VOC Emisisons (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Stake Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Dump Truck	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.018**	**0.026**	**0.026**	**0.026**	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**	**0.018**
	VOC Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Onsite Stake Truck	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Onsite Dump Truck	0.00	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.41**	**0.61**	**0.61**	**0.61**	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**	**0.41**
Onsite Total (tons/year)	**0.00**													

Onsite Construction Vehicle SOx Emissions from Bldgs. 33 & 34 Construction

	SOx Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Onsite Stake Truck	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Onsite Dump Truck	0.00000	0.00008	0.00008	0.00008	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Onsite Total (lbs/day)	**0.00021**	**0.00029**	**0.00029**	**0.00029**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**
	SOx Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
Onsite Stake Truck	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
Onsite Dump Truck	0.0000	0.0019	0.0019	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (lbs/month)	**0.0049**	**0.0067**	**0.0067**	**0.0067**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**
Onsite Total (tons/year)	**0.00003**													

Onsite Construction Vehicle NOx Emissions from Bldgs. 33 & 34 Construction

	NOx Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0010	0.0010	0.0010	0.0010	0.0010	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
Onsite Stake Truck	0.0496	0.0496	0.0496	0.0496	0.0496	0.0457	0.0457	0.0457	0.0457	0.0457	0.0457	0.0457	0.0457	0.0457
Onsite Dump Truck	0.0000	0.0248	0.0248	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (lbs/day)	**0.0506**	**0.0754**	**0.0754**	**0.0754**	**0.0506**	**0.0467**	**0.0467**	**0.0467**	**0.0467**	**0.0467**	**0.0467**	**0.0467**	**0.0467**	**0.0467**
	NOx Emissions (lbs/month) [a]													
Vehicle Type	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**	**94**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	1.14	1.14	1.14	1.14	1.14	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Onsite Dump Truck	0.00	0.57	0.57	0.57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**1.16**	**1.73**	**1.73**	**1.73**	**1.16**	**1.07**	**1.07**	**1.07**	**1.07**	**1.07**	**1.07**	**1.07**	**1.07**	**1.07**
Onsite Total (tons/year)	**0.01**													

Table 5.1A.38R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle PM_{10} Emissions from Bldgs. 33 & 34 Construction

	PM_{10} Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Onsite Stake Truck	0.0019	0.0019	0.0019	0.0019	0.0019	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
Onsite Dump Truck	0.0000	0.0009	0.0009	0.0009	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (lbs/day)	**0.0025**	**0.0034**	**0.0034**	**0.0034**	**0.0025**	**0.0022**	**0.0022**	**0.0022**	**0.0022**	**0.0022**	**0.0022**	**0.0022**	**0.0022**	**0.0022**
	PM_{10} Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Onsite Stake Truck	0.044	0.044	0.044	0.044	0.044	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037
Onsite Dump Truck	0.000	0.022	0.022	0.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (lbs/month)	**0.057**	**0.078**	**0.078**	**0.078**	**0.057**	**0.050**	**0.050**	**0.050**	**0.050**	**0.050**	**0.050**	**0.050**	**0.050**	**0.050**
Onsite Total (tons/year)	**0.0004**													

Onsite Construction Vehicle $PM_{2.5}$ Emissions from Bldgs. 33 & 34 Construction

	$PM_{2.5}$ Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Onsite Stake Truck	0.0016	0.0016	0.0016	0.0016	0.0016	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Onsite Dump Truck	0.0000	0.0008	0.0008	0.0008	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Onsite Total (lbs/day)	**0.0020**	**0.0028**	**0.0028**	**0.0028**	**0.0020**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0018**	**0.0018**
	$PM_{2.5}$ Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Onsite Stake Truck	0.036	0.036	0.036	0.036	0.036	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031
Onsite Dump Truck	0.000	0.018	0.018	0.018	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (lbs/month)	**0.047**	**0.065**	**0.065**	**0.065**	**0.047**	**0.041**	**0.041**	**0.041**	**0.041**	**0.041**	**0.041**	**0.041**	**0.041**	**0.041**
Onsite Total (tons/year)	**0.0003**													

Onsite Construction Vehicle CO_2 Emissions from Bldgs. 33 & 34 Construction

	CO_2 Emissions (metric tons/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Onsite Stake Truck	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Onsite Dump Truck	0.000	0.004	0.004	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Onsite Total (metric tons/day)	**0.010**	**0.014**	**0.014**	**0.014**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**
	CO_2 Emissions (metric tons/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Stake Truck	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Onsite Dump Truck	0.00	0.09	0.09	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (metric tons/month)	**0.23**	**0.32**	**0.32**	**0.32**	**0.23**	**0.23**	**0.23**	**0.23**	**0.23**	**0.23**	**0.23**	**0.23**	**0.23**	**0.23**
Onsite Total (metric tons/year)	**3.07**													

Onsite Construction Vehicle N_2O Emissions from Bldgs. 33 & 34 Construction

	N_2O Emissions (metric tons/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013
Onsite Stake Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000000	0.000000005	0.000000005	0.000000005	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Onsite Total (metric tons/day)	**0.000000023**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**
	N_2O Emissions (metric tons/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030
Onsite Stake Truck	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022
Onsite Dump Truck	0.00000000	0.00000011	0.00000011	0.00000011	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Onsite Total (metric tons/month)	**0.00000052**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**
Onsite Total (metric tons/year)	**0.000007**													

Table 5.1A.38R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CH_4 Emissions from Bldgs. 33 & 34 Construction

	CH_4 Emissions (metric tons/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033
Onsite Stake Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000000	0.000000005	0.000000005	0.000000005	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Onsite Total (metric tons/day)	**0.000000043**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**
	CH_4 Emissions (metric tons/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075	0.00000075
Onsite Stake Truck	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023	0.00000023
Onsite Dump Truck	0.00000000	0.00000012	0.00000012	0.00000012	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Onsite Total (metric tons/month)	**0.00000098**	**0.00000110**	**0.00000110**	**0.00000110**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**	**0.00000098**
Onsite Total (metric tons/year)	**0.000012**													

Notes:

[a] The days per month are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', as presented on the 'Onsite Fugitive Dust' tab.

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Table 5.1A.39R Onsite Construction Fugitive Dust Emissions

Grading and Bulldozing Activity Levels for Bldgs. 33 & 34 Construction

Source	Monthly Activity Levels													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Site Disturbance (acres) [a]	0.00	0.48	0.48	0.48	0.48	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozer Operation (hours) [b]	0.00	230.00	230.00	230.00	230.00	230.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes:
[a] Estimated a total of 2.4 acres is disturbed during Bldgs. 33 & 34 Construction based on data provided by H. Larios/PEC on 3/23/12; assumed this disturbance was equally distributed amongst the months in which graders are utilized.
[b] Bulldozer Operation calculated based on the number of equipment and the hours of operation per month, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls':

Hours per Day:	10
Days per Month:	23

Onsite Construction Vehicle Fugitive PM_{10} Emissions from Bldgs. 33 & 34 Construction

Vehicle Type	Fugitive PM_{10} Emissions (lbs/day) [a]													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Onsite Pick-up Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Stake Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Dump Truck	0.00	0.85	0.85	0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**3.38**	**4.23**	**4.23**	**4.23**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**
Vehicle Type	**Fugitive PM_{10} Emissions (lbs/month) [a]**													
	77	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Stake Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Dump Truck	0.00	19.44	19.44	19.44	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**77.76**	**97.20**	**97.20**	**97.20**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**
Onsite Total (tons/year)	**0.50**													

Notes:
[a] Emissions based on highest (controlled) unpaved road emission factor for PM_{10}.

Onsite Construction Vehicle Fugitive $PM_{2.5}$ Emissions from Bldgs. 33 & 34 Construction

Vehicle Type	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Onsite Pick-up Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Stake Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Dump Truck	0.00	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.34**	**0.42**	**0.42**	**0.42**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**
Vehicle Type	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]**													
	77	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Onsite Pick-up Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Stake Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Dump Truck	0.00	1.94	1.94	1.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**7.78**	**9.72**	**9.72**	**9.72**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**
Onsite Total (tons/year)	**0.05**													

Notes:
[a] Emissions based on the highest (controlled) unpaved road emission factor for $PM_{2.5}$.

Onsite Grading and Bulldozing Fugitive PM_{10} Emissions from Bldgs. 33 & 34 Construction

Construction Activity	Fugitive PM_{10} Emissions (lbs/day) [a,b]													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Grading [c]	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	10.56	10.56	10.56	10.56	10.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.00**	**10.57**	**10.57**	**10.57**	**10.57**	**10.57**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Construction Activity	**Fugitive PM_{10} Emissions (lbs/month) [a,b]**													
	77	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grading	0.00	0.20	0.20	0.20	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	242.84	242.84	242.84	242.84	242.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.00**	**243.04**	**243.04**	**243.04**	**243.04**	**243.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Onsite Total (tons/year)	**0.61**													

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for PM_{10}.
[c] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment 12 ft

Table 5.1A.39R Onsite Construction Fugitive Dust Emissions

Onsite Grading and Bulldozing Fugitive $PM_{2.5}$ Emissions from Bldgs. 33 & 34 Construction

Construction Activity	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a, b]													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Grading [c]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	2.56	2.56	2.56	2.56	2.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/day)	**0.00**	**2.56**	**2.56**	**2.56**	**2.56**	**2.56**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Construction Activity	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a, b]**													
	77	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Grading	0.00	0.02	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Bulldozing	0.00	58.82	58.82	58.82	58.82	58.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Onsite Total (lbs/month)	**0.00**	**58.85**	**58.85**	**58.85**	**58.85**	**58.85**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Onsite Total (tons/year)	**0.15**													

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for $PM_{2.5}$.
[c] Per Section 4.3 of Appendix A of the CalEEMod User's Guide, the following blade width was assumed for grading equipment 12 ft

Onsite Construction Vehicle Activity for Bldgs. 33 & 34 Construction

Vehicle Type	Miles/Day [a]	Working Days per
Onsite Pick-up Truck	2	23
Onsite Stake Truck	2	23
Onsite Dump Truck	1	23

Notes:
[a] Estimated based on the dimensions of the project site.
[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Fugitive Dust Emission Factors for Unpaved Roads

Vehicles on Unpaved Surfaces at Industrial Sites

Parameter	PM_{10}	$PM_{2.5}$
Mean Vehicle Weight [a]	16.5	16.5
Silt Content [b]	8.5	8.5
k [c]	1.5	0.15
a [c]	0.9	0.9
b [c]	0.45	0.45
P [d]	31	31
Emission Factor (Uncontrolled, lbs/mile) [e]	2.17	0.22
Reduction from Watering 3x per Day [f]	61%	61%
Emission Factor (Controlled, lbs/mile)	0.85	0.08

Notes:
[a] Mean vehicle weight assumes that medium/heavy duty trucks weigh 16.5 tons.
[b] Silt content taken from Table 13.2.2-1 of Section 13.2.2 of AP-42 for a Construction Site, Scraper Route; this value is consistent with the CalEEMod defaults for the South Coast Air Basin.
[c] k, a, and b taken from Table 13.2.2-2 of Section 13.2.2 of AP-42 for industrial roads.
[d] P taken as the CalEEMod default for the Huntington Beach climate region of the South Coast Air Basin.
[e] Emission factor calculated using Equations 1a and 2 from Section 13.2.2 of AP-42:
Emission Factor (lbs/mile) = {k (lbs/mile) x [Silt Content (%) / 12] ^{a} x [Mean Vehicle Weight (tons) / 3]^{b}} x [(365 - P) / 365]
[f] Although watering trucks are not included in the equipment list for these construction activities, it was assumed that the watering truck used for Units 1 & 2 Demolition (which is expected to occur during the same period) would also be used to control fugitive dust emissions from these construction activities. Control efficiency taken from the URBEMIS default mitigation measures for unpaved roads.

Fugitive Dust Emission Factors for Grading

Grading Equipment Passes

Parameter	PM_{10}	$PM_{2.5}$
S (mph) [a]	7.1	7.1
F [a]	0.6	0.031
Emission Factor (lbs/VMT) [b]	1.543	0.167
Reduction from Watering Every 3 Hours [c]	61%	61%
Emission Factor (Controlled, lbs/VMT)	0.602	0.065

Notes:
[a] The mean vehicle speed (S) and the particulate matter scaling factor (F) taken from Section 11.9 of AP-42 per Section 4.3 of Appendix A of the CalEEMod User's Guide.
[b] Emission factor calculated using the following equation from Section 4.3 of Appendix A of the CalEEMod User's Guide:
PM_{10} Emission Factor (lbs/VMT) = 0.051 x $(S)^{2.0}$ x F_{PM10}
$PM_{2.5}$ Emission Factor (lbs/VMT) = 0.04 x $(S)^{2.5}$ x $F_{PM2.5}$
[c] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Construction Activities.

Table 5.1A.39R Onsite Construction Fugitive Dust Emissions

Fugitive Dust Emission Factors for Bulldozing

Bulldozing Equipment Passes

Parameter	PM_{10}	$PM_{2.5}$
C [a]	5.7	5.7
M (%) [a]	7.9%	7.9%
s (%) [a]	6.9%	6.9%
F [a]	0.75	0.105
Emission Factor (lbs/hr) [b]	2.707	0.656
Reduction from Watering Every 3 Hours [c]	61%	61%
Emission Factor (Controlled, lbs/hr)	1.056	0.256

Notes:

[a] The arbitrary coefficient (C), material moisture content (M), material silt content (s), and particulate matter scaling factor (F) taken from Section 11.9 of AP-42 per Section 4.3 of Appendix A of the CalEEMod User's Guide. These values are consistent with the CalEEMod defaults for the South Coast Air Basin.

[b] Emission factor calculated using the following equation from Section 4.3 of Appendix A of the CalEEMod User's Guide:

PM_{10} Emission Factor (lbs/hr) = $[(C \times s^{1.5}) / M^{1.4}] \times F_{PM10}$

$PM_{2.5}$ Emission Factor (lbs/hr) = $[(C \times s^{1.2}) / M^{1.3}] \times F_{PM2.5}$

[c] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Construction Activities.

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Table 5.1A.40R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle Usage During Bldgs. 33 & 34 Construction

	Number per Day													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks [a]	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Material Hauling Trucks [b]	0.10	2.30	2.10	3.10	4.30	1.30	0.30	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Construction Worker Commute [c]	36.00	49.00	51.00	51.00	49.00	52.00	61.00	62.00	68.00	75.00	63.00	79.00	76.00	0.00

Notes:

[a] Offsite Delivery Trucks include trucks transporting "Consumables & Supplies", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. Due to the revised, shortened construction duration and in the absence of updated engineering data, the last month of delivery data provided in 'Huntington Beach Truck Deliveries 032112.xls' was not utilized.

[b] Material Hauling Trucks include trucks transporting "Fill Material", "Mechanical Equipment", "Electrical Equip. & Mtrls", "Concrete / Rebar / Rubble", "Steel/Architectural", "Contractor Mobilization", "Contractor Demobilization", and "Construction Equipment", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. Due to the revised, shortened construction duration and in the absence of updated engineering data, the last month of hauling data provided in 'Huntington Beach Truck Deliveries 032112.xls' was not utilized.

[c] Assumed 1 commute per 1 worker; number of workers taken from 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'. Due to the revised, shortened construction duration and in the absence of updated engineering data, the first two months of manhour data provided in 'Manpower_Schedule_Huntington_Beach 03.13.12.xls' were not utilized.

Offsite Vehicle CO Emissions from Bldgs. 33 & 34 Construction

	CO Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Material Hauling Trucks	0.01	0.26	0.24	0.35	0.49	0.15	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Construction Worker Commute	1.74	2.37	2.46	2.46	2.37	2.51	2.95	3.00	3.29	3.62	3.04	3.82	3.67	0.00
Offsite Total (lbs/day)	**1.76**	**2.63**	**2.71**	**2.82**	**2.86**	**2.67**	**2.99**	**3.01**	**3.30**	**3.64**	**3.06**	**3.83**	**3.69**	**0.02**
	CO Emissions (lbs/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Material Hauling Trucks	0.26	6.04	5.52	8.15	11.30	3.42	0.79	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Construction Worker Commute	40.00	54.44	56.67	56.67	54.44	57.78	67.78	68.89	75.56	83.33	70.00	87.78	84.45	0.00
Offsite Total (lbs/month)	**40.38**	**60.60**	**62.30**	**64.92**	**65.86**	**61.31**	**68.68**	**69.26**	**75.93**	**83.71**	**70.38**	**88.15**	**84.82**	**0.37**
Offsite Total (tons/year)	**0.43**													

Offsite Vehicle VOC Emissions from Bldgs. 33 & 34 Construction

	VOC Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Material Hauling Trucks	0.0018	0.0425	0.0388	0.0573	0.0794	0.0240	0.0055	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018
Construction Worker Commute	0.0270	0.0368	0.0383	0.0383	0.0368	0.0390	0.0458	0.0465	0.0510	0.0563	0.0473	0.0593	0.0570	0.0000
Offsite Total (lbs/day)	**0.0299**	**0.0802**	**0.0781**	**0.0965**	**0.1172**	**0.0640**	**0.0523**	**0.0494**	**0.0539**	**0.0591**	**0.0501**	**0.0621**	**0.0599**	**0.0029**
	VOC Emissions (lbs/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Material Hauling Trucks	0.042	0.977	0.892	1.317	1.827	0.552	0.127	0.042	0.042	0.042	0.042	0.042	0.042	0.042
Construction Worker Commute	0.621	0.845	0.880	0.880	0.845	0.897	1.052	1.070	1.173	1.294	1.087	1.363	1.311	0.000
Offsite Total (lbs/month)	**0.687**	**1.846**	**1.795**	**2.220**	**2.696**	**1.473**	**1.203**	**1.135**	**1.239**	**1.359**	**1.152**	**1.428**	**1.377**	**0.066**
Offsite Total (tons/year)	**0.01**													

Offsite Vehicle SOx Emissions from Bldgs. 33 & 34 Construction

	SOx Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Material Hauling Trucks	0.00014	0.00314	0.00287	0.00424	0.00588	0.00178	0.00041	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
Construction Worker Commute	0.00557	0.00758	0.00789	0.00789	0.00758	0.00805	0.00944	0.00960	0.01052	0.01161	0.00975	0.01223	0.01176	0.00000
Offsite Total (lbs/day)	**0.00576**	**0.01078**	**0.01082**	**0.01218**	**0.01352**	**0.00988**	**0.00991**	**0.00979**	**0.01072**	**0.01180**	**0.00994**	**0.01242**	**0.01195**	**0.00019**
	SOx Emissions (lbs/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
Material Hauling Trucks	0.0031	0.0723	0.0660	0.0975	0.1352	0.0409	0.0094	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031	0.0031
Construction Worker Commute	0.1281	0.1744	0.1815	0.1815	0.1744	0.1851	0.2171	0.2207	0.2420	0.2670	0.2243	0.2812	0.2705	0.0000
Offsite Total (lbs/month)	**0.1325**	**0.2480**	**0.2488**	**0.2803**	**0.3109**	**0.2272**	**0.2278**	**0.2251**	**0.2464**	**0.2714**	**0.2287**	**0.2856**	**0.2749**	**0.0044**
Offsite Total (tons/year)	**0.0015**													

Table 5.1A.40R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle NOx Emissions from Bldgs. 33 & 34 Construction

	NOx Emissions (lbs/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.012	0.012	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Material Hauling Trucks	0.026	0.603	0.550	0.813	1.127	0.297	0.068	0.023	0.023	0.023	0.023	0.023	0.023	0.023
Construction Worker Commute	0.154	0.209	0.218	0.218	0.209	0.831	0.975	0.991	1.086	1.198	1.007	1.262	1.214	0.000
Offsite Total (lbs/day)	**0.192**	**0.825**	**0.781**	**1.043**	**1.349**	**1.139**	**1.054**	**1.025**	**1.120**	**1.232**	**1.041**	**1.296**	**1.248**	**0.034**
	NOx Emissions (lbs/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.282	0.282	0.282	0.282	0.282	0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.258	0.258
Material Hauling Trucks	0.603	13.866	12.661	18.690	25.924	6.821	1.574	0.525	0.525	0.525	0.525	0.525	0.525	0.525
Construction Worker Commute	3.539	4.817	5.013	5.013	4.817	19.108	22.415	22.782	24.987	27.559	23.150	29.029	27.926	0.000
Offsite Total (lbs/month)	**4.423**	**18.965**	**17.956**	**23.984**	**31.022**	**26.186**	**24.246**	**23.564**	**25.769**	**28.341**	**23.932**	**29.811**	**28.709**	**0.782**
Offsite Total (tons/year)	**0.151**													

Offsite Vehicle PM_{10} Emissions from Bldgs. 33 & 34 Construction

	PM_{10} Emissions (lbs/day) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Material Hauling Trucks	0.004	0.096	0.088	0.130	0.180	0.054	0.012	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Construction Worker Commute	0.571	0.778	0.809	0.809	0.778	0.826	0.969	0.985	1.080	1.191	1.000	1.255	1.207	0.000
Offsite Total (lbs/day)	**0.577**	**0.876**	**0.899**	**0.941**	**0.959**	**0.881**	**0.983**	**0.990**	**1.086**	**1.197**	**1.006**	**1.260**	**1.213**	**0.006**
	PM_{10} Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.037	0.037	0.037	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036
Material Hauling Trucks	0.096	2.218	2.025	2.990	4.147	1.234	0.285	0.095	0.095	0.095	0.095	0.095	0.095	0.095
Construction Worker Commute	13.139	17.883	18.613	18.613	17.883	18.992	22.280	22.645	24.836	27.393	23.010	28.854	27.758	0.000
Offsite Total (lbs/month)	**13.272**	**20.139**	**20.676**	**21.640**	**22.067**	**20.263**	**22.601**	**22.776**	**24.968**	**27.524**	**23.141**	**28.985**	**27.889**	**0.131**
Offsite Total (tons/year)	**0.141**													

Notes:
[a] PM_{10} Emissions include emissions from exhaust and paved roads.

Offsite Vehicle $PM_{2.5}$ Emissions from Bldgs. 33 & 34 Construction

	$PM_{2.5}$ Emissions (lbs/day) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
Material Hauling Trucks	0.0018	0.0425	0.0388	0.0573	0.0795	0.0233	0.0054	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018
Construction Worker Commute	0.1601	0.2179	0.2268	0.2268	0.2179	0.2312	0.2712	0.2757	0.3023	0.3335	0.2801	0.3512	0.3379	0.0000
Offsite Total (lbs/day)	**0.1626**	**0.2611**	**0.2663**	**0.2848**	**0.2981**	**0.2552**	**0.2773**	**0.2781**	**0.3048**	**0.3359**	**0.2826**	**0.3537**	**0.3404**	**0.0025**
	$PM_{2.5}$ Emissions (lbs/month) [a]													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016
Material Hauling Trucks	0.043	0.978	0.893	1.318	1.828	0.536	0.124	0.041	0.041	0.041	0.041	0.041	0.041	0.041
Construction Worker Commute	3.681	5.011	5.215	5.215	5.011	5.318	6.238	6.340	6.954	7.670	6.443	8.079	7.772	0.000
Offsite Total (lbs/month)	**3.740**	**6.005**	**6.125**	**6.550**	**6.855**	**5.869**	**6.377**	**6.397**	**7.011**	**7.727**	**6.499**	**8.136**	**7.829**	**0.057**
Offsite Total (tons/year)	**0.041**													

Notes:
[a] $PM_{2.5}$ Emissions include emissions from exhaust and paved roads.

Table 5.1A.40R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle CO_2 Emissions from Bldgs. 33 & 34 Construction

	CO_2 Emissions (metric tons/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Material Hauling Trucks	0.007	0.151	0.138	0.203	0.282	0.085	0.020	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Construction Worker Commute	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Offsite Total (metric tons/day)	**0.009**	**0.154**	**0.140**	**0.206**	**0.285**	**0.088**	**0.022**	**0.009**	**0.009**	**0.009**	**0.009**	**0.009**	**0.009**	**0.009**
	CO_2 Emissions (metric tons/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Material Hauling Trucks	0.15	3.47	3.17	4.68	6.49	1.96	0.45	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Construction Worker Commute	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite Total (metric tons/month)	**0.21**	**3.53**	**3.23**	**4.74**	**6.55**	**2.02**	**0.51**	**0.21**	**0.21**	**0.21**	**0.21**	**0.21**	**0.21**	**0.21**
Offsite Total (metric tons/year)	**21.8**													

Offsite Vehicle N_2O Emissions from Bldgs. 33 & 34 Construction

	N_2O Emissions (metric tons/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007
Material Hauling Trucks	0.000000019	0.000000442	0.000000403	0.000000595	0.000000826	0.000000250	0.000000058	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019	0.000000019
Construction Worker Commute	0.0000028	0.0000038	0.0000040	0.0000040	0.0000038	0.0000040	0.0000047	0.0000048	0.0000053	0.0000058	0.0000049	0.0000061	0.0000059	0.0000000
Offsite Total (metric tons/day)	**0.00000283**	**0.00000426**	**0.00000438**	**0.00000457**	**0.00000464**	**0.00000430**	**0.00000481**	**0.00000485**	**0.00000531**	**0.00000586**	**0.00000493**	**0.00000617**	**0.00000594**	**0.00000003**
	N_2O Emissions (metric tons/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002
Material Hauling Trucks	0.0000004	0.0000102	0.0000093	0.0000137	0.0000190	0.0000057	0.0000013	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004	0.0000004
Construction Worker Commute	0.0000644	0.0000876	0.0000912	0.0000912	0.0000876	0.0000930	0.0001091	0.0001109	0.0001216	0.0001341	0.0001127	0.0001413	0.0001359	0.0000000
Offsite Total (metric tons/month)	**0.000065**	**0.000098**	**0.000101**	**0.000105**	**0.000107**	**0.000099**	**0.000111**	**0.000111**	**0.000122**	**0.000135**	**0.000113**	**0.000142**	**0.000137**	**0.000001**
Offsite Total (metric tons/year)	**0.0014**													

Offsite Vehicle CH_4 Emissions from Bldgs. 33 & 34 Construction

	CH_4 Emissions (metric tons/day)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007	0.000000007
Material Hauling Trucks	0.000000020	0.000000469	0.000000428	0.000000632	0.000000877	0.000000265	0.000000061	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020	0.000000020
Construction Worker Commute	0.0000135	0.0000183	0.0000191	0.0000191	0.0000183	0.0000194	0.0000228	0.0000232	0.0000254	0.0000280	0.0000235	0.0000295	0.0000284	0.0000000
Offsite Total (metric tons/day)	**0.00001348**	**0.00001879**	**0.00001949**	**0.00001970**	**0.00001919**	**0.00001970**	**0.00002286**	**0.00002320**	**0.00002544**	**0.00002805**	**0.00002357**	**0.00002955**	**0.00002843**	**0.00000003**
	CH_4 Emissions (metric tons/month)													
Vehicle Type	**77**	**78**	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**
Offsite Delivery Trucks	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017	0.00000017
Material Hauling Trucks	0.00000047	0.00001079	0.00000985	0.00001455	0.00002018	0.00000610	0.00000141	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047	0.00000047
Construction Worker Commute	0.0003094	0.0004211	0.0004383	0.0004383	0.0004211	0.0004469	0.0005243	0.0005329	0.0005844	0.0006446	0.0005415	0.0006790	0.0006532	0.0000000
Offsite Total (metric tons/month)	**0.0003100**	**0.0004321**	**0.0004484**	**0.0004530**	**0.0004415**	**0.0004532**	**0.0005259**	**0.0005335**	**0.0005851**	**0.0006452**	**0.0005421**	**0.0006796**	**0.0006538**	**0.0000006**
Offsite Total (metric tons/year)	**0.0064**													

Offsite Construction Vehicle Activity for Bldgs. 33 & 34 Construction

Vehicle Type	**Roundtrip Miles/Day** [a]	**Working Days per Month** [b]
Offsite Delivery Trucks	14.6	23
Material Hauling Trucks	40.0	23
Construction Worker Commute	21.6	23

Notes:

[a] Roundtrip miles/day taken as the CalEEMod defaults for the South Coast Air Basin.

[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Table 5.1A.41R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Bldgs. 33 & 34 Construction

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_m = EF * N * Hp * L * H / 453.6$	E_m = Emissions (lbs/month)
			EF = Emission factor (g/bhp-hr)
			N = Number of pieces of equipment
			Hp = Average horsepower
			L = Average load factor
			H = Hours per month
			453.6 = Conversion from g to lbs
		$E_d = E_m / D$	E_d = Emissions (lbs/day)
			E_m = Emissions (lbs/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
	CO_2	$E_m = N * FC * EF * H * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (kg/gallon)
			H = Hours per month
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_m = N * FC * EF * H / 1{,}000 * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (g/gallon)
			H = Hours per month
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Vehicle Exhaust and Paved and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_d = N * VMT * EF / 453.6$	E_d = Emissions (lbs/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = EMFAC2007 emission factor (g/mile). Paved and unpaved road fugitive PM_{10} and $PM_{2.5}$ emission factors calculated per Sections 13.2.1 and 13.2.2 of AP-42, respectively.
			453.6 = Conversion from g to lbs
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.41R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Bldgs. 33 & 34 Construction

Emission Source	Pollutant(s)	Equation	Variables
Onsite and Offsite Vehicle Exhaust	CO_2	$E_d = N * VMT / FE * EF * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			FE = Fuel economy (mpg)
			EF = Emission factor (kg/gallon)
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_d = N * VMT * EF / 1,000 * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = Emission factor (g/mile)
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Grading	PM_{10} and $PM_{2.5}$	$E_d = EF x A / W x 43,560 / 5,280 / D$	E_d = Emissions (lbs/day)
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/mile), calculated per Section 4.3 of Appendix A of the CalEEMod User's Guide.
			A = Site disturbed (acres/month)
			W = Grading equipment blade width (ft)
			43,560 = Conversion factor from square feet to acres
			5,280 = Conversion factor from feet to miles
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2,000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Bulldozing	PM_{10} and $PM_{2.5}$	$E_d = EF x H / D$	E_d = Emissions (lbs/day)
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/mile), calculated per Section 4.3 of Appendix A of the CalEEMod User's Guide.
			H = Hours per month for all bulldozers
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2,000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

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Table 5.1A.42R Number of Onsite Construction Equipment and Motor Vehicles

Number of Onsite Equipment for Bldgs. 33 & 34 Construction

Onsite Equipment	Number per Month [a]													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Grader	0	1	1	1	1	1	0	0	0	0	0	0	0	0
Cranes	0	0	0	1	1	1	1	1	1	1	1	1	1	1
Tractor/Loader/Backhoe [b]	0	1	1	1	1	1	0	0	0	0	0	0	0	0
Rubber Tired Loader [c]	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Crawler Tractor [d]	0	1	1	1	1	1	0	0	0	0	0	0	0	0
Air Compressor	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Roller [e]	0	1	1	1	1	1	0	0	0	0	0	0	0	0

Notes:

[a] Equipment counts taken from 'HBEP Equipment Usage 01.21.13.xls'.

[b] Numbers presented for Tractor/Loader/Backhoe includes the equipment counts for the Backhoe.

[c] Numbers presented for Rubber Tired Loader includes the equipment counts for the Front End Loader.

[d] Numbers presented for Crawler Tractor includes the equipment counts for the Dozer

[e] Numbers presented for Roller includes the equipment counts for the Compactor.

Number of Onsite Motor Vehicles for Bldgs. 33 & 34 Construction

Vehicle Type	Number per Month [a]													
	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Onsite Pick-up Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Stake Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Dump Truck	0	1	1	1	0	0	0	0	0	0	0	0	0	0

Notes:

[a] Vehicle counts taken from 'HBEP Equipment Usage 01.21.13.xls'.

Table 5.1A.43R Construction Equipment Exhaust Criteria Pollutant Emission Factors

Construction Equipment Emission Factors for Bldgs. 33 & 34 Construction

Equipment [a]	Percent Usage [b]	Hours per Month [c]	Horsepower [d]	Load Factor [d]	Emission Factors (g/bhp-hr) [e]									Fuel Consumption (gallons/hour) [f]
					CO	VOC	NO_X 2021	NO_X 2022	SO_X	PM_{10} 2021	PM_{10} 2022	$PM_{2.5}$ 2021	$PM_{2.5}$ 2022	
Grader	80%	184	162	0.61	3.337	0.391	2.300	2.046	0.006	0.122	0.107	0.122	0.107	5.64
Cranes	65%	150	208	0.43	1.219	0.337	2.231	1.979	0.006	0.077	0.068	0.077	0.068	5.07
Tractor/Loader/Backhoe	55%	127	75	0.55	3.728	0.373	2.499	2.321	0.006	0.118	0.099	0.118	0.099	2.36
Rubber Tired Loader	55%	127	87	0.54	3.820	0.501	3.155	2.929	0.006	0.198	0.171	0.198	0.171	2.69
Crawler Tractor	80%	184	82	0.64	3.977	0.673	3.959	3.710	0.006	0.290	0.262	0.290	0.262	3.01
Air Compressor	80%	184	78	0.48	3.670	0.442	3.083	2.844	0.006	0.190	0.165	0.190	0.165	2.14
Roller	60%	138	84	0.56	3.712	0.509	3.395	3.150	0.006	0.228	0.199	0.228	0.199	2.69

Notes:

[a] Assumed all equipment is fired with diesel fuel, per Section 4.2 of Appendix A of the CalEEMod User's Guide.

[b] Percent Usage assumed typical of power plant construction.

[c] Hours per month calculated based on the following schedule, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Work hours per day: 10
Work days per month: 23

[d] Construction equipment horsepower and load factor taken from Table 3.3 of Appendix D of the CalEEMod User's Guide.

[e] Construction equipment emission factors taken from Table 3.4 of Appendix D of the CalEEMod User's Guide. The emission factors for the year 2021 were used for the construction equipment exhaust emission calculations for CO, VOC, and SOx. The emission factors for years 2021 and 2022 were used for NOx, PM10, and PM2.5.

[f] Fuel consumption based on consumption in the OFFROAD2007 model for the SCAB in the year 2021; value estimated by dividing the reported consumption (gallons/day) by the reported activity (hours/day).

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Table 5.1A.44R Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors

Vehicle Emission Factors for Bldgs. 33 & 34 Construction

Vehicle Type	Vehicle Class [a]	Exhaust Emission Factors (g/mile) [b]									Paved Road Emission Factors (g/mile) [c]		Fuel Economy (mpg) [b]
		CO	VOC	SO_X	NO_X 2021	NO_X 2022	PM_{10} 2021	PM_{10} 2022	$PM_{2.5}$ 2021	$PM_{2.5}$ 2022	PM_{10}	$PM_{2.5}$	
Onsite Pick-up Truck	Light-duty Truck	2.402	0.143	0.011	0.223	0.207	0.128	0.129	0.106	0.107	N/A	N/A	7.473
Onsite Stake Truck	Heavy-duty Diesel	7.170	3.891	0.037	11.246	10.375	0.430	0.368	0.357	0.301	N/A	N/A	2.621
Onsite Dump Truck	Heavy-duty Diesel	7.170	3.891	0.037	11.246	10.375	0.430	0.368	0.357	0.301	N/A	N/A	2.621
Offsite Delivery Trucks	Heavy-duty Diesel	1.516	0.313	0.017	3.805	3.481	0.201	0.190	0.147	0.137	0.300	0.075	5.749
Material Hauling Trucks	Heavy/Medium-duty Diesel	1.296	0.210	0.016	2.973	2.587	0.175	0.168	0.135	0.128	0.300	0.075	6.224
Construction Worker Commute	Light-duty Auto/Truck	1.015	0.016	0.003	0.090	0.336	0.033	0.033	0.018	0.018	0.300	0.075	27.539

Notes:

[a] The vehicle classes are represented as follows:

Light-duty Truck: Assumed to be an average of LDT1, All and LDT2, All values.
Heavy-duty Diesel: Assumed to be 100% HHD DSL values, as confirmed in Section 4.5 of Appendix A of the CalEEMod User's Guide.
Heavy/Medium-duty Diesel: 50% HHD DSL and 50% MHD DSL values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.
Light-duty Auto/Truck: 50% LDA, All; 25% LDT1, All; and 25% LDT2, All values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.

[b] Exhaust emission factors and fuel economy from EMFAC2007 for the South Coast Air Basin, calendar year 2021 for CO, VOC, and SOx. Calendar years 2021 and 2022 were used for NOx, PM10, and PM2.5. A speed of 5 mph was assumed for onsite vehicles; a speed of 40 mph was assumed for offsite vehicles and worker commutes, which is consistent with the CalEEMod defaults. An average temperature of 68°F and humidity of 55% were used per Table B-1 of CT-EMFAC: A Computer Model to Estimate Transportation Project Emissions.

[c] Paved road emission factors calculated using CalEEMod methodology, as described below.

Derivation of Paved Road Emission Factors

Vehicles on Paved Roads

Parameter	PM_{10}	$PM_{2.5}$
Average Weight [a]	2.4	2.4
k [b]	1.0	0.25
sL [a]	0.1	0.1
Emission Factor (g/mile) [c]	0.300	0.075

Notes:

[a] Average Weight and sL taken as the default value from CalEEMod.

[b] k taken from Table 13.2.1-1 of Section 13.2.1 of AP-42.

[c] Emission factor calculated using Equation 1 from Section 13.2.1 of AP-42:

$$\text{Emission Factor (g/mile)} = k \text{ (g/mile)} \times [sL \text{ (g/m}^2)]^{0.91} \times [\text{Average Weight (tons)}]^{1.02}$$

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Table 5.1A.45R Onsite and Offsite Greenhouse Gas Emission Factors

Greenhouse Gas Emission Factors for Bldgs. 33 & 34 Construction

Fuel / Category Type	Emission Factor	Emission Factor Units	Emission Factor Source
CO_2 Emission Factors			
Gasoline	8.78	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
Diesel	10.21	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
N_2O Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0036	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0066	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0048	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.26	g N_2O/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.
CH_4 Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0173	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0163	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0051	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.58	g CH_4/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.

Notes:

[a] Model Year 2009 was the most recent year of emission factors available. As a result, it was assumed representative of vehicles used for this project.

Table 5.1A.46R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite CO Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	642.06	642.06	640.80	811.24	868.31	868.31	868.31	868.31	998.25	957.75	957.75	963.80	1,098.33	1,098.33	1,098.33																	
Total (lbs/day)	27.92	27.92	27.86	35.27	37.75	37.75	37.75	37.75	43.40	41.64	41.64	41.90	47.75	47.75	47.75																	
Block 1 Construction																																
Total (lbs/month)																1,292.23	1,292.23	1,153.77	1,232.42	820.88	603.94	682.04	682.04	721.36	721.36	680.95	680.95	720.27	590.44	551.12	551.12	551.12
Total (lbs/day)																56.18	56.18	50.16	53.58	35.69	26.26	29.65	29.65	31.36	31.36	29.61	29.61	31.32	25.67	23.96	23.96	23.96
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite CO Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**642.06**	**642.06**	**640.80**	**811.24**	**868.31**	**868.31**	**868.31**	**868.31**	**998.25**	**957.75**	**957.75**	**963.80**	**1,098.33**	**1,098.33**	**1,098.33**	**1,292.23**	**1,292.23**	**1,153.77**	**1,232.42**	**820.88**	**603.94**	**682.04**	**682.04**	**721.36**	**721.36**	**680.95**	**680.95**	**720.27**	**590.44**	**551.12**	**551.12**	**551.12**
Pounds per Day	**27.92**	**27.92**	**27.86**	**35.27**	**37.75**	**37.75**	**37.75**	**37.75**	**43.40**	**41.64**	**41.64**	**41.90**	**47.75**	**47.75**	**47.75**	**56.18**	**56.18**	**50.16**	**53.58**	**35.69**	**26.26**	**29.65**	**29.65**	**31.36**	**31.36**	**29.61**	**29.61**	**31.32**	**25.67**	**23.96**	**23.96**	**23.96**
Yearly Maximums	**10,087**	**10,543**	**10,999**	**11,457**	**11,938**	**12,362**	**12,647**	**13,011**	**12,964**	**12,570**	**12,294**	**12,018**	**11,776**	**11,399**	**10,982**	**10,564**	**9,992**	**9,290**	**8,688**	**8,006**	**7,737**	**7,684**	**7,474**	**7,265**	**7,370**	**8,237**	**9,145**	**9,727**	**10,267**	**10,713**	**11,015**	**11,317**

Maximum Pounds per Day	**69.06**
Maximum Pounds per Hour [a]	**6.91**
Maximum Pounds per Month	**1,588.30**
Month with Maximum	**37 or 38**
Maximum Pounds per Year	**14,505**
Maximum Average Pounds per Hour [b]	**1.66**
Year with Maximum	**Months 78 - 89**
Tons per Year	**7.25**

Onsite VOC Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	133.40	133.40	144.82	179.14	187.42	187.42	187.42	187.42	207.94	194.14	194.14	198.92	222.77	222.77	222.77																	
Total (lbs/day)	5.80	5.80	6.30	7.79	8.15	8.15	8.15	8.15	9.04	8.44	8.44	8.65	9.69	9.69	9.69																	
Block 1 Construction																																
Total (lbs/month)																235.92	235.92	206.45	232.57	161.54	122.85	148.65	148.65	161.71	161.71	148.01	148.01	161.07	142.09	129.03	129.03	129.03
Total (lbs/day)																10.26	10.26	8.98	10.11	7.02	5.34	6.46	6.46	7.03	7.03	6.44	6.44	7.00	6.18	5.61	5.61	5.61
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite VOC Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**133.40**	**133.40**	**144.82**	**179.14**	**187.42**	**187.42**	**187.42**	**187.42**	**207.94**	**194.14**	**194.14**	**198.92**	**222.77**	**222.77**	**222.77**	**235.92**	**235.92**	**206.45**	**232.57**	**161.54**	**122.85**	**148.65**	**148.65**	**161.71**	**161.71**	**148.01**	**148.01**	**161.07**	**142.09**	**129.03**	**129.03**	**129.03**
Pounds per Day	**5.80**	**5.80**	**6.30**	**7.79**	**8.15**	**8.15**	**8.15**	**8.15**	**9.04**	**8.44**	**8.44**	**8.65**	**9.69**	**9.69**	**9.69**	**10.26**	**10.26**	**8.98**	**10.11**	**7.02**	**5.34**	**6.46**	**6.46**	**7.03**	**7.03**	**6.44**	**6.44**	**7.00**	**6.18**	**5.61**	**5.61**	**5.61**
Yearly Maximums	**2,136**	**2,225**	**2,314**	**2,392**	**2,449**	**2,498**	**2,517**	**2,562**	**2,536**	**2,451**	**2,405**	**2,360**	**2,323**	**2,261**	**2,187**	**2,112**	**2,037**	**1,943**	**1,866**	**1,762**	**1,730**	**1,736**	**1,690**	**1,645**	**1,649**	**1,764**	**1,894**	**1,968**	**2,027**	**2,072**	**2,113**	**2,154**

Maximum Pounds per Day	**12.05**
Maximum Pounds per Hour [a]	**1.21**
Maximum Pounds per Month	**277.25**
Month with Maximum	**37 or 38**
Maximum Pounds per Year	**2,562**
Maximum Average Pounds per Hour [b]	**0.29**
Year with Maximum	**Months 8 - 19**
Tons per Year	**1.28**

Onsite NOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	894.53	894.53	1,018.01	1,286.40	1,345.15	1,345.15	1,345.15	1,345.15	1,489.83	1,231.65	1,231.65	1,259.93	1,418.47	1,418.47	1,418.47																	
Total (lbs/day)	38.89	38.89	44.26	55.93	58.48	58.48	58.48	58.48	64.78	53.55	53.55	54.78	61.67	61.67	61.67																	
Block 1 Construction																																
Total (lbs/month)																1,441.95	1,441.95	1,263.68	1,488.78	1,103.48	858.06	974.85	974.85	1,076.90	1,076.90	973.16	973.16	1,075.22	962.28	860.23	860.23	860.23
Total (lbs/day)																62.69	62.69	54.94	64.73	47.98	37.31	42.38	42.38	46.82	46.82	42.31	42.31	46.75	41.84	37.40	37.40	37.40
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite NOx Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**894.53**	**894.53**	**1,018.01**	**1,286.40**	**1,345.15**	**1,345.15**	**1,345.15**	**1,345.15**	**1,489.83**	**1,231.65**	**1,231.65**	**1,259.93**	**1,418.47**	**1,418.47**	**1,418.47**	**1,441.95**	**1,441.95**	**1,263.68**	**1,488.78**	**1,103.48**	**858.06**	**974.85**	**974.85**	**1,076.90**	**1,076.90**	**973.16**	**973.16**	**1,075.22**	**962.28**	**860.23**	**860.23**	**860.23**
Pounds per Day	**38.89**	**38.89**	**44.26**	**55.93**	**58.48**	**58.48**	**58.48**	**58.48**	**64.78**	**53.55**	**53.55**	**54.78**	**61.67**	**61.67**	**61.67**	**62.69**	**62.69**	**54.94**	**64.73**	**47.98**	**37.31**	**42.38**	**42.38**	**46.82**	**46.82**	**42.31**	**42.31**	**46.75**	**41.84**	**37.40**	**37.40**	**37.40**
Yearly Maximums	**14,687**	**15,211**	**15,735**	**16,135**	**16,291**	**16,388**	**16,306**	**16,450**	**16,208**	**15,577**	**15,320**	**15,063**	**14,880**	**14,538**	**14,093**	**13,648**	**13,281**	**12,801**	**12,398**	**11,769**	**11,526**	**11,528**	**11,143**	**10,758**	**10,675**	**11,304**	**12,037**	**12,426**	**12,712**	**12,894**	**13,123**	**13,352**

Maximum Pounds per Day	**74.19**
Maximum Pounds per Hour [a]	**7.42**
Maximum Pounds per Month	**1,706.30**
Month with Maximum	**37 or 38**
Maximum Pounds per Year	**16,450**
Maximum Average Pounds per Hour [b]	**1.88**
Year with Maximum	**Months 8 - 19**
Tons per Year	**8.22**

Table 5.1A.46R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite SOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	1.22	1.22	1.43	1.84	1.94	1.94	1.94	1.94	2.18	2.00	2.00	1.99	2.23	2.23	2.23																	
Total (lbs/day)	0.05	0.05	0.06	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10																	
Block 1 Construction																																
Total (lbs/month)																2.34	2.34	2.14	2.49	1.77	1.41	1.76	1.76	1.94	1.94	1.76	1.76	1.93	1.70	1.52	1.52	1.52
Total (lbs/day)																0.10	0.10	0.09	0.11	0.08	0.06	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite SOx Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**1.22**	**1.22**	**1.43**	**1.84**	**1.94**	**1.94**	**1.94**	**1.94**	**2.18**	**2.00**	**2.00**	**1.99**	**2.23**	**2.23**	**2.23**	**2.34**	**2.34**	**2.14**	**2.49**	**1.77**	**1.41**	**1.76**	**1.76**	**1.94**	**1.94**	**1.76**	**1.76**	**1.93**	**1.70**	**1.52**	**1.52**	**1.52**
Pounds per Day	**0.05**	**0.05**	**0.06**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.09**	**0.09**	**0.09**	**0.09**	**0.10**	**0.10**	**0.10**	**0.10**	**0.10**	**0.09**	**0.11**	**0.08**	**0.06**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.08**	**0.07**	**0.07**	**0.07**	**0.07**
Yearly Maximums	**22**	**23**	**24**	**24**	**25**	**25**	**26**	**26**	**26**	**25**	**25**	**25**	**25**	**24**	**24**	**23**	**23**	**22**	**22**	**21**	**21**	**21**	**20**	**19**	**19**	**21**	**22**	**23**	**24**	**25**	**25**	**26**

Maximum Pounds per Day	**0.14**
Maximum Pounds per Hour [a]	**0.01**
Maximum Pounds per Month	**3.24**
Month with Maximum	**37 or 38**
Maximum Pounds per Year	**32**
Maximum Average Pounds per Hour [b]	**0.00**
Year with Maximum	**Months 78 - 89**
Tons per Year	**0.02**

Onsite Exhaust PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	57.43	57.43	59.12	71.26	74.46	74.46	74.46	74.46	82.32	69.47	69.47	73.22	81.96	81.96	81.96																	
Total (lbs/day)	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.02	3.02	3.18	3.56	3.56	3.56																	
Block 1 Construction																																
Total (lbs/month)																98.69	98.69	84.01	91.73	62.56	45.87	47.30	47.30	50.77	50.77	47.21	47.21	50.69	44.71	41.23	41.23	41.23
Total (lbs/day)																4.29	4.29	3.65	3.99	2.72	1.99	2.06	2.06	2.21	2.21	2.05	2.05	2.20	1.94	1.79	1.79	1.79
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**57.43**	**57.43**	**59.12**	**71.26**	**74.46**	**74.46**	**74.46**	**74.46**	**82.32**	**69.47**	**69.47**	**73.22**	**81.96**	**81.96**	**81.96**	**98.69**	**98.69**	**84.01**	**91.73**	**62.56**	**45.87**	**47.30**	**47.30**	**50.77**	**50.77**	**47.21**	**47.21**	**50.69**	**44.71**	**41.23**	**41.23**	**41.23**
Pounds per Day	**2.50**	**2.50**	**2.57**	**3.10**	**3.24**	**3.24**	**3.24**	**3.24**	**3.58**	**3.02**	**3.02**	**3.18**	**3.56**	**3.56**	**3.56**	**4.29**	**4.29**	**3.65**	**3.99**	**2.72**	**1.99**	**2.06**	**2.06**	**2.21**	**2.21**	**2.05**	**2.05**	**2.20**	**1.94**	**1.79**	**1.79**	**1.79**
Yearly Maximums	**838**	**862**	**887**	**909**	**937**	**961**	**971**	**988**	**976**	**940**	**917**	**895**	**873**	**842**	**807**	**772**	**724**	**670**	**627**	**577**	**556**	**551**	**534**	**516**	**518**	**565**	**616**	**642**	**665**	**683**	**694**	**705**

Maximum Pounds per Day	**4.29**
Maximum Pounds per Hour [a]	**0.43**
Maximum Pounds per Month	**98.69**
Month with Maximum	**16 or 17**
Maximum Pounds per Year	**988**
Maximum Average Pounds per Hour [b]	**0.11**
Year with Maximum	**Months 8 - 19**
Tons per Year	**0.49**

Onsite Fugitive PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	209.69	209.69	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	209.69	209.69	209.69	209.69																	
Total (lbs/day)	9.12	9.12	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	9.12	9.12	9.12	9.12																	
Block 1 Construction																																
Total (lbs/month)																680.64	680.64	437.80	437.80	437.25	194.41	174.97	174.97	174.97	174.97	136.09	136.09	136.09	136.09	136.09	136.09	136.09
Total (lbs/day)																29.59	29.59	19.03	19.03	19.01	8.45	7.61	7.61	7.61	7.61	5.92	5.92	5.92	5.92	5.92	5.92	5.92
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																
Pounds per Month	**209.69**	**209.69**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**209.69**	**209.69**	**209.69**	**209.69**	**680.64**	**680.64**	**437.80**	**437.80**	**437.25**	**194.41**	**174.97**	**174.97**	**174.97**	**174.97**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**
Pounds per Day	**9.12**	**9.12**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**9.12**	**9.12**	**9.12**	**9.12**	**29.59**	**29.59**	**19.03**	**19.03**	**19.01**	**8.45**	**7.61**	**7.61**	**7.61**	**7.61**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**
Yearly Maximums	**2,866**	**2,866**	**2,866**	**2,827**	**3,259**	**3,691**	**3,881**	**4,070**	**4,259**	**4,204**	**4,131**	**4,057**	**4,023**	**3,988**	**3,914**	**3,841**	**3,296**	**2,751**	**2,450**	**2,148**	**1,847**	**1,789**	**1,750**	**1,711**	**2,012**	**2,654**	**3,334**	**3,772**	**4,190**	**4,607**	**4,782**	**4,938**

Maximum Pounds per Day	**35.50**
Maximum Pounds per Hour [a]	**3.55**
Maximum Pounds per Month	**816.45**
Month with Maximum	**37 or 38**
Maximum Pounds per Year	**5,341**
Maximum Average Pounds per Hour [b]	**0.61**
Year with Maximum	**Months 77 - 88 or 78 - 89**
Tons per Year	**2.67**

Table 5.1A.46R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Pounds per Month	267.12	267.12	307.69	319.83	323.02	323.02	323.02	323.02	330.89	318.04	318.04	282.91	291.65	291.65	291.65	779.33	779.33	521.81	529.53	499.81	240.27	222.26	222.26	225.74	225.74	183.30	183.30	186.77	180.80	177.32	177.32	177.32
Pounds per Day	11.61	11.61	13.38	13.91	14.04	14.04	14.04	14.04	14.39	13.83	13.83	12.30	12.68	12.68	12.68	33.88	33.88	22.69	23.02	21.73	10.45	9.66	9.66	9.81	9.81	7.97	7.97	8.12	7.86	7.71	7.71	7.71
Yearly Maximums	3,704	3,728	3,753	3,737	4,196	4,653	4,851	5,058	5,235	5,144	5,048	4,952	4,895	4,829	4,721	4,613	4,020	3,422	3,077	2,725	2,402	2,339	2,283	2,227	2,531	3,219	3,950	4,414	4,855	5,290	5,476	5,643
Maximum Pounds per Day	39.75																															
Maximum Pounds per Hour [a]	3.97																															
Maximum Pounds per Month	914.14																															
Month with Maximum	37 or 38																															
Maximum Pounds per Year	6,055																															
Maximum Average Pounds per Hour [b]	0.69																															
Year with Maximum	Months 36 - 47																															
Tons per Year	3.03																															

Onsite Exhaust $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	57.40	57.40	59.07	71.22	74.41	74.41	74.41	74.41	82.28	69.43	69.43	73.19	81.93	81.93	81.93																	
Total (lbs/day)	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.02	3.02	3.18	3.56	3.56	3.56																	
Block 1 Construction																																
Total (lbs/month)																98.65	98.65	83.97	91.69	62.52	45.83	47.26	47.26	50.74	50.74	47.19	47.19	50.67	44.69	41.21	41.21	41.21
Total (lbs/day)																4.29	4.29	3.65	3.99	2.72	1.99	2.05	2.05	2.21	2.21	2.05	2.05	2.20	1.94	1.79	1.79	1.79
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	57.40	57.40	59.07	71.22	74.41	74.41	74.41	74.41	82.28	69.43	69.43	73.19	81.93	81.93	81.93	98.65	98.65	83.97	91.69	62.52	45.83	47.26	47.26	50.74	50.74	47.19	47.19	50.67	44.69	41.21	41.21	41.21
Pounds per Day	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.02	3.02	3.18	3.56	3.56	3.56	4.29	4.29	3.65	3.99	2.72	1.99	2.05	2.05	2.21	2.21	2.05	2.05	2.20	1.94	1.79	1.79	1.79
Yearly Maximums	837	862	886	909	936	961	970	987	976	939	917	895	872	841	806	772	724	670	627	577	555	551	533	516	518	565	615	642	665	682	693	705
Maximum Pounds per Day	4.29																															
Maximum Pounds per Hour [a]	0.43																															
Maximum Pounds per Month	98.65																															
Month with Maximum	16 or 17																															
Maximum Pounds per Year	987																															
Maximum Average Pounds per Hour [b]	0.11																															
Year with Maximum	Months 8 - 19																															
Tons per Year	0.49																															

Onsite Fugitive $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)	23.75	23.75	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	23.75	23.75	23.75	23.75																	
Total (lbs/day)	1.03	1.03	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.03	1.03	1.03	1.03																	
Block 1 Construction																																
Total (lbs/month)																137.15	137.15	78.33	78.33	78.27	19.44	17.50	17.50	17.50	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61
Total (lbs/day)																5.96	5.96	3.41	3.41	3.40	0.85	0.76	0.76	0.76	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Block 2 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																
Pounds per Month	23.75	23.75	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	23.75	23.75	23.75	23.75	137.15	137.15	78.33	78.33	78.27	19.44	17.50	17.50	17.50	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61
Pounds per Day	1.03	1.03	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.03	1.03	1.03	1.03	5.96	5.96	3.41	3.41	3.40	0.85	0.76	0.76	0.76	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Yearly Maximums	320	320	320	316	426	535	586	637	687	679	669	659	652	646	636	626	502	379	314	249	185	179	175	171	236	369	506	584	661	737	755	770
Maximum Pounds per Day	6.55																															
Maximum Pounds per Hour [a]	0.66																															
Maximum Pounds per Month	150.73																															
Month with Maximum	37 or 38																															
Maximum Pounds per Year	808																															
Maximum Average Pounds per Hour [b]	0.09																															
Year with Maximum	Months 77 - 88 or 78 - 89																															
Tons per Year	0.40																															

Table 5.1A.46R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Pounds per Month	81.16	81.16	86.72	98.86	102.05	102.05	102.05	102.05	109.92	97.07	97.07	96.95	105.69	105.69	105.69	235.80	235.80	162.29	170.02	140.79	65.27	64.76	64.76	68.24	68.24	60.80	60.80	64.28	58.30	54.82	54.82	54.82
Pounds per Day	3.53	3.53	3.77	4.30	4.44	4.44	4.44	4.44	4.78	4.22	4.22	4.22	4.60	4.60	4.60	10.25	10.25	7.06	7.39	6.12	2.84	2.82	2.82	2.97	2.97	2.64	2.64	2.79	2.53	2.38	2.38	2.38
Yearly Maximums	1,157	1,182	1,206	1,225	1,362	1,496	1,556	1,624	1,663	1,618	1,586	1,553	1,525	1,487	1,442	1,398	1,226	1,049	941	826	740	729	708	687	754	934	1,122	1,226	1,326	1,419	1,448	1,475

Maximum Pounds per Day	10.80
Maximum Pounds per Hour [a]	1.080
Maximum Pounds per Month	248.36
Month with Maximum	37 or 38
Maximum Pounds per Year	1,663
Maximum Average Pounds per Hour [b]	0.190
Year with Maximum	Months 9 - 20
Tons per Year	0.83

Onsite CO_2 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (metric tons/month)	56.43	56.43	65.60	83.55	88.04	88.04	88.04	88.04	98.24	90.49	90.49	90.26	100.87	100.87	100.87																	
Total (metric tons/day)	2.45	2.45	2.85	3.63	3.83	3.83	3.83	3.83	4.27	3.93	3.93	3.92	4.39	4.39	4.39																	
Block 1 Construction																																
Total (metric tons/month)																105.87	105.87	96.74	112.25	80.27	64.41	79.83	79.83	87.59	87.59	79.65	79.65	87.41	77.21	69.45	69.45	69.45
Total (metric tons/day)																4.60	4.60	4.21	4.88	3.49	2.80	3.47	3.47	3.81	3.81	3.46	3.46	3.80	3.36	3.02	3.02	3.02
Block 2 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Units 1 & 2 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Bldgs. 33 & 34 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Total Onsite CO_2 Emissions (Construction Equipment and Vehicles)																																
Metric Tons per Month	56.43	56.43	65.60	83.55	88.04	88.04	88.04	88.04	98.24	90.49	90.49	90.26	100.87	100.87	100.87	105.87	105.87	96.74	112.25	80.27	64.41	79.83	79.83	87.59	87.59	79.65	79.65	87.41	77.21	69.45	69.45	69.45
Metric Tons per Day	2.45	2.45	2.85	3.63	3.83	3.83	3.83	3.83	4.27	3.93	3.93	3.92	4.39	4.39	4.39	4.60	4.60	4.21	4.88	3.49	2.80	3.47	3.47	3.81	3.81	3.46	3.46	3.80	3.36	3.02	3.02	3.02
Yearly Maximums	984	1,028	1,073	1,108	1,130	1,148	1,157	1,181	1,173	1,139	1,129	1,118	1,115	1,102	1,081	1,060	1,041	1,012	985	942	932	937	911	885	888	948	1,016	1,061	1,097	1,127	1,160	1,194

Maximum Metric Tons per Day	6.42
Maximum Metric Tons per Hour [a]	0.64
Maximum Metric Tons per Month	147.75
Month with Maximum	37 or 38
Maximum Metric Tons per Year	1,427
Maximum Average Metric Tons per Hour [b]	0.16
Year with Maximum	Months 78 - 89

Onsite N_2O Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (metric tons/month)	0.00143	0.00143	0.00166	0.00211	0.00223	0.00223	0.00223	0.00223	0.00249	0.00229	0.00229	0.00229	0.00256	0.00256	0.00256																	
Total (metric tons/day)	0.00006	0.00006	0.00007	0.00009	0.00010	0.00010	0.00010	0.00010	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011	0.00011																	
Block 1 Construction																																
Total (metric tons/month)																0.00268	0.00268	0.00245	0.00284	0.00203	0.00163	0.00202	0.00202	0.00222	0.00222	0.00202	0.00202	0.00222	0.00196	0.00176	0.00176	0.00176
Total (metric tons/day)																0.00012	0.00012	0.00011	0.00012	0.00009	0.00007	0.00009	0.00009	0.00010	0.00010	0.00009	0.00009	0.00010	0.00009	0.00008	0.00008	0.00008
Block 2 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Units 1 & 2 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Bldgs. 33 & 34 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Total Onsite N_2O Emissions (Construction Equipment and Vehicles)																																
Metric Tons per Month	0.00143	0.00143	0.00166	0.00211	0.00223	0.00223	0.00223	0.00223	0.00249	0.00229	0.00229	0.00229	0.00256	0.00256	0.00256	0.00268	0.00268	0.00245	0.00284	0.00203	0.00163	0.00202	0.00202	0.00222	0.00222	0.00202	0.00202	0.00222	0.00196	0.00176	0.00176	0.00176
Metric Tons per Day	0.00006	0.00006	0.00007	0.00009	0.00010	0.00010	0.00010	0.00010	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011	0.00011	0.00012	0.00012	0.00011	0.00012	0.00009	0.00007	0.00009	0.00009	0.00010	0.00010	0.00009	0.00009	0.00010	0.00009	0.00008	0.00008	0.00008
Yearly Maximums	0.02488	0.02601	0.02714	0.02805	0.02861	0.02907	0.02929	0.02991	0.02971	0.02885	0.02858	0.02831	0.02824	0.02790	0.02736	0.02682	0.02636	0.02563	0.02495	0.02386	0.02359	0.02373	0.02307	0.02242	0.02249	0.02401	0.02573	0.02685	0.02777	0.02851	0.02935	0.03020

Maximum Metric Tons per Day	0.000163
Maximum Metric Tons per Hour [a]	0.0000163
Maximum Metric Tons per Month	0.00374
Month with Maximum	37 or 38
Maximum Metric Tons per Year	0.03619
Maximum Average Metric Tons per Hour [b]	0.00000413
Year with Maximum	Months 78 - 89

Onsite CH_4 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (metric tons/month)	0.00318	0.00318	0.00369	0.00471	0.00497	0.00497	0.00497	0.00497	0.00555	0.00511	0.00511	0.00510	0.00571	0.00571	0.00571																	
Total (metric tons/day)	0.00014	0.00014	0.00016	0.00020	0.00022	0.00022	0.00022	0.00022	0.00024	0.00022	0.00022	0.00022	0.00025	0.00025	0.00025																	
Block 1 Construction																																
Total (metric tons/month)																0.00598	0.00598	0.00546	0.00634	0.00453	0.00362	0.00451	0.00451	0.00495	0.00495	0.00451	0.00451	0.00495	0.00437	0.00393	0.00393	0.00393
Total (metric tons/day)																0.00026	0.00026	0.00024	0.00028	0.00020	0.00016	0.00020	0.00020	0.00022	0.00022	0.00020	0.00020	0.00022	0.00019	0.00017	0.00017	0.00017
Block 2 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Units 1 & 2 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Bldgs. 33 & 34 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Total Onsite CH_4 Emissions (Construction Equipment and Vehicles)																																
Metric Tons per Month	0.00318	0.00318	0.00369	0.00471	0.00497	0.00497	0.00497	0.00497	0.00555	0.00511	0.00511	0.00510	0.00571	0.00571	0.00571	0.00598	0.00598	0.00546	0.00634	0.00453	0.00362	0.00451	0.00451	0.00495	0.00495	0.00451	0.00451	0.00495	0.00437	0.00393	0.00393	0.00393
Metric Tons per Day	0.00014	0.00014	0.00016	0.00020	0.00022	0.00022	0.00022	0.00022	0.00024	0.00022	0.00022	0.00022	0.00025	0.00025	0.00025	0.00026	0.00026	0.00024	0.00028	0.00020	0.00016	0.00020	0.00020	0.00022	0.00022	0.00020	0.00020	0.00022	0.00019	0.00017	0.00017	0.00017
Yearly Maximums	0.05549	0.05802	0.06054	0.06256	0.06382	0.06484	0.06533	0.06671	0.06627	0.06434	0.06374	0.06314	0.06299	0.06223	0.06103	0.05983	0.05879	0.05718	0.05564	0.05323	0.05263	0.05293	0.05147	0.05001	0.05016	0.05356	0.05739	0.05989	0.06195	0.06358	0.06547	0.06735

Maximum Metric Tons per Day	0.000363
Maximum Metric Tons per Hour [a]	0.0000363
Maximum Metric Tons per Month	0.00834
Month with Maximum	37 or 38
Maximum Metric Tons per Year	0.08072
Maximum Average Metric Tons per Hour [b]	0.0000092
Year with Maximum	Months 78 - 89

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Beach 03.13.12.xls': 10 hours/day
[b] The hours per year are assumed to allow operation 24 hours per day, 7 days per week despite the actual construction schedule per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 8,760 hours/year

Table 5.1A.46R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite CO Emissions

	CO Emissions by Month																															
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	551.12	472.47	472.47	357.55	306.20	306.20	306.20	227.01	227.01	183.29	183.29	372.40	372.40																			
Total (lbs/day)	23.96	20.54	20.54	15.55	13.31	13.31	13.31	9.87	9.87	7.97	7.97	16.19	16.19																			
Block 2 Construction																																
Total (lbs/month)				469.54	1,282.09	1,282.09	957.23	1,032.52	810.23	669.84	669.38	669.38	707.03	669.38	668.47	743.76	706.11	538.80	538.80	538.80	538.80	463.51	349.45	298.70	298.70	298.70	298.70	298.70	222.96	411.07	411.07	
Total (lbs/day)				20.41	55.74	55.74	41.62	44.89	35.23	29.12	29.10	29.10	30.74	29.10	29.06	32.34	30.70	23.43	23.43	23.43	23.43	20.15	15.19	12.99	12.99	12.99	12.99	12.99	9.69	17.87	17.87	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite CO Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**551.12**	**472.47**	**472.47**	**827.09**	**1,588.30**	**1,588.30**	**1,263.44**	**1,259.53**	**1,037.24**	**853.13**	**852.68**	**1,041.78**	**1,079.43**	**669.38**	**668.47**	**743.76**	**706.11**	**538.80**	**538.80**	**538.80**	**538.80**	**463.51**	**349.45**	**298.70**	**298.70**	**298.70**	**298.70**	**298.70**	**222.96**	**411.07**	**411.07**	**0.00**
Pounds per Day	**23.96**	**20.54**	**20.54**	**35.96**	**69.06**	**69.06**	**54.93**	**54.76**	**45.10**	**37.09**	**37.07**	**45.29**	**46.93**	**29.10**	**29.06**	**32.34**	**30.70**	**23.43**	**23.43**	**23.43**	**23.43**	**20.15**	**15.19**	**12.99**	**12.99**	**12.99**	**12.99**	**12.99**	**9.69**	**17.87**	**17.87**	**0.00**
Yearly Maximums	**11,808**	**12,336**	**12,533**	**12,729**	**12,645**	**11,763**	**10,714**	**9,989**	**9,268**	**8,770**	**8,380**	**7,877**	**7,134**	**6,353**	**5,983**	**5,613**	**5,168**	**4,685**	**4,557**	**4,429**	**3,890**	**3,352**	**2,888**	**3,191**	**3,544**	**4,085**	**4,625**	**5,295**	**5,965**	**6,674**	**7,195**	**7,716**
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite VOC Emissions

	VOC Emissions by Month																															
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	129.03	102.92	102.92	83.87	74.10	74.10	74.10	47.67	47.67	41.04	41.04	74.33	74.33																			
Total (lbs/day)	5.61	4.47	4.47	3.65	3.22	3.22	3.22	2.07	2.07	1.78	1.78	3.23	3.23																			
Block 2 Construction																																
Total (lbs/month)				82.06	203.15	203.15	148.63	172.09	139.18	129.19	128.94	128.94	140.67	128.94	128.42	151.88	140.15	112.34	112.34	112.34	112.34	88.87	72.98	64.65	64.65	64.65	64.65	64.65	40.93	69.74	69.74	
Total (lbs/day)				3.57	8.83	8.83	6.46	7.48	6.05	5.62	5.61	5.61	6.12	5.61	5.58	6.60	6.09	4.88	4.88	4.88	4.88	3.86	3.17	2.81	2.81	2.81	2.81	2.81	1.78	3.03	3.03	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite VOC Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**129.03**	**102.92**	**102.92**	**165.92**	**277.25**	**277.25**	**222.73**	**219.76**	**186.85**	**170.24**	**169.98**	**203.27**	**215.00**	**128.94**	**128.42**	**151.88**	**140.15**	**112.34**	**112.34**	**112.34**	**112.34**	**88.87**	**72.98**	**64.65**	**64.65**	**64.65**	**64.65**	**64.65**	**40.93**	**69.74**	**69.74**	**0.00**
Pounds per Day	**5.61**	**4.47**	**4.47**	**7.21**	**12.05**	**12.05**	**9.68**	**9.55**	**8.12**	**7.40**	**7.39**	**8.84**	**9.35**	**5.61**	**5.58**	**6.60**	**6.09**	**4.88**	**4.88**	**4.88**	**4.88**	**3.86**	**3.17**	**2.81**	**2.81**	**2.81**	**2.81**	**2.81**	**1.78**	**3.03**	**3.03**	**0.00**
Yearly Maximums	**2,228**	**2,314**	**2,340**	**2,366**	**2,352**	**2,214**	**2,050**	**1,939**	**1,832**	**1,757**	**1,676**	**1,579**	**1,440**	**1,290**	**1,226**	**1,162**	**1,075**	**975**	**933**	**890**	**778**	**666**	**577**	**608**	**648**	**707**	**766**	**839**	**911**	**997**	**1,055**	**1,112**
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite NOx Emissions

	NOx Emissions by Month																															
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	860.23	589.76	589.76	488.50	436.42	436.42	436.42	251.43	251.43	214.32	214.32	403.84	403.84																			
Total (lbs/day)	37.40	25.64	25.64	21.24	18.97	18.97	18.97	10.93	10.93	9.32	9.32	17.56	17.56																			
Block 2 Construction																																
Total (lbs/month)				505.06	1,269.88	1,269.88	925.54	1,109.78	892.78	875.27	874.52	874.52	966.64	783.13	781.76	947.25	864.50	695.29	695.29	695.29	695.29	529.80	438.73	390.56	390.56	348.76	348.76	348.76	200.33	356.05	356.05	
Total (lbs/day)				21.96	55.21	55.21	40.24	48.25	38.82	38.06	38.02	38.02	42.03	34.05	33.99	41.18	37.59	30.23	30.23	30.23	30.23	23.03	19.08	16.98	16.98	15.16	15.16	15.16	8.71	15.48	15.48	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite NOx Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**860.23**	**589.76**	**589.76**	**993.57**	**1,706.30**	**1,706.30**	**1,361.96**	**1,361.20**	**1,144.21**	**1,089.59**	**1,088.83**	**1,278.36**	**1,370.48**	**783.13**	**781.76**	**947.25**	**864.50**	**695.29**	**695.29**	**695.29**	**695.29**	**529.80**	**438.73**	**390.56**	**390.56**	**348.76**	**348.76**	**348.76**	**200.33**	**356.05**	**356.05**	**0.00**
Pounds per Day	**37.40**	**25.64**	**25.64**	**43.20**	**74.19**	**74.19**	**59.22**	**59.18**	**49.75**	**47.37**	**47.34**	**55.58**	**59.59**	**34.05**	**33.99**	**41.18**	**37.59**	**30.23**	**30.23**	**30.23**	**30.23**	**23.03**	**19.08**	**16.98**	**16.98**	**15.16**	**15.16**	**15.16**	**8.71**	**15.48**	**15.48**	**0.00**
Yearly Maximums	**13,770**	**14,280**	**14,474**	**14,666**	**14,619**	**13,778**	**12,767**	**12,100**	**11,434**	**10,985**	**10,425**	**9,775**	**8,887**	**7,907**	**7,473**	**7,040**	**6,442**	**5,777**	**5,438**	**5,099**	**4,404**	**3,708**	**3,179**	**3,379**	**3,627**	**3,981**	**4,290**	**4,666**	**5,041**	**5,499**	**5,802**	**6,104**
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Table 5.1A.46R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite SOx Emissions

Construction Step	SOx Emissions by Month																															
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	1.52	1.17	1.17	0.98	0.90	0.90	0.90	0.54	0.54	0.47	0.47	0.80	0.80																			
Total (lbs/day)	0.07	0.05	0.05	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.03	0.03																			
Block 2 Construction																																
Total (lbs/month)				0.97	2.34	2.34	1.81	2.17	1.77	1.76	1.76	1.76	1.94	1.76	1.76	2.11	1.93	1.52	1.52	1.52	1.52	1.17	0.98	0.90	0.90	0.90	0.90	0.90	0.54	0.87	0.87	
Total (lbs/day)				0.04	0.10	0.10	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.07	0.07	0.07	0.07	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.04	0.04	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite SOx Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**1.52**	**1.17**	**1.17**	**1.95**	**3.24**	**3.24**	**2.71**	**2.71**	**2.31**	**2.24**	**2.23**	**2.56**	**2.74**	**1.76**	**1.76**	**2.11**	**1.93**	**1.52**	**1.52**	**1.52**	**1.52**	**1.17**	**0.98**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.54**	**0.87**	**0.87**	**0.00**
Pounds per Day	**0.07**	**0.05**	**0.05**	**0.08**	**0.14**	**0.14**	**0.12**	**0.12**	**0.10**	**0.10**	**0.10**	**0.11**	**0.12**	**0.08**	**0.08**	**0.09**	**0.08**	**0.07**	**0.07**	**0.07**	**0.07**	**0.05**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.04**	**0.02**	**0.04**	**0.04**	**0.00**
Yearly Maximums	**27**	**28**	**29**	**29**	**30**	**28**	**27**	**25**	**24**	**23**	**22**	**21**	**19**	**18**	**17**	**16**	**15**	**13**	**13**	**12**	**10**	**9**	**8**	**8**	**9**	**10**	**11**	**13**	**14**	**15**	**17**	**18**
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite Exhaust PM_{10} Emissions

Construction Step	Exhaust PM_{10} Emissions by Month																															
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	41.23	30.10	30.10	23.38	19.50	19.50	19.50	13.15	13.15	10.84	10.84	22.59	22.59																			
Total (lbs/day)	1.79	1.31	1.31	1.02	0.85	0.85	0.85	0.57	0.57	0.47	0.47	0.98	0.98																			
Block 2 Construction																																
Total (lbs/month)				29.24	78.19	78.19	54.34	60.65	48.69	41.65	41.61	41.61	44.77	36.25	36.19	41.85	39.02	31.79	31.79	31.79	31.79	26.13	20.40	16.98	16.98	14.81	14.81	14.81	9.72	19.01	19.01	
Total (lbs/day)				1.27	3.40	3.40	2.36	2.64	2.12	1.81	1.81	1.81	1.95	1.58	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	**41.23**	**30.10**	**30.10**	**52.61**	**97.69**	**97.69**	**73.84**	**73.80**	**61.84**	**52.49**	**52.45**	**64.20**	**67.36**	**36.25**	**36.19**	**41.85**	**39.02**	**31.79**	**31.79**	**31.79**	**31.79**	**26.13**	**20.40**	**16.98**	**16.98**	**14.81**	**14.81**	**14.81**	**9.72**	**19.01**	**19.01**	**0.00**
Pounds per Day	**1.79**	**1.31**	**1.31**	**2.29**	**4.25**	**4.25**	**3.21**	**3.21**	**2.69**	**2.28**	**2.28**	**2.79**	**2.93**	**1.58**	**1.57**	**1.82**	**1.70**	**1.38**	**1.38**	**1.38**	**1.38**	**1.14**	**0.89**	**0.74**	**0.74**	**0.64**	**0.64**	**0.64**	**0.42**	**0.83**	**0.83**	**0.00**
Yearly Maximums	**728**	**754**	**760**	**766**	**756**	**697**	**631**	**589**	**547**	**517**	**491**	**459**	**411**	**361**	**340**	**318**	**291**	**262**	**249**	**236**	**204**	**173**	**147**	**156**	**168**	**186**	**202**	**220**	**239**	**261**	**273**	**285**
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite Fugitive PM_{10} Emissions

Construction Step	Fugitive PM_{10} Emissions by Month																															
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	136.09	136.09	136.09	136.09	136.09	136.09	136.09	116.64	116.64	116.64	116.64	117.20	117.20																			
Total (lbs/day)	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.07	5.07	5.07	5.07	5.10	5.10																			
Block 2 Construction																																
Total (lbs/month)				340.32	680.36	680.36	437.52	437.52	437.25	194.41	174.97	174.97	174.97	174.97	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	116.64	116.92	116.92	
Total (lbs/day)				14.80	29.58	29.58	19.02	19.02	19.01	8.45	7.61	7.61	7.61	7.61	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.07	5.08	5.08	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																
Pounds per Month	**136.09**	**136.09**	**136.09**	**476.40**	**816.45**	**816.45**	**573.61**	**554.17**	**553.90**	**311.05**	**291.61**	**292.16**	**292.16**	**174.97**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**136.09**	**116.64**	**116.92**	**116.92**	**0.00**
Pounds per Day	**5.92**	**5.92**	**5.92**	**20.71**	**35.50**	**35.50**	**24.94**	**24.09**	**24.08**	**13.52**	**12.68**	**12.70**	**12.70**	**7.61**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.92**	**5.07**	**5.08**	**5.08**	**0.00**
Yearly Maximums	**5,094**	**5,250**	**5,289**	**5,289**	**4,949**	**4,268**	**3,588**	**3,150**	**2,732**	**2,315**	**2,140**	**1,984**	**1,828**	**1,672**	**1,633**	**1,633**	**1,633**	**1,614**	**1,594**	**1,575**	**1,439**	**1,303**	**1,167**	**1,292**	**1,417**	**1,542**	**1,667**	**1,792**	**1,918**	**2,062**	**2,206**	**2,351**
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Table 5.1A.46R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite PM_{10} Emissions (Exhaust and Fugitive)

	Total PM_{10} Emissions by Month																													
Parameter	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Pounds per Month	177.32	166.19	166.19	529.02	914.14	914.14	647.45	627.97	615.73	363.54	344.06	356.37	359.52	211.22	172.27	177.93	175.10	167.88	167.88	167.88	167.88	162.22	156.48	153.06	153.06	150.90	150.90	150.90	126.36	135.93	135.93	0.00
Pounds per Day	7.71	7.23	7.23	23.00	39.75	39.75	28.15	27.30	26.77	15.81	14.96	15.49	15.63	9.18	7.49	7.74	7.61	7.30	7.30	7.30	7.30	7.05	6.80	6.65	6.65	6.56	6.56	6.56	5.49	5.91	5.91	0.00
Yearly Maximums	5,822	6,004	6,049	6,055	5,704	4,965	4,219	3,739	3,279	2,832	2,630	2,443	2,239	2,033	1,973	1,951	1,924	1,875	1,843	1,811	1,644	1,476	1,314	1,448	1,586	1,729	1,869	2,013	2,157	2,323	2,479	2,636
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite Exhaust $PM_{2.5}$ Emissions

	Exhaust $PM_{2.5}$ Emissions by Month																													
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	41.21	30.08	30.08	23.36	19.48	19.48	19.48	13.14	13.14	10.83	10.83	22.58	22.58																			
Total (lbs/day)	1.79	1.31	1.31	1.02	0.85	0.85	0.85	0.57	0.57	0.47	0.47	0.98	0.98																			
Block 2 Construction																																
Total (lbs/month)				29.22	78.15	78.15	54.31	60.62	48.65	41.61	41.58	41.58	44.74	36.22	36.17	41.83	39.00	31.77	31.77	31.77	31.77	26.11	20.38	16.96	16.96	14.80	14.80	14.80	9.71	19.00	19.00	
Total (lbs/day)				1.27	3.40	3.40	2.36	2.64	2.12	1.81	1.81	1.81	1.95	1.57	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																
Pounds per Month	41.21	30.08	30.08	52.58	97.63	97.63	73.79	73.76	61.79	52.44	52.41	64.16	67.31	36.22	36.17	41.83	39.00	31.77	31.77	31.77	31.77	26.11	20.38	16.96	16.96	14.80	14.80	14.80	9.71	19.00	19.00	0.00
Pounds per Day	1.79	1.31	1.31	2.29	4.24	4.24	3.21	3.21	2.69	2.28	2.28	2.79	2.93	1.57	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83	0.00
Yearly Maximums	728	754	760	766	755	697	631	589	547	517	490	458	411	361	339	318	291	262	249	236	204	173	146	156	168	186	202	220	239	260	273	285
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions by Month																													
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Block 1 Construction																																
Total (lbs/month)	13.61	13.61	13.61	13.61	13.61	13.61	13.61	11.66	11.66	11.66	11.66	11.72	11.72																			
Total (lbs/day)	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51	0.51	0.51	0.51																			
Block 2 Construction																																
Total (lbs/month)				68.57	137.12	137.12	78.29	78.29	78.27	19.44	17.50	17.50	17.50	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	11.66	11.69	11.69	
Total (lbs/day)				2.98	5.96	5.96	3.40	3.40	3.40	0.85	0.76	0.76	0.76	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51	
Units 1 & 2 Demolition																																
Total (lbs/month)																																
Total (lbs/day)																																
Bldgs. 33 & 34 Construction																																
Total (lbs/month)																																
Total (lbs/day)																																
Total Onsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																
Pounds per Month	13.61	13.61	13.61	82.18	150.73	150.73	91.90	89.96	89.93	31.11	29.16	29.22	29.22	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	11.66	11.69	11.69	0.00
Pounds per Day	0.59	0.59	0.59	3.57	6.55	6.55	4.00	3.91	3.91	1.35	1.27	1.27	1.27	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51	0.00
Yearly Maximums	786	801	805	805	737	600	462	384	308	231	214	198	183	167	163	163	163	161	159	158	144	130	117	138	159	180	200	221	242	265	288	311
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Table 5.1A.46R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

	Total $PM_{2.5}$ Emissions by Month																														
Parameter	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Pounds per Month	54.82	43.69	43.69	134.76	248.36	248.36	165.69	163.72	151.72	83.55	81.57	93.38	96.53	53.72	49.78	55.44	52.61	45.38	45.38	45.38	45.38	39.72	33.99	30.57	30.57	28.41	28.41	28.41	21.37	30.69	30.69	0.00
Pounds per Day	2.38	1.90	1.90	5.86	10.80	10.80	7.20	7.12	6.60	3.63	3.55	4.06	4.20	2.34	2.16	2.41	2.29	1.97	1.97	1.97	1.97	1.73	1.48	1.33	1.33	1.24	1.24	1.24	0.93	1.33	1.33	0.00
Yearly Maximums	1,513	1,555	1,565	1,571	1,492	1,296	1,093	973	854	748	704	657	594	528	503	481	454	423	408	394	348	303	263	293	327	366	402	442	481	526	561	596
Maximum Pounds per Day																																
Maximum Pounds per Hour [a]																																
Maximum Pounds per Month																																
Month with Maximum																																
Maximum Pounds per Year																																
Maximum Average Pounds per Hour [b]																																
Year with Maximum																																
Tons per Year																																

Onsite CO_2 Emissions

	CO_2 Emissions by Month																														
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Block 1 Construction																																
Total (metric tons/month)	69.45	53.95	53.95	45.42	41.94	41.94	41.94	26.34	26.34	23.30	23.30	37.71	37.71																			
Total (metric tons/day)	3.02	2.35	2.35	1.97	1.82	1.82	1.82	1.15	1.15	1.01	1.01	1.64	1.64																			
Block 2 Construction																																
Total (metric tons/month)				45.05	105.81	105.81	82.28	97.79	80.22	79.87	79.78	79.78	87.54	79.78	79.60	95.11	87.36	69.40	69.40	69.40	69.40	53.90	45.38	41.91	41.91	41.91	41.91	41.91	26.31	40.72	40.72	
Total (metric tons/day)				1.96	4.60	4.60	3.58	4.25	3.49	3.47	3.47	3.47	3.81	3.47	3.46	4.14	3.80	3.02	3.02	3.02	3.02	2.34	1.97	1.82	1.82	1.82	1.82	1.82	1.14	1.77	1.77	
Units 1 & 2 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Bldgs. 33 & 34 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Total Onsite CO_2 Emissions (Construction Equipment and Vehicles)																																
Metric Tons per Month	69.45	53.95	53.95	90.46	147.75	147.75	124.22	124.13	106.56	103.17	103.08	117.50	125.25	79.78	79.60	95.11	87.36	69.40	69.40	69.40	69.40	53.90	45.38	41.91	41.91	41.91	41.91	41.91	26.31	40.72	40.72	0.00
Metric Tons per Day	3.02	2.35	2.35	3.93	6.42	6.42	5.40	5.40	4.63	4.49	4.48	5.11	5.45	3.47	3.46	4.14	3.80	3.02	3.02	3.02	3.02	2.34	1.97	1.82	1.82	1.82	1.82	1.82	1.14	1.77	1.77	0.00
Yearly Maximums	1,242	1,298	1,324	1,349	1,354	1,294	1,215	1,160	1,106	1,068	1,019	962	886	803	765	727	674	613	584	555	486	417	363	392	424	472	519	576	634	699	750	801
Maximum Metric Tons per Day																																
Maximum Metric Tons per Hour [a]																																
Maximum Metric Tons per Month																																
Month with Maximum																																
Maximum Metric Tons per Year																																
Maximum Average Metric Tons per Hour [b]																																
Year with Maximum																																

Onsite N_2O Emissions

	N_2O Emissions by Month																														
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Block 1 Construction																																
Total (metric tons/month)	0.00176	0.00137	0.00137	0.00115	0.00106	0.00106	0.00106	0.00066	0.00066	0.00059	0.00059	0.00095	0.00095																			
Total (metric tons/day)	0.00008	0.00006	0.00006	0.00005	0.00005	0.00005	0.00005	0.00003	0.00003	0.00003	0.00003	0.00004	0.00004																			
Block 2 Construction																																
Total (metric tons/month)				0.00114	0.00268	0.00268	0.00208	0.00247	0.00203	0.00202	0.00202	0.00202	0.00222	0.00202	0.00202	0.00241	0.00222	0.00176	0.00176	0.00176	0.00176	0.00136	0.00115	0.00106	0.00106	0.00106	0.00106	0.00106	0.00066	0.00103	0.00103	
Total (metric tons/day)				0.00005	0.00012	0.00012	0.00009	0.00011	0.00009	0.00009	0.00009	0.00009	0.00010	0.00009	0.00009	0.00010	0.00010	0.00008	0.00008	0.00008	0.00008	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00003	0.00004	0.00004	
Units 1 & 2 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Bldgs. 33 & 34 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Total Onsite N_2O Emissions (Construction Equipment and Vehicles)																																
Metric Tons per Month	0.00176	0.00137	0.00137	0.00229	0.00374	0.00374	0.00314	0.00314	0.00269	0.00261	0.00261	0.00297	0.00317	0.00202	0.00202	0.00241	0.00222	0.00176	0.00176	0.00176	0.00176	0.00136	0.00115	0.00106	0.00106	0.00106	0.00106	0.00106	0.00066	0.00103	0.00103	0.00000
Metric Tons per Day	0.00008	0.00006	0.00006	0.00010	0.00016	0.00016	0.00014	0.00014	0.00012	0.00011	0.00011	0.00013	0.00014	0.00009	0.00009	0.00010	0.00010	0.00008	0.00008	0.00008	0.00008	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00003	0.00004	0.00004	0.00000
Yearly Maximums	0.03141	0.03282	0.03347	0.03413	0.03425	0.03273	0.03075	0.02937	0.02799	0.02705	0.02581	0.02435	0.02244	0.02033	0.01937	0.01841	0.01705	0.01550	0.01477	0.01405	0.01229	0.01053	0.00916	0.00991	0.01074	0.01194	0.01314	0.01461	0.01607	0.01773	0.01903	0.02032
Maximum Metric Tons per Day																																
Maximum Metric Tons per Hour [a]																																
Maximum Metric Tons per Month																																
Month with Maximum																																
Maximum Metric Tons per Year																																
Maximum Average Metric Tons per Hour [b]																																
Year with Maximum																																

Onsite CH_4 Emissions

	CH_4 Emissions by Month																														
Construction Step	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**
Peaker and Tank Area and Stack 3&4 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Block 1 Construction																																
Total (metric tons/month)	0.00393	0.00304	0.00304	0.00256	0.00236	0.00236	0.00236	0.00148	0.00148	0.00131	0.00131	0.00213	0.00213																			
Total (metric tons/day)	0.00017	0.00013	0.00013	0.00011	0.00010	0.00010	0.00010	0.00006	0.00006	0.00006	0.00006	0.00009	0.00009																			
Block 2 Construction																																
Total (metric tons/month)				0.00254	0.00598	0.00598	0.00464	0.00552	0.00452	0.00450	0.00450	0.00450	0.00494	0.00450	0.00450	0.00538	0.00494	0.00392	0.00392	0.00392	0.00392	0.00304	0.00256	0.00236	0.00236	0.00236	0.00236	0.00236	0.00148	0.00230	0.00230	
Total (metric tons/day)				0.00011	0.00026	0.00026	0.00020	0.00024	0.00020	0.00020	0.00020	0.00020	0.00021	0.00020	0.00020	0.00023	0.00021	0.00017	0.00017	0.00017	0.00017	0.00013	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00006	0.00010	0.00010	
Units 1 & 2 Demolition																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Bldgs. 33 & 34 Construction																																
Total (metric tons/month)																																
Total (metric tons/day)																																
Total Onsite CH_4 Emissions (Construction Equipment and Vehicles)																																
Metric Tons per Month	0.00393	0.00304	0.00304	0.00510	0.00834	0.00834	0.00700	0.00700	0.00600	0.00581	0.00581	0.00663	0.00707	0.00450	0.00450	0.00538	0.00494	0.00392	0.00392	0.00392	0.00392	0.00304	0.00256	0.00236	0.00236	0.00236	0.00236	0.00236	0.00148	0.00230	0.00230	0.00000
Metric Tons per Day	0.00017	0.00013	0.00013	0.00022	0.00036	0.00036	0.00030	0.00030	0.00026	0.00025	0.00025	0.00029	0.00031	0.00020	0.00020	0.00023	0.00021	0.00017	0.00017	0.00017	0.00017	0.00013	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00006	0.00010	0.00010	0.00000
Yearly Maximums	0.07006	0.07320	0.07466	0.07612	0.07640	0.07300	0.06859	0.06551	0.06243	0.06035	0.05758	0.05433	0.05006	0.04535	0.04321	0.04106	0.03804	0.03458	0.03295	0.03133	0.02741	0.02348	0.02044	0.02210	0.02395	0.02663	0.02932	0.03258	0.03585	0.03955	0.04244	0.04533
Maximum Metric Tons per Day																																
Maximum Metric Tons per Hour [a]																																
Maximum Metric Tons per Month																																
Month with Maximum																																
Maximum Metric Tons per Year																																
Maximum Average Metric Tons per Hour [b]																																
Year with Maximum																																

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Be
[b] The hours per year are assumed to allow operation 24 hours per

Table 5.1A.46R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite CO Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			652.25	652.25	839.00	839.00	968.63	968.63	932.20	932.20	932.20	932.20	932.20	932.20	932.20	932.20	932.20	932.20	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89
Total (lbs/day)			28.36	28.36	36.48	36.48	42.11	42.11	40.53	40.53	40.53	40.53	40.53	40.53	40.53	40.53	40.53	40.53	44.30	44.30	44.30	44.30	44.30	44.30	44.30	44.30
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													106.76	421.56	421.56	457.49	401.39	401.39	86.95	86.95	86.95	86.95	86.95	86.95	86.95	86.95
Total (lbs/day)													4.64	18.33	18.33	19.89	17.45	17.45	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78
Total Onsite CO Emissions (Construction Equipment and Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**652.25**	**652.25**	**839.00**	**839.00**	**968.63**	**968.63**	**932.20**	**932.20**	**932.20**	**932.20**	**1,038.95**	**1,353.76**	**1,353.76**	**1,389.69**	**1,333.59**	**1,333.59**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**
Pounds per Day	**0.00**	**0.00**	**28.36**	**28.36**	**36.48**	**36.48**	**42.11**	**42.11**	**40.53**	**40.53**	**40.53**	**40.53**	**45.17**	**58.86**	**58.86**	**60.42**	**57.98**	**57.98**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**
Yearly Maximums	**8,649**	**9,688**	**11,041**	**11,743**	**12,480**	**12,975**	**13,469**	**13,607**	**13,744**	**13,917**	**14,091**	**14,265**	**14,438**	**14,505**	**14,257**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite VOC Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			104.30	104.30	123.73	123.73	137.43	137.43	126.93	126.93	126.93	126.93	126.93	126.93	126.93	126.93	126.93	126.93	144.53	144.53	144.53	144.53	144.53	144.53	144.53	144.53
Total (lbs/day)			4.53	4.53	5.38	5.38	5.98	5.98	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	6.28	6.28	6.28	6.28	6.28	6.28	6.28	6.28
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													13.69	55.46	55.46	65.39	58.48	58.48	16.91	16.91	16.91	16.91	16.91	16.91	16.91	16.91
Total (lbs/day)													0.60	2.41	2.41	2.84	2.54	2.54	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Total Onsite VOC Emissions (Construction Equipment and Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**104.30**	**104.30**	**123.73**	**123.73**	**137.43**	**137.43**	**126.93**	**126.93**	**126.93**	**126.93**	**140.62**	**182.39**	**182.39**	**192.32**	**185.41**	**185.41**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**
Pounds per Day	**0.00**	**0.00**	**4.53**	**4.53**	**5.38**	**5.38**	**5.98**	**5.98**	**5.52**	**5.52**	**5.52**	**5.52**	**6.11**	**7.93**	**7.93**	**8.36**	**8.06**	**8.06**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**
Yearly Maximums	**1,239**	**1,379**	**1,562**	**1,640**	**1,728**	**1,789**	**1,851**	**1,875**	**1,899**	**1,934**	**1,968**	**2,003**	**2,037**	**2,058**	**2,037**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite NOx Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			638.75	638.75	744.56	658.30	724.25	724.25	658.49	658.49	658.49	658.49	658.49	658.49	658.49	658.49	658.49	582.51	679.22	679.22	679.22	679.22	679.22	679.22	679.22	679.22
Total (lbs/day)			27.77	27.77	32.37	28.62	31.49	31.49	28.63	28.63	28.63	28.63	28.63	28.63	28.63	28.63	28.63	25.33	29.53	29.53	29.53	29.53	29.53	29.53	29.53	29.53
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													89.32	343.70	343.70	409.47	362.08	330.56	97.79	97.79	97.79	97.79	97.79	97.79	97.79	97.79
Total (lbs/day)													3.88	14.94	14.94	17.80	15.74	14.37	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25
Total Onsite NOx Emissions (Construction Equipment and Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**638.75**	**638.75**	**744.56**	**658.30**	**724.25**	**724.25**	**658.49**	**658.49**	**658.49**	**658.49**	**747.81**	**1,002.19**	**1,002.19**	**1,067.96**	**1,020.56**	**913.07**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**
Pounds per Day	**0.00**	**0.00**	**27.77**	**27.77**	**32.37**	**28.62**	**31.49**	**31.49**	**28.63**	**28.63**	**28.63**	**28.63**	**32.51**	**43.57**	**43.57**	**46.43**	**44.37**	**39.70**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**
Yearly Maximums	**6,763**	**7,511**	**8,513**	**8,876**	**9,305**	**9,581**	**9,836**	**9,889**	**9,942**	**10,060**	**10,179**	**10,297**	**10,416**	**10,445**	**10,220**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Table 5.1A.46R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite SOx Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			1.64	1.64	1.97	1.97	2.20	2.20	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28
Total (lbs/day)			0.07	0.07	0.09	0.09	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													0.17	0.70	0.70	0.88	0.78	0.78	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Total (lbs/day)													0.01	0.03	0.03	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Onsite SOx Emissions (Construction Equipment and Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**1.64**	**1.64**	**1.97**	**1.97**	**2.20**	**2.20**	**2.03**	**2.03**	**2.03**	**2.03**	**2.20**	**2.73**	**2.73**	**2.90**	**2.81**	**2.81**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**
Pounds per Day	**0.00**	**0.00**	**0.07**	**0.07**	**0.09**	**0.09**	**0.10**	**0.10**	**0.09**	**0.09**	**0.09**	**0.09**	**0.10**	**0.12**	**0.12**	**0.13**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**
Yearly Maximums	**20**	**22**	**25**	**26**	**27**	**28**	**29**	**29**	**29**	**30**	**30**	**31**	**31**	**32**	**32**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite Exhaust PM_{10} Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			29.66	29.66	34.92	30.19	33.47	33.47	31.20	31.20	31.20	31.20	31.20	31.20	31.20	31.20	31.20	26.80	31.04	31.04	31.04	31.04	31.04	31.04	31.04	31.04
Total (lbs/day)			1.29	1.29	1.52	1.31	1.46	1.46	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.17	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													5.54	21.24	21.24	23.51	20.60	18.15	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30
Total (lbs/day)													0.24	0.92	0.92	1.02	0.90	0.79	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Total Onsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**29.66**	**29.66**	**34.92**	**30.19**	**33.47**	**33.47**	**31.20**	**31.20**	**31.20**	**31.20**	**36.73**	**52.44**	**52.44**	**54.71**	**51.80**	**44.94**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**
Pounds per Day	**0.00**	**0.00**	**1.29**	**1.29**	**1.52**	**1.31**	**1.46**	**1.46**	**1.36**	**1.36**	**1.36**	**1.36**	**1.60**	**2.28**	**2.28**	**2.38**	**2.25**	**1.95**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**
Yearly Maximums	**316**	**353**	**405**	**428**	**453**	**470**	**485**	**487**	**489**	**493**	**497**	**501**	**505**	**504**	**487**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite Fugitive PM_{10} Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17
Total (lbs/day)			11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													77.76	340.24	340.24	340.24	320.80	320.80	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Total (lbs/day)													3.38	14.79	14.79	14.79	13.95	13.95	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Total Onsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**338.94**	**601.42**	**601.42**	**601.42**	**581.98**	**581.98**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**
Pounds per Day	**0.00**	**0.00**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**14.74**	**26.15**	**26.15**	**26.15**	**25.30**	**25.30**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**
Yearly Maximums	**2,612**	**2,951**	**3,552**	**3,892**	**4,233**	**4,553**	**4,874**	**4,952**	**5,030**	**5,107**	**5,185**	**5,263**	**5,341**	**5,341**	**5,078**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Table 5.1A.46R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	0.00	0.00	290.84	290.84	296.10	291.36	294.64	294.64	292.37	292.37	292.37	292.37	375.67	653.86	653.86	656.13	633.78	626.92	374.27	374.27	374.27	374.27	374.27	374.27	374.27	374.27
Pounds per Day	0.00	0.00	12.65	12.65	12.87	12.67	12.81	12.81	12.71	12.71	12.71	12.71	16.33	28.43	28.43	28.53	27.56	27.26	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27
Yearly Maximums	2,928	3,304	3,957	4,320	4,686	5,023	5,359	5,439	5,518	5,600	5,682	5,764	5,846	5,844	5,565											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite Exhaust $PM_{2.5}$ Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			29.65	29.65	34.91	30.17	33.45	33.45	31.18	31.18	31.18	31.18	31.18	31.18	31.18	31.18	31.18	26.78	31.03	31.03	31.03	31.03	31.03	31.03	31.03	31.03
Total (lbs/day)			1.29	1.29	1.52	1.31	1.45	1.45	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.16	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													5.53	21.23	21.23	23.50	20.60	18.14	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29
Total (lbs/day)													0.24	0.92	0.92	1.02	0.90	0.79	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Total Onsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**29.65**	**29.65**	**34.91**	**30.17**	**33.45**	**33.45**	**31.18**	**31.18**	**31.18**	**31.18**	**36.71**	**52.41**	**52.41**	**54.68**	**51.78**	**44.92**	**35.31**	**35.31**	**35.31**	**35.31**	**35.31**	**35.31**	**35.31**	**35.31**
Pounds per Day	**0.00**	**0.00**	**1.29**	**1.29**	**1.52**	**1.31**	**1.45**	**1.45**	**1.36**	**1.36**	**1.36**	**1.36**	**1.60**	**2.28**	**2.28**	**2.38**	**2.25**	**1.95**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**
Yearly Maximums	**316**	**353**	**405**	**428**	**453**	**470**	**485**	**486**	**488**	**492**	**497**	**501**	**505**	**503**	**486**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite Fugitive $PM_{2.5}$ Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 1 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Block 2 Construction																										
Total (lbs/month)																										
Total (lbs/day)																										
Units 1 & 2 Demolition																										
Total (lbs/month)			34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55
Total (lbs/day)			1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Bldgs. 33 & 34 Construction																										
Total (lbs/month)													7.78	68.57	68.57	68.57	66.62	66.62	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78
Total (lbs/day)													0.34	2.98	2.98	2.98	2.90	2.90	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Total Onsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																										
Pounds per Month	**0.00**	**0.00**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**42.33**	**103.12**	**103.12**	**103.12**	**101.17**	**101.17**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**
Pounds per Day	**0.00**	**0.00**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.84**	**4.48**	**4.48**	**4.48**	**4.40**	**4.40**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**
Yearly Maximums	**345**	**388**	**491**	**560**	**628**	**695**	**761**	**769**	**777**	**785**	**792**	**800**	**808**	**808**	**747**											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Table 5.1A.46R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	0.00	0.00	64.20	64.20	69.46	64.72	68.00	68.00	65.73	65.73	65.73	65.73	79.04	155.53	155.53	157.80	152.95	146.10	77.64	77.64	77.64	77.64	77.64	77.64	77.64	77.64
Pounds per Day	0.00	0.00	2.79	2.79	3.02	2.81	2.96	2.96	2.86	2.86	2.86	2.86	3.44	6.76	6.76	6.86	6.65	6.35	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Yearly Maximums	662	741	896	987	1,081	1,164	1,246	1,256	1,265	1,277	1,289	1,301	1,313	1,311	1,234											
Maximum Pounds per Day																										
Maximum Pounds per Hour [a]																										
Maximum Pounds per Month																										
Month with Maximum																										
Maximum Pounds per Year																										
Maximum Average Pounds per Hour [b]																										
Year with Maximum																										
Tons per Year																										

Onsite CO_2 Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Block 1 Construction																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Block 2 Construction																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Units 1 & 2 Demolition																										
Total (metric tons/month)			74.46	74.46	89.15	89.15	99.35	99.35	91.59	91.59	91.59	91.59	91.59	91.59	91.59	91.59	91.59	91.59	102.82	102.82	102.82	102.82	102.82	102.82	102.82	102.82
Total (metric tons/day)			3.24	3.24	3.88	3.88	4.32	4.32	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	4.47	4.47	4.47	4.47	4.47	4.47	4.47	4.47
Bldgs. 33 & 34 Construction																										
Total (metric tons/month)													7.73	30.91	30.91	38.64	34.53	34.53	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45
Total (metric tons/day)													0.34	1.34	1.34	1.68	1.50	1.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Total Onsite CO_2 Emissions (Construction Equipment and Vehicles)																										
Metric Tons per Month	0.00	0.00	74.46	74.46	89.15	89.15	99.35	99.35	91.59	91.59	91.59	91.59	99.32	122.50	122.50	130.24	126.13	126.13	114.27	114.27	114.27	114.27	114.27	114.27	114.27	114.27
Metric Tons per Day	0.00	0.00	3.24	3.24	3.88	3.88	4.32	4.32	3.98	3.98	3.98	3.98	4.32	5.33	5.33	5.66	5.48	5.48	4.97	4.97	4.97	4.97	4.97	4.97	4.97	4.97
Yearly Maximums	892	992	1,114	1,162	1,218	1,255	1,292	1,307	1,322	1,344	1,367	1,390	1,412	1,427	1,419											
Maximum Metric Tons per Day																										
Maximum Metric Tons per Hour [a]																										
Maximum Metric Tons per Month																										
Month with Maximum																										
Maximum Metric Tons per Year																										
Maximum Average Metric Tons per Hour [b]																										
Year with Maximum																										

Onsite N_2O Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Block 1 Construction																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Block 2 Construction																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Units 1 & 2 Demolition																										
Total (metric tons/month)			0.00189	0.00189	0.00226	0.00226	0.00252	0.00252	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261
Total (metric tons/day)			0.00008	0.00008	0.00010	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
Bldgs. 33 & 34 Construction																										
Total (metric tons/month)													0.00019	0.00078	0.00078	0.00098	0.00087	0.00087	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029
Total (metric tons/day)													0.00001	0.00003	0.00003	0.00004	0.00004	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Total Onsite N_2O Emissions (Construction Equipment and Vehicles)																										
Metric Tons per Month	0.00000	0.00000	0.00189	0.00189	0.00226	0.00226	0.00252	0.00252	0.00232	0.00232	0.00232	0.00232	0.00252	0.00310	0.00310	0.00330	0.00320	0.00320	0.00290	0.00290	0.00290	0.00290	0.00290	0.00290	0.00290	0.00290
Metric Tons per Day	0.00000	0.00000	0.00008	0.00008	0.00010	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00011	0.00013	0.00013	0.00014	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
Yearly Maximums	0.02265	0.02516	0.02827	0.02948	0.03090	0.03183	0.03277	0.03314	0.03352	0.03409	0.03466	0.03523	0.03581	0.03619	0.03598											
Maximum Metric Tons per Day																										
Maximum Metric Tons per Hour [a]																										
Maximum Metric Tons per Month																										
Month with Maximum																										
Maximum Metric Tons per Year																										
Maximum Average Metric Tons per Hour [b]																										
Year with Maximum																										

Onsite CH_4 Emissions

Construction Step	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Block 1 Construction																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Block 2 Construction																										
Total (metric tons/month)																										
Total (metric tons/day)																										
Units 1 & 2 Demolition																										
Total (metric tons/month)			0.00421	0.00421	0.00505	0.00505	0.00563	0.00563	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582
Total (metric tons/day)			0.00018	0.00018	0.00022	0.00022	0.00024	0.00024	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Bldgs. 33 & 34 Construction																										
Total (metric tons/month)													0.00043	0.00174	0.00174	0.00218	0.00195	0.00195	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064
Total (metric tons/day)													0.00002	0.00008	0.00008	0.00009	0.00008	0.00008	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
Total Onsite CH_4 Emissions (Construction Equipment and Vehicles)																										
Metric Tons per Month	0.00000	0.00000	0.00421	0.00421	0.00505	0.00505	0.00563	0.00563	0.00519	0.00519	0.00519	0.00519	0.00561	0.00692	0.00692	0.00736	0.00714	0.00714	0.00646	0.00646	0.00646	0.00646	0.00646	0.00646	0.00646	0.00646
Metric Tons per Day	0.00000	0.00000	0.00018	0.00018	0.00022	0.00022	0.00024	0.00024	0.00023	0.00023	0.00023	0.00023	0.00024	0.00030	0.00030	0.00032	0.00031	0.00031	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
Yearly Maximums	0.05052	0.05613	0.06305	0.06576	0.06892	0.07100	0.07309	0.07393	0.07476	0.07604	0.07731	0.07859	0.07987	0.08072	0.08025											
Maximum Metric Tons per Day																										
Maximum Metric Tons per Hour [a]																										
Maximum Metric Tons per Month																										
Month with Maximum																										
Maximum Metric Tons per Year																										
Maximum Average Metric Tons per Hour [b]																										
Year with Maximum																										

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Be
[b] The hours per year are assumed to allow operation 24 hours per

Huntington Beach Energy Project
Construction Emission Estimates - All Project Stages
October 2013

Table 5.1A.47R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite CO Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																					
Total (lbs/month)	0.94	18.82	22.21	42.82	67.17	74.41	104.74	111.23	119.71	117.72	110.66	76.48	69.99	40.34	30.17																						
Total (lbs/day)	0.04	0.82	0.97	1.86	2.92	3.24	4.55	4.84	5.20	5.12	4.81	3.33	3.04	1.75	1.31																						
Block 1 Construction																																					
Total (lbs/month)																5.08	62.73	71.08	84.90	117.30	123.58	131.69	138.95	164.22	183.08	217.47	215.31	246.99	253.04	261.99	267.54	303.91	320.33	321.77	343.77	346.06	364.91	342.59
Total (lbs/day)																0.22	2.73	3.09	3.69	5.10	5.37	5.73	6.04	7.14	7.96	9.46	9.36	10.74	11.00	11.39	11.63	13.21	13.93	13.99	14.95	15.05	15.87	14.90
Block 2 Construction																																				51.40	67.56	95.52
Total (lbs/month)																																				2.23	2.94	4.15
Total (lbs/day)																																						
Units 1 & 2 Demolition																																					
Total (lbs/month)																																					
Total (lbs/day)																																					
Bldgs. 33 & 34 Construction																																					
Total (lbs/month)																																					
Total (lbs/day)																																					
Total Offsite CO Emissions (Construction Vehicles)																																					
Pounds per Month	**0.94**	**18.82**	**22.21**	**42.82**	**67.17**	**74.41**	**104.74**	**111.23**	**119.71**	**117.72**	**110.66**	**76.48**	**69.99**	**40.34**	**30.17**	**5.08**	**62.73**	**71.08**	**84.90**	**117.30**	**123.58**	**131.69**	**138.95**	**164.22**	**183.08**	**217.47**	**215.31**	**246.99**	**253.04**	**261.99**	**267.54**	**303.91**	**320.33**	**321.77**	**343.77**	**397.46**	**432.47**	**438.12**
Pounds per Day	**0.04**	**0.82**	**0.97**	**1.86**	**2.92**	**3.24**	**4.55**	**4.84**	**5.20**	**5.12**	**4.81**	**3.33**	**3.04**	**1.75**	**1.31**	**0.22**	**2.73**	**3.09**	**3.69**	**5.10**	**5.37**	**5.73**	**6.04**	**7.14**	**7.96**	**9.46**	**9.36**	**10.74**	**11.00**	**11.39**	**11.63**	**13.21**	**13.93**	**13.99**	**14.95**	**17.28**	**18.80**	**19.05**
Yearly Maximums	**867**	**936**	**957**	**965**	**928**	**923**	**920**	**900**	**906**	**910**	**924**	**952**	**1,040**	**1,153**	**1,330**	**1,515**	**1,757**	**1,948**	**2,139**	**2,321**	**2,508**	**2,705**	**2,895**	**3,099**	**3,333**	**3,582**	**3,803**	**4,074**	**4,341**	**4,633**	**4,916**	**5,212**	**5,435**	**5,656**	**5,587**	**5,532**	**5,496**	**5,427**

Maximum Pounds per Day	**24.49**
Maximum Pounds per Hour [a]	**2.45**
Maximum Pounds per Month	**563.18**
Month with Maximum	**43**
Maximum Pounds per Year	**5,656**
Maximum Average Pounds per Hour [b]	**0.65**
Year with Maximum	**Months 34-45**
Tons per Year	**2.83**

Offsite VOC Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																					
Total (lbs/month)	0.16	0.68	0.75	1.00	3.12	3.35	7.01	7.35	7.53	7.70	7.76	7.24	6.89	2.34	2.13																						
Total (lbs/day)	0.01	0.03	0.03	0.04	0.14	0.15	0.30	0.32	0.33	0.33	0.34	0.31	0.30	0.10	0.09																						
Block 1 Construction																																					
Total (lbs/month)																0.39	1.70	2.40	2.91	4.63	4.76	5.19	6.41	7.64	8.01	9.85	10.89	12.96	13.52	13.62	13.62	13.91	12.94	12.25	12.69	12.37	12.75	9.41
Total (lbs/day)																0.02	0.07	0.10	0.13	0.20	0.21	0.23	0.28	0.33	0.35	0.43	0.47	0.56	0.59	0.59	0.59	0.60	0.56	0.53	0.55	0.54	0.55	0.41
Block 2 Construction																																				1.12	1.39	2.07
Total (lbs/month)																																				0.05	0.06	0.09
Total (lbs/day)																																						
Units 1 & 2 Demolition																																					
Total (lbs/month)																																					
Total (lbs/day)																																					
Bldgs. 33 & 34 Construction																																					
Total (lbs/month)																																					
Total (lbs/day)																																					
Total Offsite VOC Emissions (Construction Vehicles)																																					
Pounds per Month	**0.16**	**0.68**	**0.75**	**1.00**	**3.12**	**3.35**	**7.01**	**7.35**	**7.53**	**7.70**	**7.76**	**7.24**	**6.89**	**2.34**	**2.13**	**0.39**	**1.70**	**2.40**	**2.91**	**4.63**	**4.76**	**5.19**	**6.41**	**7.64**	**8.01**	**9.85**	**10.89**	**12.96**	**13.52**	**13.62**	**13.62**	**13.91**	**12.94**	**12.25**	**12.69**	**13.49**	**14.14**	**11.47**
Pounds per Day	**0.01**	**0.03**	**0.03**	**0.04**	**0.14**	**0.15**	**0.30**	**0.32**	**0.33**	**0.33**	**0.34**	**0.31**	**0.30**	**0.10**	**0.09**	**0.02**	**0.07**	**0.10**	**0.13**	**0.20**	**0.21**	**0.23**	**0.28**	**0.33**	**0.35**	**0.43**	**0.47**	**0.56**	**0.59**	**0.59**	**0.59**	**0.60**	**0.56**	**0.53**	**0.55**	**0.59**	**0.61**	**0.50**
Yearly Maximums	**54**	**60**	**62**	**63**	**63**	**61**	**60**	**56**	**54**	**51**	**48**	**47**	**47**	**49**	**56**	**65**	**77**	**89**	**100**	**111**	**120**	**129**	**136**	**142**	**148**	**154**	**156**	**159**	**161**	**164**	**167**	**168**	**169**	**172**	**173**	**173**	**173**	**173**

Maximum Pounds per Day	**0.73**
Maximum Pounds per Hour [a]	**0.07**
Maximum Pounds per Month	**16.70**
Month with Maximum	**42**
Maximum Pounds per Year	**176**
Maximum Average Pounds per Hour [b]	**0.02**
Year with Maximum	**Months 39-50**
Tons per Year	**0.09**

Offsite NOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																					
Total (lbs/month)	2.92	7.47	7.79	5.48	40.35	42.46	106.18	111.05	111.87	102.74	105.87	106.60	102.28	29.72	28.83																						
Total (lbs/day)	0.13	0.32	0.34	0.24	1.75	1.85	4.62	4.83	4.86	4.47	4.60	4.63	4.45	1.29	1.25																						
Block 1 Construction																																					
Total (lbs/month)																6.04	14.64	25.85	30.72	54.63	55.23	54.68	73.83	88.36	90.00	112.55	130.87	158.31	166.24	165.78	164.41	160.16	139.37	114.04	115.78	110.45	111.94	66.61
Total (lbs/day)																0.26	0.64	1.12	1.34	2.38	2.40	2.38	3.21	3.84	3.91	4.89	5.69	6.88	7.23	7.21	7.15	6.96	6.06	4.96	5.03	4.80	4.87	2.90
Block 2 Construction																																				8.88	10.37	15.74
Total (lbs/month)																																				0.39	0.45	0.68
Total (lbs/day)																																						
Units 1 & 2 Demolition																																					
Total (lbs/month)																																					
Total (lbs/day)																																					
Bldgs. 33 & 34 Construction																																					
Total (lbs/month)																																					
Total (lbs/day)																																					
Total Offsite NOx Emissions (Construction Vehicles)																																					
Pounds per Month	**2.92**	**7.47**	**7.79**	**5.48**	**40.35**	**42.46**	**106.18**	**111.05**	**111.87**	**102.74**	**105.87**	**106.60**	**102.28**	**29.72**	**28.83**	**6.04**	**14.64**	**25.85**	**30.72**	**54.63**	**55.23**	**54.68**	**73.83**	**88.36**	**90.00**	**112.55**	**130.87**	**158.31**	**166.24**	**165.78**	**164.41**	**160.16**	**139.37**	**114.04**	**115.78**	**119.33**	**122.31**	**82.35**
Pounds per Day	**0.13**	**0.32**	**0.34**	**0.24**	**1.75**	**1.85**	**4.62**	**4.83**	**4.86**	**4.47**	**4.60**	**4.63**	**4.45**	**1.29**	**1.25**	**0.26**	**0.64**	**1.12**	**1.34**	**2.38**	**2.40**	**2.38**	**3.21**	**3.84**	**3.91**	**4.89**	**5.69**	**6.88**	**7.23**	**7.21**	**7.15**	**6.96**	**6.06**	**4.96**	**5.03**	**5.19**	**5.32**	**3.58**
Yearly Maximums	**751**	**850**	**872**	**893**	**894**	**868**	**852**	**776**	**720**	**663**	**615**	**583**	**565**	**553**	**635**	**737**	**890**	**1,041**	**1,181**	**1,315**	**1,420**	**1,505**	**1,564**	**1,606**	**1,637**	**1,669**	**1,639**	**1,633**	**1,605**	**1,585**	**1,570**	**1,514**	**1,482**	**1,501**	**1,538**	**1,566**	**1,598**	**1,631**

Maximum Pounds per Day	**7.23**
Maximum Pounds per Hour [a]	**0.72**
Maximum Pounds per Month	**166.24**
Month with Maximum	**29**
Maximum Pounds per Year	**1,708**
Maximum Average Pounds per Hour [b]	**0.19**
Year with Maximum	**Months 40-51**
Tons per Year	**0.85**

Huntington Beach Energy Project
Construction Emission Estimates - All Project Stages
October 2013

Table 5.1A.47R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite SOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																						
Total (lbs/month)	0.008	0.054	0.062	0.099	0.220	0.239	0.431	0.455	0.474	0.478	0.470	0.402	0.378	0.151	0.128																							
Total (lbs/day)	0.000	0.002	0.003	0.004	0.010	0.010	0.019	0.020	0.021	0.021	0.020	0.017	0.016	0.007	0.006																							
Block 1 Construction																																						
Total (lbs/month)																0.025	0.173	0.217	0.257	0.384	0.400	0.431	0.497	0.590	0.636	0.770	0.813	0.954	0.988	1.006	1.015	1.085	1.067	1.039	1.093	1.082	1.128	0.950
Total (lbs/day)																0.001	0.008	0.009	0.011	0.017	0.017	0.019	0.022	0.026	0.028	0.033	0.035	0.041	0.043	0.044	0.044	0.047	0.046	0.045	0.048	0.047	0.049	0.041
Block 2 Construction																																						
Total (lbs/month)																																				0.148	0.191	0.271
Total (lbs/day)																																				0.006	0.008	0.012
Units 1 & 2 Demolition																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Bldgs. 33 & 34 Construction																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Total Offsite SOx Emissions (Construction Vehicles)																																						
Pounds per Month	**0.008**	**0.054**	**0.062**	**0.099**	**0.220**	**0.239**	**0.431**	**0.455**	**0.474**	**0.478**	**0.470**	**0.402**	**0.378**	**0.151**	**0.128**	**0.025**	**0.173**	**0.217**	**0.257**	**0.384**	**0.400**	**0.431**	**0.497**	**0.590**	**0.636**	**0.770**	**0.813**	**0.954**	**0.988**	**1.006**	**1.015**	**1.085**	**1.067**	**1.039**	**1.093**	**1.230**	**1.319**	**1.221**
Pounds per Day	**0.000**	**0.002**	**0.003**	**0.004**	**0.010**	**0.010**	**0.019**	**0.020**	**0.021**	**0.021**	**0.020**	**0.017**	**0.016**	**0.007**	**0.006**	**0.001**	**0.008**	**0.009**	**0.011**	**0.017**	**0.017**	**0.019**	**0.022**	**0.026**	**0.028**	**0.033**	**0.035**	**0.041**	**0.043**	**0.044**	**0.044**	**0.047**	**0.046**	**0.045**	**0.048**	**0.053**	**0.057**	**0.053**
Yearly Maximums	**3**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**3**	**3**	**3**	**4**	**4**	**5**	**5**	**6**	**7**	**8**	**8**	**9**	**10**	**10**	**11**	**12**	**12**	**13**	**13**	**14**	**15**	**15**	**16**	**16**	**17**	**17**	**17**	**17**	**17**

Maximum Pounds per Day	**0.07**
Maximum Pounds per Hour [a]	**0.01**
Maximum Pounds per Month	**1.69**
Month with Maximum	**45**
Maximum Pounds per Year	**17**
Maximum Average Pounds per Hour [b]	**0.002**
Year with Maximum	**Months 39 - 50**
Tons per Year	**0.01**

Offsite Exhaust PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																						
Total (lbs/month)	0.28	4.21	4.94	9.23	15.39	16.99	25.23	26.75	28.57	27.91	26.49	19.24	17.74	9.40	7.21																							
Total (lbs/day)	0.01	0.18	0.21	0.40	0.67	0.74	1.10	1.16	1.24	1.21	1.15	0.84	0.77	0.41	0.31																							
Block 1 Construction																																						
Total (lbs/month)																1.33	14.80	17.03	20.28	28.39	29.84	31.72	33.92	40.13	44.51	53.02	53.03	61.07	62.68	64.72	65.96	74.21	77.41	77.08	82.19	82.57	86.95	80.64
Total (lbs/day)																0.03	0.60	0.65	0.78	1.03	1.09	1.16	1.16	1.36	1.56	1.82	1.73	1.95	1.98	2.08	2.14	2.54	2.79	2.86	3.08	3.13	3.32	3.28
Block 2 Construction																																						
Total (lbs/month)																																				14.04	18.42	26.02
Total (lbs/day)																																				0.61	0.80	1.13
Units 1 & 2 Demolition																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Bldgs. 33 & 34 Construction																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Total Offsite Exhaust PM_{10} Emissions (Construction Vehicles)																																						
Pounds per Month	**0.28**	**4.21**	**4.94**	**9.23**	**15.39**	**16.99**	**25.23**	**26.75**	**28.57**	**27.91**	**26.49**	**19.24**	**17.74**	**9.40**	**7.21**	**1.33**	**14.80**	**17.03**	**20.28**	**28.39**	**29.84**	**31.72**	**33.92**	**40.13**	**44.51**	**53.02**	**53.03**	**61.07**	**62.68**	**64.72**	**65.96**	**74.21**	**77.41**	**77.08**	**82.19**	**96.61**	**105.37**	**106.66**
Pounds per Day	**0.01**	**0.18**	**0.21**	**0.40**	**0.67**	**0.74**	**1.10**	**1.16**	**1.24**	**1.21**	**1.15**	**0.84**	**0.77**	**0.41**	**0.31**	**0.03**	**0.60**	**0.65**	**0.78**	**1.03**	**1.09**	**1.16**	**1.16**	**1.36**	**1.56**	**1.82**	**1.73**	**1.95**	**1.98**	**2.08**	**2.14**	**2.54**	**2.79**	**2.86**	**3.08**	**3.74**	**4.12**	**4.42**
Yearly Maximums	**205**	**223**	**228**	**230**	**222**	**222**	**222**	**217**	**218**	**220**	**223**	**231**	**252**	**279**	**322**	**368**	**428**	**476**	**523**	**569**	**615**	**662**	**708**	**756**	**813**	**873**	**927**	**994**	**1,061**	**1,134**	**1,205**	**1,279**	**1,338**	**1,398**	**1,392**	**1,391**	**1,395**	**1,391**

Maximum Pounds per Day	**6.05**
Maximum Pounds per Hour [a]	**0.61**
Maximum Pounds per Month	**140.01**
Month with Maximum	**43**
Maximum Pounds per Year	**1,398**
Maximum Average Pounds per Hour [b]	**0.16**
Year with Maximum	**Months 34 - 45**
Tons per Year	**0.70**

Offsite Fugitive PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition [c]																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Block 1 Construction																																						
Total (lbs/month)																0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Total (lbs/day)																0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Block 2 Construction																																						
Total (lbs/month)																																				0.35	0.35	0.35
Total (lbs/day)																																				0.02	0.02	0.02
Units 1 & 2 Demolition [c]																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Bldgs. 33 & 34 Construction [c]																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Total Offsite Fugitive PM_{10} Emissions (Grading)																																						
Pounds per Month	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.71**	**0.71**	**0.71**
Pounds per Day	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.03**	**0.03**	**0.03**
Yearly Maximums	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**0.7**	**1.1**	**1.4**	**1.8**	**2.1**	**2.5**	**2.8**	**3.2**	**3.5**	**3.9**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.6**	**4.9**	**5.3**	**5.7**	**6.0**	**6.4**	**6.7**	**7.1**	**7.4**	**7.8**	**7.8**	**7.8**	**7.4**	**7.1**

Maximum Pounds per Day	**0.03**
Maximum Pounds per Hour [a]	**0.003**
Maximum Pounds per Month	**0.71**
Month with Maximum	**36 - 45**
Maximum Pounds per Year	**7.8**
Maximum Average Pounds per Hour [b]	**0.0009**
Year with Maximum	**Months 34 - 45, 35 - 46, or 36 -**
Tons per Year	**0.004**

Table 5.1A.47R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Pounds per Month	0.28	4.21	4.94	9.23	15.39	16.99	25.23	26.75	28.57	27.91	26.49	19.24	17.74	9.40	7.21	1.69	15.16	17.39	20.63	28.74	30.20	32.08	34.28	40.49	44.87	53.37	53.38	61.43	63.04	65.08	66.32	74.56	77.76	77.44	82.55	97.32	106.08	107.37
Pounds per Day	0.01	0.18	0.21	0.40	0.67	0.74	1.10	1.16	1.24	1.21	1.15	0.84	0.77	0.41	0.31	0.05	0.62	0.67	0.79	1.05	1.11	1.17	1.17	1.38	1.57	1.84	1.74	1.97	2.00	2.09	2.16	2.55	2.81	2.87	3.09	3.77	4.15	4.45
Yearly Maximums	205	223	228	230	223	222	223	218	220	222	226	234	255	282	326	372	432	480	528	573	619	667	712	760	817	878	932	1,000	1,067	1,140	1,212	1,286	1,345	1,406	1,400	1,399	1,403	1,398

Maximum Pounds per Day	6.08
Maximum Pounds per Hour [a]	0.61
Maximum Pounds per Month	140.72
Month with Maximum	43
Maximum Pounds per Year	1,406
Maximum Average Pounds per Hour [b]	0.16
Year with Maximum	Months 34 - 45
Tons per Year	0.70

Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																						
Total (lbs/month)	0.14	1.30	1.50	2.60	5.06	5.54	9.23	9.75	10.26	9.97	9.66	7.72	7.22	3.24	2.63																							
Total (lbs/day)	0.01	0.06	0.07	0.11	0.22	0.24	0.40	0.42	0.45	0.43	0.42	0.34	0.31	0.14	0.11																							
Block 1 Construction																																						
Total (lbs/month)																0.50	4.34	5.21	6.20	8.95	9.36	9.90	10.96	12.99	14.22	17.06	17.51	20.35	20.98	21.52	21.82	23.95	24.31	23.71	25.14	25.11	26.34	23.51
Total (lbs/day)																0.02	0.19	0.23	0.27	0.39	0.41	0.43	0.48	0.56	0.62	0.74	0.76	0.88	0.91	0.94	0.95	1.04	1.06	1.03	1.09	1.09	1.15	1.02
Block 2 Construction																																						
Total (lbs/month)																																				4.02	5.25	7.44
Total (lbs/day)																																				0.17	0.23	0.32
Units 1 & 2 Demolition																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Bldgs. 33 & 34 Construction																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Total Offsite Exhaust $PM_{2.5}$ Emissions (Construction Vehicles)																																						
Pounds per Month	0.14	1.30	1.50	2.60	5.06	5.54	9.23	9.75	10.26	9.97	9.66	7.72	7.22	3.24	2.63	0.50	4.34	5.21	6.20	8.95	9.36	9.90	10.96	12.99	14.22	17.06	17.51	20.35	20.98	21.52	21.82	23.95	24.31	23.71	25.14	29.14	31.58	30.94
Pounds per Day	0.01	0.06	0.07	0.11	0.22	0.24	0.40	0.42	0.45	0.43	0.42	0.34	0.31	0.14	0.11	0.02	0.19	0.23	0.27	0.39	0.41	0.43	0.48	0.56	0.62	0.74	0.76	0.88	0.91	0.94	0.95	1.04	1.06	1.03	1.09	1.27	1.37	1.35
Yearly Maximums	73	80	82	83	81	80	80	77	76	75	75	76	82	89	102	117	137	154	170	186	201	216	229	244	260	277	291	309	327	346	365	384	399	416	415	415	417	417

Maximum Pounds per Day	1.79
Maximum Pounds per Hour [a]	0.18
Maximum Pounds per Month	41.15
Month with Maximum	45
Maximum Pounds per Year	417
Maximum Average Pounds per Hour [b]	0.05
Year with Maximum	Months 37 - 48
Tons per Year	0.21

Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition [c]																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Block 1 Construction																																						
Total (lbs/month)																0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038
Total (lbs/day)																0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Block 2 Construction																																						
Total (lbs/month)																																				0.038	0.038	0.038
Total (lbs/day)																																				0.002	0.002	0.002
Units 1 & 2 Demolition [c]																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Bldgs. 33 & 34 Construction [c]																																						
Total (lbs/month)																																						
Total (lbs/day)																																						
Total Offsite Fugitive $PM_{2.5}$ Emissions (Grading)																																						
Pounds per Month	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.076	0.076	0.076
Pounds per Day	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003
Yearly Maximums	0.00	0.00	0.00	0.00	0.04	0.08	0.11	0.15	0.19	0.23	0.27	0.31	0.34	0.38	0.42	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.50	0.53	0.57	0.61	0.65	0.69	0.73	0.76	0.80	0.84	0.84	0.84	0.80	0.76

Maximum Pounds per Day	0.003
Maximum Pounds per Hour [a]	0.0003
Maximum Pounds per Month	0.08
Month with Maximum	36 - 35
Maximum Pounds per Year	0.84
Maximum Average Pounds per Hour [b]	0.0001
Year with Maximum	35 - 46, or 36 - 47
Tons per Year	0.0004

Huntington Beach Energy Project
Construction Emission Estimates - All Project Stages
October 2013

Table 5.1A.47R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Pounds per Month	0.14	1.30	1.50	2.60	5.06	5.54	9.23	9.75	10.26	9.97	9.66	7.72	7.22	3.24	2.63	0.54	4.38	5.25	6.24	8.99	9.40	9.94	11.00	13.03	14.25	17.10	17.55	20.39	21.02	21.56	21.86	23.99	24.35	23.75	25.18	29.21	31.66	31.02
Pounds per Day	0.01	0.06	0.07	0.11	0.22	0.24	0.40	0.42	0.45	0.43	0.42	0.34	0.31	0.14	0.11	0.02	0.19	0.23	0.27	0.39	0.41	0.43	0.48	0.57	0.62	0.74	0.76	0.89	0.91	0.94	0.95	1.04	1.06	1.03	1.09	1.27	1.38	1.35
Yearly Maximums	73	80	82	83	81	80	80	77	76	75	75	77	82	89	103	118	138	154	170	186	201	216	230	244	260	278	292	310	327	347	366	385	400	417	416	416	418	418

Maximum Pounds per Day	1.79
Maximum Pounds per Hour [a]	0.179
Maximum Pounds per Month	41.22
Month with Maximum	45
Maximum Pounds per Year	418
Maximum Average Pounds per Hour [b]	0.048
Year with Maximum	Months 37-48
Tons per Year	0.21

Offsite CO_2 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																						
Total (metric tons/month)	0.38	2.35	2.67	4.15	9.77	10.59	19.67	20.71	21.51	21.76	21.52	18.73	17.69	6.80	5.84																							
Total (metric tons/day)	0.02	0.10	0.12	0.18	0.42	0.46	0.86	0.90	0.94	0.95	0.94	0.81	0.77	0.30	0.25																							
Block 1 Construction																																						
Total (metric tons/month)																1.16	7.38	9.43	11.15	16.85	17.49	18.92	22.07	26.24	28.15	34.16	36.35	42.78	44.36	45.11	45.43	48.17	46.94	45.48	47.72	47.15	49.06	40.54
Total (metric tons/day)																0.05	0.32	0.41	0.48	0.73	0.76	0.82	0.96	1.14	1.22	1.49	1.58	1.86	1.93	1.96	1.98	2.09	2.04	1.98	2.07	2.05	2.13	1.76
Block 2 Construction																																						
Total (metric tons/month)																																				6.67	8.58	12.21
Total (metric tons/day)																																				0.29	0.37	0.53
Units 1 & 2 Demolition																																						
Total (metric tons/month)																																						
Total (metric tons/day)																																						
Bldgs. 33 & 34 Construction																																						
Total (metric tons/month)																																						
Total (metric tons/day)																																						
Total Offsite CO_2 Emissions (Construction Vehicles)																																						
Metric Tons per Month	0.38	2.35	2.67	4.15	9.77	10.59	19.67	20.71	21.51	21.76	21.52	18.73	17.69	6.80	5.84	1.16	7.38	9.43	11.15	16.85	17.49	18.92	22.07	26.24	28.15	34.16	36.35	42.78	44.36	45.11	45.43	48.17	46.94	45.48	47.72	53.82	57.65	52.75
Metric Tons per Day	0.02	0.10	0.12	0.18	0.42	0.46	0.86	0.90	0.94	0.95	0.94	0.81	0.77	0.30	0.25	0.05	0.32	0.41	0.48	0.73	0.76	0.82	0.96	1.14	1.22	1.49	1.58	1.86	1.93	1.96	1.98	2.09	2.04	1.98	2.07	2.34	2.51	2.29
Yearly Maximums	154	171	176	179	176	173	172	164	160	156	153	154	161	171	199	229	271	308	344	378	409	439	465	491	518	548	567	594	619	647	675	699	720	748	753	759	767	772

Maximum Metric Tons per Day	3.26
Maximum Metric Tons per Hour [a]	0.33
Maximum Metric Tons per Month	74.92
Month with Maximum	45
Maximum Metric Tons per Year	781
Maximum Average Metric Tons per Hour [b]	0.09
Year with Maximum	Months 39 - 50

Offsite N_2O Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																						
Total (metric tons/month)	0.0000011	0.0000201	0.0000237	0.0000451	0.0000721	0.0000798	0.0001143	0.0001213	0.0001303	0.0001283	0.0001210	0.0000851	0.0000781	0.0000436	0.0000329																							
Total (metric tons/day)	0.0000000	0.0000009	0.0000010	0.0000020	0.0000031	0.0000035	0.0000050	0.0000053	0.0000057	0.0000056	0.0000053	0.0000037	0.0000034	0.0000019	0.0000014																							
Block 1 Construction																																						
Total (metric tons/month)																0.0000060	0.0000718	0.0000818	0.0000973	0.0001351	0.0001423	0.0001517	0.0001609	0.0001903	0.0002118	0.0002518	0.0002503	0.0002876	0.0002948	0.0003050	0.0003112	0.0003522	0.0003698	0.0003708	0.0003958	0.0003981	0.0004196	0.0003921
Total (metric tons/day)																0.0000003	0.0000031	0.0000036	0.0000042	0.0000059	0.0000062	0.0000066	0.0000070	0.0000083	0.0000092	0.0000109	0.0000109	0.0000125	0.0000128	0.0000133	0.0000135	0.0000153	0.0000161	0.0000161	0.0000172	0.0000173	0.0000182	0.0000170
Block 2 Construction																																				0.0000685	0.0000899	0.0001269
Total (metric tons/month)																																				0.0000030	0.0000039	0.0000055
Total (metric tons/day)																																						
Units 1 & 2 Demolition																																						
Total (metric tons/month)																																						
Total (metric tons/day)																																						
Bldgs. 33 & 34 Construction																																						
Total (metric tons/month)																																						
Total (metric tons/day)																																						
Total Offsite N_2O Emissions (Construction Vehicles)																																						
Metric Tons per Month	0.00000	0.00002	0.00002	0.00005	0.00007	0.00008	0.00011	0.00012	0.00013	0.00013	0.00012	0.00009	0.00008	0.00004	0.00003	0.00001	0.00007	0.00008	0.00010	0.00014	0.00014	0.00015	0.00016	0.00019	0.00021	0.00025	0.00025	0.00029	0.00029	0.00030	0.00031	0.00035	0.00037	0.00037	0.00040	0.00047	0.00051	0.00052
Metric Tons per Day	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
Yearly Maximums	0.00094	0.00102	0.00104	0.00105	0.00101	0.00101	0.00101	0.00100	0.00101	0.00102	0.00105	0.00109	0.00119	0.00133	0.00153	0.00175	0.00203	0.00226	0.00248	0.00269	0.00291	0.00314	0.00336	0.00359	0.00387	0.00417	0.00443	0.00476	0.00510	0.00546	0.00581	0.00618	0.00647	0.00677	0.00674	0.00673	0.00675	0.00673

Maximum Metric Tons per Day	0.000030
Maximum Metric Tons per Hour [a]	0.0000030
Maximum Metric Tons per Month	0.00068
Month with Maximum	43
Maximum Metric Tons per Year	0.00677
Maximum Average Metric Tons per Hour [b]	0.00000077
Year with Maximum	Months 34 - 45

Offsite CH_4 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
Peaker and Tank Area and Stack 3&4 Demolition																																						
Total (metric tons/month)	0.0000012	0.0000883	0.0001055	0.0002153	0.0002975	0.0003325	0.0004093	0.0004368	0.0004798	0.0004644	0.0004232	0.0002444	0.0002169	0.0001669	0.0001153																							
Total (metric tons/day)	0.0000001	0.0000038	0.0000046	0.0000094	0.0000129	0.0000145	0.0000178	0.0000190	0.0000209	0.0000202	0.0000184	0.0000106	0.0000094	0.0000073	0.0000050																							
Block 1 Construction																																						
Total (metric tons/month)																0.0000198	0.0003307	0.0003613	0.0004314	0.0005787	0.0006131	0.0006499	0.0006597	0.0007779	0.0008811	0.0010374	0.0009956	0.0011290	0.0011501	0.0012010	0.0012344	0.0014453	0.0015711	0.0015990	0.0017193	0.0017418	0.0018449	0.0018023
Total (metric tons/day)																0.0000009	0.0000144	0.0000157	0.0000188	0.0000252	0.0000267	0.0000283	0.0000287	0.0000338	0.0000383	0.0000451	0.0000433	0.0000491	0.0000500	0.0000522	0.0000537	0.0000628	0.0000683	0.0000695	0.0000748	0.0000757	0.0000802	0.0000784
Block 2 Construction																																				0.0003204	0.0004236	0.0005968
Total (metric tons/month)																																				0.0000139	0.0000184	0.0000259
Total (metric tons/day)																																						
Units 1 & 2 Demolition																																						
Total (metric tons/month)																																						
Total (metric tons/day)																																						
Bldgs. 33 & 34 Construction																																						
Total (metric tons/month)																																						
Total (metric tons/day)																																						
Total Offsite CH_4 Emissions (Construction Vehicles)																																						
Metric Tons per Month	0.00000	0.00009	0.00011	0.00022	0.00030	0.00033	0.00041	0.00044	0.00048	0.00046	0.00042	0.00024	0.00022	0.00017	0.00012	0.00002	0.00033	0.00036	0.00043	0.00058	0.00061	0.00065	0.00066	0.00078	0.00088	0.00104	0.00100	0.00113	0.00115	0.00120	0.00123	0.00145	0.00157	0.00160	0.00172	0.00206	0.00227	0.00240
Metric Tons per Day	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00001	0.00001	0.00000	0.00000	0.00000	0.00001	0.00002	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00004	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00006	0.00007	0.00007	0.00007	0.00009	0.00010	0.00010
Yearly Maximums	0.00350	0.00371	0.00379	0.00380	0.00361	0.00364	0.00367	0.00369	0.00383	0.00397	0.00415	0.00439	0.00492	0.00559	0.00646	0.00734	0.00845	0.00927	0.01010	0.01091	0.01177	0.01273	0.01368	0.01474	0.01603	0.01741	0.01877	0.02040	0.02206	0.02387	0.02562	0.02753	0.02900	0.03039	0.03014	0.03001	0.03000	0.02979

Maximum Metric Tons per Day	0.000137
Maximum Metric Tons per Hour [a]	0.0000137
Maximum Metric Tons per Month	0.00315
Month with Maximum	43
Maximum Metric Tons per Year	0.03039
Maximum Average Metric Tons per Hour [b]	0.0000035
Year with Maximum	Months 34 - 45

Notes:

[a] The hours per day are per 'Manpower Schedule Huntington Beach 03.13.12.xls 10 hours/day

[b] The hours per year are assumed to allow operation 24 hours per day, 7 days per week despite the actual construction schedule per 'Manpower_Schedule_Huntington_Beach 03.13. 8,760 hours/year

[c] There are no offsite activities generating fugitive dust during Peaker and Tank Area and Stack 3&4 Demolition, Units 1&2 Demolition and Bldgs. 33 & 34 Construction.

Table 5.1A.47R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite CO Emissions

	CO Emissions by Month																																								
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	358.17	358.17	367.60	367.60	364.20	317.06	309.21																																		
Total (lbs/day)	15.57	15.57	15.98	15.98	15.83	13.79	13.44																																		
Block 2 Construction																																									
Total (lbs/month)	128.18	156.17	177.12	177.90	198.99	210.21	231.99	252.73	288.42	361.53	363.24	360.04	355.77	354.83	351.91	356.17	336.65	349.44	332.38	328.12	252.74	202.71	134.06	132.94	128.67																
Total (lbs/day)	5.57	6.79	7.70	7.73	8.65	9.14	10.09	10.99	12.54	15.72	15.79	15.65	15.47	15.43	15.30	15.49	14.64	15.19	14.45	14.27	10.99	8.81	5.83	5.78	5.59																
Units 1 & 2 Demolition																																									
Total (lbs/month)																													31.70	35.83	53.52	71.81	75.15	82.23	84.01	84.01	92.28	92.28	104.68	104.68	108.81
Total (lbs/day)																													1.38	1.56	2.33	3.12	3.27	3.58	3.65	3.65	4.01	4.01	4.55	4.55	4.73
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																							40.38	60.60	62.30
Total (lbs/day)																																							1.76	2.63	2.71
Total Offsite CO Emissions (Construction Vehicles)																																									
Pounds per Month	**486.35**	**514.34**	**544.72**	**545.51**	**563.18**	**527.27**	**541.20**	**252.73**	**288.42**	**361.53**	**363.24**	**360.04**	**355.77**	**354.83**	**351.91**	**356.17**	**336.65**	**349.44**	**332.38**	**328.12**	**252.74**	**202.71**	**134.06**	**132.94**	**128.67**	**0.00**	**0.00**	**0.00**	**31.70**	**35.83**	**53.52**	**71.81**	**75.15**	**82.23**	**84.01**	**84.01**	**92.28**	**92.28**	**145.05**	**165.28**	**171.11**
Pounds per Day	**21.15**	**22.36**	**23.68**	**23.72**	**24.49**	**22.92**	**23.53**	**10.99**	**12.54**	**15.72**	**15.79**	**15.65**	**15.47**	**15.43**	**15.30**	**15.49**	**14.64**	**15.19**	**14.45**	**14.27**	**10.99**	**8.81**	**5.83**	**5.78**	**5.59**	**0.00**	**0.00**	**0.00**	**1.38**	**1.56**	**2.33**	**3.12**	**3.27**	**3.58**	**3.65**	**3.65**	**4.01**	**4.01**	**6.31**	**7.19**	**7.44**
Yearly Maximums	**5,349**	**5,218**	**5,058**	**4,866**	**4,676**	**4,450**	**4,272**	**4,063**	**4,139**	**4,103**	**3,944**	**3,715**	**3,488**	**3,261**	**2,906**	**2,554**	**2,198**	**1,893**	**1,579**	**1,300**	**1,044**	**866**	**746**	**696**	**647**	**611**	**703**	**848**	**1,013**	**1,153**	**1,295**	**1,420**	**1,522**	**1,629**	**1,729**	**1,834**	**1,927**	**1,997**	**2,054**	**2,047**	**1,923**
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite VOC Emissions

	VOC Emissions by Month																																								
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	8.99	8.99	9.18	9.18	7.67	6.74	6.58																																		
Total (lbs/day)	0.39	0.39	0.40	0.40	0.33	0.29	0.29																																		
Block 2 Construction																																									
Total (lbs/month)	5.48	6.12	7.19	7.52	6.61	8.07	10.10	12.74	12.65	13.96	14.24	13.71	13.00	11.85	11.16	11.87	9.63	11.75	8.92	8.22	6.93	5.44	4.26	4.88	4.17																
Total (lbs/day)	0.24	0.27	0.31	0.33	0.29	0.35	0.44	0.55	0.55	0.61	0.62	0.60	0.57	0.52	0.49	0.52	0.42	0.51	0.39	0.36	0.30	0.24	0.19	0.21	0.18																
Units 1 & 2 Demolition																																									
Total (lbs/month)																													2.95	3.63	3.91	4.80	4.65	4.76	5.40	5.40	6.74	6.74	8.76	8.76	9.43
Total (lbs/day)																													0.13	0.16	0.17	0.21	0.20	0.21	0.23	0.23	0.29	0.29	0.38	0.38	0.41
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																							0.69	1.85	1.80
Total (lbs/day)																																							0.03	0.08	0.08
Total Offsite VOC Emissions (Construction Vehicles)																																									
Pounds per Month	**14.47**	**15.11**	**16.37**	**16.70**	**14.28**	**14.81**	**16.68**	**12.74**	**12.65**	**13.96**	**14.24**	**13.71**	**13.00**	**11.85**	**11.16**	**11.87**	**9.63**	**11.75**	**8.92**	**8.22**	**6.93**	**5.44**	**4.26**	**4.88**	**4.17**	**0.00**	**0.00**	**0.00**	**2.95**	**3.63**	**3.91**	**4.80**	**4.65**	**4.76**	**5.40**	**5.40**	**6.74**	**6.74**	**9.45**	**10.61**	**11.23**
Pounds per Day	**0.63**	**0.66**	**0.71**	**0.73**	**0.62**	**0.64**	**0.73**	**0.55**	**0.55**	**0.61**	**0.62**	**0.60**	**0.57**	**0.52**	**0.49**	**0.52**	**0.42**	**0.51**	**0.39**	**0.36**	**0.30**	**0.24**	**0.19**	**0.21**	**0.18**	**0.00**	**0.00**	**0.00**	**0.13**	**0.16**	**0.17**	**0.21**	**0.20**	**0.21**	**0.23**	**0.23**	**0.29**	**0.29**	**0.41**	**0.46**	**0.49**
Yearly Maximums	**176**	**174**	**171**	**166**	**161**	**156**	**153**	**145**	**141**	**135**	**127**	**117**	**108**	**99**	**87**	**76**	**64**	**58**	**49**	**44**	**41**	**39**	**38**	**39**	**40**	**42**	**49**	**58**	**69**	**77**	**86**	**95**	**102**	**108**	**115**	**121**	**124**	**126**	**126**	**122**	**116**
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite NOx Emissions

	NOx Emissions by Month																																								
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	56.82	56.82	57.57	57.57	35.25	31.53	30.90																																		
Total (lbs/day)	2.47	2.47	2.50	2.50	1.53	1.37	1.34																																		
Block 2 Construction																																									
Total (lbs/month)	68.30	73.64	87.96	93.54	73.47	96.53	126.99	151.67	143.83	151.02	155.12	147.44	137.20	119.34	109.22	119.46	88.17	118.89	77.93	61.78	55.84	43.00	37.59	46.41	37.17																
Total (lbs/day)	2.97	3.20	3.82	4.07	3.19	4.20	5.52	6.59	6.25	6.57	6.74	6.41	5.97	5.19	4.75	5.19	3.83	5.17	3.39	2.69	2.43	1.87	1.63	2.02	1.62																
Units 1 & 2 Demolition																																									
Total (lbs/month)																													41.05	51.02	52.61	57.99	55.37	55.96	64.81	64.81	82.90	82.90	110.03	110.03	119.07
Total (lbs/day)																													1.78	2.22	2.29	2.52	2.41	2.43	2.82	2.82	3.60	3.60	4.78	4.78	5.18
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																							4.42	18.96	17.96
Total (lbs/day)																																							0.19	0.82	0.78
Total Offsite NOx Emissions (Construction Vehicles)																																									
Pounds per Month	**125.13**	**130.46**	**145.53**	**151.11**	**108.72**	**128.05**	**157.90**	**151.67**	**143.83**	**151.02**	**155.12**	**147.44**	**137.20**	**119.34**	**109.22**	**119.46**	**88.17**	**118.89**	**77.93**	**61.78**	**55.84**	**43.00**	**37.59**	**46.41**	**37.17**	**0.00**	**0.00**	**0.00**	**41.05**	**51.02**	**52.61**	**57.99**	**55.37**	**55.96**	**64.81**	**64.81**	**82.90**	**82.90**	**114.45**	**128.99**	**137.02**
Pounds per Day	**5.44**	**5.67**	**6.33**	**6.57**	**4.73**	**5.57**	**6.87**	**6.59**	**6.25**	**6.57**	**6.74**	**6.41**	**5.97**	**5.19**	**4.75**	**5.19**	**3.83**	**5.17**	**3.39**	**2.69**	**2.43**	**1.87**	**1.63**	**2.02**	**1.62**	**0.00**	**0.00**	**0.00**	**1.78**	**2.22**	**2.29**	**2.52**	**2.41**	**2.43**	**2.82**	**2.82**	**3.60**	**3.60**	**4.98**	**5.61**	**5.96**
Yearly Maximums	**1,696**	**1,708**	**1,697**	**1,661**	**1,629**	**1,608**	**1,599**	**1,519**	**1,429**	**1,341**	**1,233**	**1,116**	**1,015**	**915**	**795**	**686**	**567**	**520**	**452**	**426**	**423**	**422**	**435**	**462**	**481**	**527**	**609**	**724**	**853**	**949**	**1,050**	**1,156**	**1,255**	**1,354**	**1,452**	**1,543**	**1,603**	**1,638**	**1,655**	**1,629**	**1,553**
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Table 5.1A.47R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite SOx Emissions

	SOx Emissions by Month																																								
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	0.956	0.956	0.979	0.979	0.907	0.792	0.772																																		
Total (lbs/day)	0.042	0.042	0.043	0.043	0.039	0.034	0.034																																		
Block 2 Construction																																									
Total (lbs/month)	0.504	0.586	0.678	0.696	0.687	0.781	0.922	1.094	1.153	1.349	1.367	1.334	1.290	1.229	1.189	1.233	1.084	1.215	1.040	0.997	0.797	0.632	0.451	0.480	0.437																
Total (lbs/day)	0.022	0.025	0.029	0.030	0.030	0.034	0.040	0.048	0.050	0.059	0.059	0.058	0.056	0.053	0.052	0.054	0.047	0.053	0.045	0.043	0.035	0.027	0.020	0.021	0.019																
Units 1 & 2 Demolition																																									
Total (lbs/month)																													0.232	0.279	0.332	0.422	0.421	0.442	0.482	0.482	0.576	0.576	0.718	0.718	0.765
Total (lbs/day)																													0.010	0.012	0.014	0.018	0.018	0.019	0.021	0.021	0.025	0.025	0.031	0.031	0.033
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																							0.133	0.248	0.249
Total (lbs/day)																																							0.006	0.011	0.011
Total Offsite SOx Emissions (Construction Vehicles)																																									
Pounds per Month	**1.459**	**1.542**	**1.656**	**1.675**	**1.594**	**1.573**	**1.695**	**1.094**	**1.153**	**1.349**	**1.367**	**1.334**	**1.290**	**1.229**	**1.189**	**1.233**	**1.084**	**1.215**	**1.040**	**0.997**	**0.797**	**0.632**	**0.451**	**0.480**	**0.437**	**0.000**	**0.000**	**0.000**	**0.232**	**0.279**	**0.332**	**0.422**	**0.421**	**0.442**	**0.482**	**0.482**	**0.576**	**0.576**	**0.850**	**0.966**	**1.014**
Pounds per Day	**0.063**	**0.067**	**0.072**	**0.073**	**0.069**	**0.068**	**0.074**	**0.048**	**0.050**	**0.059**	**0.059**	**0.058**	**0.056**	**0.053**	**0.052**	**0.054**	**0.047**	**0.053**	**0.045**	**0.043**	**0.035**	**0.027**	**0.020**	**0.021**	**0.019**	**0.000**	**0.000**	**0.000**	**0.010**	**0.012**	**0.014**	**0.018**	**0.018**	**0.019**	**0.021**	**0.021**	**0.025**	**0.025**	**0.037**	**0.042**	**0.044**
Yearly Maximums	**17**	**17**	**17**	**17**	**16**	**16**	**15**	**15**	**14**	**14**	**13**	**12**	**12**	**11**	**10**	**8**	**7**	**6**	**5**	**5**	**4**	**4**	**3**	**4**	**4**	**4**	**4**	**5**	**6**	**7**	**8**	**8**	**9**	**10**	**10**	**11**	**11**	**12**	**12**	**11**	**11**
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite Exhaust PM_{10} Emissions

	Exhaust PM_{10} Emissions by Month																																								
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	83.96	83.96	86.15	86.15	84.76	73.81	71.98																																		
Total (lbs/day)	3.49	3.49	3.59	3.59	3.65	3.17	3.09																																		
Block 2 Construction																																									
Total (lbs/month)	36.09	43.75	49.73	50.08	55.26	58.84	65.43	71.57	80.99	100.84	101.39	100.35	98.96	98.27	97.25	98.64	92.64	96.82	91.24	89.74	69.30	55.53	36.91	36.82	35.45																
Total (lbs/day)	1.57	1.90	2.16	2.18	2.40	2.56	2.84	3.11	3.52	4.38	4.41	4.36	4.30	4.27	4.23	4.29	4.03	4.21	3.97	3.90	3.01	2.41	1.60	1.60	1.54																
Units 1 & 2 Demolition																																									
Total (lbs/month)																													10.52	12.00	17.47	23.17	24.14	26.33	27.05	27.05	29.94	29.94	34.28	34.28	35.73
Total (lbs/day)																													0.46	0.52	0.76	1.01	1.05	1.14	1.18	1.18	1.30	1.30	1.49	1.49	1.55
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																							13.27	20.14	20.68
Total (lbs/day)																																							0.58	0.88	0.90
Total Offsite Exhaust PM_{10} Emissions (Construction Vehicles)																																									
Pounds per Month	**120.05**	**127.71**	**135.88**	**136.23**	**140.01**	**132.65**	**137.41**	**71.57**	**80.99**	**100.84**	**101.39**	**100.35**	**98.96**	**98.27**	**97.25**	**98.64**	**92.64**	**96.82**	**91.24**	**89.74**	**69.30**	**55.53**	**36.91**	**36.82**	**35.45**	**0.00**	**0.00**	**0.00**	**10.52**	**12.00**	**17.47**	**23.17**	**24.14**	**26.33**	**27.05**	**27.05**	**29.94**	**29.94**	**47.56**	**54.42**	**56.41**
Pounds per Day	**5.06**	**5.39**	**5.75**	**5.76**	**6.05**	**5.73**	**5.94**	**3.11**	**3.52**	**4.38**	**4.41**	**4.36**	**4.30**	**4.27**	**4.23**	**4.29**	**4.03**	**4.21**	**3.97**	**3.90**	**3.01**	**2.41**	**1.60**	**1.60**	**1.54**	**0.00**	**0.00**	**0.00**	**0.46**	**0.52**	**0.76**	**1.01**	**1.05**	**1.14**	**1.18**	**1.18**	**1.30**	**1.30**	**2.07**	**2.37**	**2.45**
Yearly Maximums	**1,385**	**1,364**	**1,335**	**1,296**	**1,258**	**1,211**	**1,175**	**1,129**	**1,147**	**1,135**	**1,090**	**1,026**	**962**	**899**	**800**	**703**	**604**	**522**	**438**	**364**	**297**	**252**	**223**	**213**	**203**	**198**	**228**	**275**	**330**	**375**	**422**	**464**	**498**	**533**	**567**	**602**	**632**	**655**	**674**	**672**	**631**
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite Fugitive PM_{10} Emissions

	Fugitive PM_{10} Emissions by Month																																								
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	0.35	0.35	0.35	0.35	0.35	0.35	0.35																																		
Total (lbs/day)	0.02	0.02	0.02	0.02	0.02	0.02	0.02																																		
Block 2 Construction																																									
Total (lbs/month)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35																
Total (lbs/day)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02																
Units 1 & 2 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite Fugitive PM_{10} Emissions (Grading)																																									
Pounds per Month	**0.71**	**0.71**	**0.71**	**0.71**	**0.71**	**0.71**	**0.71**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Pounds per Day	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**6.7**	**6.4**	**6.0**	**5.7**	**5.3**	**4.9**	**4.6**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**3.9**	**3.5**	**3.2**	**2.8**	**2.5**	**2.1**	**1.8**	**1.4**	**1.1**	**0.7**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Table 5.1A.47R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite PM_{10} Emissions (Exhaust and Fugitive)

	Total PM_{10} Emissions by Month																																							
Parameter	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Pounds per Month	120.76	128.41	136.59	136.94	140.72	133.35	138.12	71.93	81.34	101.19	101.75	100.70	99.31	98.63	97.60	98.99	92.99	97.17	91.60	90.09	69.65	55.88	37.27	37.17	35.81	0.00	0.00	0.00	10.52	12.00	17.47	23.17	24.14	26.33	27.05	27.05	29.94	29.94	47.56	54.42	56.41
Pounds per Day	5.09	5.42	5.78	5.79	6.08	5.76	5.97	3.13	3.54	4.40	4.42	4.38	4.32	4.29	4.24	4.30	4.04	4.22	3.98	3.92	3.03	2.43	1.62	1.62	1.56	0.00	0.00	0.00	0.46	0.52	0.76	1.01	1.05	1.14	1.18	1.18	1.30	1.30	2.07	2.37	2.45
Yearly Maximums	1,392	1,370	1,341	1,302	1,264	1,216	1,180	1,133	1,151	1,140	1,094	1,030	966	903	804	707	608	525	440	366	299	253	224	214	204	198	228	275	330	375	422	464	498	533	567	602	632	655	674	672	631
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite Exhaust $PM_{2.5}$ Emissions

	Exhaust $PM_{2.5}$ Emissions by Month																																							
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	24.16	24.16	24.77	24.77	23.84	20.78	20.27																																		
Total (lbs/day)	1.05	1.05	1.08	1.08	1.04	0.90	0.88																																		
Block 2 Construction																																									
Total (lbs/month)	11.47	13.68	15.65	15.89	16.79	18.34	20.88	22.96	25.36	30.94	31.19	30.73	30.12	29.53	29.02	29.63	27.29	29.12	26.68	26.07	20.34	16.25	11.03	11.24	10.62																
Total (lbs/day)	0.50	0.59	0.68	0.69	0.73	0.80	0.91	1.00	1.10	1.35	1.36	1.34	1.31	1.28	1.26	1.29	1.19	1.27	1.16	1.13	0.88	0.71	0.48	0.49	0.46																
Units 1 & 2 Demolition																																									
Total (lbs/month)																													3.93	4.59	6.13	7.87	8.07	8.68	9.11	9.11	10.39	10.39	12.30	12.30	12.94
Total (lbs/day)																													0.17	0.20	0.27	0.34	0.35	0.38	0.40	0.40	0.45	0.45	0.53	0.53	0.56
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																							3.74	6.01	6.12
Total (lbs/day)																																							0.16	0.26	0.27
Total Offsite Exhaust $PM_{2.5}$ Emissions (Construction Vehicles)																																									
Pounds per Month	35.63	37.84	40.43	40.66	40.63	39.12	41.15	22.96	25.36	30.94	31.19	30.73	30.12	29.53	29.02	29.63	27.29	29.12	26.68	26.07	20.34	16.25	11.03	11.24	10.62	0.00	0.00	0.00	3.93	4.59	6.13	7.87	8.07	8.68	9.11	9.11	10.39	10.39	16.04	18.31	19.06
Pounds per Day	1.55	1.65	1.76	1.77	1.77	1.70	1.79	1.00	1.10	1.35	1.36	1.34	1.31	1.28	1.26	1.29	1.19	1.27	1.16	1.13	0.88	0.71	0.48	0.49	0.46	0.00	0.00	0.00	0.17	0.20	0.27	0.34	0.35	0.38	0.40	0.40	0.45	0.45	0.70	0.80	0.83
Yearly Maximums	417	411	403	391	380	367	357	343	346	341	326	306	286	267	237	208	179	155	131	110	92	80	72	70	68	68	78	94	113	128	143	158	169	181	192	203	212	218	223	221	208
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions by Month																																							
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)	0.038	0.038	0.038	0.038	0.038	0.038	0.038																																		
Total (lbs/day)	0.002	0.002	0.002	0.002	0.002	0.002	0.002																																		
Block 2 Construction																																									
Total (lbs/month)	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038																
Total (lbs/day)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002																
Units 1 & 2 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite Fugitive $PM_{2.5}$ Emissions (Grading)																																									
Pounds per Month	0.076	0.076	0.076	0.076	0.076	0.076	0.076	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pounds per Day	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Yearly Maximums	0.73	0.69	0.65	0.61	0.57	0.53	0.50	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.38	0.34	0.31	0.27	0.23	0.19	0.15	0.11	0.08	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Table 5.1A.47R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

	Total $PM_{2.5}$ Emissions by Month																																						
Parameter	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Pounds per Month	35.71	37.91	40.50	40.74	40.71	39.19	41.22	23.00	25.40	30.98	31.22	30.77	30.15	29.57	29.06	29.67	27.33	29.16	26.71	26.10	20.38	16.29	11.07	11.28	10.66	0.00	0.00	0.00	3.93	4.59	6.13	7.87	8.07	8.68	9.11	9.11	10.39	10.39	16.04	18.31	19.06
Pounds per Day	1.55	1.65	1.76	1.77	1.77	1.70	1.79	1.00	1.10	1.35	1.36	1.34	1.31	1.29	1.26	1.29	1.19	1.27	1.16	1.13	0.89	0.71	0.48	0.49	0.46	0.00	0.00	0.00	0.17	0.20	0.27	0.34	0.35	0.38	0.40	0.40	0.45	0.45	0.70	0.80	0.83
Yearly Maximums	417	412	403	392	381	368	358	343	346	341	326	306	287	267	238	209	179	156	131	110	92	80	72	70	68	68	78	94	113	128	143	158	169	181	192	203	212	218	223	221	208
Maximum Pounds per Day																																									
Maximum Pounds per Hour [a]																																									
Maximum Pounds per Month																																									
Month with Maximum																																									
Maximum Pounds per Year																																									
Maximum Average Pounds per Hour [b]																																									
Year with Maximum																																									
Tons per Year																																									

Offsite CO_2 Emissions

	CO_2 Emissions by Month																																						
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Block 1 Construction																																									
Total (metric tons/month)	40.51	40.51	41.47	41.47	37.91	33.12	32.33																																		
Total (metric tons/day)	1.76	1.76	1.80	1.80	1.65	1.44	1.41																																		
Block 2 Construction																																									
Total (metric tons/month)	23.24	26.95	31.22	32.11	31.41	35.93	42.59	50.78	53.25	62.05	62.89	61.31	59.21	56.23	54.29	56.39	49.30	55.60	47.20	45.11	36.20	28.69	20.58	22.04	19.94																
Total (metric tons/day)	1.01	1.17	1.36	1.40	1.37	1.56	1.85	2.21	2.32	2.70	2.73	2.67	2.57	2.44	2.36	2.45	2.14	2.42	2.05	1.96	1.57	1.25	0.89	0.96	0.87																
Units 1 & 2 Demolition																													10.96	13.22	15.60	19.77	19.65	20.60	22.55	22.55	27.08	27.08	33.87	33.87	36.13
Total (metric tons/day)																													0.48	0.57	0.68	0.86	0.85	0.90	0.98	0.98	1.18	1.18	1.47	1.47	1.57
Bldgs. 33 & 34 Construction																																							0.21	3.53	3.23
Total (metric tons/day)																																							0.01	0.15	0.14
Total Offsite CO_2 Emissions (Construction Vehicles)																																									
Metric Tons per Month	**63.76**	**67.46**	**72.69**	**73.58**	**69.32**	**69.05**	**74.92**	**50.78**	**53.25**	**62.05**	**62.89**	**61.31**	**59.21**	**56.23**	**54.29**	**56.39**	**49.30**	**55.60**	**47.20**	**45.11**	**36.20**	**28.69**	**20.58**	**22.04**	**19.94**	**0.00**	**0.00**	**0.00**	**10.96**	**13.22**	**15.60**	**19.77**	**19.65**	**20.60**	**22.55**	**22.55**	**27.08**	**27.08**	**34.08**	**37.40**	**39.36**
Metric Tons per Day	**2.77**	**2.93**	**3.16**	**3.20**	**3.01**	**3.00**	**3.26**	**2.21**	**2.32**	**2.70**	**2.73**	**2.67**	**2.57**	**2.44**	**2.36**	**2.45**	**2.14**	**2.42**	**2.05**	**1.96**	**1.57**	**1.25**	**0.89**	**0.96**	**0.87**	**0.00**	**0.00**	**0.00**	**0.48**	**0.57**	**0.68**	**0.86**	**0.85**	**0.90**	**0.98**	**0.98**	**1.18**	**1.18**	**1.48**	**1.63**	**1.71**
Yearly Maximums	**781**	**777**	**765**	**747**	**730**	**710**	**696**	**669**	**663**	**646**	**612**	**570**	**531**	**492**	**435**	**381**	**325**	**286**	**244**	**212**	**187**	**170**	**162**	**164**	**165**	**172**	**199**	**233**	**271**	**299**	**329**	**358**	**379**	**398**	**416**	**432**	**439**	**440**	**434**	**418**	**396**
Maximum Metric Tons per Day																																									
Maximum Metric Tons per Hour [a]																																									
Maximum Metric Tons per Month																																									
Month with Maximum																																									
Maximum Metric Tons per Year																																									
Maximum Average Metric Tons per Hour [b]																																									
Year with Maximum																																									

Offsite N_2O Emissions

	N_2O Emissions by Month																																						
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Block 1 Construction																																									
Total (metric tons/month)	0.0004092	0.0004092	0.0004199	0.0004199	0.0004148	0.0003612	0.0003522																																		
Total (metric tons/day)	0.0000178	0.0000178	0.0000183	0.0000183	0.0000180	0.0000157	0.0000153																																		
Block 2 Construction																																									
Total (metric tons/month)	0.0001724	0.0002097	0.0002381	0.0002394	0.0002664	0.0002823	0.0003124	0.0003416	0.0003885	0.0004857	0.0004882	0.0004836	0.0004774	0.0004753	0.0004710	0.0004771	0.0004497	0.0004682	0.0004436	0.0004375	0.0003373	0.0002704	0.0001791	0.0001781	0.0001720																
Total (metric tons/day)	0.0000075	0.0000091	0.0000104	0.0000104	0.0000116	0.0000123	0.0000136	0.0000149	0.0000169	0.0000211	0.0000212	0.0000210	0.0000208	0.0000207	0.0000205	0.0000207	0.0000196	0.0000204	0.0000193	0.0000190	0.0000147	0.0000118	0.0000078	0.0000077	0.0000075																
Units 1 & 2 Demolition																													0.0000492	0.0000558	0.0000826	0.0001107	0.0001156	0.0001264	0.0001294	0.0001294	0.0001427	0.0001427	0.0001625	0.0001625	0.0001692
Total (metric tons/day)																													0.0000021	0.0000024	0.0000036	0.0000048	0.0000050	0.0000055	0.0000056	0.0000056	0.0000062	0.0000062	0.0000071	0.0000071	0.0000074
Bldgs. 33 & 34 Construction																																							0.0000650	0.0000980	0.0001006
Total (metric tons/day)																																							0.0000028	0.0000043	0.0000044
Total Offsite N_2O Emissions (Construction Vehicles)																																									
Metric Tons per Month	**0.00058**	**0.00062**	**0.00066**	**0.00066**	**0.00068**	**0.00064**	**0.00066**	**0.00034**	**0.00039**	**0.00049**	**0.00049**	**0.00048**	**0.00048**	**0.00048**	**0.00047**	**0.00048**	**0.00045**	**0.00047**	**0.00044**	**0.00044**	**0.00034**	**0.00027**	**0.00018**	**0.00018**	**0.00017**	**0.00000**	**0.00000**	**0.00000**	**0.00005**	**0.00006**	**0.00008**	**0.00011**	**0.00012**	**0.00013**	**0.00013**	**0.00013**	**0.00014**	**0.00014**	**0.00023**	**0.00026**	**0.00027**
Metric Tons per Day	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00003**	**0.00001**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00000**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**	**0.00001**
Yearly Maximums	**0.00669**	**0.00659**	**0.00645**	**0.00626**	**0.00608**	**0.00585**	**0.00567**	**0.00545**	**0.00555**	**0.00549**	**0.00528**	**0.00497**	**0.00466**	**0.00436**	**0.00388**	**0.00341**	**0.00294**	**0.00254**	**0.00212**	**0.00176**	**0.00144**	**0.00121**	**0.00107**	**0.00102**	**0.00097**	**0.00094**	**0.00108**	**0.00131**	**0.00157**	**0.00179**	**0.00202**	**0.00222**	**0.00238**	**0.00255**	**0.00271**	**0.00288**	**0.00303**	**0.00315**	**0.00324**	**0.00323**	**0.00304**
Maximum Metric Tons per Day																																									
Maximum Metric Tons per Hour [a]																																									
Maximum Metric Tons per Month																																									
Month with Maximum																																									
Maximum Metric Tons per Year																																									
Maximum Average Metric Tons per Hour [b]																																									
Year with Maximum																																									

Offsite CH_4 Emissions

	CH_4 Emissions by Month																																						
Construction Step	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Block 1 Construction																																									
Total (metric tons/month)	0.0019076	0.0019076	0.0019591	0.0019591	0.0019805	0.0017226	0.0016796																																		
Total (metric tons/day)	0.0000829	0.0000829	0.0000852	0.0000852	0.0000861	0.0000749	0.0000730																																		
Block 2 Construction																																									
Total (metric tons/month)	0.0007121	0.0008856	0.0009961	0.0009907	0.0011668	0.0011970	0.0012825	0.0013403	0.0015910	0.0020558	0.0020584	0.0020535	0.0020470	0.0020782	0.0020803	0.0020868	0.0020242	0.0020438	0.0020177	0.0020112	0.0015299	0.0012312	0.0007928	0.0007650	0.0007585																
Total (metric tons/day)	0.0000310	0.0000385	0.0000433	0.0000431	0.0000507	0.0000520	0.0000558	0.0000583	0.0000692	0.0000894	0.0000895	0.0000893	0.0000890	0.0000904	0.0000904	0.0000907	0.0000880	0.0000889	0.0000877	0.0000874	0.0000665	0.0000535	0.0000345	0.0000333	0.0000330																
Units 1 & 2 Demolition																													0.0001392	0.0001463	0.0002752	0.0003854	0.0004174	0.0004690	0.0004588	0.0004588	0.0004729	0.0004729	0.0004940	0.0004940	0.0005011
Total (metric tons/day)																													0.0000061	0.0000064	0.0000120	0.0000168	0.0000181	0.0000204	0.0000199	0.0000199	0.0000206	0.0000206	0.0000215	0.0000215	0.0000218
Bldgs. 33 & 34 Construction																																							0.0003100	0.0004321	0.0004484
Total (metric tons/day)																																							0.0000135	0.0000188	0.0000195
Total Offsite CH_4 Emissions (Construction Vehicles)																																									
Metric Tons per Month	**0.00262**	**0.00279**	**0.00296**	**0.00295**	**0.00315**	**0.00292**	**0.00296**	**0.00134**	**0.00159**	**0.00206**	**0.00206**	**0.00205**	**0.00205**	**0.00208**	**0.00208**	**0.00209**	**0.00202**	**0.00204**	**0.00202**	**0.00201**	**0.00153**	**0.00123**	**0.00079**	**0.00076**	**0.00076**	**0.00000**	**0.00000**	**0.00000**	**0.00014**	**0.00015**	**0.00028**	**0.00039**	**0.00042**	**0.00047**	**0.00046**	**0.00046**	**0.00047**	**0.00047**	**0.00080**	**0.00093**	**0.00095**
Metric Tons per Day	**0.00011**	**0.00012**	**0.00013**	**0.00013**	**0.00014**	**0.00013**	**0.00013**	**0.00006**	**0.00007**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00009**	**0.00007**	**0.00005**	**0.00003**	**0.00003**	**0.00003**	**0.00000**	**0.00000**	**0.00000**	**0.00001**	**0.00001**	**0.00001**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00002**	**0.00003**	**0.00004**	**0.00004**
Yearly Maximums	**0.02945**	**0.02887**	**0.02816**	**0.02728**	**0.02642**	**0.02530**	**0.02442**	**0.02348**	**0.02415**	**0.02409**	**0.02326**	**0.02200**	**0.02071**	**0.01942**	**0.01734**	**0.01526**	**0.01317**	**0.01129**	**0.00939**	**0.00765**	**0.00602**	**0.00491**	**0.00415**	**0.00381**	**0.00351**	**0.00322**	**0.00370**	**0.00450**	**0.00543**	**0.00624**	**0.00705**	**0.00773**	**0.00830**	**0.00892**	**0.00949**	**0.01012**	**0.01077**	**0.01130**	**0.01178**	**0.01187**	**0.01111**
Maximum Metric Tons per Day																																									
Maximum Metric Tons per Hour [a]																																									
Maximum Metric Tons per Month																																									
Month with Maximum																																									
Maximum Metric Tons per Year																																									
Maximum Average Metric Tons per Hour [b]																																									
Year with Maximum																																									

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington
[b] The hours per year are assumed to allow operation 24 hours p
[c] There are no offsite activities generating fugitive dust during P

Table 5.1A.47R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite CO Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition											
Total (lbs/month)	112.95	112.95	112.95	112.95	112.95	112.95	94.05	91.49	60.81	53.14	41.12
Total (lbs/day)	4.91	4.91	4.91	4.91	4.91	4.91	4.09	3.98	2.64	2.31	1.79
Bldgs. 33 & 34 Construction											
Total (lbs/month)	64.92	65.86	61.31	68.68	69.26	75.93	83.71	70.38	88.15	84.82	0.37
Total (lbs/day)	2.82	2.86	2.67	2.99	3.01	3.30	3.64	3.06	3.83	3.69	0.02
Total Offsite CO Emissions (Construction Vehicles)											
Pounds per Month	**177.87**	**178.80**	**174.25**	**181.63**	**182.21**	**188.88**	**177.76**	**161.87**	**148.97**	**137.96**	**41.50**
Pounds per Day	**7.73**	**7.77**	**7.58**	**7.90**	**7.92**	**8.21**	**7.73**	**7.04**	**6.48**	**6.00**	**1.80**
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite VOC Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition											
Total (lbs/month)	10.10	10.10	10.10	10.10	10.10	10.10	7.38	7.14	5.44	4.71	4.09
Total (lbs/day)	0.44	0.44	0.44	0.44	0.44	0.44	0.32	0.31	0.24	0.20	0.18
Bldgs. 33 & 34 Construction											
Total (lbs/month)	2.22	2.70	1.47	1.20	1.14	1.24	1.36	1.15	1.43	1.38	0.07
Total (lbs/day)	0.10	0.12	0.06	0.05	0.05	0.05	0.06	0.05	0.06	0.06	0.00
Total Offsite VOC Emissions (Construction Vehicles)											
Pounds per Month	**12.33**	**12.80**	**11.58**	**11.31**	**11.24**	**11.34**	**8.74**	**8.29**	**6.87**	**6.09**	**4.15**
Pounds per Day	**0.54**	**0.56**	**0.50**	**0.49**	**0.49**	**0.49**	**0.38**	**0.36**	**0.30**	**0.26**	**0.18**
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite NOx Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition											
Total (lbs/month)	128.11	128.11	130.29	130.29	130.29	130.29	96.53	93.41	69.92	60.56	52.29
Total (lbs/day)	5.57	5.57	5.66	5.66	5.66	5.66	4.20	4.06	3.04	2.63	2.27
Bldgs. 33 & 34 Construction											
Total (lbs/month)	23.98	31.02	26.19	24.25	23.56	25.77	28.34	23.93	29.81	28.71	0.78
Total (lbs/day)	1.04	1.35	1.14	1.05	1.02	1.12	1.23	1.04	1.30	1.25	0.03
Total Offsite NOx Emissions (Construction Vehicles)											
Pounds per Month	**152.10**	**159.14**	**156.47**	**154.53**	**153.85**	**156.06**	**124.87**	**117.34**	**99.73**	**89.27**	**53.07**
Pounds per Day	**6.61**	**6.92**	**6.80**	**6.72**	**6.69**	**6.79**	**5.43**	**5.10**	**4.34**	**3.88**	**2.31**
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Table 5.1A.47R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite SOx Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition											
Total (lbs/month)	0.812	0.812	0.812	0.812	0.812	0.812	0.616	0.597	0.435	0.377	0.321
Total (lbs/day)	0.035	0.035	0.035	0.035	0.035	0.035	0.027	0.026	0.019	0.016	0.014
Bldgs. 33 & 34 Construction											
Total (lbs/month)	0.280	0.311	0.227	0.228	0.225	0.246	0.271	0.229	0.286	0.275	0.004
Total (lbs/day)	0.012	0.014	0.010	0.010	0.010	0.011	0.012	0.010	0.012	0.012	0.000
Total Offsite SOx Emissions (Construction Vehicles)											
Pounds per Month	**1.092**	**1.123**	**1.039**	**1.040**	**1.037**	**1.059**	**0.888**	**0.826**	**0.721**	**0.652**	**0.325**
Pounds per Day	**0.047**	**0.049**	**0.045**	**0.045**	**0.045**	**0.046**	**0.039**	**0.036**	**0.031**	**0.028**	**0.014**
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite Exhaust PM_{10} Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition											
Total (lbs/month)	37.18	37.18	36.88	36.88	36.88	36.88	30.45	29.61	19.83	17.31	13.55
Total (lbs/day)	1.62	1.62	1.60	1.60	1.60	1.60	1.32	1.29	0.86	0.75	0.59
Bldgs. 33 & 34 Construction											
Total (lbs/month)	21.64	22.07	20.26	22.60	22.78	24.97	27.52	23.14	28.99	27.89	0.13
Total (lbs/day)	0.94	0.96	0.88	0.98	0.99	1.09	1.20	1.01	1.26	1.21	0.01
Total Offsite Exhaust PM_{10} Emissions (Construction Vehicles)											
Pounds per Month	**58.82**	**59.24**	**57.14**	**59.48**	**59.65**	**61.85**	**57.98**	**52.75**	**48.81**	**45.20**	**13.68**
Pounds per Day	**2.56**	**2.58**	**2.48**	**2.59**	**2.59**	**2.69**	**2.52**	**2.29**	**2.12**	**1.97**	**0.59**
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite Fugitive PM_{10} Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition [c]											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition [c]											
Total (lbs/month)											
Total (lbs/day)											
Bldgs. 33 & 34 Construction [c]											
Total (lbs/month)											
Total (lbs/day)											
Total Offsite Fugitive PM_{10} Emissions (Grading)											
Pounds per Month	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Pounds per Day	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Table 5.1A.47R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	58.82	59.24	57.14	59.48	59.65	61.85	57.98	52.75	48.81	45.20	13.68
Pounds per Day	2.56	2.58	2.48	2.59	2.59	2.69	2.52	2.29	2.12	1.97	0.59
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition											
Total (lbs/month)	13.58	13.58	13.31	13.31	13.31	13.31	10.63	10.32	7.14	6.22	5.04
Total (lbs/day)	0.59	0.59	0.58	0.58	0.58	0.58	0.46	0.45	0.31	0.27	0.22
Bldgs. 33 & 34 Construction											
Total (lbs/month)	6.55	6.86	5.87	6.38	6.40	7.01	7.73	6.50	8.14	7.83	0.06
Total (lbs/day)	0.28	0.30	0.26	0.28	0.28	0.30	0.34	0.28	0.35	0.34	0.00
Total Offsite Exhaust $PM_{2.5}$ Emissions (Construction Vehicles)											
Pounds per Month	20.13	20.43	19.17	19.68	19.70	20.32	18.36	16.82	15.28	14.05	5.09
Pounds per Day	0.88	0.89	0.83	0.86	0.86	0.88	0.80	0.73	0.66	0.61	0.22
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition [c]											
Total (lbs/month)											
Total (lbs/day)											
Block 1 Construction											
Total (lbs/month)											
Total (lbs/day)											
Block 2 Construction											
Total (lbs/month)											
Total (lbs/day)											
Units 1 & 2 Demolition [c]											
Total (lbs/month)											
Total (lbs/day)											
Bldgs. 33 & 34 Construction [c]											
Total (lbs/month)											
Total (lbs/day)											
Total Offsite Fugitive $PM_{2.5}$ Emissions (Grading)											
Pounds per Month	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pounds per Day	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Table 5.1A.47R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	20.13	20.43	19.17	19.68	19.70	20.32	18.36	16.82	15.28	14.05	5.09
Pounds per Day	0.88	0.89	0.83	0.86	0.86	0.88	0.80	0.73	0.66	0.61	0.22
Yearly Maximums											
Maximum Pounds per Day											
Maximum Pounds per Hour [a]											
Maximum Pounds per Month											
Month with Maximum											
Maximum Pounds per Year											
Maximum Average Pounds per Hour [b]											
Year with Maximum											
Tons per Year											

Offsite CO_2 Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (metric tons/month)											
Total (metric tons/day)											
Block 1 Construction											
Total (metric tons/month)											
Total (metric tons/day)											
Block 2 Construction											
Total (metric tons/month)											
Total (metric tons/day)											
Units 1 & 2 Demolition											
Total (metric tons/month)	38.40	38.40	38.40	38.40	38.40	38.40	29.02	28.11	20.57	17.83	15.21
Total (metric tons/day)	1.67	1.67	1.67	1.67	1.67	1.67	1.26	1.22	0.89	0.78	0.66
Bldgs. 33 & 34 Construction											
Total (metric tons/month)	4.74	6.55	2.02	0.51	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Total (metric tons/day)	0.21	0.28	0.09	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Offsite CO_2 Emissions (Construction Vehicles)											
Metric Tons per Month	43.13	44.94	40.42	38.91	38.61	38.61	29.23	28.32	20.78	18.04	15.42
Metric Tons per Day	1.88	1.95	1.76	1.69	1.68	1.68	1.27	1.23	0.90	0.78	0.67
Yearly Maximums											
Maximum Metric Tons per Day											
Maximum Metric Tons per Hour [a]											
Maximum Metric Tons per Month											
Month with Maximum											
Maximum Metric Tons per Year											
Maximum Average Metric Tons per Hour [b]											
Year with Maximum											

Offsite N_2O Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (metric tons/month)											
Total (metric tons/day)											
Block 1 Construction											
Total (metric tons/month)											
Total (metric tons/day)											
Block 2 Construction											
Total (metric tons/month)											
Total (metric tons/day)											
Units 1 & 2 Demolition											
Total (metric tons/month)	0.0001758	0.0001758	0.0001758	0.0001758	0.0001758	0.0001758	0.0001457	0.0001417	0.0000945	0.0000825	0.0000644
Total (metric tons/day)	0.0000076	0.0000076	0.0000076	0.0000076	0.0000076	0.0000076	0.0000063	0.0000062	0.0000041	0.0000036	0.0000028
Bldgs. 33 & 34 Construction											
Total (metric tons/month)	0.0001051	0.0001068	0.0000989	0.0001106	0.0001115	0.0001222	0.0001347	0.0001133	0.0001419	0.0001365	0.0000006
Total (metric tons/day)	0.0000046	0.0000046	0.0000043	0.0000048	0.0000048	0.0000053	0.0000059	0.0000049	0.0000062	0.0000059	0.0000000
Total Offsite N_2O Emissions (Construction Vehicles)											
Metric Tons per Month	0.00028	0.00028	0.00027	0.00029	0.00029	0.00030	0.00028	0.00025	0.00024	0.00022	0.00006
Metric Tons per Day	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00000
Yearly Maximums											
Maximum Metric Tons per Day											
Maximum Metric Tons per Hour [a]											
Maximum Metric Tons per Month											
Month with Maximum											
Maximum Metric Tons per Year											
Maximum Average Metric Tons per Hour [b]											
Year with Maximum											

Offsite CH_4 Emissions

Construction Step	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition											
Total (metric tons/month)											
Total (metric tons/day)											
Block 1 Construction											
Total (metric tons/month)											
Total (metric tons/day)											
Block 2 Construction											
Total (metric tons/month)											
Total (metric tons/day)											
Units 1 & 2 Demolition											
Total (metric tons/month)	0.0005081	0.0005081	0.0005081	0.0005081	0.0005081	0.0005081	0.0004628	0.0004518	0.0002744	0.0002416	0.0001688
Total (metric tons/day)	0.0000221	0.0000221	0.0000221	0.0000221	0.0000221	0.0000221	0.0000201	0.0000196	0.0000119	0.0000105	0.0000073
Bldgs. 33 & 34 Construction											
Total (metric tons/month)	0.0004530	0.0004415	0.0004532	0.0005259	0.0005335	0.0005851	0.0006452	0.0005421	0.0006796	0.0006538	0.0000006
Total (metric tons/day)	0.0000197	0.0000192	0.0000197	0.0000229	0.0000232	0.0000254	0.0000281	0.0000236	0.0000295	0.0000284	0.0000000
Total Offsite CH_4 Emissions (Construction Vehicles)											
Metric Tons per Month	0.00096	0.00095	0.00096	0.00103	0.00104	0.00109	0.00111	0.00099	0.00095	0.00090	0.00017
Metric Tons per Day	0.00004	0.00004	0.00004	0.00004	0.00005	0.00005	0.00005	0.00004	0.00004	0.00004	0.00001
Yearly Maximums											
Maximum Metric Tons per Day											
Maximum Metric Tons per Hour [a]											
Maximum Metric Tons per Month											
Month with Maximum											
Maximum Metric Tons per Year											
Maximum Average Metric Tons per Hour [b]											
Year with Maximum											

Notes:

[a] The hours per day are per 'Manpower Schedule Huntington

[b] The hours per year are assumed to allow operation 24 hours p

[c] There are no offsite activities generating fugitive dust during P

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite CO Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	642.99	660.88	663.01	854.07	935.47	942.72	973.05	979.54	1,117.96	1,075.47	1,068.40	1,040.28	1,168.32	1,138.67	1,128.50																		
Total (lbs/day)	27.96	28.73	28.83	37.13	40.67	40.99	42.31	42.59	48.61	46.76	46.45	45.23	50.80	49.51	49.07																		
Block 1 Construction																																	
Total (lbs/month)																1,297.31	1,354.96	1,224.85	1,317.31	938.18	727.52	813.73	820.99	885.59	904.44	898.41	896.26	967.26	843.49	813.11	818.66	855.03	871.45
Total (lbs/day)																56.40	58.91	53.25	57.27	40.79	31.63	35.38	35.70	38.50	39.32	39.06	38.97	42.05	36.67	35.35	35.59	37.18	37.89
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite CO Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**642.99**	**660.88**	**663.01**	**854.07**	**935.47**	**942.72**	**973.05**	**979.54**	**1,117.96**	**1,075.47**	**1,068.40**	**1,040.28**	**1,168.32**	**1,138.67**	**1,128.50**	**1,297.31**	**1,354.96**	**1,224.85**	**1,317.31**	**938.18**	**727.52**	**813.73**	**820.99**	**885.59**	**904.44**	**898.41**	**896.26**	**967.26**	**843.49**	**813.11**	**818.66**	**855.03**	**871.45**
Pounds per Day	**27.96**	**28.73**	**28.83**	**37.13**	**40.67**	**40.99**	**42.31**	**42.59**	**48.61**	**46.76**	**46.45**	**45.23**	**50.80**	**49.51**	**49.07**	**56.40**	**58.91**	**53.25**	**57.27**	**40.79**	**31.63**	**35.38**	**35.70**	**38.50**	**39.32**	**39.06**	**38.97**	**42.05**	**36.67**	**35.35**	**35.59**	**37.18**	**37.89**
Yearly Maximums	**10,954**	**11,479**	**11,957**	**12,422**	**12,866**	**13,285**	**13,567**	**13,912**	**13,870**	**13,480**	**13,218**	**12,971**	**12,816**	**12,552**	**12,312**	**12,080**	**11,749**	**11,238**	**10,826**	**10,328**	**10,244**	**10,388**	**10,369**	**10,364**	**10,703**	**11,819**	**12,947**	**13,801**	**14,608**	**15,346**	**15,932**	**16,529**	**17,243**

Maximum Pounds per Day	**88.11**
Maximum Pounds per Hour [a]	**8.81**
Maximum Pounds per Month	**2,026.42**
Month with Maximum	**38**
Maximum Pounds per Year	**18,261**
Maximum Average Pounds per Hour [b]	**2.08**
Year with Maximum	**Months 36 - 47**
Tons per Year	**9.13**

Onsite and Offsite VOC Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	133.56	134.08	145.58	180.13	190.54	190.77	194.42	194.77	215.47	201.84	201.90	206.17	229.67	225.12	224.90																		
Total (lbs/day)	5.81	5.83	6.33	7.83	8.28	8.29	8.45	8.47	9.37	8.78	8.78	8.96	9.99	9.79	9.78																		
Block 1 Construction																																	
Total (lbs/month)																236.31	237.62	208.85	235.47	166.17	127.60	153.83	155.06	169.34	169.72	157.86	158.90	174.03	155.61	142.66	142.66	142.95	141.98
Total (lbs/day)																10.27	10.33	9.08	10.24	7.22	5.55	6.69	6.74	7.36	7.38	6.86	6.91	7.57	6.77	6.20	6.20	6.22	6.17
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite VOC Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**133.56**	**134.08**	**145.58**	**180.13**	**190.54**	**190.77**	**194.42**	**194.77**	**215.47**	**201.84**	**201.90**	**206.17**	**229.67**	**225.12**	**224.90**	**236.31**	**237.62**	**208.85**	**235.47**	**166.17**	**127.60**	**153.83**	**155.06**	**169.34**	**169.72**	**157.86**	**158.90**	**174.03**	**155.61**	**142.66**	**142.66**	**142.95**	**141.98**
Pounds per Day	**5.81**	**5.83**	**6.33**	**7.83**	**8.28**	**8.29**	**8.45**	**8.47**	**9.37**	**8.78**	**8.78**	**8.96**	**9.99**	**9.79**	**9.78**	**10.27**	**10.33**	**9.08**	**10.24**	**7.22**	**5.55**	**6.69**	**6.74**	**7.36**	**7.38**	**6.86**	**6.91**	**7.57**	**6.77**	**6.20**	**6.20**	**6.22**	**6.17**
Yearly Maximums	**2,189**	**2,285**	**2,376**	**2,456**	**2,512**	**2,559**	**2,577**	**2,618**	**2,589**	**2,502**	**2,454**	**2,407**	**2,370**	**2,310**	**2,243**	**2,177**	**2,114**	**2,032**	**1,966**	**1,873**	**1,850**	**1,865**	**1,826**	**1,786**	**1,797**	**1,918**	**2,049**	**2,127**	**2,188**	**2,236**	**2,280**	**2,322**	**2,397**

Maximum Pounds per Day	**12.67**
Maximum Pounds per Hour [a]	**1.27**
Maximum Pounds per Month	**291.39**
Month with Maximum	**37**
Maximum Pounds per Year	**2,618**
Maximum Average Pounds per Hour [b]	**0.30**
Year with Maximum	**Months 8 - 19**
Tons per Year	**1.31**

Onsite and Offsite NOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	897.45	902.00	1,025.80	1,291.88	1,385.50	1,387.61	1,451.33	1,456.20	1,601.69	1,334.39	1,337.52	1,366.54	1,520.76	1,448.19	1,447.30																		
Total (lbs/day)	39.02	39.22	44.60	56.17	60.24	60.33	63.10	63.31	69.64	58.02	58.15	59.41	66.12	62.96	62.93																		
Block 1 Construction																																	
Total (lbs/month)																1,447.99	1,456.59	1,289.53	1,519.50	1,158.11	913.29	1,029.53	1,048.68	1,165.27	1,166.90	1,085.71	1,104.03	1,233.53	1,128.52	1,026.01	1,024.64	1,020.39	999.60
Total (lbs/day)																62.96	63.33	56.07	66.07	50.35	39.71	44.76	45.59	50.66	50.73	47.20	48.00	53.63	49.07	44.61	44.55	44.36	43.46
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite NOx Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**897.45**	**902.00**	**1,025.80**	**1,291.88**	**1,385.50**	**1,387.61**	**1,451.33**	**1,456.20**	**1,601.69**	**1,334.39**	**1,337.52**	**1,366.54**	**1,520.76**	**1,448.19**	**1,447.30**	**1,447.99**	**1,456.59**	**1,289.53**	**1,519.50**	**1,158.11**	**913.29**	**1,029.53**	**1,048.68**	**1,165.27**	**1,166.90**	**1,085.71**	**1,104.03**	**1,233.53**	**1,128.52**	**1,026.01**	**1,024.64**	**1,020.39**	**999.60**
Pounds per Day	**39.02**	**39.22**	**44.60**	**56.17**	**60.24**	**60.33**	**63.10**	**63.31**	**69.64**	**58.02**	**58.15**	**59.41**	**66.12**	**62.96**	**62.93**	**62.96**	**63.33**	**56.07**	**66.07**	**50.35**	**39.71**	**44.76**	**45.59**	**50.66**	**50.73**	**47.20**	**48.00**	**53.63**	**49.07**	**44.61**	**44.55**	**44.36**	**43.46**
Yearly Maximums	**15,438**	**16,061**	**16,607**	**17,029**	**17,185**	**17,256**	**17,158**	**17,226**	**16,928**	**16,240**	**15,935**	**15,646**	**15,445**	**15,091**	**14,728**	**14,385**	**14,171**	**13,843**	**13,579**	**13,084**	**12,947**	**13,033**	**12,707**	**12,364**	**12,312**	**12,973**	**13,676**	**14,059**	**14,317**	**14,479**	**14,693**	**14,866**	**15,252**

Maximum Pounds per Day	**79.50**
Maximum Pounds per Hour [a]	**7.95**
Maximum Pounds per Month	**1,828.61**
Month with Maximum	**37**
Maximum Pounds per Year	**17,256**
Maximum Average Pounds per Hour [b]	**1.97**
Year with Maximum	**Months 6 - 17**
Tons per Year	**8.63**

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite SOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	1.2315	1.2777	1.4953	1.9408	2.1639	2.1831	2.3751	2.3984	2.6490	2.4762	2.4688	2.3946	2.6118	2.3841	2.3611																		
Total (lbs/day)	0.0535	0.0556	0.0650	0.0844	0.0941	0.0949	0.1033	0.1043	0.1152	0.1077	0.1073	0.1041	0.1136	0.1037	0.1027																		
Block 1 Construction																																	
Total (lbs/month)																2.3693	2.5171	2.3550	2.7489	2.1512	1.8074	2.1910	2.2565	2.5269	2.5729	2.5261	2.5687	2.8866	2.6891	2.5309	2.5396	2.6092	2.5919
Total (lbs/day)																0.1030	0.1094	0.1024	0.1195	0.0935	0.0786	0.0953	0.0981	0.1099	0.1119	0.1098	0.1117	0.1255	0.1169	0.1100	0.1104	0.1134	0.1127
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite SOx Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**1.2315**	**1.2777**	**1.4953**	**1.9408**	**2.1639**	**2.1831**	**2.3751**	**2.3984**	**2.6490**	**2.4762**	**2.4688**	**2.3946**	**2.6118**	**2.3841**	**2.3611**	**2.3693**	**2.5171**	**2.3550**	**2.7489**	**2.1512**	**1.8074**	**2.1910**	**2.2565**	**2.5269**	**2.5729**	**2.5261**	**2.5687**	**2.8866**	**2.6891**	**2.5309**	**2.5396**	**2.6092**	**2.5919**
Pounds per Day	**0.0535**	**0.0556**	**0.0650**	**0.0844**	**0.0941**	**0.0949**	**0.1033**	**0.1043**	**0.1152**	**0.1077**	**0.1073**	**0.1041**	**0.1136**	**0.1037**	**0.1027**	**0.1030**	**0.1094**	**0.1024**	**0.1195**	**0.0935**	**0.0786**	**0.0953**	**0.0981**	**0.1099**	**0.1119**	**0.1098**	**0.1117**	**0.1255**	**0.1169**	**0.1100**	**0.1104**	**0.1134**	**0.1127**
Yearly Maximums	**25**	**26**	**28**	**28**	**29**	**29**	**29**	**30**	**29**	**29**	**28**	**28**	**28**	**28**	**28**	**29**	**29**	**29**	**29**	**29**	**30**	**30**	**31**	**31**	**31**	**33**	**35**	**37**	**38**	**39**	**41**	**42**	**44**

Maximum Pounds per Day	**0.20**
Maximum Pounds per Hour [a]	**0.02**
Maximum Pounds per Month	**4.56**
Month with Maximum	**37**
Maximum Pounds per Year	**47**
Maximum Average Pounds per Hour [b]	**0.01**
Year with Maximum	**Months 37 - 48**
Tons per Year	**0.02**

Onsite and Offsite Exhaust PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	57.72	61.64	64.06	80.49	89.85	91.45	99.69	101.21	110.90	97.38	95.96	92.46	99.70	91.36	89.17																		
Total (lbs/day)	2.51	2.68	2.79	3.50	3.91	3.98	4.33	4.40	4.82	4.23	4.17	4.02	4.33	3.97	3.88																		
Block 1 Construction																																	
Total (lbs/month)																100.02	113.49	101.04	112.01	90.95	75.71	79.02	81.22	90.91	95.29	100.23	100.24	111.76	107.39	105.96	107.20	115.44	118.64
Total (lbs/day)																4.32	4.89	4.30	4.77	3.75	3.09	3.21	3.21	3.57	3.76	3.88	3.78	4.16	3.93	3.87	3.93	4.33	4.59
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**57.72**	**61.64**	**64.06**	**80.49**	**89.85**	**91.45**	**99.69**	**101.21**	**110.90**	**97.38**	**95.96**	**92.46**	**99.70**	**91.36**	**89.17**	**100.02**	**113.49**	**101.04**	**112.01**	**90.95**	**75.71**	**79.02**	**81.22**	**90.91**	**95.29**	**100.23**	**100.24**	**111.76**	**107.39**	**105.96**	**107.20**	**115.44**	**118.64**
Pounds per Day	**2.51**	**2.68**	**2.79**	**3.50**	**3.91**	**3.98**	**4.33**	**4.40**	**4.82**	**4.23**	**4.17**	**4.02**	**4.33**	**3.97**	**3.88**	**4.32**	**4.89**	**4.30**	**4.77**	**3.75**	**3.09**	**3.21**	**3.21**	**3.57**	**3.76**	**3.88**	**3.78**	**4.16**	**3.93**	**3.87**	**3.93**	**4.33**	**4.59**
Yearly Maximums	**1,043**	**1,085**	**1,114**	**1,140**	**1,159**	**1,183**	**1,192**	**1,205**	**1,194**	**1,159**	**1,141**	**1,126**	**1,125**	**1,120**	**1,129**	**1,140**	**1,152**	**1,146**	**1,151**	**1,146**	**1,170**	**1,213**	**1,241**	**1,273**	**1,331**	**1,439**	**1,543**	**1,636**	**1,726**	**1,816**	**1,899**	**1,985**	**2,066**

Maximum Pounds per Day	**8.87**
Maximum Pounds per Hour [a]	**0.89**
Maximum Pounds per Month	**204.76**
Month with Maximum	**45**
Maximum Pounds per Year	**2,158**
Maximum Average Pounds per Hour [b]	**0.25**
Year with Maximum	**Months 36 - 47**
Tons per Year	**1.08**

Onsite and Offsite Fugitive PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	209.69	209.69	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	209.69	209.69	209.69	209.69																		
Total (lbs/day)	9.12	9.12	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	9.12	9.12	9.12	9.12																		
Block 1 Construction																																	
Total (lbs/month)																681.00	681.00	438.16	438.16	437.60	194.76	175.32	175.32	175.32	175.32	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44
Total (lbs/day)																29.61	29.61	19.05	19.05	19.03	8.47	7.62	7.62	7.62	7.62	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																	
Pounds per Month	**209.69**	**209.69**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**209.69**	**209.69**	**209.69**	**209.69**	**681.00**	**681.00**	**438.16**	**438.16**	**437.60**	**194.76**	**175.32**	**175.32**	**175.32**	**175.32**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**
Pounds per Day	**9.12**	**9.12**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**9.12**	**9.12**	**9.12**	**9.12**	**29.61**	**29.61**	**19.05**	**19.05**	**19.03**	**8.47**	**7.62**	**7.62**	**7.62**	**7.62**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**
Yearly Maximums	**2,866**	**2,866**	**2,866**	**2,827**	**3,260**	**3,692**	**3,882**	**4,071**	**4,260**	**4,207**	**4,133**	**4,060**	**4,026**	**3,991**	**3,918**	**3,845**	**3,300**	**2,756**	**2,454**	**2,152**	**1,851**	**1,793**	**1,754**	**1,715**	**2,017**	**2,659**	**3,339**	**3,777**	**4,196**	**4,614**	**4,789**	**4,945**	**5,101**

Maximum Pounds per Day	**35.53**
Maximum Pounds per Hour [a]	**3.55**
Maximum Pounds per Month	**817.16**
Month with Maximum	**37 or 38**
Maximum Pounds per Year	**5,341**
Maximum Average Pounds per Hour [b]	**0.61**
Year with Maximum	**Months 77 - 88 or 78 - 89**
Tons per Year	**2.67**

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Pounds per Month	267.40	271.33	312.63	329.06	338.41	340.01	348.26	349.77	359.47	345.94	344.53	302.15	309.39	301.04	298.85	781.02	794.49	539.20	550.17	528.55	270.47	254.34	256.54	266.23	270.61	236.67	236.68	248.20	243.83	242.40	243.64	251.88	255.08
Pounds per Day	11.63	11.80	13.59	14.31	14.71	14.78	15.14	15.21	15.63	15.04	14.98	13.14	13.45	13.09	12.99	33.93	34.50	23.35	23.82	22.78	11.56	10.84	10.84	11.19	11.39	9.81	9.71	10.09	9.86	9.80	9.87	10.26	10.52
Yearly Maximums	3,909	3,951	3,981	3,967	4,419	4,875	5,074	5,276	5,455	5,366	5,274	5,186	5,150	5,112	5,047	4,985	4,452	3,901	3,605	3,298	3,021	3,006	2,995	2,988	3,348	4,097	4,882	5,414	5,922	6,430	6,688	6,930	7,167

Maximum Pounds per Day	44.19
Maximum Pounds per Hour [a]	4.42
Maximum Pounds per Month	1,021.51
Month with Maximum	38
Maximum Pounds per Year	7,454
Maximum Average Pounds per Hour [b]	0.85
Year with Maximum	Months 36 - 47
Tons per Year	3.73

Onsite and Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	57.55	58.70	60.58	73.81	79.47	79.95	83.65	84.16	92.54	79.40	79.09	80.92	89.15	85.17	84.56																		
Total (lbs/day)	2.50	2.55	2.63	3.21	3.46	3.48	3.64	3.66	4.02	3.45	3.44	3.52	3.88	3.70	3.68																		
Block 1 Construction																																	
Total (lbs/month)																99.15	102.99	89.18	97.89	71.48	55.19	57.17	58.22	63.74	64.96	64.25	64.70	71.02	65.67	62.73	63.03	65.16	65.52
Total (lbs/day)																4.31	4.48	3.88	4.26	3.11	2.40	2.49	2.53	2.77	2.82	2.79	2.81	3.09	2.86	2.73	2.74	2.83	2.85
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	57.55	58.70	60.58	73.81	79.47	79.95	83.65	84.16	92.54	79.40	79.09	80.92	89.15	85.17	84.56	99.15	102.99	89.18	97.89	71.48	55.19	57.17	58.22	63.74	64.96	64.25	64.70	71.02	65.67	62.73	63.03	65.16	65.52
Pounds per Day	2.50	2.55	2.63	3.21	3.46	3.48	3.64	3.66	4.02	3.45	3.44	3.52	3.88	3.70	3.68	4.31	4.48	3.88	4.26	3.11	2.40	2.49	2.53	2.77	2.82	2.79	2.81	3.09	2.86	2.73	2.74	2.83	2.85
Yearly Maximums	910	941	968	992	1,017	1,041	1,050	1,064	1,052	1,014	992	971	954	930	909	889	861	823	797	762	756	766	763	760	778	842	906	951	992	1,028	1,059	1,089	1,127

Maximum Pounds per Day	5.62
Maximum Pounds per Hour [a]	0.56
Maximum Pounds per Month	129.22
Month with Maximum	37
Maximum Pounds per Year	1,181
Maximum Average Pounds per Hour [b]	0.13
Year with Maximum	Months 36 - 47
Tons per Year	0.59

Onsite and Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)	23.754	23.754	27.642	27.642	27.642	27.642	27.642	27.642	27.642	27.642	27.642	23.754	23.754	23.754	23.754																		
Total (lbs/day)	1.033	1.033	1.202	1.202	1.202	1.202	1.202	1.202	1.202	1.202	1.202	1.033	1.033	1.033	1.033																		
Block 1 Construction																																	
Total (lbs/month)																137.188	137.188	78.363	78.363	78.304	19.479	17.535	17.535	17.535	17.535	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647
Total (lbs/day)																5.965	5.965	3.407	3.407	3.405	0.847	0.762	0.762	0.762	0.762	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593
Block 2 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																	
Pounds per Month	23.75	23.75	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	23.75	23.75	23.75	23.75	137.19	137.19	78.36	78.36	78.30	19.48	17.53	17.53	17.53	17.53	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65
Pounds per Day	1.03	1.03	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.03	1.03	1.03	1.03	5.96	5.96	3.41	3.41	3.40	0.85	0.76	0.76	0.76	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Yearly Maximums	320	320	320	316	426	535	586	637	687	679	669	659	653	647	636	626	503	379	315	250	185	179	175	172	236	370	507	585	661	738	755	771	787

Maximum Pounds per Day	6.56
Maximum Pounds per Hour [a]	0.66
Maximum Pounds per Month	150.80
Month with Maximum	37 or 38
Maximum Pounds per Year	808
Maximum Average Pounds per Hour [b]	0.09
Year with Maximum	Months 77 - 88 or 78 - 89
Tons per Year	0.40

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Pounds per Month	81.30	82.46	88.22	101.46	107.11	107.59	111.29	111.81	120.18	107.04	106.73	104.67	112.90	108.93	108.31	236.34	240.18	167.54	176.25	149.78	74.67	74.70	75.76	81.27	82.49	77.90	78.35	84.67	79.32	76.38	76.68	78.81	79.17
Pounds per Day	3.53	3.59	3.84	4.41	4.66	4.68	4.84	4.86	5.23	4.65	4.64	4.55	4.91	4.74	4.71	10.28	10.44	7.28	7.66	6.51	3.25	3.25	3.29	3.53	3.59	3.39	3.41	3.68	3.45	3.32	3.33	3.43	3.44
Yearly Maximums	1,230	1,261	1,288	1,308	1,443	1,576	1,636	1,701	1,739	1,693	1,661	1,630	1,607	1,576	1,545	1,515	1,364	1,203	1,112	1,012	941	945	938	931	1,014	1,212	1,413	1,536	1,653	1,766	1,814	1,859	1,913

Maximum Pounds per Day	12.17
Maximum Pounds per Hour [a]	1.217
Maximum Pounds per Month	280.02
Month with Maximum	37
Maximum Pounds per Year	1,987
Maximum Average Pounds per Hour [b]	0.227
Year with Maximum	Months 36 - 47
Tons per Year	0.99

Onsite and Offsite CO_2 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (metric tons/month)	56.81	58.79	68.27	87.70	97.81	98.64	107.71	108.75	119.75	112.24	112.01	108.99	118.56	107.67	106.71																		
Total (metric tons/day)	2.47	2.56	2.97	3.81	4.25	4.29	4.68	4.73	5.21	4.88	4.87	4.74	5.15	4.68	4.64																		
Block 1 Construction																																	
Total (metric tons/month)																107.03	113.25	106.17	123.40	97.12	81.91	98.75	101.90	113.83	115.74	113.82	116.01	130.19	121.57	114.56	114.89	117.62	116.40
Total (metric tons/day)																4.65	4.92	4.62	5.37	4.22	3.56	4.29	4.43	4.95	5.03	4.95	5.04	5.66	5.29	4.98	5.00	5.11	5.06
Block 2 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Units 1 & 2 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Total Onsite and Offsite CO_2 Emissions (Construction Equipment and Vehicles)																																	
Metric Tons per Month	56.81	58.79	68.27	87.70	97.81	98.64	107.71	108.75	119.75	112.24	112.01	108.99	118.56	107.67	106.71	107.03	113.25	106.17	123.40	97.12	81.91	98.75	101.90	113.83	115.74	113.82	116.01	130.19	121.57	114.56	114.89	117.62	116.40
Metric Tons per Day	2.47	2.56	2.97	3.81	4.25	4.29	4.68	4.73	5.21	4.88	4.87	4.74	5.15	4.68	4.64	4.65	4.92	4.62	5.37	4.22	3.56	4.29	4.43	4.95	5.03	4.95	5.04	5.66	5.29	4.98	5.00	5.11	5.06
Yearly Maximums	1,137	1,199	1,248	1,287	1,306	1,321	1,329	1,345	1,333	1,295	1,282	1,271	1,276	1,273	1,280	1,289	1,312	1,320	1,329	1,320	1,341	1,375	1,376	1,376	1,406	1,496	1,583	1,654	1,716	1,774	1,836	1,893	1,962

Maximum Metric Tons per Day	8.93
Maximum Metric Tons per Hour [a]	0.89
Maximum Metric Tons per Month	205.40
Month with Maximum	37
Maximum Metric Tons per Year	2,121
Maximum Average Metric Tons per Hour [b]	0.24
Year with Maximum	Months 37 - 48

Onsite and Offsite N_2O Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (metric tons/month)	0.00142731	0.00144630	0.00167892	0.00215756	0.00229894	0.00230664	0.00234111	0.00234813	0.00261681	0.00241743	0.00241015	0.00237268	0.00263595	0.00260146	0.00259073																			
Total (metric tons/day)	0.00006206	0.00006288	0.00007300	0.00009381	0.00009995	0.00010029	0.00010179	0.00010209	0.00011377	0.00010511	0.00010479	0.00010316	0.00011461	0.00011311	0.00011264																			
Block 1 Construction																																	
Total (metric tons/month)																0.00268688	0.00275265	0.00253014	0.00294058	0.00216399	0.00176740	0.00217166	0.00218087	0.00240772	0.00242918	0.00227152	0.00226999	0.00250477	0.00225229	0.00206494	0.00207118	0.00211221	0.00212977
Total (metric tons/day)																0.00011682	0.00011968	0.00011001	0.00012785	0.00009409	0.00007684	0.00009442	0.00009482	0.00010468	0.00010562	0.00009876	0.00009870	0.00010890	0.00009793	0.00008978	0.00009005	0.00009184	0.00009260
Block 2 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Units 1 & 2 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Total Onsite and Offsite N_2O Emissions (Construction Equipment and Vehicles)																																	
Metric Tons per Month	0.001427	0.001446	0.001679	0.002158	0.002299	0.002307	0.002341	0.002348	0.002617	0.002417	0.002410	0.002373	0.002636	0.002601	0.002591	0.002687	0.002753	0.002530	0.002941	0.002164	0.001767	0.002172	0.002181	0.002408	0.002429	0.002272	0.002270	0.002505	0.002252	0.002065	0.002071	0.002112	0.002130
Metric Tons per Day	0.000062	0.000063	0.000073	0.000094	0.000100	0.000100	0.000102	0.000102	0.000114	0.000105	0.000105	0.000103	0.000115	0.000113	0.000113	0.000117	0.000120	0.000110	0.000128	0.000094	0.000077	0.000094	0.000095	0.000105	0.000106	0.000099	0.000099	0.000109	0.000098	0.000090	0.000090	0.000092	0.000093
Yearly Maximums	0.02582	0.02703	0.02819	0.02910	0.02963	0.03008	0.03030	0.03090	0.03072	0.02987	0.02962	0.02939	0.02943	0.02922	0.02889	0.02857	0.02839	0.02789	0.02742	0.02656	0.02650	0.02687	0.02643	0.02601	0.02636	0.02818	0.03016	0.03161	0.03287	0.03396	0.03516	0.03638	0.03788

Maximum Metric Tons per Day	0.000185
Maximum Metric Tons per Hour [a]	0.0000185
Maximum Metric Tons per Month	0.00426
Month with Maximum	38
Maximum Metric Tons per Year	0.04100
Maximum Average Metric Tons per Hour [b]	0.00000468
Year with Maximum	Months 37 - 48

Onsite and Offsite CH_4 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (metric tons/month)	0.0031823	0.0032695	0.0037973	0.0049271	0.0052644	0.0052994	0.0053762	0.0054037	0.0060261	0.0055702	0.0055290	0.0053470	0.0059224	0.0058724	0.0058208																			
Total (metric tons/day)	0.0001384	0.0001422	0.0001651	0.0002142	0.0002289	0.0002304	0.0002337	0.0002349	0.0002620	0.0002422	0.0002404	0.0002325	0.0002575	0.0002553	0.0002531																			
Block 1 Construction																																	
Total (metric tons/month)																0.0059995	0.0063104	0.0058225	0.0067735	0.0051040	0.0042377	0.0051554	0.0051652	0.0057239	0.0058271	0.0055427	0.0055009	0.0060748	0.0055164	0.0051269	0.0051603	0.0053712	0.0054970
Total (metric tons/day)																0.0002608	0.0002744	0.0002532	0.0002945	0.0002219	0.0001842	0.0002241	0.0002246	0.0002489	0.0002534	0.0002410	0.0002392	0.0002641	0.0002398	0.0002229	0.0002244	0.0002335	0.0002390
Block 2 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Units 1 & 2 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Total Onsite and Offsite CH_4 Emissions (Construction Equipment and Vehicles)																																	
Metric Tons per Month	0.00318	0.00327	0.00380	0.00493	0.00526	0.00530	0.00538	0.00540	0.00603	0.00557	0.00553	0.00535	0.00592	0.00587	0.00582	0.00600	0.00631	0.00582	0.00677	0.00510	0.00424	0.00516	0.00517	0.00572	0.00583	0.00554	0.00550	0.00607	0.00552	0.00513	0.00516	0.00537	0.00550
Metric Tons per Day	0.00014	0.00014	0.00017	0.00021	0.00023	0.00023	0.00023	0.00023	0.00026	0.00024	0.00024	0.00023	0.00026	0.00026	0.00025	0.00026	0.00027	0.00025	0.00029	0.00022	0.00018	0.00022	0.00022	0.00025	0.00025	0.00024	0.00024	0.00026	0.00024	0.00022	0.00022	0.00023	0.00024
Yearly Maximums	0.05899	0.06173	0.06434	0.06636	0.06743	0.06848	0.06900	0.07040	0.07010	0.06831	0.06789	0.06753	0.06791	0.06781	0.06748	0.06716	0.06724	0.06644	0.06575	0.06414	0.06440	0.06566	0.06515	0.06475	0.06619	0.07097	0.07617	0.08029	0.08401	0.08745	0.09109	0.09488	0.09906

Maximum Metric Tons per Day	0.000467
Maximum Metric Tons per Hour [a]	0.0000467
Maximum Metric Tons per Month	0.01074
Month with Maximum	38
Maximum Metric Tons per Year	0.10640
Maximum Average Metric Tons per Hour [b]	0.0000121
Year with Maximum	Months 37 - 48

Notes:
[a] The hours per day are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 10 hours/day
[b] The hours per year are assumed to allow operation 24 hours per day, 7 days per week despite the actual construction schedule per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 8,760 hours/year

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite CO Emissions

	CO Emissions by Month																																	
Construction Step	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	794.24	816.24	703.61	671.11	648.80	664.38	585.18	594.61	550.90	547.49	689.46	681.61																					
Total (lbs/day)	34.53	35.49	30.59	29.18	28.21	28.89	25.44	25.85	23.95	23.80	29.98	29.64																					
Block 2 Construction																																	
Total (lbs/month)			520.95	1,349.65	1,377.62	1,085.41	1,188.69	987.35	847.74	868.37	879.59	939.02	922.11	956.89	1,105.29	1,069.35	898.84	894.57	893.62	890.71	819.68	686.09	648.15	631.09	626.82	551.44	501.41	357.02	544.01	539.74			
Total (lbs/day)			22.65	58.68	59.90	47.19	51.68	42.93	36.86	37.76	38.24	40.83	40.09	41.60	48.06	46.49	39.08	38.89	38.85	38.73	35.64	29.83	28.18	27.44	27.25	23.98	21.80	15.52	23.65	23.47			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite CO Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**794.24**	**816.24**	**1,224.55**	**2,020.76**	**2,026.42**	**1,749.79**	**1,773.87**	**1,581.96**	**1,398.64**	**1,415.86**	**1,569.06**	**1,620.63**	**922.11**	**956.89**	**1,105.29**	**1,069.35**	**898.84**	**894.57**	**893.62**	**890.71**	**819.68**	**686.09**	**648.15**	**631.09**	**626.82**	**551.44**	**501.41**	**357.02**	**544.01**	**539.74**	**0.00**	**0.00**	**0.00**
Pounds per Day	**34.53**	**35.49**	**53.24**	**87.86**	**88.11**	**76.08**	**77.12**	**68.78**	**60.81**	**61.56**	**68.22**	**70.46**	**40.09**	**41.60**	**48.06**	**46.49**	**39.08**	**38.89**	**38.85**	**38.73**	**35.64**	**29.83**	**28.18**	**27.44**	**27.25**	**23.98**	**21.80**	**15.52**	**23.65**	**23.47**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**17,992**	**18,120**	**18,261**	**18,141**	**17,190**	**16,062**	**15,207**	**14,327**	**13,636**	**13,057**	**12,327**	**11,406**	**10,416**	**10,121**	**9,716**	**9,112**	**8,399**	**8,045**	**7,690**	**6,796**	**5,905**	**5,086**	**5,084**	**5,124**	**5,385**	**5,669**	**6,161**	**6,711**	**7,370**	**7,842**	**8,327**	**9,351**	**10,535**
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite VOC Emissions

	VOC Emissions by Month																																	
Construction Step	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	115.17	115.60	96.24	86.85	83.51	83.10	56.66	56.85	50.22	48.71	81.07	80.91																					
Total (lbs/day)	5.01	5.03	4.18	3.78	3.63	3.61	2.46	2.47	2.18	2.12	3.52	3.52																					
Block 2 Construction																																	
Total (lbs/month)			83.18	204.54	205.21	154.11	178.21	146.37	136.71	135.55	137.01	150.76	141.67	141.07	165.84	154.39	126.05	125.34	124.18	123.50	100.74	82.61	76.40	73.57	72.86	71.58	70.09	45.19	74.62	73.91			
Total (lbs/day)			3.62	8.89	8.92	6.70	7.75	6.36	5.94	5.89	5.96	6.55	6.16	6.13	7.21	6.71	5.48	5.45	5.40	5.37	4.38	3.59	3.32	3.20	3.17	3.11	3.05	1.96	3.24	3.21			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite VOC Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**115.17**	**115.60**	**179.41**	**291.39**	**288.72**	**237.21**	**234.87**	**203.22**	**186.94**	**184.26**	**218.08**	**231.68**	**141.67**	**141.07**	**165.84**	**154.39**	**126.05**	**125.34**	**124.18**	**123.50**	**100.74**	**82.61**	**76.40**	**73.57**	**72.86**	**71.58**	**70.09**	**45.19**	**74.62**	**73.91**	**0.00**	**0.00**	**0.00**
Pounds per Day	**5.01**	**5.03**	**7.80**	**12.67**	**12.55**	**10.31**	**10.21**	**8.84**	**8.13**	**8.01**	**9.48**	**10.07**	**6.16**	**6.13**	**7.21**	**6.71**	**5.48**	**5.45**	**5.40**	**5.37**	**4.38**	**3.59**	**3.32**	**3.20**	**3.17**	**3.11**	**3.05**	**1.96**	**3.24**	**3.21**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**2,487**	**2,513**	**2,539**	**2,525**	**2,388**	**2,225**	**2,113**	**2,003**	**1,923**	**1,837**	**1,735**	**1,593**	**1,435**	**1,367**	**1,297**	**1,201**	**1,092**	**1,041**	**989**	**865**	**742**	**641**	**665**	**697**	**751**	**807**	**877**	**949**	**1,036**	**1,094**	**1,154**	**1,288**	**1,438**
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite NOx Emissions

	NOx Emissions by Month																																	
Construction Step	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	703.80	705.54	598.95	548.37	503.03	493.25	308.25	309.00	271.88	249.57	435.37	434.74																					
Total (lbs/day)	30.60	30.68	26.04	23.84	21.87	21.45	13.40	13.43	11.82	10.85	18.93	18.90																					
Block 2 Construction																																	
Total (lbs/month)			513.94	1,280.25	1,285.61	993.84	1,183.42	980.75	968.82	947.98	971.04	1,093.63	934.80	925.59	1,098.27	1,019.62	842.73	832.49	814.63	804.51	649.25	526.90	509.44	468.49	410.53	404.60	391.76	237.93	402.46	393.22			
Total (lbs/day)			22.35	55.66	55.90	43.21	51.45	42.64	42.12	41.22	42.22	47.55	40.64	40.24	47.75	44.33	36.64	36.20	35.42	34.98	28.23	22.91	22.15	20.37	17.85	17.59	17.03	10.34	17.50	17.10			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite NOx Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**703.80**	**705.54**	**1,112.89**	**1,828.61**	**1,788.65**	**1,487.09**	**1,491.67**	**1,289.74**	**1,240.70**	**1,197.56**	**1,406.41**	**1,528.37**	**934.80**	**925.59**	**1,098.27**	**1,019.62**	**842.73**	**832.49**	**814.63**	**804.51**	**649.25**	**526.90**	**509.44**	**468.49**	**410.53**	**404.60**	**391.76**	**237.93**	**402.46**	**393.22**	**0.00**	**0.00**	**0.00**
Pounds per Day	**30.60**	**30.68**	**48.39**	**79.50**	**77.77**	**64.66**	**64.86**	**56.08**	**53.94**	**52.07**	**61.15**	**66.45**	**40.64**	**40.24**	**47.75**	**44.33**	**36.64**	**36.20**	**35.42**	**34.98**	**28.23**	**22.91**	**22.15**	**20.37**	**17.85**	**17.59**	**17.03**	**10.34**	**17.50**	**17.10**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**15,781**	**16,012**	**16,232**	**16,217**	**15,408**	**14,463**	**13,808**	**13,131**	**12,646**	**12,054**	**11,384**	**10,487**	**9,427**	**8,902**	**8,381**	**7,675**	**6,893**	**6,453**	**6,014**	**5,199**	**4,395**	**3,745**	**3,898**	**4,079**	**4,407**	**4,713**	**5,088**	**5,476**	**5,962**	**6,283**	**6,631**	**7,372**	**8,234**
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite SOx Emissions

Construction Step	SOx Emissions by Month																																
	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	2.2098	2.2635	2.0600	2.0274	1.8486	1.8548	1.4991	1.5221	1.4531	1.3811	1.5924	1.5733																					
Total (lbs/day)	0.0961	0.0984	0.0896	0.0881	0.0804	0.0806	0.0652	0.0662	0.0632	0.0600	0.0692	0.0684																					
Block 2 Construction																																	
Total (lbs/month)			1.1157	2.5349	2.6155	2.3151	2.7509	2.4446	2.4575	2.4465	2.5410	2.8588	2.8535	2.9084	3.4587	3.2994	2.8583	2.8146	2.7537	2.7136	2.4036	2.0616	2.1140	1.9392	1.8955	1.6962	1.5315	0.9943	1.3502	1.3065			
Total (lbs/day)			0.0485	0.1102	0.1137	0.1007	0.1196	0.1063	0.1068	0.1064	0.1105	0.1243	0.1241	0.1265	0.1504	0.1435	0.1243	0.1224	0.1197	0.1180	0.1045	0.0896	0.0919	0.0843	0.0824	0.0737	0.0666	0.0432	0.0587	0.0568			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite SOx Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**2.2098**	**2.2635**	**3.1757**	**4.5623**	**4.4642**	**4.1698**	**4.2501**	**3.9668**	**3.9106**	**3.8276**	**4.1335**	**4.4321**	**2.8535**	**2.9084**	**3.4587**	**3.2994**	**2.8583**	**2.8146**	**2.7537**	**2.7136**	**2.4036**	**2.0616**	**2.1140**	**1.9392**	**1.8955**	**1.6962**	**1.5315**	**0.9943**	**1.3502**	**1.3065**	**0.0000**	**0.0000**	**0.0000**
Pounds per Day	**0.0961**	**0.0984**	**0.1381**	**0.1984**	**0.1941**	**0.1813**	**0.1848**	**0.1725**	**0.1700**	**0.1664**	**0.1797**	**0.1927**	**0.1241**	**0.1265**	**0.1504**	**0.1435**	**0.1243**	**0.1224**	**0.1197**	**0.1180**	**0.1045**	**0.0896**	**0.0919**	**0.0843**	**0.0824**	**0.0737**	**0.0666**	**0.0432**	**0.0587**	**0.0568**	**0.0000**	**0.0000**	**0.0000**
Yearly Maximums	**45**	**46**	**47**	**47**	**46**	**44**	**43**	**41**	**40**	**38**	**37**	**35**	**32**	**31**	**30**	**28**	**26**	**24**	**23**	**20**	**17**	**15**	**15**	**15**	**15**	**15**	**16**	**17**	**19**	**20**	**21**	**24**	**27**
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite Exhaust PM_{10} Emissions

Construction Step	Exhaust PM_{10} Emissions by Month																																
	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	107.18	112.29	105.95	106.45	100.14	103.46	97.11	99.30	96.99	95.60	96.40	94.57																					
Total (lbs/day)	4.16	4.39	4.14	4.16	4.13	4.34	4.06	4.16	4.06	4.12	4.16	4.08																					
Block 2 Construction																																	
Total (lbs/month)			43.27	96.61	104.21	90.43	104.40	98.42	91.73	96.87	100.45	110.19	107.82	117.18	142.68	140.41	132.14	130.75	130.07	129.04	124.77	113.03	113.79	108.22	104.55	84.11	70.34	46.63	55.83	54.46			
Total (lbs/day)			1.88	4.20	4.53	3.93	4.54	4.28	3.99	4.21	4.37	4.79	4.69	5.09	6.20	6.10	5.75	5.68	5.66	5.61	5.42	4.91	4.95	4.71	4.55	3.66	3.06	2.03	2.43	2.37			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																	
Pounds per Month	**107.18**	**112.29**	**149.23**	**203.06**	**204.35**	**193.89**	**201.51**	**197.72**	**188.72**	**192.47**	**196.85**	**204.76**	**107.82**	**117.18**	**142.68**	**140.41**	**132.14**	**130.75**	**130.07**	**129.04**	**124.77**	**113.03**	**113.79**	**108.22**	**104.55**	**84.11**	**70.34**	**46.63**	**55.83**	**54.46**	**0.00**	**0.00**	**0.00**
Pounds per Day	**4.16**	**4.39**	**6.02**	**8.36**	**8.66**	**8.27**	**8.60**	**8.44**	**8.05**	**8.33**	**8.52**	**8.87**	**4.69**	**5.09**	**6.20**	**6.10**	**5.75**	**5.68**	**5.66**	**5.61**	**5.42**	**4.91**	**4.95**	**4.71**	**4.55**	**3.66**	**3.06**	**2.03**	**2.43**	**2.37**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**2,152**	**2,153**	**2,158**	**2,151**	**2,088**	**2,016**	**1,953**	**1,882**	**1,813**	**1,749**	**1,670**	**1,586**	**1,490**	**1,487**	**1,454**	**1,381**	**1,287**	**1,211**	**1,135**	**1,005**	**876**	**751**	**678**	**606**	**550**	**499**	**472**	**462**	**474**	**476**	**483**	**544**	**628**
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite Fugitive PM_{10} Emissions

Construction Step	Fugitive PM_{10} Emissions by Month																																
	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	136.44	136.44	136.44	136.44	136.44	136.44	117.00	117.00	117.00	117.00	117.55	117.55																					
Total (lbs/day)	5.93	5.93	5.93	5.93	5.93	5.93	5.09	5.09	5.09	5.09	5.11	5.11																					
Block 2 Construction																																	
Total (lbs/month)			340.67	680.72	680.72	437.88	437.88	437.60	194.76	175.32	175.32	175.32	175.32	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	117.00	117.27	117.27			
Total (lbs/day)			14.81	29.60	29.60	19.04	19.04	19.03	8.47	7.62	7.62	7.62	7.62	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.09	5.10	5.10			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Total Onsite and Offsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																	
Pounds per Month	**136.44**	**136.44**	**477.11**	**817.16**	**817.16**	**574.31**	**554.87**	**554.60**	**311.76**	**292.32**	**292.87**	**292.87**	**175.32**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**117.00**	**117.27**	**117.27**	**0.00**	**0.00**	**0.00**
Pounds per Day	**5.93**	**5.93**	**20.74**	**35.53**	**35.53**	**24.97**	**24.12**	**24.11**	**13.55**	**12.71**	**12.73**	**12.73**	**7.62**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.09**	**5.10**	**5.10**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**5,258**	**5,297**	**5,297**	**4,956**	**4,275**	**3,595**	**3,157**	**2,738**	**2,320**	**2,145**	**1,989**	**1,833**	**1,676**	**1,637**	**1,637**	**1,637**	**1,618**	**1,599**	**1,579**	**1,443**	**1,307**	**1,170**	**1,295**	**1,420**	**1,544**	**1,669**	**1,794**	**1,919**	**2,063**	**2,207**	**2,351**	**2,612**	**2,951**
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite PM_{10} Emissions (Exhaust and Fugitive)

	Total PM_{10} Emissions by Month																														
Parameter	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Pounds per Month	243.62	248.73	626.34	1,020.22	1,021.51	768.21	756.39	752.32	500.48	484.78	489.72	497.64	283.14	253.62	279.12	276.85	268.58	267.19	266.50	265.48	261.21	249.47	250.23	244.66	240.99	220.55	206.78	163.63	173.10	171.73	0.00	0.00	0.00
Pounds per Day	10.10	10.32	26.77	43.89	44.19	33.24	32.73	32.55	21.60	21.04	21.26	21.60	12.31	11.03	12.14	12.04	11.68	11.62	11.59	11.54	11.36	10.85	10.88	10.64	10.48	9.59	8.99	7.11	7.53	7.47	0.00	0.00	0.00
Yearly Maximums	7,410	7,449	7,454	7,107	6,364	5,611	5,110	4,620	4,133	3,894	3,659	3,419	3,166	3,124	3,091	3,018	2,905	2,810	2,714	2,448	2,182	1,921	1,973	2,026	2,095	2,168	2,266	2,381	2,536	2,683	2,833	3,156	3,579
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite Exhaust $PM_{2.5}$ Emissions

	Exhaust $PM_{2.5}$ Emissions by Month																														
Construction Step	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	53.79	55.22	48.47	45.81	42.98	43.64	37.30	37.91	35.60	34.67	43.36	42.85																					
Total (lbs/day)	2.34	2.40	2.11	1.99	1.87	1.90	1.62	1.65	1.55	1.51	1.89	1.86																					
Block 2 Construction																																	
Total (lbs/month)			33.24	83.40	85.59	65.78	74.29	64.31	57.50	58.37	59.92	65.61	59.18	61.53	72.77	70.19	62.50	61.89	61.30	60.79	55.74	47.67	46.08	43.64	40.86	35.14	31.05	20.74	30.24	29.62			
Total (lbs/day)			1.45	3.63	3.72	2.86	3.23	2.80	2.50	2.54	2.61	2.85	2.57	2.68	3.16	3.05	2.72	2.69	2.67	2.64	2.42	2.07	2.00	1.90	1.78	1.53	1.35	0.90	1.31	1.29			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	

Total Onsite and Offsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)

Pounds per Month	53.79	55.22	81.71	129.22	128.57	109.42	111.60	102.22	93.10	93.04	103.28	108.46	59.18	61.53	72.77	70.19	62.50	61.89	61.30	60.79	55.74	47.67	46.08	43.64	40.86	35.14	31.05	20.74	30.24	29.62	0.00	0.00	0.00
Pounds per Day	2.34	2.40	3.55	5.62	5.59	4.76	4.85	4.44	4.05	4.05	4.49	4.72	2.57	2.68	3.16	3.05	2.72	2.69	2.67	2.64	2.42	2.07	2.00	1.90	1.78	1.53	1.35	0.90	1.31	1.29	0.00	0.00	0.00
Yearly Maximums	1,170	1,175	1,181	1,172	1,113	1,047	1,000	949	908	871	825	768	703	685	659	617	567	535	503	442	381	325	311	299	297	294	300	311	331	341	353	394	447
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions by Month																														
Construction Step	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Block 1 Construction																																	
Total (lbs/month)	13.647	13.647	13.647	13.647	13.647	13.647	11.703	11.703	11.703	11.703	11.762	11.762																					
Total (lbs/day)	0.593	0.593	0.593	0.593	0.593	0.593	0.509	0.509	0.509	0.509	0.511	0.511																					
Block 2 Construction																																	
Total (lbs/month)			68.613	137.158	137.158	78.333	78.333	78.304	19.479	17.535	17.535	17.535	17.535	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	11.703	11.732	11.732			
Total (lbs/day)			2.983	5.963	5.963	3.406	3.406	3.405	0.847	0.762	0.762	0.762	0.762	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.509	0.510	0.510			
Units 1 & 2 Demolition																																	
Total (lbs/month)																																	
Total (lbs/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (lbs/month)																																	
Total (lbs/day)																																	

Total Onsite and Offsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)

Pounds per Month	13.65	13.65	82.26	150.80	150.80	91.98	90.04	90.01	31.18	29.24	29.30	29.30	17.53	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	11.70	11.73	11.73	0.00	0.00	0.00
Pounds per Day	0.59	0.59	3.58	6.56	6.56	4.00	3.91	3.91	1.36	1.27	1.27	1.27	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51	0.00	0.00	0.00
Yearly Maximums	802	806	806	737	600	463	385	308	232	215	199	183	168	164	164	164	162	160	158	144	131	117	138	159	180	201	222	242	265	288	311	345	388
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

	Total $PM_{2.5}$ Emissions by Month																														
Parameter	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Pounds per Month	67.44	68.87	163.97	280.02	279.38	201.40	201.63	192.23	124.28	122.28	132.57	137.76	76.72	75.17	86.42	83.83	76.15	75.54	74.95	74.44	69.39	61.31	59.73	57.28	54.51	48.78	44.69	32.44	41.97	41.36	0.00	0.00	0.00
Pounds per Day	2.93	2.99	7.13	12.17	12.15	8.76	8.77	8.36	5.40	5.32	5.76	5.99	3.34	3.27	3.76	3.64	3.31	3.28	3.26	3.24	3.02	2.67	2.60	2.49	2.37	2.12	1.94	1.41	1.82	1.80	0.00	0.00	0.00
Yearly Maximums	1,972	1,981	1,987	1,910	1,714	1,510	1,385	1,258	1,140	1,085	1,024	951	871	849	822	781	729	695	661	586	511	442	449	458	476	494	522	554	596	629	664	740	835
Maximum Pounds per Day																																	
Maximum Pounds per Hour [a]																																	
Maximum Pounds per Month																																	
Month with Maximum																																	
Maximum Pounds per Year																																	
Maximum Average Pounds per Hour [b]																																	
Year with Maximum																																	
Tons per Year																																	

Onsite and Offsite CO_2 Emissions

	CO_2 Emissions by Month																																
Construction Step	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Block 1 Construction																																	
Total (metric tons/month)	99.43	101.66	92.56	91.01	82.48	82.45	66.86	67.81	64.77	61.21	70.84	70.04																					
Total (metric tons/day)	4.32	4.42	4.02	3.96	3.59	3.58	2.91	2.95	2.82	2.66	3.08	3.05																					
Block 2 Construction																																	
Total (metric tons/month)			51.72	114.39	118.02	105.52	124.74	111.44	111.98	111.19	115.71	130.13	130.56	132.85	157.16	150.24	130.72	128.62	125.64	123.70	110.29	94.69	97.51	89.12	87.02	78.11	70.60	46.89	62.76	60.66			
Total (metric tons/day)			2.25	4.97	5.13	4.59	5.42	4.85	4.87	4.83	5.03	5.66	5.68	5.78	6.83	6.53	5.68	5.59	5.46	5.38	4.80	4.12	4.24	3.87	3.78	3.40	3.07	2.04	2.73	2.64			
Units 1 & 2 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Total Onsite and Offsite CO_2 Emissions (Construction Equipment and Vehicles)																																	
Metric Tons per Month	99.43	101.66	144.28	205.40	200.50	187.98	191.59	179.25	176.75	172.40	186.55	200.17	130.56	132.85	157.16	150.24	130.72	128.62	125.64	123.70	110.29	94.69	97.51	89.12	87.02	78.11	70.60	46.89	62.76	60.66	0.00	0.00	0.00
Metric Tons per Day	4.32	4.42	6.27	8.93	8.72	8.17	8.33	7.79	7.68	7.50	8.11	8.70	5.68	5.78	6.83	6.53	5.68	5.59	5.46	5.38	4.80	4.12	4.24	3.87	3.78	3.40	3.07	2.04	2.73	2.64	0.00	0.00	0.00
Yearly Maximums	2,046	2,077	2,108	2,121	2,066	1,996	1,937	1,871	1,815	1,749	1,671	1,582	1,471	1,428	1,373	1,286	1,183	1,115	1,047	921	798	687	678	668	684	706	747	796	863	915	973	1,091	1,225
Maximum Metric Tons per Day																																	
Maximum Metric Tons per Hour [a]																																	
Maximum Metric Tons per Month																																	
Month with Maximum																																	
Maximum Metric Tons per Year																																	
Maximum Average Metric Tons per Hour [b]																																	
Year with Maximum																																	

Onsite and Offsite N_2O Emissions

	N_2O Emissions by Month																																
Construction Step	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Block 1 Construction																																	
Total (metric tons/month)	0.00173587	0.00176091	0.00154598	0.00147897	0.00145147	0.00146858	0.00107355	0.00108428	0.00100666	0.00100154	0.00131506	0.00130612																					
Total (metric tons/day)	0.00007547	0.00007656	0.00006722	0.00006430	0.00006311	0.00006385	0.00004668	0.00004714	0.00004377	0.00004355	0.00005718	0.00005679																					
Block 2 Construction																																	
Total (metric tons/month)			0.00120803	0.00276929	0.00280627	0.00225249	0.00268471	0.00226572	0.00225818	0.00228514	0.00230099	0.00252851	0.00236030	0.00240598	0.00289909	0.00270409	0.00224228	0.00223614	0.00223404	0.00222969	0.00184091	0.00159680	0.00152674	0.00150219	0.00149605	0.00139590	0.00132895	0.00084271	0.00120851	0.00120237			
Total (metric tons/day)			0.00005252	0.00012040	0.00012201	0.00009793	0.00011673	0.00009851	0.00009818	0.00009935	0.00010004	0.00010994	0.00010262	0.00010465	0.00012605	0.00011757	0.00009749	0.00009722	0.00009713	0.00009694	0.00008004	0.00006943	0.00006638	0.00006531	0.00006505	0.00006069	0.00005778	0.00003664	0.00005254	0.00005228			
Units 1 & 2 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Total Onsite and Offsite N_2O Emissions (Construction Equipment and Vehicles)																																	
Metric Tons per Month	0.001736	0.001761	0.002754	0.004248	0.004258	0.003721	0.003758	0.003350	0.003265	0.003287	0.003616	0.003835	0.002360	0.002407	0.002899	0.002704	0.002242	0.002236	0.002234	0.002230	0.001841	0.001597	0.001527	0.001502	0.001496	0.001396	0.001329	0.000843	0.001209	0.001202	0.000000	0.000000	0.000000
Metric Tons per Day	0.000075	0.000077	0.000120	0.000185	0.000185	0.000162	0.000163	0.000146	0.000142	0.000143	0.000157	0.000167	0.000103	0.000105	0.000126	0.000118	0.000097	0.000097	0.000097	0.000097	0.000080	0.000069	0.000066	0.000065	0.000065	0.000061	0.000058	0.000037	0.000053	0.000052	0.000000	0.000000	0.000000
Yearly Maximums	0.03959	0.04021	0.04086	0.04100	0.03946	0.03744	0.03596	0.03444	0.03331	0.03189	0.03020	0.02811	0.02578	0.02492	0.02390	0.02233	0.02047	0.01944	0.01840	0.01617	0.01394	0.01210	0.01244	0.01286	0.01370	0.01458	0.01582	0.01714	0.01875	0.02000	0.02126	0.02373	0.02647
Maximum Metric Tons per Day																																	
Maximum Metric Tons per Hour [a]																																	
Maximum Metric Tons per Month																																	
Month with Maximum																																	
Maximum Metric Tons per Year																																	
Maximum Average Metric Tons per Hour [b]																																	
Year with Maximum																																	

Onsite and Offsite CH_4 Emissions

	CH_4 Emissions by Month																																
Construction Step	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**
Peaker and Tank Area and Stack 3&4 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Block 1 Construction																																	
Total (metric tons/month)	0.0046439	0.0047642	0.0043021	0.0042079	0.0041653	0.0042705	0.0033894	0.0034410	0.0032678	0.0032892	0.0038504	0.0038074																					
Total (metric tons/day)	0.0002019	0.0002071	0.0001870	0.0001830	0.0001811	0.0001857	0.0001474	0.0001496	0.0001421	0.0001430	0.0001674	0.0001655																					
Block 2 Construction																																	
Total (metric tons/month)			0.0028622	0.0064000	0.0065731	0.0053516	0.0064061	0.0055186	0.0054936	0.0056695	0.0056997	0.0062257	0.0058431	0.0060935	0.0074392	0.0070014	0.0059766	0.0059700	0.0060013	0.0060033	0.0051289	0.0045828	0.0044050	0.0043790	0.0043724	0.0038911	0.0035924	0.0022730	0.0030634	0.0030569			
Total (metric tons/day)			0.0001244	0.0002783	0.0002858	0.0002327	0.0002785	0.0002399	0.0002389	0.0002465	0.0002478	0.0002707	0.0002540	0.0002649	0.0003234	0.0003044	0.0002599	0.0002596	0.0002609	0.0002610	0.0002230	0.0001993	0.0001915	0.0001904	0.0001901	0.0001692	0.0001562	0.0000988	0.0001332	0.0001329			
Units 1 & 2 Demolition																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Bldgs. 33 & 34 Construction																																	
Total (metric tons/month)																																	
Total (metric tons/day)																																	
Total Onsite and Offsite CH_4 Emissions (Construction Equipment and Vehicles)																																	
Metric Tons per Month	0.00464	0.00476	0.00716	0.01061	0.01074	0.00962	0.00980	0.00896	0.00876	0.00896	0.00955	0.01003	0.00584	0.00609	0.00744	0.00700	0.00598	0.00597	0.00600	0.00600	0.00513	0.00458	0.00441	0.00438	0.00437	0.00389	0.00359	0.00227	0.00306	0.00306	0.00000	0.00000	0.00000
Metric Tons per Day	0.00020	0.00021	0.00031	0.00046	0.00047	0.00042	0.00043	0.00039	0.00038	0.00039	0.00042	0.00044	0.00025	0.00026	0.00032	0.00030	0.00026	0.00026	0.00026	0.00026	0.00022	0.00020	0.00019	0.00019	0.00019	0.00017	0.00016	0.00010	0.00013	0.00013	0.00000	0.00000	0.00000
Yearly Maximums	0.10360	0.10480	0.10613	0.10640	0.10280	0.09803	0.09438	0.09059	0.08763	0.08400	0.07962	0.07448	0.06882	0.06735	0.06515	0.06130	0.05658	0.05366	0.05075	0.04475	0.03874	0.03362	0.03338	0.03334	0.03428	0.03534	0.03749	0.04000	0.04337	0.04595	0.04855	0.05421	0.06063
Maximum Metric Tons per Day																																	
Maximum Metric Tons per Hour [a]																																	
Maximum Metric Tons per Month																																	
Month with Maximum																																	
Maximum Metric Tons per Year																																	
Maximum Average Metric Tons per Hour [b]																																	
Year with Maximum																																	

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Be
[b] The hours per year are assumed to allow operation 24 hours per

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite CO Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	683.95	688.08	892.52	910.81	1,043.79	1,050.86	1,016.20	1,016.20	1,024.47	1,024.47	1,036.88	1,036.88	1,041.01	1,045.15	1,045.15	1,045.15	1,131.84	1,131.84	1,131.84	1,112.94	1,110.38	1,079.70	1,072.03	1,060.01
Total (lbs/day)	29.74	29.92	38.81	39.60	45.38	45.69	44.18	44.18	44.54	44.54	45.08	45.08	45.26	45.44	45.44	45.44	49.21	49.21	49.21	48.39	48.28	46.94	46.61	46.09
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											147.13	482.16	483.86	522.42	467.25	462.70	155.63	156.22	162.88	170.66	157.33	175.11	171.77	87.33
Total (lbs/day)											6.40	20.96	21.04	22.71	20.32	20.12	6.77	6.79	7.08	7.42	6.84	7.61	7.47	3.80
Total Onsite and Offsite CO Emissions (Construction Equipment and Vehicles)																								
Pounds per Month	**683.95**	**688.08**	**892.52**	**910.81**	**1,043.79**	**1,050.86**	**1,016.20**	**1,016.20**	**1,024.47**	**1,024.47**	**1,184.01**	**1,519.04**	**1,524.87**	**1,567.56**	**1,512.39**	**1,507.84**	**1,287.47**	**1,288.06**	**1,294.72**	**1,283.60**	**1,267.71**	**1,254.81**	**1,243.80**	**1,147.34**
Pounds per Day	**29.74**	**29.92**	**38.81**	**39.60**	**45.38**	**45.69**	**44.18**	**44.18**	**44.54**	**44.54**	**51.48**	**66.05**	**66.30**	**68.15**	**65.76**	**65.56**	**55.98**	**56.00**	**56.29**	**55.81**	**55.12**	**54.56**	**54.08**	**49.88**
Yearly Maximums	**12,054**	**12,895**	**13,775**	**14,395**	**14,992**	**15,235**	**15,473**	**15,751**	**16,019**	**16,262**	**16,492**	**16,552**	**16,180**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite VOC Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	107.25	107.92	127.64	128.53	142.08	142.19	132.33	132.33	133.67	133.67	135.69	135.69	136.36	137.04	137.04	137.04	154.63	154.63	154.63	151.91	151.66	149.96	149.24	148.62
Total (lbs/day)	4.66	4.69	5.55	5.59	6.18	6.18	5.75	5.75	5.81	5.81	5.90	5.90	5.93	5.96	5.96	5.96	6.72	6.72	6.72	6.60	6.59	6.52	6.49	6.46
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											14.37	57.30	57.25	67.61	61.18	59.96	18.11	18.04	18.15	18.27	18.06	18.34	18.28	16.97
Total (lbs/day)											0.62	2.49	2.49	2.94	2.66	2.61	0.79	0.78	0.79	0.79	0.79	0.80	0.79	0.74
Total Onsite and Offsite VOC Emissions (Construction Equipment and Vehicles)																								
Pounds per Month	**107.25**	**107.92**	**127.64**	**128.53**	**142.08**	**142.19**	**132.33**	**132.33**	**133.67**	**133.67**	**150.06**	**193.00**	**193.62**	**204.65**	**198.21**	**196.99**	**172.74**	**172.67**	**172.78**	**170.17**	**169.72**	**168.30**	**167.52**	**165.59**
Pounds per Day	**4.66**	**4.69**	**5.55**	**5.59**	**6.18**	**6.18**	**5.75**	**5.75**	**5.81**	**5.81**	**6.52**	**8.39**	**8.42**	**8.90**	**8.62**	**8.56**	**7.51**	**7.51**	**7.51**	**7.40**	**7.38**	**7.32**	**7.28**	**7.20**
Yearly Maximums	**1,631**	**1,717**	**1,814**	**1,884**	**1,953**	**1,983**	**2,014**	**2,054**	**2,092**	**2,128**	**2,163**	**2,180**	**2,153**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite NOx Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	679.80	689.77	797.17	716.29	779.63	780.22	723.30	723.30	741.38	741.38	768.51	768.51	777.56	786.60	786.60	712.80	809.51	809.51	809.51	775.75	772.63	749.14	739.78	731.51
Total (lbs/day)	29.56	29.99	34.66	31.14	33.90	33.92	31.45	31.45	32.23	32.23	33.41	33.41	33.81	34.20	34.20	30.99	35.20	35.20	35.20	33.73	33.59	32.57	32.16	31.80
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											93.74	362.67	361.66	433.45	393.10	356.75	122.03	121.35	123.55	126.13	121.72	127.60	126.49	98.57
Total (lbs/day)											4.08	15.77	15.72	18.85	17.09	15.51	5.31	5.28	5.37	5.48	5.29	5.55	5.50	4.29
Total Onsite and Offsite NOx Emissions (Construction Equipment and Vehicles)																								
Pounds per Month	**679.80**	**689.77**	**797.17**	**716.29**	**779.63**	**780.22**	**723.30**	**723.30**	**741.38**	**741.38**	**862.26**	**1,131.18**	**1,139.22**	**1,220.05**	**1,179.70**	**1,069.54**	**931.54**	**930.86**	**933.06**	**901.88**	**894.35**	**876.74**	**866.28**	**830.08**
Pounds per Day	**29.56**	**29.99**	**34.66**	**31.14**	**33.90**	**33.92**	**31.45**	**31.45**	**32.23**	**32.23**	**37.49**	**49.18**	**49.53**	**53.05**	**51.29**	**46.50**	**40.50**	**40.47**	**40.57**	**39.21**	**38.88**	**38.12**	**37.66**	**36.09**
Yearly Maximums	**9,366**	**9,825**	**10,355**	**10,738**	**11,091**	**11,243**	**11,394**	**11,603**	**11,782**	**11,935**	**12,070**	**12,074**	**11,773**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite SOx Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	1.8701	1.9173	2.3041	2.3939	2.6239	2.6452	2.5084	2.5084	2.6027	2.6027	2.7442	2.7442	2.7913	2.8385	2.8385	2.8385	3.0940	3.0940	3.0940	2.8982	2.8789	2.7170	2.6592	2.6024
Total (lbs/day)	0.0813	0.0834	0.1002	0.1041	0.1141	0.1150	0.1091	0.1091	0.1132	0.1132	0.1193	0.1193	0.1214	0.1234	0.1234	0.1234	0.1345	0.1345	0.1345	0.1260	0.1252	0.1181	0.1156	0.1131
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											0.3071	0.9476	0.9484	1.1567	1.0943	1.0107	0.4882	0.4854	0.5068	0.5317	0.4890	0.5460	0.5353	0.2647
Total (lbs/day)											0.0134	0.0412	0.0412	0.0503	0.0476	0.0439	0.0212	0.0211	0.0220	0.0231	0.0213	0.0237	0.0233	0.0115
Total Onsite and Offsite SOx Emissions (Construction Equipment and Vehicles)																								
Pounds per Month	**1.8701**	**1.9173**	**2.3041**	**2.3939**	**2.6239**	**2.6452**	**2.5084**	**2.5084**	**2.6027**	**2.6027**	**3.0513**	**3.6918**	**3.7398**	**3.9952**	**3.9328**	**3.8492**	**3.5821**	**3.5794**	**3.6008**	**3.4299**	**3.3679**	**3.2630**	**3.1944**	**2.8671**
Pounds per Day	**0.0813**	**0.0834**	**0.1002**	**0.1041**	**0.1141**	**0.1150**	**0.1091**	**0.1091**	**0.1132**	**0.1132**	**0.1327**	**0.1605**	**0.1626**	**0.1737**	**0.1710**	**0.1674**	**0.1557**	**0.1556**	**0.1566**	**0.1491**	**0.1464**	**0.1419**	**0.1389**	**0.1247**
Yearly Maximums	**31**	**33**	**35**	**36**	**38**	**39**	**40**	**41**	**42**	**42**	**43**	**43**	**42**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite Exhaust PM_{10} Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	40.19	41.66	52.39	53.35	57.61	59.80	58.25	58.25	61.14	61.14	65.48	65.48	66.93	68.37	68.37	63.67	67.92	67.92	67.92	61.49	60.65	50.87	48.35	44.59
Total (lbs/day)	1.75	1.81	2.28	2.32	2.50	2.60	2.53	2.53	2.66	2.66	2.85	2.85	2.91	2.97	2.97	2.77	2.95	2.95	2.95	2.67	2.64	2.21	2.10	1.94
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											18.81	41.38	41.92	45.15	42.67	38.41	26.90	27.07	29.26	31.82	27.44	33.28	32.18	4.43
Total (lbs/day)											0.82	1.80	1.82	1.96	1.86	1.67	1.17	1.18	1.27	1.38	1.19	1.45	1.40	0.19
Total Onsite and Offsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																								
Pounds per Month	**40.19**	**41.66**	**52.39**	**53.35**	**57.61**	**59.80**	**58.25**	**58.25**	**61.14**	**61.14**	**84.29**	**106.86**	**108.84**	**113.53**	**111.05**	**102.09**	**94.81**	**94.99**	**97.18**	**93.31**	**88.09**	**84.15**	**80.53**	**49.01**
Pounds per Day	**1.75**	**1.81**	**2.28**	**2.32**	**2.50**	**2.60**	**2.53**	**2.53**	**2.66**	**2.66**	**3.66**	**4.65**	**4.73**	**4.94**	**4.83**	**4.44**	**4.12**	**4.13**	**4.23**	**4.06**	**3.83**	**3.66**	**3.50**	**2.13**
Yearly Maximums	**735**	**804**	**875**	**934**	**983**	**1,020**	**1,055**	**1,094**	**1,129**	**1,156**	**1,179**	**1,175**	**1,118**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite Fugitive PM_{10} Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17
Total (lbs/day)	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											77.76	340.24	340.24	340.24	320.80	320.80	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Total (lbs/day)											3.38	14.79	14.79	14.79	13.95	13.95	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Total Onsite and Offsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																								
Pounds per Month	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**338.94**	**601.42**	**601.42**	**601.42**	**581.98**	**581.98**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**
Pounds per Day	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**14.74**	**26.15**	**26.15**	**26.15**	**25.30**	**25.30**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**
Yearly Maximums	**3,552**	**3,892**	**4,233**	**4,553**	**4,874**	**4,952**	**5,030**	**5,107**	**5,185**	**5,263**	**5,341**	**5,341**	**5,078**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	301.36	302.83	313.57	314.53	318.78	320.97	319.42	319.42	322.31	322.31	423.22	708.28	710.26	714.94	693.02	684.06	433.75	433.93	436.12	432.25	427.03	423.08	419.47	387.95
Pounds per Day	13.10	13.17	13.63	13.68	13.86	13.96	13.89	13.89	14.01	14.01	18.40	30.79	30.88	31.08	30.13	29.74	18.86	18.87	18.96	18.79	18.57	18.39	18.24	16.87
Yearly Maximums	4,287	4,696	5,108	5,487	5,857	5,972	6,085	6,202	6,314	6,419	6,520	6,516	6,196											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	33.58	34.24	41.03	38.04	41.52	42.13	40.29	40.29	41.57	41.57	43.48	43.48	44.12	44.76	44.76	40.09	44.33	44.33	44.33	41.66	41.35	38.17	37.25	36.06
Total (lbs/day)	1.46	1.49	1.78	1.65	1.81	1.83	1.75	1.75	1.81	1.81	1.89	1.89	1.92	1.95	1.95	1.74	1.93	1.93	1.93	1.81	1.80	1.66	1.62	1.57
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											9.27	27.23	27.35	30.05	27.45	24.01	10.66	10.68	11.30	12.01	10.79	12.42	12.12	4.34
Total (lbs/day)											0.40	1.18	1.19	1.31	1.19	1.04	0.46	0.46	0.49	0.52	0.47	0.54	0.53	0.19
Total Onsite and Offsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																								
Pounds per Month	**33.58**	**34.24**	**41.03**	**38.04**	**41.52**	**42.13**	**40.29**	**40.29**	**41.57**	**41.57**	**52.75**	**70.72**	**71.47**	**74.81**	**72.21**	**64.10**	**55.00**	**55.02**	**55.63**	**53.67**	**52.13**	**50.59**	**49.36**	**40.41**
Pounds per Day	**1.46**	**1.49**	**1.78**	**1.65**	**1.81**	**1.83**	**1.75**	**1.75**	**1.81**	**1.81**	**2.29**	**3.07**	**3.11**	**3.25**	**3.14**	**2.79**	**2.39**	**2.39**	**2.42**	**2.33**	**2.27**	**2.20**	**2.15**	**1.76**
Yearly Maximums	**518**	**556**	**596**	**627**	**653**	**667**	**680**	**695**	**709**	**719**	**728**	**725**	**694**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 1 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Block 2 Construction																								
Total (lbs/month)																								
Total (lbs/day)																								
Units 1 & 2 Demolition																								
Total (lbs/month)	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550
Total (lbs/day)	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502
Bldgs. 33 & 34 Construction																								
Total (lbs/month)											7.776	68.567	68.567	68.567	66.623	66.623	7.776	7.776	7.776	7.776	7.776	7.776	7.776	7.776
Total (lbs/day)											0.338	2.981	2.981	2.981	2.897	2.897	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338
Total Onsite and Offsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																								
Pounds per Month	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**34.55**	**42.33**	**103.12**	**103.12**	**103.12**	**101.17**	**101.17**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**	**42.33**
Pounds per Day	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.50**	**1.84**	**4.48**	**4.48**	**4.48**	**4.40**	**4.40**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**	**1.84**
Yearly Maximums	**491**	**560**	**628**	**695**	**761**	**769**	**777**	**785**	**792**	**800**	**808**	**808**	**747**											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Table 5.1A.48R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	68.13	68.79	75.58	72.59	76.07	76.68	74.84	74.84	76.12	76.12	95.08	173.83	174.59	177.92	173.38	165.27	97.32	97.34	97.96	96.00	94.46	92.92	91.69	82.73
Pounds per Day	2.96	2.99	3.29	3.16	3.31	3.33	3.25	3.25	3.31	3.31	4.13	7.56	7.59	7.74	7.54	7.19	4.23	4.23	4.26	4.17	4.11	4.04	3.99	3.60
Yearly Maximums	1,009	1,115	1,224	1,322	1,415	1,436	1,457	1,480	1,501	1,519	1,536	1,533	1,442											
Maximum Pounds per Day																								
Maximum Pounds per Hour [a]																								
Maximum Pounds per Month																								
Month with Maximum																								
Maximum Pounds per Year																								
Maximum Average Pounds per Hour [b]																								
Year with Maximum																								
Tons per Year																								

Onsite and Offsite CO_2 Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Block 1 Construction																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Block 2 Construction																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Units 1 & 2 Demolition																								
Total (metric tons/month)	85.42	87.68	104.75	108.92	119.00	119.95	114.14	114.14	118.67	118.67	125.46	125.46	127.72	129.99	129.99	129.99	141.22	141.22	141.22	131.84	130.93	123.39	120.65	118.03
Total (metric tons/day)	3.71	3.81	4.55	4.74	5.17	5.22	4.96	4.96	5.16	5.16	5.45	5.45	5.55	5.65	5.65	5.65	6.14	6.14	6.14	5.73	5.69	5.36	5.25	5.13
Bldgs. 33 & 34 Construction																								
Total (metric tons/month)											7.94	34.44	34.14	43.38	41.08	36.56	11.96	11.66	11.66	11.66	11.66	11.66	11.66	11.66
Total (metric tons/day)											0.35	1.50	1.48	1.89	1.79	1.59	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Total Onsite and Offsite CO_2 Emissions (Construction Equipment and Vehicles)																								
Metric Tons per Month	85.42	87.68	104.75	108.92	119.00	119.95	114.14	114.14	118.67	118.67	133.40	159.90	161.86	173.37	171.07	166.54	153.18	152.87	152.87	143.50	142.59	135.05	132.31	129.69
Metric Tons per Day	3.71	3.81	4.55	4.74	5.17	5.22	4.96	4.96	5.16	5.16	5.80	6.95	7.04	7.54	7.44	7.24	6.66	6.65	6.65	6.24	6.20	5.87	5.75	5.64
Yearly Maximums	1,385	1,461	1,547	1,613	1,671	1,705	1,738	1,777	1,806	1,830	1,846	1,845	1,815											
Maximum Metric Tons per Day																								
Maximum Metric Tons per Hour [a]																								
Maximum Metric Tons per Month																								
Month with Maximum																								
Maximum Metric Tons per Year																								
Maximum Average Metric Tons per Hour [b]																								
Year with Maximum																								

Onsite and Offsite N_2O Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Block 1 Construction																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Block 2 Construction																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Units 1 & 2 Demolition																								
Total (metric tons/month)	0.00193761	0.00194424	0.00234517	0.00237326	0.00263794	0.00264867	0.00245426	0.00245426	0.00246751	0.00246751	0.00248738	0.00248738	0.00249401	0.00250063	0.00250063	0.00250063	0.00278656	0.00278656	0.00278656	0.00275649	0.00275249	0.00270527	0.00269328	0.00267515
Total (metric tons/day)	0.00006424	0.00006453	0.00010196	0.00010319	0.00011469	0.00011516	0.00010671	0.00010671	0.00010728	0.00010728	0.00010815	0.00010815	0.00010844	0.00010872	0.00010872	0.00010872	0.00012115	0.00012115	0.00012115	0.00011985	0.00011967	0.00011762	0.00011710	0.00011631
Bldgs. 33 & 34 Construction																								
Total (metric tons/month)											0.00025636	0.00087739	0.00088009	0.00108157	0.00098081	0.00097293	0.00039665	0.00039756	0.00040829	0.00042081	0.00039935	0.00042796	0.00042260	0.00028667
Total (metric tons/day)											0.00001115	0.00003815	0.00003826	0.00004702	0.00004264	0.00004230	0.00001725	0.00001729	0.00001775	0.00001830	0.00001736	0.00001861	0.00001837	0.00001246
Total Onsite and Offsite N_2O Emissions (Construction Equipment and Vehicles)																								
Metric Tons per Month	0.001938	0.001944	0.002345	0.002373	0.002638	0.002649	0.002454	0.002454	0.002468	0.002468	0.002744	0.003365	0.003374	0.003582	0.003481	0.003474	0.003183	0.003184	0.003195	0.003177	0.003152	0.003133	0.003116	0.002962
Metric Tons per Day	0.000084	0.000085	0.000102	0.000103	0.000115	0.000115	0.000107	0.000107	0.000107	0.000107	0.000119	0.000146	0.000147	0.000156	0.000151	0.000151	0.000138	0.000138	0.000139	0.000138	0.000137	0.000136	0.000135	0.000129
Yearly Maximums	0.02984	0.03128	0.03291	0.03405	0.03515	0.03570	0.03623	0.03697	0.03769	0.03838	0.03904	0.03942	0.03901											
Maximum Metric Tons per Day																								
Maximum Metric Tons per Hour [a]																								
Maximum Metric Tons per Month																								
Month with Maximum																								
Maximum Metric Tons per Year																								
Maximum Average Metric Tons per Hour [b]																								
Year with Maximum																								

Onsite and Offsite CH_4 Emissions

Construction Step	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Block 1 Construction																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Block 2 Construction																								
Total (metric tons/month)																								
Total (metric tons/day)																								
Units 1 & 2 Demolition																								
Total (metric tons/month)	0.0043517	0.0043587	0.0053222	0.0054323	0.0060438	0.0060954	0.0056447	0.0056447	0.0056588	0.0056588	0.0056799	0.0056799	0.0056870	0.0056940	0.0056940	0.0056940	0.0063318	0.0063318	0.0063318	0.0062865	0.0062756	0.0060982	0.0060654	0.0059925
Total (metric tons/day)	0.0001892	0.0001895	0.0002314	0.0002362	0.0002628	0.0002650	0.0002454	0.0002454	0.0002460	0.0002460	0.0002470	0.0002470	0.0002473	0.0002476	0.0002476	0.0002476	0.0002753	0.0002753	0.0002753	0.0002733	0.0002729	0.0002651	0.0002637	0.0002605
Bldgs. 33 & 34 Construction																								
Total (metric tons/month)											0.0007368	0.0021705	0.0021868	0.0026311	0.0023910	0.0024028	0.0011638	0.0011715	0.0012230	0.0012832	0.0011801	0.0013176	0.0012918	0.0006386
Total (metric tons/day)											0.0000320	0.0000944	0.0000951	0.0001144	0.0001040	0.0001045	0.0000506	0.0000509	0.0000532	0.0000558	0.0000513	0.0000573	0.0000562	0.0000278
Total Onsite and Offsite CH_4 Emissions (Construction Equipment and Vehicles)																								
Metric Tons per Month	0.00435	0.00436	0.00532	0.00543	0.00604	0.00610	0.00564	0.00564	0.00566	0.00566	0.00642	0.00785	0.00787	0.00833	0.00809	0.00810	0.00750	0.00750	0.00755	0.00757	0.00746	0.00742	0.00736	0.00663
Metric Tons per Day	0.00019	0.00019	0.00023	0.00024	0.00026	0.00027	0.00025	0.00025	0.00025	0.00025	0.00028	0.00034	0.00034	0.00036	0.00035	0.00035	0.00033	0.00033	0.00033	0.00033	0.00032	0.00032	0.00032	0.00029
Yearly Maximums	0.06848	0.07200	0.07597	0.07873	0.08139	0.08285	0.08425	0.08616	0.08809	0.08989	0.09164	0.09258	0.09136											
Maximum Metric Tons per Day																								
Maximum Metric Tons per Hour [a]																								
Maximum Metric Tons per Month																								
Month with Maximum																								
Maximum Metric Tons per Year																								
Maximum Average Metric Tons per Hour [b]																								
Year with Maximum																								

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Be
[b] The hours per year are assumed to allow operation 24 hours per

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.49R Onsite Construction Equipment Exhaust Emissions

Construction Equipment CO Emissions from Units 3 & 4 Demolition

	CO Emisisons (lbs/month)																									
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57	66.57
Cranes	39.32	39.32	39.32	39.32	39.32	39.32	39.32	39.32	78.65	78.65	117.97	117.97	117.97	117.97	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	78.65	117.97	117.97	117.97
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	51.35	102.69	102.69	102.69
Air Compressor	57.77	57.77	57.77	57.77	57.77	57.77	57.77	57.77	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54	115.54
Forklift	57.15	57.15	57.15	57.15	57.15	57.15	57.15	57.15	57.15	57.15	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30	114.30
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	259.65	259.65	389.48	389.48	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30	519.30
Onsite Total (lbs/month)	**220.81**	**220.81**	**220.81**	**220.81**	**220.81**	**220.81**	**220.81**	**220.81**	**628.91**	**628.91**	**855.21**	**855.21**	**985.03**	**985.03**	**945.71**	**945.71**	**945.71**	**945.71**	**945.71**	**945.71**	**945.71**	**945.71**	**945.71**	**945.71**	**1,036.38**	**1,036.38**	**1,036.38**
Onsite Total (lbs/day) [a]	**9.60**	**9.60**	**9.60**	**9.60**	**9.60**	**9.60**	**9.60**	**9.60**	**27.34**	**27.34**	**37.18**	**37.18**	**42.83**	**42.83**	**41.12**	**41.12**	**41.12**	**41.12**	**41.12**	**41.12**	**41.12**	**41.12**	**41.12**	**41.12**	**45.06**	**45.06**	**45.06**
Onsite Total (tons/year)	**5.81**																										

Construction Equipment VOC Emissions from Units 3 & 4 Demolition

	VOC Emisisons (lbs/month)																									
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31	21.31
Cranes	13.06	13.06	13.06	13.06	13.06	13.06	13.06	13.06	26.12	26.12	39.18	39.18	39.18	39.18	26.12	26.12	26.12	26.12	26.12	26.12	26.12	26.12	26.12	26.12	39.18	39.18	39.18
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	9.76	19.52	19.52	19.52
Air Compressor	11.30	11.30	11.30	11.30	11.30	11.30	11.30	11.30	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60	22.60
Forklift	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50	15.50
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37.95	37.95	56.93	56.93	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91	75.91
Onsite Total (lbs/month)	**53.42**	**53.42**	**53.42**	**53.42**	**53.42**	**53.42**	**53.42**	**53.42**	**125.49**	**125.49**	**165.28**	**165.28**	**184.25**	**184.25**	**171.19**	**171.19**	**171.19**	**171.19**	**171.19**	**171.19**	**171.19**	**171.19**	**171.19**	**171.19**	**194.01**	**194.01**	**194.01**
Onsite Total (lbs/day) [a]	**2.32**	**2.32**	**2.32**	**2.32**	**2.32**	**2.32**	**2.32**	**2.32**	**5.46**	**5.46**	**7.19**	**7.19**	**8.01**	**8.01**	**7.44**	**7.44**	**7.44**	**7.44**	**7.44**	**7.44**	**7.44**	**7.44**	**7.44**	**7.44**	**8.44**	**8.44**	**8.44**
Onsite Total (tons/year)	**1.06**																										

Construction Equipment NOx Emissions from Units 3 & 4 Demolition

	NOx Emissions (lbs/month)																									
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	143.87	143.87	143.87	143.87	143.87	143.87	143.87	143.87	143.87	143.87	143.87	143.87	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	126.74	111.49	111.49	111.49
Cranes	112.55	112.55	112.55	112.55	112.55	112.55	112.55	112.55	225.10	225.10	337.64	337.64	306.16	306.16	204.11	204.11	204.11	204.11	204.11	204.11	204.11	204.11	204.11	204.11	276.36	276.36	276.36
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.02	61.02	61.02	61.02	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	56.36	104.16	104.16	104.16
Air Compressor	72.75	72.75	72.75	72.75	72.75	72.75	72.75	72.75	145.49	145.49	145.49	145.49	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	134.01	123.02	123.02	123.02
Forklift	52.05	52.05	52.05	52.05	52.05	52.05	52.05	52.05	52.05	52.05	104.10	104.10	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	91.66	79.49	79.49	79.49
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	256.34	256.34	384.50	384.50	451.73	451.73	451.73	451.73	451.73	451.73	451.73	451.73	451.73	451.73	451.73	451.73	396.04	396.04	396.04
Onsite Total (lbs/month)	**381.21**	**381.21**	**381.21**	**381.21**	**381.21**	**381.21**	**381.21**	**381.21**	**883.86**	**883.86**	**1,176.62**	**1,176.62**	**1,166.67**	**1,166.67**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,064.62**	**1,090.55**	**1,090.55**	**1,090.55**
Onsite Total (lbs/day) [a]	**16.57**	**16.57**	**16.57**	**16.57**	**16.57**	**16.57**	**16.57**	**16.57**	**38.43**	**38.43**	**51.16**	**51.16**	**50.72**	**50.72**	**46.29**	**46.29**	**46.29**	**46.29**	**46.29**	**46.29**	**46.29**	**46.29**	**46.29**	**46.29**	**47.42**	**47.42**	**47.42**
Onsite Total (tons/year)	**6.60**																										

Construction Equipment SOx Emissions from Units 3 & 4 Demolition

	SOx Emissions (lbs/month)																									
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Cranes	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.35	0.35	0.53	0.53	0.53	0.53	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.53	0.53	0.53
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.16	0.16	0.16
Air Compressor	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Forklift	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.46	0.69	0.69	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Onsite Total (lbs/month)	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**0.65**	**1.45**	**1.45**	**1.97**	**1.97**	**2.20**	**2.20**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.02**	**2.28**	**2.28**	**2.28**
Onsite Total (lbs/day) [a]	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.06**	**0.06**	**0.09**	**0.09**	**0.10**	**0.10**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.10**	**0.10**	**0.10**
Onsite Total (tons/year)	**0.01**																										

Construction Equipment PM_{10} Emissions from Units 3 & 4 Demolition

	PM_{10} Emissions (lbs/month)																									
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.02	4.02	4.02
Cranes	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	7.72	7.72	11.58	11.58	10.44	10.44	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	9.46	9.46	9.46
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.89	4.89	4.89	4.89	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	7.76	7.76	7.76
Air Compressor	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	12.06	12.06	12.06	12.06	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	9.23	9.23	9.23
Forklift	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	5.64	5.64	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.22	4.22	4.22
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.81	13.81	20.71	20.71	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	20.52	20.52	20.52
Onsite Total (lbs/month)	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**46.42**	**46.42**	**60.01**	**60.01**	**58.79**	**58.79**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.21**	**55.21**	**55.21**
Onsite Total (lbs/day) [a]	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**2.02**	**2.02**	**2.61**	**2.61**	**2.56**	**2.56**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**
Onsite Total (tons/year)	**0.34**																										

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.49R Onsite Construction Equipment Exhaust Emissions

Construction Equipment $PM_{2.5}$ Emissions from Units 3 & 4 Demolition

	$PM_{2.5}$ Emissions (lbs/month)																											
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	5.12	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.51	4.02	4.02	4.02
Cranes	3.86	3.86	3.86	3.86	3.86	3.86	3.86	3.86	7.72	7.72	11.58	11.58	10.44	10.44	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	6.96	9.46	9.46	9.46
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.89	4.89	4.89	4.89	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	7.76	7.76	7.76
Air Compressor	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	12.06	12.06	12.06	12.06	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	9.23	9.23	9.23
Forklift	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	2.82	5.64	5.64	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.22	4.22	4.22
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.81	13.81	20.71	20.71	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	23.91	20.52	20.52	20.52
Onsite Total (lbs/month)	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**17.83**	**46.42**	**46.42**	**60.01**	**60.01**	**58.79**	**58.79**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.31**	**55.21**	**55.21**	**55.21**
Onsite Total (lbs/day) [a]	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**0.78**	**2.02**	**2.02**	**2.61**	**2.61**	**2.56**	**2.56**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**	**2.40**
Onsite Total (tons/year)	**0.34**																										

Construction Equipment CO_2 Emissions from Units 3 & 4 Demolition

	CO_2 Emissions (metric tons/month)																											
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48	14.48
Cranes	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75	15.51	15.51	23.26	23.26	23.26	23.26	15.51	15.51	15.51	15.51	15.51	15.51	15.51	15.51	15.51	15.51	23.26	23.26	23.26
Rubber Tired Loader	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	3.47	6.95	6.95	6.95
Air Compressor	4.04	4.04	4.04	4.04	4.04	4.04	4.04	4.04	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08	8.08
Forklift	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	4.49	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98	8.98
Excavator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.40	20.40	30.60	30.60	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80
Onsite Total (metric tons/month)	**30.76**	**30.76**	**30.76**	**30.76**	**30.76**	**30.76**	**30.76**	**30.76**	**66.43**	**66.43**	**88.87**	**88.87**	**99.07**	**99.07**	**91.32**	**91.32**	**91.32**	**91.32**	**91.32**	**91.32**	**91.32**	**91.32**	**91.32**	**91.32**	**102.55**	**102.55**	**102.55**
Onsite Total (metric tons/day) [a]	**1.34**	**1.34**	**1.34**	**1.34**	**1.34**	**1.34**	**1.34**	**1.34**	**2.89**	**2.89**	**3.86**	**3.86**	**4.31**	**4.31**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**3.97**	**4.46**	**4.46**	**4.46**
Onsite Total (metric tons/year)	**1129.52**																										

Construction Equipment N_2O Emissions from Units 3 & 4 Demolition

	N_2O Emissions (metric tons/month)																											
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Cranes	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004	0.0006	0.0006	0.0006	0.0006	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0006	0.0006	0.0006
Rubber Tired Loader	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002
Air Compressor	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Forklift	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Excavator	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005	0.0005	0.0008	0.0008	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
Onsite Total (metric tons/month)	**0.0008**	**0.0008**	**0.0008**	**0.0008**	**0.0008**	**0.0008**	**0.0008**	**0.0008**	**0.0017**	**0.0017**	**0.0023**	**0.0023**	**0.0025**	**0.0025**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0023**	**0.0026**	**0.0026**	**0.0026**
Onsite Total (metric tons/day) [a]	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**
Onsite Total (metric tons/year)	**0.0288**																										

Construction Equipment CH_4 Emissions from Units 3 & 4 Demolition

	CH_4 Emissions (metric tons/month)																											
Onsite Equipment	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Water Truck	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Cranes	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0009	0.0009	0.0013	0.0013	0.0013	0.0013	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0013	0.0013	0.0013
Rubber Tired Loader	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0004	0.0004	0.0004
Air Compressor	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Forklift	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Excavator	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0012	0.0012	0.0017	0.0017	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023
Onsite Total (metric tons/month)	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0017**	**0.0038**	**0.0038**	**0.0050**	**0.0050**	**0.0056**	**0.0056**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0052**	**0.0058**	**0.0058**	**0.0058**
Onsite Total (metric tons/day) [a]	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0001**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0002**	**0.0003**	**0.0003**	**0.0003**
Onsite Total (metric tons/year)	**0.0642**																										

Notes:

[a] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', the days per month are as follo

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.50R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle CO Emissions from Units 3 & 4 Demolition

	CO Emissions (lbs/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Total (lbs/day)	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.06**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**	**0.09**
	CO Emissions (lbs/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Onsite Stake Truck	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Onsite Total (lbs/month)	**1.45**	**1.45**	**1.45**	**1.45**	**1.45**	**1.45**	**1.45**	**1.45**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**	**2.00**
Onsite Total (tons/year)	**0.01**																										

Onsite Construction Vehicle VOC Emissions from Units 3 & 4 Demolition

	VOC Emisisons (lbs/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Onsite Total (lbs/day)	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.029**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**	**0.043**
	VOC Emissions (lbs/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Onsite Stake Truck	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
Onsite Total (lbs/month)	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**
Onsite Total (tons/year)	**0.01**																										

Onsite Construction Vehicle SOx Emissions from Units 3 & 4 Demolition

	SOx Emissions (lbs/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
Onsite Stake Truck	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Onsite Dump Truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
Onsite Total (lbs/day)	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00021**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**	**0.00029**
	SOx Emissions (lbs/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011	0.0011
Onsite Stake Truck	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038	0.0038
Onsite Dump Truck	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019
Onsite Total (lbs/month)	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0049**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**	**0.0067**
Onsite Total (tons/year)	**0.00**																										

Onsite Construction Vehicle NOx Emissions from Units 3 & 4 Demolition

	NOx Emissions (lbs/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.082	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.066	0.066	0.066
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.041	0.041	0.041	0.041	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.033	0.033	0.033
Onsite Total (lbs/day)	**0.084**	**0.084**	**0.084**	**0.084**	**0.084**	**0.084**	**0.084**	**0.084**	**0.125**	**0.125**	**0.125**	**0.125**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.111**	**0.100**	**0.100**	**0.100**
	NOx Emissions (lbs/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.028	0.028	0.028
Onsite Stake Truck	1.895	1.895	1.895	1.895	1.895	1.895	1.895	1.895	1.895	1.895	1.895	1.895	1.688	1.688	1.688	1.688	1.688	1.688	1.688	1.688	1.688	1.688	1.688	1.688	1.514	1.514	1.514
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.948	0.948	0.948	0.948	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.844	0.757	0.757	0.757
Onsite Total (lbs/month)	**1.928**	**1.928**	**1.928**	**1.928**	**1.928**	**1.928**	**1.928**	**1.928**	**2.876**	**2.876**	**2.876**	**2.876**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.563**	**2.300**	**2.300**	**2.300**
Onsite Total (tons/year)	**0.02**																										

Onsite Construction Vehicle PM_{10} Emissions from Units 3 & 4 Demolition

	PM_{10} Emissions (lbs/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.001	0.001	0.001	0.001
Onsite Stake Truck	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0044	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.0037	0.004	0.003	0.003	0.003
Onsite Dump Truck	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0022	0.0022	0.0022	0.0022	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.0019	0.002	0.002	0.002	0.002
Onsite Total (lbs/day)	**0.0050**	**0.0050**	**0.0050**	**0.0050**	**0.0050**	**0.0050**	**0.0050**	**0.0050**	**0.0072**	**0.0072**	**0.0072**	**0.0072**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.0061**	**0.006**	**0.005**	**0.005**	**0.005**
	PM_{10} Emissions (lbs/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Onsite Stake Truck	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.102	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.085	0.072	0.072	0.072
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.051	0.051	0.051	0.051	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.036	0.036	0.036
Onsite Total (lbs/month)	**0.115**	**0.115**	**0.115**	**0.115**	**0.115**	**0.115**	**0.115**	**0.115**	**0.166**	**0.166**	**0.166**	**0.166**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.141**	**0.121**	**0.121**	**0.121**
Onsite Total (tons/year)	**0.001**																										

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.50R Onsite Motor Vehicle Exhaust Emissions

Onsite Construction Vehicle $PM_{2.5}$ Emissions from Units 3 & 4 Demolition

	$PM_{2.5}$ Emissions (lbs/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Onsite Stake Truck	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0039	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0027	0.0027	0.0027
Onsite Dump Truck	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020	0.0020	0.0020	0.0020	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0014	0.0014	0.0014
Onsite Total (lbs/day)	**0.0044**	**0.0044**	**0.0044**	**0.0044**	**0.0044**	**0.0044**	**0.0044**	**0.0044**	**0.0063**	**0.0063**	**0.0063**	**0.0063**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0053**	**0.0045**	**0.0045**	**0.0045**
	$PM_{2.5}$ Emissions (lbs/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Onsite Stake Truck	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.062	0.062	0.062
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.045	0.045	0.045	0.045	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.031	0.031	0.031
Onsite Total (lbs/month)	**0.100**	**0.100**	**0.100**	**0.100**	**0.100**	**0.100**	**0.100**	**0.100**	**0.145**	**0.145**	**0.145**	**0.145**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.123**	**0.104**	**0.104**	**0.104**
Onsite Total (tons/year)	**0.001**																										

Onsite Construction Vehicle CO_2 Emissions from Units 3 & 4 Demolition

	CO_2 Emissions (metric tons/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Onsite Stake Truck	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Onsite Total (metric tons/day)	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.010**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**	**0.014**
	CO_2 Emissions (metric tons/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.054
Onsite Stake Truck	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179	0.179
Onsite Dump Truck	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090
Onsite Total (metric tons/month)	**0.233**	**0.233**	**0.233**	**0.233**	**0.233**	**0.233**	**0.233**	**0.233**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**	**0.323**
Onsite Total (metric tons/year)	**3.877**																										

Onsite Construction Vehicle N_2O Emissions from Units 3 & 4 Demolition

	N_2O Emissions (metric tons/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013	0.000000013
Onsite Stake Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005
Onsite Total (metric tons/day)	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000023**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**	**0.000000028**
	N_2O Emissions (metric tons/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030	0.00000030
Onsite Stake Truck	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022	0.00000022
Onsite Dump Truck	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011	0.00000011
Onsite Total (metric tons/month)	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000052**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**	**0.00000063**
Onsite Total (metric tons/year)	**0.000008**																										

Onsite Construction Vehicle CH_4 Emissions from Units 3 & 4 Demolition

	CH_4 Emissions (metric tons/day)																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033	0.000000033
Onsite Stake Truck	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010	0.000000010
Onsite Dump Truck	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005	0.000000005
Onsite Total (metric tons/day)	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000043**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**	**0.000000048**
	CH_4 Emissions (metric tons/month) [a]																									
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007	0.0000007
Onsite Stake Truck	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002	0.0000002
Onsite Dump Truck	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001	0.0000001
Onsite Total (metric tons/month)	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000010**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**	**0.0000011**
Onsite Total (metric tons/year)	**0.000013**																										

Notes:

[a] The days per month are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls', as presented on the 'Onsite Fugitive Dust' tab.

Table 5.1A.51R Onsite Demolition Fugitive Dust Emissions

Demolition Activity Levels for Units 3 & 4 Demolition

Source	Monthly Activity Levels																									
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Debris Generated from Mechanical Dismemberment (tons	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74	812.74

[a] Debris generated from Table 5.14-3, Wastes Generated during Demolition of HBGS Units 1 & 2 or HBGS Units 3 & 4. Only materials generated from demolition that may generate fugitive dust were included. The monthly quantities were determined as follows:

Scrap Materials	16,000	lbs/week	which equals	32.00	tons/month
Scrap Metals	20,000	tons	which equals	740.74	tons/month
Concrete	0	tons	which equals	0.00	tons/month
Asphalt	80	tons	which equals	2.96	tons/month
Asbestos Waste	1,000	tons	which equals	37.04	tons/month

The above calculations are based on the following assumptions:

Demolition will last	27	months
The construction schedule allows for	4	weeks/month

Onsite Construction Vehicle Fugitive PM_{10} Emissions from Units 3 & 4 Demolition

Vehicle Type	Fugitive PM_{10} Emissions (lbs/day) [a]																									
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Onsite Pick-up Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Stake Truck	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Onsite Total (lbs/day)	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**3.38**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**	**4.23**
Vehicle Type	**Fugitive PM_{10} Emissions (lbs/month) [a]**																									
	10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Stake Truck	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88	38.88
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44	19.44
Onsite Total (lbs/month)	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**77.76**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**	**97.20**
Onsite Total (tons/year)	**0.58**																										

Notes:
[a] Emissions based on highest (controlled) unpaved road emission factor for PM_{10}.

Onsite Construction Vehicle Fugitive $PM_{2.5}$ Emissions from Units 3 & 4 Demolition

Vehicle Type	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a]																									
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Onsite Pick-up Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Stake Truck	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Onsite Total (lbs/day)	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.34**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**	**0.42**
Vehicle Type	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a]**																									
	10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Onsite Pick-up Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Stake Truck	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89	3.89
Onsite Dump Truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94	1.94
Onsite Total (lbs/month)	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**7.78**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**	**9.72**
Onsite Total (tons/year)	**0.06**																										

Notes:
[a] Emissions based on the highest (controlled) unpaved road emission factor for $PM_{2.5}$.

Onsite Demolition Fugitive PM_{10} Emissions from Units 3 & 4 Demolition

Demolition Activity	Fugitive PM_{10} Emissions (lbs/day) [a, b]																									
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Dismemberment	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50
Debris Loading [c]	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Onsite Total (lbs/day)	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**	**5.96**
Demolition Activity	**Fugitive PM_{10} Emissions (lbs/month) [a, b]**																									
	10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Dismemberment	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43	126.43
Debris Loading [c]	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56	10.56
Onsite Total (lbs/month)	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**	**136.99**
Onsite Total (tons/year)	**0.82**																										

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for PM_{10}.
[c] Assume that all debris generated per month from dismemberment is loaded in the same month that it is generated.

Table 5.1A.51R Onsite Demolition Fugitive Dust Emissions

Onsite Demolition Fugitive $PM_{2.5}$ Emissions from Units 3 & 4 Demolition

Demolition Activity	Fugitive $PM_{2.5}$ Emissions (lbs/day) [a, b]																											
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Dismemberment	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Debris Loading [c]	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Onsite Total (lbs/day)	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**	**0.90**
Demolition Activity	**Fugitive $PM_{2.5}$ Emissions (lbs/month) [a, b]**																										
	10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Dismemberment	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14	19.14
Debris Loading [c]	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Onsite Total (lbs/month)	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**	**20.74**
Onsite Total (tons/year)	**0.12**																										

Notes:
[a] Work days per month are as follows, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 23
[b] Emissions based on the highest (controlled) emission factor for $PM_{2.5}$.
[c] Assume that all debris generated per month from dismemberment is loaded in the same month that it is generated.

Onsite Construction Vehicle Activity for Units 3 & 4 Demolition

Vehicle Type	Miles/Day [a]	Working Days per Month [b]
Onsite Pick-up Truck	2	23
Onsite Stake Truck	2	23
Onsite Dump Truck	1	23

Notes:
[a] Estimated based on the dimensions of the project site.
[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Fugitive Dust Emission Factors for Unpaved Roads

Vehicles on Unpaved Surfaces at Industrial Sites

Parameter	PM_{10}	$PM_{2.5}$
Mean Vehicle Weight [a]	16.5	16.5
Silt Content [b]	8.5	8.5
k [c]	1.5	0.15
a [c]	0.9	0.9
b [c]	0.45	0.45
P [d]	31	31
Emission Factor (Uncontrolled, lbs/mile) [e]	2.17	0.22
Reduction from Watering 3x per Day [f]	61%	61%
Emission Factor (Controlled, lbs/mile)	0.85	0.08

Notes:
[a] Mean vehicle weight assumes that medium/heavy duty trucks weigh 16.5 tons.
[b] Silt content taken from Table 13.2.2-1 of Section 13.2.2 of AP-42 for a Construction Site, Scraper Route; this value is consistent with the CalEEMod defaults for the South Coast Air Basin.
[c] k, a, and b taken from Table 13.2.2-2 of Section 13.2.2 of AP-42 for industrial roads.
[d] P taken as the CalEEMod default for the Huntington Beach climate region of the South Coast Air Basin.
[e] Emission factor calculated using Equations 1a and 2 from Section 13.2.2 of AP-42:

Emission Factor (lbs/mile) = $\{k \text{ (lbs/mile)} \times [\text{Silt Content (\%)} / 12]^a \times [\text{Mean Vehicle Weight (tons)} / 3]^b\} \times [(365 - P) / 365]$

[f] Control efficiency taken from the URBEMIS default mitigation measures for unpaved roads.

Fugitive Dust Emission Factors for Dismemberment

Dismemberment and Collapse of Structures

Parameter	PM_{10}	$PM_{2.5}$
k [a]	0.35	0.053
U [b]	2.2	2.2
M [c]	2%	2%
Emission Factor (lbs/ton) [d]	0.243	0.037
Reduction from Watering Every 4 Hours [e]	36%	36%
Emission Factor (Controlled, lbs/ton)	0.156	0.024

Notes:
[a] k, the particle size multiplier, taken from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide.
[b] U, the mean wind speed, taken as the CalEEMod default for the South Coast Air Basin.
[c] M, the material moisture content, taken from Section 4.4 of Appendix A of the CalEEMod User's Guide.
[d] Emission factor calculated using the following equation from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide:

Emission Factor (lbs/ton) = $k \times 0.0032 \times [U \text{ (m/s)} / 5]^{1.3} \times [M \text{ (\%)} / 2]^{1.4}$

[e] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Active Demolition and Debris Removal.

Fugitive Dust Emission Factors for Debris Loading

Loading of Debris/Building Waste

Parameter	PM_{10}	$PM_{2.5}$
k [a]	0.35	0.053
$EF_{L\text{-}TSP}$ [b]	0.058	0.058
Emission Factor (lbs/ton) [c]	0.020	0.003
Reduction from Watering Every 4 Hours [d]	36%	36%
Emission Factor (Controlled, lbs/ton)	0.013	0.002

Notes:
[a] k taken from Section 13.2.4.3 of AP-42 per Section 4.4 of Appendix A of the CalEEMod User's Guide.
[b] $EF_{L\text{-}TSP}$ taken from Section 4.4 of Appendix A of the CalEEMod User's Guide.
[c] Emission factor calculated using the following equation from Section 4.4 of Appendix A of the CalEEMod User's Guide:

Emission Factor (lbs/ton) = $k \times EF_{L\text{-}TSP}$ (lbs/ton)

[d] Control efficiency taken from Table XI-A of the SCAQMD CEQA Handbook for Active Demolition and Debris Removal.

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.52R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle Usage During Units 3 & 4 Demolition

	Number per Day																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks [a]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Material Hauling Trucks [b]	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	3.50	4.50	4.50	4.50	1.00	0.50	0.50	0.50
Waste Hauling Trucks [c]	3.00	4.00	4.00	5.00	5.00	5.00	6.00	6.00	8.00	8.00	11.00	11.00	12.00	13.00	13.00	13.00	13.00	13.00	13.00	9.00	8.00	6.00	5.00	5.00	13.00	13.00	13.00
Construction Worker Commute [d]	13.00	13.00	28.00	40.00	44.00	50.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	48.00	46.00	45.00	26.00	23.00	15.00	48.00	48.00	48.00

Notes:

[a] Offsite Delivery Trucks include trucks transporting "Consumables & Supplies", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. Due to the revised, extended construction duration and in the absence of updated engineering data, delivery data for Months 34 through 36 was assumed equal to Month 28.

[b] Material Hauling Trucks include trucks transporting "Fill Material", "Contractor Mobilization", "Contractor Demobilization", and "Construction Equipment", as provided in 'Huntington Beach Truck Deliveries 032112.xls'. Due to the revised, extended construction duration and in the absence of updated engineering data, hauling data for Months 34 through 36 was assumed equal to Month 28.

[c] Waste Hauling Trucks include trucks transporting "Mechanical Equipment", "Electrical Equip. & Mtrls", "Concrete / Rebar / Rubble", and "Steel/Architectural", as provided in 'Huntington Beach Truck Deliveries 032112.xls'.Due to the revised, extended construction duration and in the absence of updated engineering data, hauling data for Months 34 through 36 was assumed equal to Month 28.

[d] Assumed 1 commute per 1 worker; number of workers taken from 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'. Due to the revised, extended construction duration and in the absence of updated engineering data, mahour data for Months 34 through 36 was assumed equal to Month 28.

Offsite Vehicle CO Emissions from Units 3 & 4 Demolition

	CO Emissions (lbs/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.00	0.07	0.07	0.07
Material Hauling Trucks	0.15	0.15	0.15	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.53	0.68	0.68	0.68	0.15	0.08	0.08	0.08
Waste Hauling Trucks	0.68	0.91	0.91	1.14	1.14	1.14	1.36	1.36	1.82	1.82	2.50	2.50	2.73	2.96	2.96	2.96	2.96	2.96	2.96	2.05	1.82	1.36	1.14	1.14	2.96	2.96	2.96
Construction Worker Commute	0.89	0.89	1.91	2.73	3.01	3.42	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.28	3.14	3.07	1.78	1.57	1.02	3.28	3.28	3.28
Offsite Total (lbs/day)	**1.79**	**2.02**	**3.05**	**4.09**	**4.29**	**4.70**	**4.79**	**4.79**	**5.25**	**5.25**	**5.93**	**5.93**	**6.15**	**6.38**	**6.38**	**6.38**	**6.38**	**6.38**	**6.38**	**5.79**	**5.65**	**3.89**	**3.46**	**2.31**	**6.38**	**6.38**	**6.38**
	CO Emissions (lbs/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	0.00	1.66	1.66	1.66
Material Hauling Trucks	3.49	3.49	3.49	3.49	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	12.20	15.68	15.68	15.68	3.49	1.74	1.74	1.74
Waste Hauling Trucks	15.68	20.91	20.91	26.14	26.14	26.14	31.37	31.37	41.83	41.83	57.51	57.51	62.74	67.97	67.97	67.97	67.97	67.97	67.97	47.05	41.83	31.37	26.14	26.14	67.97	67.97	67.97
Construction Worker Commute	20.42	20.42	43.99	62.84	69.13	78.56	75.41	75.41	75.41	75.41	75.41	75.41	75.41	75.41	75.41	75.41	75.41	75.41	75.41	72.27	70.70	40.85	36.14	23.57	75.41	75.41	75.41
Offsite Total (lbs/month)	**41.26**	**46.49**	**70.05**	**94.14**	**98.68**	**108.10**	**110.19**	**110.19**	**120.65**	**120.65**	**136.33**	**136.33**	**141.56**	**146.79**	**146.79**	**146.79**	**146.79**	**146.79**	**146.79**	**133.19**	**129.88**	**89.57**	**79.63**	**53.19**	**146.79**	**146.79**	**146.79**
Offsite Total (tons/year)	**0.84**																										

Offsite Vehicle VOC Emissions from Units 3 & 4 Demolition

	VOC Emissions (lbs/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01
Material Hauling Trucks	0.03	0.03	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.09	0.12	0.12	0.12	0.03	0.01	0.01	0.01
Waste Hauling Trucks	0.12	0.15	0.15	0.19	0.19	0.19	0.23	0.23	0.31	0.31	0.42	0.42	0.46	0.50	0.50	0.50	0.50	0.50	0.50	0.35	0.31	0.23	0.19	0.19	0.50	0.50	0.50
Construction Worker Commute	0.02	0.02	0.04	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.04	0.03	0.02	0.07	0.07	0.07
Offsite Total (lbs/day)	**0.17**	**0.21**	**0.23**	**0.29**	**0.28**	**0.29**	**0.32**	**0.32**	**0.40**	**0.40**	**0.51**	**0.51**	**0.55**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.59**	**0.51**	**0.50**	**0.40**	**0.35**	**0.24**	**0.59**	**0.59**	**0.59**
	VOC Emissions (lbs/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.00	0.34	0.34	0.34
Material Hauling Trucks	0.59	0.59	0.59	0.59	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	2.06	2.65	2.65	2.65	0.59	0.29	0.29	0.29
Waste Hauling Trucks	2.65	3.53	3.53	4.41	4.41	4.41	5.29	5.29	7.06	7.06	9.71	9.71	10.59	11.47	11.47	11.47	11.47	11.47	11.47	7.94	7.06	5.29	4.41	4.41	11.47	11.47	11.47
Construction Worker Commute	0.41	0.41	0.87	1.25	1.37	1.56	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.44	1.40	0.81	0.72	0.47	1.50	1.50	1.50
Offsite Total (lbs/month)	**3.98**	**4.86**	**5.33**	**6.58**	**6.41**	**6.60**	**7.42**	**7.42**	**9.19**	**9.19**	**11.83**	**11.83**	**12.72**	**13.60**	**13.60**	**13.60**	**13.60**	**13.60**	**13.60**	**11.77**	**11.45**	**9.09**	**8.11**	**5.47**	**13.60**	**13.60**	**13.60**
Offsite Total (tons/year)	**0.08**																										

Offsite Vehicle SOx Emissions from Units 3 & 4 Demolition

	SOx Emissions (lbs/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0000	0.0005	0.0005	0.0005
Material Hauling Trucks	0.0014	0.0014	0.0014	0.0014	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0048	0.0062	0.0062	0.0062	0.0014	0.0007	0.0007	0.0007
Waste Hauling Trucks	0.0062	0.0082	0.0082	0.0103	0.0103	0.0103	0.0123	0.0123	0.0164	0.0164	0.0226	0.0226	0.0246	0.0267	0.0267	0.0267	0.0267	0.0267	0.0267	0.0185	0.0164	0.0123	0.0103	0.0103	0.0267	0.0267	0.0267
Construction Worker Commute	0.0022	0.0022	0.0047	0.0067	0.0073	0.0083	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0080	0.0077	0.0075	0.0043	0.0038	0.0025	0.0080	0.0080	0.0080
Offsite Total (lbs/day)	**0.0102**	**0.0123**	**0.0148**	**0.0188**	**0.0188**	**0.0198**	**0.0215**	**0.0215**	**0.0256**	**0.0256**	**0.0318**	**0.0318**	**0.0338**	**0.0359**	**0.0359**	**0.0359**	**0.0359**	**0.0359**	**0.0359**	**0.0315**	**0.0306**	**0.0233**	**0.0208**	**0.0141**	**0.0359**	**0.0359**	**0.0359**
	SOx Emissions (lbs/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.000	0.013	0.013	0.013
Material Hauling Trucks	0.031	0.031	0.031	0.031	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.110	0.141	0.141	0.141	0.031	0.016	0.016	0.016
Waste Hauling Trucks	0.141	0.189	0.189	0.236	0.236	0.236	0.283	0.283	0.377	0.377	0.519	0.519	0.566	0.613	0.613	0.613	0.613	0.613	0.613	0.424	0.377	0.283	0.236	0.236	0.613	0.613	0.613
Construction Worker Commute	0.050	0.050	0.107	0.153	0.169	0.192	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.184	0.176	0.173	0.100	0.088	0.058	0.184	0.184	0.184
Offsite Total (lbs/month)	**0.235**	**0.282**	**0.340**	**0.433**	**0.433**	**0.456**	**0.495**	**0.495**	**0.590**	**0.590**	**0.731**	**0.731**	**0.778**	**0.825**	**0.825**	**0.825**	**0.825**	**0.825**	**0.825**	**0.723**	**0.704**	**0.537**	**0.478**	**0.325**	**0.825**	**0.825**	**0.825**
Offsite Total (tons/year)	**0.005**																										

Table 5.1A.52R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle NOx Emissions from Units 3 & 4 Demolition

	NOx Emissions (lbs/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.00	0.17	0.17	0.17
Material Hauling Trucks	0.45	0.45	0.45	0.45	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.40	1.80	1.80	1.80	0.40	0.18	0.18	0.18
Waste Hauling Trucks	2.02	2.69	2.69	3.37	3.37	3.37	4.04	4.04	5.39	5.39	7.41	7.41	7.19	7.79	7.79	7.79	7.79	7.79	7.79	5.39	4.79	3.59	2.99	2.99	6.96	6.96	6.96
Construction Worker Commute	0.08	0.08	0.18	0.26	0.29	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.15	0.14	0.09	0.26	0.26	0.26
Offsite Total (lbs/day)	**2.77**	**3.44**	**3.54**	**4.29**	**4.09**	**4.13**	**4.79**	**4.79**	**6.14**	**6.14**	**8.16**	**8.16**	**7.86**	**8.46**	**8.46**	**8.46**	**8.46**	**8.46**	**8.46**	**7.25**	**7.04**	**5.73**	**5.12**	**3.48**	**7.56**	**7.56**	**7.56**
	NOx Emissions (lbs/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.32	0.00	3.84	3.84	3.84
Material Hauling Trucks	10.32	10.32	10.32	10.32	5.16	5.16	5.16	5.16	5.16	5.16	5.16	5.16	4.59	4.59	4.59	4.59	4.59	4.59	4.59	32.14	41.32	41.32	41.32	9.18	4.10	4.10	4.10
Waste Hauling Trucks	46.46	61.94	61.94	77.43	77.43	77.43	92.91	92.91	123.88	123.88	170.34	170.34	165.29	179.06	179.06	179.06	179.06	179.06	179.06	123.97	110.19	82.64	68.87	68.87	160.00	160.00	160.00
Construction Worker Commute	1.94	1.94	4.18	5.97	6.57	7.46	7.16	7.16	7.16	7.16	7.16	7.16	6.55	6.55	6.55	6.55	6.55	6.55	6.55	6.27	6.14	3.55	3.14	2.05	5.97	5.97	5.97
Offsite Total (lbs/month)	**63.62**	**79.11**	**81.35**	**98.62**	**94.06**	**94.95**	**110.14**	**110.14**	**141.11**	**141.11**	**187.57**	**187.57**	**180.75**	**194.53**	**194.53**	**194.53**	**194.53**	**194.53**	**194.53**	**166.70**	**161.98**	**131.84**	**117.65**	**80.10**	**173.91**	**173.91**	**173.91**
Offsite Total (tons/year)	**1.096**																										

Offsite Vehicle PM_{10} Emissions from Units 3 & 4 Demolition

	PM_{10} Emissions (lbs/day) [a]																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00	0.02	0.02	0.02
Material Hauling Trucks	0.05	0.05	0.05	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.16	0.21	0.21	0.21	0.05	0.02	0.02	0.02
Waste Hauling Trucks	0.21	0.28	0.28	0.35	0.35	0.35	0.43	0.43	0.57	0.57	0.78	0.78	0.83	0.89	0.89	0.89	0.89	0.89	0.89	0.62	0.55	0.41	0.34	0.34	0.87	0.87	0.87
Construction Worker Commute	0.21	0.21	0.44	0.63	0.70	0.79	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.73	0.71	0.41	0.36	0.24	0.76	0.76	0.76
Offsite Total (lbs/day)	**0.49**	**0.56**	**0.79**	**1.06**	**1.10**	**1.19**	**1.23**	**1.23**	**1.37**	**1.37**	**1.58**	**1.58**	**1.63**	**1.70**	**1.70**	**1.70**	**1.70**	**1.70**	**1.70**	**1.53**	**1.49**	**1.05**	**0.93**	**0.63**	**1.67**	**1.67**	**1.67**
	PM_{10} Emissions (lbs/month) [a]																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.00	0.41	0.41	0.41
Material Hauling Trucks	1.09	1.09	1.09	1.09	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.53	0.53	0.53	0.53	0.53	0.53	0.53	3.69	4.75	4.75	4.75	1.05	0.51	0.51	0.51
Waste Hauling Trucks	4.90	6.53	6.53	8.16	8.16	8.16	9.79	9.79	13.06	13.06	17.95	17.95	18.98	20.57	20.57	20.57	20.57	20.57	20.57	14.24	12.66	9.49	7.91	7.91	20.01	20.01	20.01
Construction Worker Commute	4.74	4.74	10.21	14.59	16.05	18.23	17.51	17.51	17.51	17.51	17.51	17.51	17.52	17.52	17.52	17.52	17.52	17.52	17.52	16.79	16.42	9.49	8.39	5.47	17.52	17.52	17.52
Offsite Total (lbs/month)	**11.17**	**12.80**	**18.27**	**24.28**	**25.19**	**27.38**	**28.28**	**28.28**	**31.55**	**31.55**	**36.45**	**36.45**	**37.45**	**39.03**	**39.03**	**39.03**	**39.03**	**39.03**	**39.03**	**35.14**	**34.25**	**24.15**	**21.47**	**14.44**	**38.45**	**38.45**	**38.45**
Offsite Total (tons/year)	**0.223**																										

Notes:
[a] PM_{10} Emissions include emissions from exhaust and paved roads.

Offsite Vehicle $PM_{2.5}$ Emissions from Units 3 & 4 Demolition

	$PM_{2.5}$ Emissions (lbs/day) [a]																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01
Material Hauling Trucks	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.08	0.10	0.10	0.10	0.02	0.01	0.01	0.01
Waste Hauling Trucks	0.11	0.14	0.14	0.18	0.18	0.18	0.21	0.21	0.28	0.28	0.39	0.39	0.40	0.43	0.43	0.43	0.43	0.43	0.43	0.30	0.27	0.20	0.17	0.17	0.41	0.41	0.41
Construction Worker Commute	0.06	0.06	0.12	0.18	0.20	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.12	0.10	0.07	0.21	0.21	0.21
Offsite Total (lbs/day)	**0.20**	**0.23**	**0.30**	**0.39**	**0.39**	**0.42**	**0.45**	**0.45**	**0.52**	**0.52**	**0.62**	**0.62**	**0.63**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.66**	**0.59**	**0.57**	**0.42**	**0.38**	**0.25**	**0.64**	**0.64**	**0.64**
	$PM_{2.5}$ Emissions (lbs/month) [a]																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.00	0.20	0.20	0.20
Material Hauling Trucks	0.54	0.54	0.54	0.54	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.25	0.25	0.25	0.25	0.25	0.25	0.25	1.78	2.29	2.29	2.29	0.51	0.24	0.24	0.24
Waste Hauling Trucks	2.42	3.23	3.23	4.04	4.04	4.04	4.85	4.85	6.46	6.46	8.89	8.89	9.15	9.91	9.91	9.91	9.91	9.91	9.91	6.86	6.10	4.57	3.81	3.81	9.40	9.40	9.40
Construction Worker Commute	1.33	1.33	2.86	4.08	4.49	5.10	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.90	4.69	4.59	2.65	2.35	1.53	4.90	4.90	4.90
Offsite Total (lbs/month)	**4.52**	**5.33**	**6.86**	**8.89**	**9.03**	**9.64**	**10.24**	**10.24**	**11.86**	**11.86**	**14.28**	**14.28**	**14.51**	**15.27**	**15.27**	**15.27**	**15.27**	**15.27**	**15.27**	**13.54**	**13.19**	**9.73**	**8.66**	**5.85**	**14.73**	**14.73**	**14.73**
Offsite Total (tons/year)	**0.087**																										

Notes:
[a] $PM_{2.5}$ Emissions include emissions from exhaust and paved roads.

Offsite Vehicle CO_2 Emissions from Units 3 & 4 Demolition

	CO_2 Emissions (metric tons/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.00	0.03	0.03	0.03
Material Hauling Trucks	0.07	0.07	0.07	0.07	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.23	0.30	0.30	0.30	0.07	0.03	0.03	0.03
Waste Hauling Trucks	0.30	0.39	0.39	0.49	0.49	0.49	0.59	0.59	0.79	0.79	1.08	1.08	1.18	1.28	1.28	1.28	1.28	1.28	1.28	0.89	0.79	0.59	0.49	0.49	1.28	1.28	1.28
Construction Worker Commute	0.09	0.09	0.19	0.28	0.31	0.35	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.31	0.18	0.16	0.10	0.33	0.33	0.33
Offsite Total (metric tons/day)	**0.48**	**0.58**	**0.68**	**0.86**	**0.86**	**0.90**	**0.98**	**0.98**	**1.18**	**1.18**	**1.47**	**1.47**	**1.57**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.67**	**1.46**	**1.42**	**1.09**	**0.97**	**0.66**	**1.67**	**1.67**	**1.67**
	CO_2 Emissions (metric tons/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.00	0.60	0.60	0.60
Material Hauling Trucks	1.51	1.51	1.51	1.51	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	5.28	6.79	6.79	6.79	1.51	0.75	0.75	0.75
Waste Hauling Trucks	6.79	9.06	9.06	11.32	11.32	11.32	13.58	13.58	18.11	18.11	24.90	24.90	27.17	29.43	29.43	29.43	29.43	29.43	29.43	20.38	18.11	13.58	11.32	11.32	29.43	29.43	29.43
Construction Worker Commute	2.08	2.08	4.47	6.39	7.02	7.98	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.34	7.18	4.15	3.67	2.39	7.66	7.66	7.66
Offsite Total (metric tons/month)	**10.97**	**13.24**	**15.63**	**19.81**	**19.69**	**20.65**	**22.60**	**22.60**	**27.13**	**27.13**	**33.92**	**33.92**	**36.18**	**38.44**	**38.44**	**38.44**	**38.44**	**38.44**	**38.44**	**33.60**	**32.68**	**25.12**	**22.38**	**15.22**	**38.44**	**38.44**	**38.44**
Offsite Total (metric tons/year)	**428.1**																										

Table 5.1A.52R Offsite Motor Vehicle Exhaust and Fugitive Dust Emissions

Offsite Vehicle N_2O Emissions from Units 3 & 4 Demolition

	N_2O Emissions (metric tons/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000000	0.00000007	0.00000007	0.00000007
Material Hauling Trucks	0.00000019	0.00000019	0.00000019	0.00000019	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000067	0.00000086	0.00000086	0.00000086	0.00000019	0.00000010	0.00000010	0.00000010
Waste Hauling Trucks	0.00000086	0.00000115	0.00000115	0.00000144	0.00000144	0.00000144	0.00000173	0.00000173	0.00000230	0.00000230	0.00000317	0.00000317	0.00000346	0.00000374	0.00000374	0.00000374	0.00000374	0.00000374	0.00000374	0.00000259	0.00000230	0.00000173	0.00000144	0.00000144	0.00000374	0.00000374	0.00000374
Construction Worker Commute	0.00000101	0.00000101	0.00000218	0.00000311	0.00000342	0.00000389	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000373	0.00000358	0.00000350	0.00000202	0.00000179	0.00000117	0.00000373	0.00000373	0.00000373
Offsite Total (metric tons/day)	**0.00000214**	**0.00000242**	**0.00000359**	**0.00000481**	**0.00000503**	**0.00000549**	**0.00000563**	**0.00000563**	**0.00000620**	**0.00000620**	**0.00000707**	**0.00000707**	**0.00000735**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000764**	**0.00000691**	**0.00000674**	**0.00000468**	**0.00000416**	**0.00000280**	**0.00000764**	**0.00000764**	**0.00000764**
	N_2O Emissions (metric tons/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000016	0.0000000	0.0000016	0.0000016	0.0000016
Material Hauling Trucks	0.0000044	0.0000044	0.0000044	0.0000044	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000022	0.0000155	0.0000199	0.0000199	0.0000199	0.0000044	0.0000022	0.0000022	0.0000022
Waste Hauling Trucks	0.0000199	0.0000265	0.0000265	0.0000331	0.0000331	0.0000331	0.0000397	0.0000397	0.0000530	0.0000530	0.0000729	0.0000729	0.0000795	0.0000861	0.0000861	0.0000861	0.0000861	0.0000861	0.0000861	0.0000596	0.0000530	0.0000397	0.0000331	0.0000331	0.0000861	0.0000861	0.0000861
Construction Worker Commute	0.0000233	0.0000233	0.0000501	0.0000715	0.0000787	0.0000894	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000858	0.0000823	0.0000805	0.0000465	0.0000411	0.0000268	0.0000858	0.0000858	0.0000858
Offsite Total (metric tons/month)	**0.0000492**	**0.0000558**	**0.0000826**	**0.0001107**	**0.0001156**	**0.0001264**	**0.0001294**	**0.0001294**	**0.0001427**	**0.0001427**	**0.0001625**	**0.0001625**	**0.0001692**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001758**	**0.0001590**	**0.0001550**	**0.0001077**	**0.0000957**	**0.0000644**	**0.0001758**	**0.0001758**	**0.0001758**
Offsite Total (metric tons/year)	**0.00201**																										

Offsite Vehicle CH_4 Emissions from Units 3 & 4 Demolition

	CH_4 Emissions (metric tons/day)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000007	0.00000000	0.00000007	0.00000007	0.00000007
Material Hauling Trucks	0.00000020	0.00000020	0.00000020	0.00000020	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000010	0.00000071	0.00000092	0.00000092	0.00000092	0.00000020	0.00000010	0.00000010	0.00000010
Waste Hauling Trucks	0.00000092	0.00000122	0.00000122	0.00000153	0.00000153	0.00000153	0.00000184	0.00000184	0.00000245	0.00000245	0.00000337	0.00000337	0.00000367	0.00000398	0.00000398	0.00000398	0.00000398	0.00000398	0.00000398	0.00000275	0.00000245	0.00000184	0.00000153	0.00000153	0.00000398	0.00000398	0.00000398
Construction Worker Commute	0.00000486	0.00000486	0.00001046	0.00001495	0.00001644	0.00001868	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001794	0.00001719	0.00001682	0.00000972	0.00000859	0.00000561	0.00001794	0.00001794	0.00001794
Offsite Total (metric tons/day)	**0.00000605**	**0.00000636**	**0.00001197**	**0.00001676**	**0.00001815**	**0.00002039**	**0.00001995**	**0.00001995**	**0.00002056**	**0.00002056**	**0.00002148**	**0.00002148**	**0.00002179**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002209**	**0.00002073**	**0.00002026**	**0.00001254**	**0.00001112**	**0.00000734**	**0.00002209**	**0.00002209**	**0.00002209**
	CH_4 Emissions (metric tons/month)																										
Vehicle Type	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**
Offsite Delivery Trucks	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000017	0.0000000	0.0000017	0.0000017	0.0000017
Material Hauling Trucks	0.0000047	0.0000047	0.0000047	0.0000047	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000023	0.0000164	0.0000211	0.0000211	0.0000211	0.0000047	0.0000023	0.0000023	0.0000023
Waste Hauling Trucks	0.0000211	0.0000282	0.0000282	0.0000352	0.0000352	0.0000352	0.0000422	0.0000422	0.0000563	0.0000563	0.0000774	0.0000774	0.0000845	0.0000915	0.0000915	0.0000915	0.0000915	0.0000915	0.0000915	0.0000633	0.0000563	0.0000422	0.0000352	0.0000352	0.0000915	0.0000915	0.0000915
Construction Worker Commute	0.0001117	0.0001117	0.0002406	0.0003438	0.0003782	0.0004297	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0004125	0.0003954	0.0003868	0.0002235	0.0001977	0.0001289	0.0004125	0.0004125	0.0004125
Offsite Total (metric tons/month)	**0.0001392**	**0.0001463**	**0.0002752**	**0.0003854**	**0.0004174**	**0.0004690**	**0.0004588**	**0.0004588**	**0.0004729**	**0.0004729**	**0.0004940**	**0.0004940**	**0.0005011**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0005081**	**0.0004768**	**0.0004659**	**0.0002885**	**0.0002557**	**0.0001688**	**0.0005081**	**0.0005081**	**0.0005081**
Offsite Total (metric tons/year)	**0.00596**																										

Offsite Construction Vehicle Activity for Units 3 & 4 Demolition

Vehicle Type	**Roundtrip Miles/Day [a]**	**Working Days per Month [b]**
Offsite Delivery Trucks	14.6	23
Material Hauling Trucks	40.0	23
Waste Hauling Trucks	60.0	23
Construction Worker Commute	21.6	23

Notes:

[a] Roundtrip miles/day taken as the CalEEMod defaults for the South Coast Air Basin except for Waste Hauling Trucks, which were assumed to travel directly to the the landfill for offsite waste disposal.

[b] Per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Table 5.1A.53R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Units 3 & 4 Demolition

Emission Source	Pollutant(s)	Equation	Variables
Construction Equipment Exhaust	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_m = EF * N * Hp * L * H / 453.6$	E_m = Emissions (lbs/month)
			EF = Emission factor (g/bhp-hr)
			N = Number of pieces of equipment
			Hp = Average horsepower
			L = Average load factor
			H = Hours per month
			453.6 = Conversion from g to lbs
		$E_d = E_m / D$	E_d = Emissions (lbs/day)
			E_m = Emissions (lbs/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons
	CO_2	$E_m = N * FC * EF * H * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (kg/gallon)
			H = Hours per month
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_m = N * FC * EF * H / 1{,}000 * 0.001$	E_m = Emissions (metric tons/month)
			N = Number of pieces of equipment
			FC = Fuel consumption (gallons/hour)
			EF = Emission factor (g/gallon)
			H = Hours per month
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_d = E_m / D$	E_d = Emissions (metric tons/day)
			E_m = Emissions (metric tons/month)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite and Offsite Vehicle Exhaust and Paved and Unpaved Road Fugitive PM_{10} and $PM_{2.5}$	CO, VOC, NOx, SOx, PM_{10}, and $PM_{2.5}$	$E_d = N * VMT * EF / 453.6$	E_d = Emissions (lbs/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = EMFAC2007 emission factor (g/mile). Paved and unpaved road fugitive PM_{10} and $PM_{2.5}$ emission factors calculated per Sections 13.2.1 and 13.2.2 of AP-42, respectively.
			453.6 = Conversion from g to lbs
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2{,}000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Table 5.1A.53R Equations Used to Calculate Criteria Pollutant and GHG Emissions

Equations Used to Calculate Emissions from Units 3 & 4 Demolition

Emission Source	Pollutant(s)	Equation	Variables
Onsite and Offsite Vehicle Exhaust	CO_2	$E_d = N * VMT / FE * EF * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			FE = Fuel economy (mpg)
			EF = Emission factor (kg/gallon)
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
	CH_4 and N_2O	$E_d = N * VMT * EF / 1,000 * 0.001$	E_d = Emissions (metric tons/day)
			N = Number of vehicles
			VMT = Vehicle miles traveled per day (miles/day)
			EF = Emission factor (g/mile)
			1,000 = Conversion from g to kg
			0.001 = Conversion from kg to metric tons
		$E_m = E_d * D$	E_m = Emissions (metric tons/month)
			E_d = Emissions (metric tons/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m$	E_t = Emissions (metric tons/year)
			E_m = Emissions (metric tons/month)
Onsite Fugitive PM_{10} and $PM_{2.5}$ from Dismemberment and Debris Loading	PM_{10} and $PM_{2.5}$	$E_d = T * EF / D$	E_d = Emissions (lbs/day)
			T = Tons of material dismembered or loaded
			EF = Fugitive PM_{10} and $PM_{2.5}$ emission factors (lbs/ton), calculated per Section 13.2.4.3 of AP-42 for dismemberment and Section 4.4 of Appendix A of the CalEEMod User's Guide for debris loading.
			D = Number of construction days per month
		$E_m = E_d * D$	E_m = Emissions (lbs/month)
			E_d = Emissions (lbs/day)
			D = Number of construction days per month
		$E_t = \Sigma E_m / 2,000$	E_t = Emissions (tons/year)
			E_m = Emissions (lbs/month)
			2,000 = Conversion from lbs to tons

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.54R Number of Onsite Construction Equipment and Motor Vehicles

Number of Onsite Equipment for Units 3 & 4 Demolition

Onsite Equipment	Number per Month [a]																											
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Water Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cranes [b]	1	1	1	1	1	1	1	1	2	2	3	3	3	3	2	2	2	2	2	2	2	2	2	2	3	3	3
Rubber Tired Loader	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2
Air Compressor	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Forklift	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Excavator	0	0	0	0	0	0	0	0	2	2	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

Notes:

[a] Equipment counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

[b] Numbers presented for Cranes includes the equipment counts for the 75 Ton Hydraulic Crane and the 35 Ton Hydraulic Crane.

Number of Onsite Motor Vehicles for Units 3 & 4 Demolition

Vehicle Type	Number per Month [a]																											
	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Onsite Pick-up Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Stake Truck	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Onsite Dump Truck	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Notes:

[a] Vehicle counts taken from 'HBEP Equipment Usage 1.21.13.xls'.

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.55R Construction Equipment Exhaust Criteria Pollutant Emission Factors

Construction Equipment Emission Factors for Units 3 & 4 Demolition

Equipment [a]	Percent Usage [b]	Hours per Month [c]	Horsepower [d]	Load Factor [d]	Emission Factors (g/bhp-hr) [e]												Fuel Consumption (gallons/hour) [f]
					CO	VOC	NO_X 2016	NO_X 2017	NO_X 2018	SO_X	PM_{10} 2016	PM_{10} 2017	PM_{10} 2018	$PM_{2.5}$ 2016	$PM_{2.5}$ 2017	$PM_{2.5}$ 2018	
Water Truck [g]	50%	115	381	0.57	1.209	0.387	2.613	2.302	2.025	0.005	0.093	0.082	0.073	0.093	0.082	0.073	12.33
Cranes	65%	150	208	0.43	1.334	0.443	3.818	3.462	3.125	0.006	0.131	0.118	0.107	0.131	0.118	0.107	5.08
Rubber Tired Loader	55%	127	87	0.54	3.919	0.745	4.657	4.302	3.975	0.006	0.373	0.333	0.296	0.373	0.333	0.296	2.69
Air Compressor	80%	184	78	0.48	3.804	0.744	4.790	4.412	4.050	0.006	0.397	0.350	0.304	0.397	0.350	0.304	2.15
Forklift	75%	173	149	0.30	3.362	0.456	3.062	2.696	2.338	0.006	0.166	0.145	0.124	0.166	0.145	0.124	2.55
Excavator	85%	196	157	0.57	3.366	0.492	3.323	2.928	2.567	0.006	0.179	0.155	0.133	0.179	0.155	0.133	5.11

Notes:

[a] Assumed all equipment is fired with diesel fuel, per Section 4.2 of Appendix A of the CalEEMod User's Guide.

[b] Percent Usage assumed typical of power plant construction.

[c] Hours per month calculated based on the following schedule, per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls'.

Work hours per day: 10
Work days per month: 23

[d] Construction equipment horsepower and load factor taken from Table 3.3 of Appendix D of the CalEEMod User's Guide.

[e] Construction equipment emission factors taken from Table 3.4 of Appendix D of the CalEEMod User's Guide. The emission factors for the year 2016 were used for the construction equipment exhaust emission calculations for CO, VOC, and SOx. The emission factors for year 2016, 2017 and 2018 were used for NOx, PM10, and PM2.5.

[f] Fuel consumption based on consumption in the OFFROAD2007 model for the SCAB in the year 2016; value estimated by dividing the reported consumption (gallons/day) by the reported activity (hours/day).

[g] Horsepower, load factor, and emission factors for Off-Highway Trucks were assumed representative of Water Trucks.

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.56R Onsite and Offsite Motor Vehicle Criteria Pollutant Emission Factors

Vehicle Emission Factors for Units 3 & 4 Demolition

Vehicle Type	Vehicle Class [a]	Exhaust Emission Factors (g/mile) [b]												Paved Road Emission Factors (g/mile) [c]		Fuel Economy (mpg) [b]
		CO	VOC	SO_X	NO_X 2016	NO_X 2017	NO_X 2018	PM_{10} 2016	PM_{10} 2017	PM_{10} 2018	$PM_{2.5}$ 2016	$PM_{2.5}$ 2017	$PM_{2.5}$ 2018	PM_{10}	$PM_{2.5}$	
Onsite Pick-up Truck	Light-duty Truck	3.508	0.235	0.011	0.327	0.301	0.278	0.123	0.124	0.126	0.101	0.103	0.104	N/A	N/A	7.440
Onsite Stake Truck	Heavy-duty Diesel	10.786	6.276	0.037	18.687	16.645	14.934	1.007	0.843	0.709	0.889	0.738	0.614	N/A	N/A	2.621
Onsite Dump Truck	Heavy-duty Diesel	10.786	6.276	0.037	18.687	16.645	14.934	1.007	0.843	0.709	0.889	0.738	0.614	N/A	N/A	2.621
Offsite Delivery Trucks	Heavy-duty Diesel	2.249	0.453	0.017	6.621	5.842	5.193	0.297	0.270	0.248	0.235	0.211	0.190	0.300	0.075	5.749
Material Hauling Trucks	Heavy/Medium-duty Diesel	1.719	0.290	0.016	5.090	4.528	4.046	0.236	0.220	0.206	0.191	0.176	0.163	0.300	0.075	6.224
Waste Hauling Trucks	Heavy/Medium-duty Diesel	1.719	0.290	0.016	5.090	4.528	4.046	0.236	0.220	0.206	0.191	0.176	0.163	0.300	0.075	6.224
Construction Worker Commute	Light-duty Auto/Truck	1.435	0.029	0.004	0.136	0.125	0.114	0.033	0.033	0.033	0.018	0.018	0.018	0.300	0.075	27.325

Notes:

[a] The vehicle classes are represented as follows:

Light-duty Truck: Assumed to be an average of LDT1, All and LDT2, All values.
Heavy-duty Diesel: Assumed to be 100% HHD DSL values, as confirmed in Section 4.5 of Appendix A of the CalEEMod User's Guide.
Heavy/Medium-duty Diesel: 50% HHD DSL and 50% MHD DSL values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.
Light-duty Auto/Truck: 50% LDA, All; 25% LDT1, All; and 25% LDT2, All values, per Section 4.5 of Appendix A of the CalEEMod User's Guide.

[b] Exhaust emission factors and fuel economy from EMFAC2007 for the South Coast Air Basin, calendar year 2016 for CO, VOC, and SOx. Calendar year 2016, 2017 and 2018 were used for NOx, PM10, and PM2.5. A speed of 5 mph was assumed for onsite vehicles; a speed of 40 mph was assumed for offsite vehicles and worker commutes, which is consistent with the CalEEMod defaults. An average temperature of 68°F and humidity of 55% were used per Table B-1 of CT-EMFAC: A Computer Model to Estimate Transportation Project Emissions.

[c] Paved road emission factors calculated using CalEEMod methodology, as described below.

Derivation of Paved Road Emission Factors

Vehicles on Paved Roads

Parameter	PM_{10}	$PM_{2.5}$
Average Weight [a]	2.4	2.4
k [b]	1.0	0.25
sL [a]	0.1	0.1
Emission Factor (g/mile) [c]	0.300	0.075

Notes:

[a] Average Weight and sL taken as the default value from CalEEMod.

[b] k taken from Table 13.2.1-1 of Section 13.2.1 of AP-42.

[c] Emission factor calculated using Equation 1 from Section 13.2.1 of AP-42:

$$\text{Emission Factor (g/mile)} = k \text{ (g/mile)} \times [\text{sL (g/m}^2)]^{0.91} \times [\text{Average Weight (tons)}]^{1.02}$$

Huntington Beach Energy Project
Construction Emission Estimates - Units 3 and 4 Demolition
October 2013

Table 5.1A.57R Onsite and Offsite Greenhouse Gas Emission Factors

Greenhouse Gas Emission Factors for Units 3 & 4 Demolition

Fuel / Category Type	Emission Factor	Emission Factor Units	Emission Factor Source
CO_2 Emission Factors			
Gasoline	8.78	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
Diesel	10.21	kg CO_2/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.1, May 2008 as updated through January 2012.
N_2O Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0036	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0066	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0048	g N_2O/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.26	g N_2O/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.
CH_4 Emission Factors			
Gasoline Passenger Car Model Year 2009 [a]	0.0173	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Gasoline Light-duty Truck Model Year 2009 [a]	0.0163	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Heavy-duty Truck Model Year 1960 - 2009 [a]	0.0051	g CH_4/mile	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.5, May 2008 as updated through January 2012.
Diesel Off-road Vehicle	0.58	g CH_4/gallon	The Climate Registry General Reporting Protocol, Version 1.1, Table 13.7, May 2008 as updated through January 2012.

Notes:

[a] Model Year 2009 was the most recent year of emission factors available. As a result, it was assumed representative of vehicles used for this project.

Huntington Beach Energy Project
Construction Emission Estimates - Cumulative Project
October 2013

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite CO Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	642.06	642.06	640.80	811.24	868.31	868.31	868.31	868.31	998.25	957.75	957.75	963.80	1,098.33	1,098.33	1,098.33																				
Total (lbs/day)	27.92	27.92	27.86	35.27	37.75	37.75	37.75	37.75	43.40	41.64	41.64	41.90	47.75	47.75	47.75																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										222.26	222.26	222.26	222.26	222.26	222.26	222.26	222.26	630.90	630.90	857.20	857.20	987.03	987.03	947.71	947.71	947.71	947.71	947.71	947.71	947.71	947.71	947.71	947.71	1,038.38	1,038.38
Total (lbs/day)										9.66	9.66	9.66	9.66	9.66	9.66	9.66	9.66	27.43	27.43	37.27	37.27	42.91	42.91	41.20	41.20	41.20	41.20	41.20	41.20	41.20	41.20	41.20	41.20	45.15	45.15
Block 1 Construction																																			
Total (lbs/month)																1,292.23	1,292.23	1,153.77	1,232.42	820.88	603.94	682.04	682.04	721.36	721.36	680.95	680.95	720.27	590.44	551.12	551.12	551.12	551.12	472.47	472.47
Total (lbs/day)																56.18	56.18	50.16	53.58	35.69	26.26	29.65	29.65	31.36	31.36	29.61	29.61	31.32	25.67	23.96	23.96	23.96	23.96	20.54	20.54
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite CO Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**642.06**	**642.06**	**640.80**	**811.24**	**868.31**	**868.31**	**868.31**	**868.31**	**998.25**	**1,180.01**	**1,180.01**	**1,186.06**	**1,320.59**	**1,320.59**	**1,320.59**	**1,514.49**	**1,514.49**	**1,784.67**	**1,863.32**	**1,678.08**	**1,461.14**	**1,669.07**	**1,669.07**	**1,669.07**	**1,669.07**	**1,628.65**	**1,628.65**	**1,667.98**	**1,538.15**	**1,498.83**	**1,498.83**	**1,498.83**	**1,498.83**	**1,510.85**	**1,510.85**
Pounds per Day	**27.92**	**27.92**	**27.86**	**35.27**	**37.75**	**37.75**	**37.75**	**37.75**	**43.40**	**51.30**	**51.30**	**51.57**	**57.42**	**57.42**	**57.42**	**65.85**	**65.85**	**77.59**	**81.01**	**72.96**	**63.53**	**72.57**	**72.57**	**72.57**	**72.57**	**70.81**	**70.81**	**72.52**	**66.88**	**65.17**	**65.17**	**65.17**	**65.17**	**65.69**	**65.69**
Yearly Maximums	**10,754**	**11,432**	**12,111**	**12,791**	**13,494**	**14,140**	**15,056**	**16,051**	**16,861**	**17,324**	**17,813**	**18,302**	**18,785**	**19,134**	**19,442**	**19,750**	**19,903**	**19,927**	**19,641**	**19,277**	**19,097**	**19,135**	**18,977**	**18,819**	**19,015**	**18,934**	**18,894**	**18,529**	**18,120**	**17,619**	**16,974**	**16,327**	**15,870**	**15,451**	**14,610**

Maximum Pounds per Day	**81.11**
Maximum Pounds per Hour [a]	**8.11**
Maximum Pounds per Month	**1,865.47**
Month with Maximum	**36**
Maximum Pounds per Year	**19,927**
Maximum Average Pounds per Hour [b]	**2.27**
Year with Maximum	**Months 18 - 29**
Tons per Year	**9.96**

Onsite VOC Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	133.40	133.40	144.82	179.14	187.42	187.42	187.42	187.42	207.94	194.14	194.14	198.92	222.77	222.77	222.77																				
Total (lbs/day)	5.80	5.80	6.30	7.79	8.15	8.15	8.15	8.15	9.04	8.44	8.44	8.65	9.69	9.69	9.69																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										54.08	54.08	54.08	54.08	54.08	54.08	54.08	54.08	126.47	126.47	166.25	166.25	185.23	185.23	172.17	172.17	172.17	172.17	172.17	172.17	172.17	172.17	172.17	172.17	194.99	194.99
Total (lbs/day)										2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	5.50	5.50	7.23	7.23	8.05	8.05	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	7.49	8.48	8.48
Block 1 Construction																																			
Total (lbs/month)																235.92	235.92	206.45	232.57	161.54	122.85	148.65	148.65	161.71	161.71	148.01	148.01	161.07	142.09	129.03	129.03	129.03	129.03	102.92	102.92
Total (lbs/day)																10.26	10.26	8.98	10.11	7.02	5.34	6.46	6.46	7.03	7.03	6.44	6.44	7.00	6.18	5.61	5.61	5.61	5.61	4.47	4.47
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite VOC Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**133.40**	**133.40**	**144.82**	**179.14**	**187.42**	**187.42**	**187.42**	**187.42**	**207.94**	**248.22**	**248.22**	**253.00**	**276.85**	**276.85**	**276.85**	**290.00**	**290.00**	**332.92**	**359.03**	**327.79**	**289.10**	**333.88**	**333.88**	**333.88**	**333.88**	**320.18**	**320.18**	**333.24**	**314.26**	**301.21**	**301.21**	**301.21**	**301.21**	**297.91**	**297.91**
Pounds per Day	**5.80**	**5.80**	**6.30**	**7.79**	**8.15**	**8.15**	**8.15**	**8.15**	**9.04**	**10.79**	**10.79**	**11.00**	**12.04**	**12.04**	**12.04**	**12.61**	**12.61**	**14.47**	**15.61**	**14.25**	**12.57**	**14.52**	**14.52**	**14.52**	**14.52**	**13.92**	**13.92**	**14.49**	**13.66**	**13.10**	**13.10**	**13.10**	**13.10**	**12.95**	**12.95**
Yearly Maximums	**2,298**	**2,441**	**2,585**	**2,717**	**2,828**	**2,930**	**3,076**	**3,247**	**3,388**	**3,469**	**3,554**	**3,640**	**3,721**	**3,778**	**3,821**	**3,865**	**3,908**	**3,932**	**3,901**	**3,843**	**3,816**	**3,828**	**3,792**	**3,756**	**3,783**	**3,727**	**3,684**	**3,586**	**3,473**	**3,345**	**3,214**	**3,083**	**2,985**	**2,899**	**2,730**

Maximum Pounds per Day	**15.69**
Maximum Pounds per Hour [a]	**1.57**
Maximum Pounds per Month	**360.92**
Month with Maximum	**36**
Maximum Pounds per Year	**3,932**
Maximum Average Pounds per Hour [b]	**0.45**
Year with Maximum	**Months 18-29**
Tons per Year	**1.97**

Onsite NOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	894.53	894.53	1,018.01	1,286.40	1,345.15	1,345.15	1,345.15	1,345.15	1,489.83	1,231.65	1,231.65	1,259.93	1,418.47	1,418.47	1,418.47																				
Total (lbs/day)	38.89	38.89	44.26	55.93	58.48	58.48	58.48	58.48	64.78	53.55	53.55	54.78	61.67	61.67	61.67																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										383.14	383.14	383.14	383.14	383.14	383.14	383.14	383.14	886.73	886.73	1,179.50	1,179.50	1,169.23	1,169.23	1,067.18	1,067.18	1,067.18	1,067.18	1,067.18	1,067.18	1,067.18	1,067.18	1,067.18	1,067.18	1,092.85	1,092.85
Total (lbs/day)										16.66	16.66	16.66	16.66	16.66	16.66	16.66	16.66	38.55	38.55	51.28	51.28	50.84	50.84	46.40	46.40	46.40	46.40	46.40	46.40	46.40	46.40	46.40	46.40	47.52	47.52
Block 1 Construction																																			
Total (lbs/month)																1,441.95	1,441.95	1,263.68	1,488.78	1,103.48	858.06	974.85	974.85	1,076.90	1,076.90	973.16	973.16	1,075.22	962.28	860.23	860.23	860.23	860.23	589.76	589.76
Total (lbs/day)																62.69	62.69	54.94	64.73	47.98	37.31	42.38	42.38	46.82	46.82	42.31	42.31	46.75	41.84	37.40	37.40	37.40	37.40	25.64	25.64
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite NOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**894.53**	**894.53**	**1,018.01**	**1,286.40**	**1,345.15**	**1,345.15**	**1,345.15**	**1,345.15**	**1,489.83**	**1,614.79**	**1,614.79**	**1,643.07**	**1,801.61**	**1,801.61**	**1,801.61**	**1,825.09**	**1,825.09**	**2,150.42**	**2,375.51**	**2,282.98**	**2,037.56**	**2,144.08**	**2,144.08**	**2,144.08**	**2,144.08**	**2,040.34**	**2,040.34**	**2,142.39**	**2,029.46**	**1,927.41**	**1,927.41**	**1,927.41**	**1,927.41**	**1,682.61**	**1,682.61**
Pounds per Day	**38.89**	**38.89**	**44.26**	**55.93**	**58.48**	**58.48**	**58.48**	**58.48**	**64.78**	**70.21**	**70.21**	**71.44**	**78.33**	**78.33**	**78.33**	**79.35**	**79.35**	**93.50**	**103.28**	**99.26**	**88.59**	**93.22**	**93.22**	**93.22**	**93.22**	**88.71**	**88.71**	**93.15**	**88.24**	**83.80**	**83.80**	**83.80**	**83.80**	**73.16**	**73.16**
Yearly Maximums	**15,837**	**16,744**	**17,651**	**18,434**	**18,973**	**19,453**	**20,258**	**21,289**	**22,226**	**22,774**	**23,303**	**23,833**	**24,334**	**24,676**	**24,915**	**25,154**	**25,471**	**25,675**	**25,452**	**25,004**	**24,649**	**24,539**	**24,077**	**23,616**	**23,558**	**23,120**	**22,786**	**22,108**	**21,326**	**20,441**	**19,603**	**18,765**	**18,116**	**17,559**	**16,659**

Maximum Pounds per Day	**103.28**
Maximum Pounds per Hour [a]	**10.33**
Maximum Pounds per Month	**2,375.51**
Month with Maximum	**19**
Maximum Pounds per Year	**25,675**
Maximum Average Pounds per Hour [b]	**2.93**
Year with Maximum	**Months 18 - 29**
Tons per Year	**12.84**

Huntington Beach Energy Project
Construction Emission Estimates - Cumulative Project
October 2013

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite SOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	1.22	1.22	1.43	1.84	1.94	1.94	1.94	1.94	2.18	2.00	2.00	1.99	2.23	2.23	2.23																				
Total (lbs/day)	0.05	0.05	0.06	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	1.46	1.46	1.97	1.97	2.20	2.20	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.28	2.28
Total (lbs/day)										0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.06	0.06	0.09	0.09	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10
Block 1 Construction																																			
Total (lbs/month)																2.34	2.34	2.14	2.49	1.77	1.41	1.76	1.76	1.94	1.94	1.76	1.76	1.93	1.70	1.52	1.52	1.52	1.52	1.17	1.17
Total (lbs/day)																0.10	0.10	0.09	0.11	0.08	0.06	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.05	0.05
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite SOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	1.22	1.22	1.43	1.84	1.94	1.94	1.94	1.94	2.18	2.65	2.65	2.64	2.88	2.88	2.88	2.99	2.99	3.60	3.95	3.74	3.38	3.96	3.96	3.96	3.96	3.78	3.78	3.96	3.73	3.55	3.55	3.55	3.55	3.45	3.45
Pounds per Day	0.05	0.05	0.06	0.08	0.08	0.08	0.08	0.08	0.09	0.12	0.12	0.11	0.13	0.13	0.13	0.13	0.13	0.16	0.17	0.16	0.15	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.16	0.15	0.15	0.15	0.15	0.15	0.15
Yearly Maximums	24	25	27	28	30	31	32	34	36	37	39	40	41	42	43	44	45	46	46	45	45	45	45	44	45	44	43	42	41	40	38	37	36	35	33

Maximum Pounds per Day	0.18
Maximum Pounds per Hour [a]	0.02
Maximum Pounds per Month	4.23
Month with Maximum	36
Maximum Pounds per Year	46
Maximum Average Pounds per Hour [b]	0.01
Year with Maximum	Months 18 - 29
Tons per Year	0.02

Onsite Exhaust PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	57.43	57.43	59.12	71.26	74.46	74.46	74.46	74.46	82.32	69.47	69.47	73.22	81.96	81.96	81.96																				
Total (lbs/day)	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.02	3.02	3.18	3.56	3.56	3.56																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										17.95	17.95	17.95	17.95	17.95	17.95	17.95	17.95	46.58	46.58	60.17	60.17	58.93	58.93	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.45	55.33	55.33
Total (lbs/day)										0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	2.03	2.03	2.62	2.62	2.56	2.56	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41
Block 1 Construction																																			
Total (lbs/month)																98.69	98.69	84.01	91.73	62.56	45.87	47.30	47.30	50.77	50.77	47.21	47.21	50.69	44.71	41.23	41.23	41.23	41.23	30.10	30.10
Total (lbs/day)																4.29	4.29	3.65	3.99	2.72	1.99	2.06	2.06	2.21	2.21	2.05	2.05	2.20	1.94	1.79	1.79	1.79	1.79	1.31	1.31
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	57.43	57.43	59.12	71.26	74.46	74.46	74.46	74.46	82.32	87.41	87.41	91.17	99.91	99.91	99.91	116.64	116.64	130.59	138.32	122.74	106.04	106.22	106.22	106.22	106.22	102.66	102.66	106.14	100.16	96.68	96.68	96.68	96.68	85.43	85.43
Pounds per Day	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.80	3.80	3.96	4.34	4.34	4.34	5.07	5.07	5.68	6.01	5.34	4.61	4.62	4.62	4.62	4.62	4.46	4.46	4.61	4.35	4.20	4.20	4.20	4.20	3.71	3.71
Yearly Maximums	891	934	976	1,017	1,063	1,105	1,161	1,225	1,273	1,297	1,315	1,334	1,349	1,356	1,358	1,361	1,351	1,334	1,300	1,259	1,233	1,223	1,202	1,182	1,183	1,175	1,170	1,141	1,109	1,070	1,026	982	949	920	871

Maximum Pounds per Day	6.01
Maximum Pounds per Hour [a]	0.60
Maximum Pounds per Month	138.32
Month with Maximum	19
Maximum Pounds per Year	1,361
Maximum Average Pounds per Hour [b]	0.16
Year with Maximum	Months 16 - 27
Tons per Year	0.68

Onsite Fugitive PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	209.69	209.69	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	209.69	209.69	209.69	209.69																				
Total (lbs/day)	9.12	9.12	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	9.12	9.12	9.12	9.12																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										214.75	214.75	214.75	214.75	214.75	214.75	214.75	214.75	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19
Total (lbs/day)										9.34	9.34	9.34	9.34	9.34	9.34	9.34	9.34	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18
Block 1 Construction																																			
Total (lbs/month)																680.64	680.64	437.80	437.80	437.25	194.41	174.97	174.97	174.97	174.97	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09
Total (lbs/day)																29.59	29.59	19.03	19.03	19.01	8.45	7.61	7.61	7.61	7.61	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	209.69	209.69	248.57	248.57	248.57	248.57	248.57	248.57	248.57	463.32	463.32	424.44	424.44	424.44	424.44	895.39	895.39	671.99	671.99	671.44	428.60	409.16	409.16	409.16	409.16	370.28	370.28	370.28	370.28	370.28	370.28	370.28	370.28	370.28	370.28
Pounds per Day	9.12	9.12	10.81	10.81	10.81	10.81	10.81	10.81	10.81	20.14	20.14	18.45	18.45	18.45	18.45	38.93	38.93	29.22	29.22	29.19	18.63	17.79	17.79	17.79	17.79	16.10	16.10	16.10	16.10	16.10	16.10	16.10	16.10	16.10	16.10
Yearly Maximums	3,510	3,725	3,940	4,116	4,763	5,409	5,833	6,256	6,679	6,859	6,805	6,751	6,736	6,720	6,666	6,612	6,087	5,562	5,260	4,958	4,657	4,599	4,560	4,521	4,823	5,230	5,676	5,879	6,063	6,247	6,188	6,109	6,031	5,953	5,757

Maximum Pounds per Day	38.93
Maximum Pounds per Hour [a]	3.89
Maximum Pounds per Month	895.39
Month with Maximum	16 or 17
Maximum Pounds per Year	6,859
Maximum Average Pounds per Hour [b]	0.78
Year with Maximum	Months 10 - 21
Tons per Year	3.43

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Total Onsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Pounds per Month	267.12	267.12	307.69	318.83	323.02	323.02	323.02	323.02	330.89	550.73	550.73	515.60	524.34	524.34	524.34	1,012.03	1,012.03	802.59	810.31	794.18	534.64	515.38	515.38	515.38	515.38	472.94	472.94	476.41	470.44	466.96	466.96	466.96	466.96	455.70	455.70
Pounds per Day	11.61	11.61	13.38	13.91	14.04	14.04	14.04	14.04	14.39	23.94	23.94	22.42	22.80	22.80	22.80	44.00	44.00	34.90	35.23	34.53	23.25	22.41	22.41	22.41	22.41	20.56	20.56	20.71	20.45	20.30	20.30	20.30	20.30	19.81	19.81
Yearly Maximums	4,402	4,659	4,916	5,133	5,825	6,514	6,994	7,481	7,952	8,156	8,121	8,085	8,085	8,076	8,025	7,973	7,438	6,896	6,560	6,217	5,890	5,822	5,762	5,703	6,006	6,405	6,846	7,020	7,172	7,317	7,214	7,091	6,980	6,873	6,628

Maximum Pounds per Day	44.00
Maximum Pounds per Hour [a]	4.40
Maximum Pounds per Month	1,012.03
Month with Maximum	16 or 17
Maximum Pounds per Year	8,156
Maximum Average Pounds per Hour [a]	0.93
Year with Maximum	Months 10 - 21
Tons per Year	4.08

Onsite Exhaust $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	57.40	57.40	59.07	71.22	74.41	74.41	74.41	74.41	82.28	69.43	69.43	73.19	81.93	81.93	81.93																				
Total (lbs/day)	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.02	3.02	3.18	3.56	3.56	3.56																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										17.93	17.93	17.93	17.93	17.93	17.93	17.93	17.93	46.56	46.56	60.15	60.15	58.91	58.91	55.43	55.43	55.43	55.43	55.43	55.43	55.43	55.43	55.43	55.31	55.31
Total (lbs/day)										0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	2.02	2.02	2.62	2.62	2.56	2.56	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.41	2.40	2.40
Block 1 Construction																																			
Total (lbs/month)																98.65	98.65	83.97	91.69	62.52	45.83	47.26	47.26	50.74	50.74	47.19	47.19	50.67	44.69	41.21	41.21	41.21	41.21	30.08	30.08
Total (lbs/day)																4.29	4.29	3.65	3.99	2.72	1.99	2.05	2.05	2.21	2.21	2.05	2.05	2.20	1.94	1.79	1.79	1.79	1.79	1.31	1.31
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	57.40	57.40	59.07	71.22	74.41	74.41	74.41	74.41	82.28	87.36	87.36	91.13	99.87	99.87	99.87	116.58	116.58	130.53	138.26	122.67	105.98	106.17	106.17	106.17	106.17	102.62	102.62	106.10	100.12	96.64	96.64	96.64	96.64	85.39	85.39
Pounds per Day	2.50	2.50	2.57	3.10	3.24	3.24	3.24	3.24	3.58	3.80	3.80	3.96	4.34	4.34	4.34	5.07	5.07	5.68	6.01	5.33	4.61	4.62	4.62	4.62	4.62	4.46	4.46	4.61	4.35	4.20	4.20	4.20	4.20	3.71	3.71
Yearly Maximums	891	933	976	1,017	1,062	1,104	1,160	1,224	1,272	1,296	1,315	1,334	1,349	1,355	1,358	1,361	1,350	1,334	1,300	1,258	1,232	1,223	1,202	1,181	1,183	1,174	1,169	1,141	1,108	1,070	1,026	981	949	920	870

Maximum Pounds per Day	6.01
Maximum Pounds per Hour [a]	0.60
Maximum Pounds per Month	138.26
Month with Maximum	19
Maximum Pounds per Year	1,361
Maximum Average Pounds per Hour [a]	0.16
Year with Maximum	Months 16 - 27
Tons per Year	0.68

Onsite Fugitive $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	23.75	23.75	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	27.64	23.75	23.75	23.75	23.75																				
Total (lbs/day)	1.03	1.03	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.03	1.03	1.03	1.03																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										28.52	28.52	28.52	28.52	28.52	28.52	28.52	28.52	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46	30.46
Total (lbs/day)										1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Block 1 Construction																																			
Total (lbs/month)																137.15	137.15	78.33	78.33	78.27	19.44	17.50	17.50	17.50	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61
Total (lbs/day)																5.96	5.96	3.41	3.41	3.40	0.85	0.76	0.76	0.76	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	23.75	23.75	27.64	27.64	27.64	27.64	27.64	27.64	27.64	56.16	56.16	52.27	52.27	52.27	52.27	165.67	165.67	108.79	108.79	108.73	49.90	47.96	47.96	47.96	47.96	44.07	44.07	44.07	44.07	44.07	44.07	44.07	44.07	44.07	44.07
Pounds per Day	1.03	1.03	1.20	1.20	1.20	1.20	1.20	1.20	1.20	2.44	2.44	2.27	2.27	2.27	2.27	7.20	7.20	4.73	4.73	4.73	2.17	2.09	2.09	2.09	2.09	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Yearly Maximums	406	434	463	487	625	763	844	926	1,007	1,029	1,021	1,013	1,008	1,004	996	988	866	744	680	615	550	544	541	537	601	704	811	859	904	950	937	922	908	893	866

Maximum Pounds per Day	7.20
Maximum Pounds per Hour [a]	0.72
Maximum Pounds per Month	165.67
Month with Maximum	16 or 17
Maximum Pounds per Year	1,029
Maximum Average Pounds per Hour [a]	0.12
Year with Maximum	Months 10 -21
Tons per Year	0.51

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Total Onsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Pounds per Month	81.16	81.16	86.72	98.86	102.05	102.05	102.05	102.05	109.92	143.52	143.52	143.40	152.14	152.14	152.14	282.25	282.25	239.32	247.05	231.40	155.88	154.14	154.14	154.14	154.14	146.69	146.69	150.17	144.19	140.72	140.72	140.72	140.72	129.47	129.47
Pounds per Day	3.53	3.53	3.77	4.30	4.44	4.44	4.44	4.44	4.78	6.24	6.24	6.23	6.61	6.61	6.61	12.27	12.27	10.41	10.74	10.06	6.78	6.70	6.70	6.70	6.70	6.38	6.38	6.53	6.27	6.12	6.12	6.12	6.12	5.63	5.63
Yearly Maximums	1,296	1,367	1,438	1,504	1,687	1,867	2,005	2,150	2,279	2,325	2,336	2,346	2,357	2,359	2,354	2,348	2,216	2,078	1,979	1,873	1,782	1,767	1,742	1,718	1,784	1,878	1,980	1,999	2,013	2,020	1,963	1,904	1,857	1,812	1,737

Maximum Pounds per Day	12.27
Maximum Pounds per Hour [a]	1.227
Maximum Pounds per Month	282.25
Month with Maximum	16 or 17
Maximum Pounds per Year	2,359
Maximum Average Pounds per Hour [b]	0.269
Year with Maximum	Months 14 - 25
Tons per Year	1.18

Onsite CO_2 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)	56.43	56.43	65.60	83.55	88.04	88.04	88.04	88.04	98.24	90.49	90.49	90.26	100.87	100.87	100.87																				
Total (metric tons/day)	2.45	2.45	2.85	3.63	3.83	3.83	3.83	3.83	4.27	3.93	3.93	3.92	4.39	4.39	4.39																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	66.75	66.75	89.20	89.20	99.40	99.40	91.64	91.64	91.64	91.64	91.64	91.64	91.64	91.64	91.64	102.87	102.87
Total (lbs/day)										1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	2.90	2.90	3.88	3.88	4.32	4.32	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	4.47	4.47
Block 1 Construction																																			
Total (metric tons/month)																105.87	105.87	96.74	112.25	80.27	64.41	79.83	79.83	87.59	87.59	79.65	79.65	87.41	77.21	69.45	69.45	69.45	69.45	53.95	53.95
Total (metric tons/day)																4.60	4.60	4.21	4.88	3.49	2.80	3.47	3.47	3.81	3.81	3.46	3.46	3.80	3.36	3.02	3.02	3.02	3.02	2.35	2.35
Block 2 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite CO_2 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	56.43	56.43	65.60	83.55	88.04	88.04	88.04	88.04	98.24	121.48	121.48	121.25	131.86	131.86	131.86	136.87	136.87	163.49	179.00	169.47	153.61	179.23	179.23	179.23	179.23	171.30	171.30	179.05	168.85	161.10	161.10	161.10	161.10	156.82	156.82
Metric Tons per Day	2.45	2.45	2.85	3.63	3.83	3.83	3.83	3.83	4.27	5.28	5.28	5.27	5.73	5.73	5.73	5.95	5.95	7.11	7.78	7.37	6.68	7.79	7.79	7.79	7.79	7.45	7.45	7.78	7.34	7.00	7.00	7.00	7.00	6.82	6.82
Yearly Maximums	1,077	1,152	1,228	1,294	1,347	1,396	1,471	1,562	1,644	1,699	1,757	1,815	1,873	1,920	1,959	1,999	2,041	2,073	2,071	2,053	2,044	2,052	2,029	2,007	2,021	1,990	1,966	1,919	1,864	1,802	1,744	1,686	1,642	1,606	1,529

Maximum Metric Tons per Day	8.41
Maximum Metric Tons per Hour [a]	0.84
Maximum Metric Tons per Month	193.33
Month with Maximum	36
Maximum Metric Tons per Year	2,073
Maximum Average Metric Tons per Hour [b]	0.24
Year with Maximum	Months 18 - 29

Onsite N_2O Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)	0.00143	0.00143	0.00166	0.00211	0.00223	0.00223	0.00223	0.00223	0.00249	0.00229	0.00229	0.00229	0.00256	0.00256	0.00256																				
Total (metric tons/day)	0.00006	0.00006	0.00007	0.00009	0.00010	0.00010	0.00010	0.00010	0.00011	0.00010	0.00010	0.00010	0.00011	0.00011	0.00011																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										0.00078	0.00078	0.00078	0.00078	0.00078	0.00078	0.00078	0.00078	0.00169	0.00169	0.00226	0.00226	0.00252	0.00252	0.00233	0.00233	0.00233	0.00233	0.00233	0.00233	0.00233	0.00233	0.00233	0.00261	0.00261
Total (lbs/day)										0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00007	0.00007	0.00010	0.00010	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00011	0.00011
Block 1 Construction																																			
Total (metric tons/month)																0.00268	0.00268	0.00245	0.00284	0.00203	0.00163	0.00202	0.00202	0.00222	0.00222	0.00202	0.00202	0.00222	0.00196	0.00176	0.00176	0.00176	0.00176	0.00137	0.00137
Total (metric tons/day)																0.00012	0.00012	0.00011	0.00012	0.00009	0.00007	0.00009	0.00009	0.00010	0.00010	0.00009	0.00009	0.00010	0.00009	0.00008	0.00008	0.00008	0.00008	0.00006	0.00006
Block 2 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite N_2O Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.00143	0.00143	0.00166	0.00211	0.00223	0.00223	0.00223	0.00223	0.00249	0.00307	0.00307	0.00307	0.00334	0.00334	0.00334	0.00346	0.00346	0.00414	0.00454	0.00429	0.00389	0.00454	0.00454	0.00454	0.00454	0.00435	0.00435	0.00454	0.00428	0.00409	0.00409	0.00409	0.00409	0.00398	0.00398
Metric Tons per Day	0.00006	0.00006	0.00007	0.00009	0.00010	0.00010	0.00010	0.00010	0.00011	0.00013	0.00013	0.00013	0.00015	0.00015	0.00015	0.00015	0.00015	0.00018	0.00020	0.00019	0.00017	0.00020	0.00020	0.00020	0.00020	0.00019	0.00019	0.00020	0.00019	0.00018	0.00018	0.00018	0.00018	0.00017	0.00017
Yearly Maximums	0.02723	0.02915	0.03106	0.03275	0.03410	0.03534	0.03725	0.03956	0.04163	0.04303	0.04450	0.04597	0.04744	0.04864	0.04965	0.05065	0.05173	0.05255	0.05250	0.05205	0.05184	0.05204	0.05147	0.05090	0.05126	0.05046	0.04985	0.04864	0.04724	0.04565	0.04417	0.04268	0.04157	0.04066	0.03870

Maximum Metric Tons per Day	0.000213
Maximum Metric Tons per Hour [a]	0.0000213
Maximum Metric Tons per Month	0.00490
Month with Maximum	36
Maximum Metric Tons per Year	0.05255
Maximum Average Metric Tons per Hour [b]	0.000006000
Year with Maximum	Months 18 - 29

Onsite CH_4 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)	0.00318	0.00318	0.00369	0.00471	0.00497	0.00497	0.00497	0.00497	0.00555	0.00511	0.00511	0.00510	0.00571	0.00571	0.00571																				
Total (metric tons/day)	0.00014	0.00014	0.00016	0.00020	0.00022	0.00022	0.00022	0.00022	0.00024	0.00022	0.00022	0.00022	0.00025	0.00025	0.00025																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										0.00175	0.00175	0.00175	0.00175	0.00175	0.00175	0.00175	0.00175	0.00377	0.00377	0.00505	0.00505	0.00563	0.00563	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00583	0.00583
Total (lbs/day)										0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00016	0.00016	0.00022	0.00022	0.00024	0.00024	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00025	0.00025
Block 1 Construction																																			
Total (metric tons/month)																0.00598	0.00598	0.00546	0.00634	0.00453	0.00362	0.00451	0.00451	0.00495	0.00495	0.00451	0.00451	0.00495	0.00437	0.00393	0.00393	0.00393	0.00393	0.00304	0.00304
Total (metric tons/day)																0.00026	0.00026	0.00024	0.00028	0.00020	0.00016	0.00020	0.00020	0.00022	0.00022	0.00020	0.00020	0.00022	0.00019	0.00017	0.00017	0.00017	0.00017	0.00013	0.00013
Block 2 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite CH_4 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.00318	0.00318	0.00369	0.00471	0.00497	0.00497	0.00497	0.00497	0.00555	0.00685	0.00685	0.00685	0.00745	0.00745	0.00745	0.00773	0.00773	0.00924	0.01012	0.00958	0.00867	0.01013	0.01013	0.01013	0.01013	0.00969	0.00969	0.01013	0.00956	0.00911	0.00911	0.00911	0.00911	0.00887	0.00887
Metric Tons per Day	0.00014	0.00014	0.00016	0.00020	0.00022	0.00022	0.00022	0.00022	0.00024	0.00030	0.00030	0.00030	0.00032	0.00032	0.00032	0.00034	0.00034	0.00040	0.00044	0.00042	0.00038	0.00044	0.00044	0.00044	0.00044	0.00042	0.00042	0.00044	0.00042	0.00040	0.00040	0.00040	0.00040	0.00039	0.00039
Yearly Maximums	0.06074	0.06501	0.06929	0.07305	0.07606	0.07882	0.08309	0.08824	0.09285	0.09598	0.09926	0.10254	0.10582	0.10851	0.11075	0.11299	0.11539	0.11722	0.11710	0.11610	0.11563	0.11607	0.11481	0.11355	0.11434	0.11255	0.11119	0.10850	0.10537	0.10182	0.09851	0.09521	0.09273	0.09068	0.08632

Maximum Metric Tons per Day	0.000475
Maximum Metric Tons per Hour [a]	0.0000475
Maximum Metric Tons per Month	0.01093
Month with Maximum	36
Maximum Metric Tons per Year	0.11722
Maximum Average Metric Tons per Hour [b]	0.0000134
Year with Maximum	Months 18 - 29

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Beach 03.13.12.xls': 10 hours/day
[b] The hours per year are assumed to allow operation 24 hours per day, 7 days per week despite the actual construction schedule per 'Manpower Schedule Huntington Beach 03.13.12.xls': 8,760 hours/year

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite CO Emissions

	CO Emissions by Month																																	
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	1,038.38																																		
Total (lbs/day)	45.15																																		
Block 1 Construction																																			
Total (lbs/month)	357.55	306.20	306.20	306.20	227.01	227.01	183.29	183.29	372.40	372.40																									
Total (lbs/day)	15.55	13.31	13.31	13.31	9.87	9.87	7.97	7.97	16.19	16.19																									
Block 2 Construction																																			
Total (lbs/month)	469.54	1,282.09	1,282.09	957.23	1,032.52	810.23	669.84	669.38	669.38	707.03	669.38	668.47	743.76	706.11	538.80	538.80	538.80	538.80	463.51	349.45	298.70	298.70	298.70	298.70	298.70	222.96	411.07	411.07							
Total (lbs/day)	20.41	55.74	55.74	41.62	44.89	35.23	29.12	29.10	29.10	30.74	29.10	29.06	32.34	30.70	23.43	23.43	23.43	23.43	20.15	15.19	12.99	12.99	12.99	12.99	12.99	9.69	17.87	17.87							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																652.25	652.25	839.00	839.00
Total (lbs/day)																																28.36	28.36	36.48	36.48
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite CO Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**1,865.47**	**1,588.30**	**1,588.30**	**1,263.44**	**1,259.53**	**1,037.24**	**853.13**	**852.68**	**1,041.78**	**1,079.43**	**669.38**	**668.47**	**743.76**	**706.11**	**538.80**	**538.80**	**538.80**	**538.80**	**463.51**	**349.45**	**298.70**	**298.70**	**298.70**	**298.70**	**298.70**	**222.96**	**411.07**	**411.07**	**0.00**	**0.00**	**0.00**	**652.25**	**652.25**	**839.00**	**839.00**
Pounds per Day	**81.11**	**69.06**	**69.06**	**54.93**	**54.76**	**45.10**	**37.09**	**37.07**	**45.29**	**46.93**	**29.10**	**29.06**	**32.34**	**30.70**	**23.43**	**23.43**	**23.43**	**23.43**	**20.15**	**15.19**	**12.99**	**12.99**	**12.99**	**12.99**	**12.99**	**9.69**	**17.87**	**17.87**	**0.00**	**0.00**	**0.00**	**28.36**	**28.36**	**36.48**	**36.48**
Yearly Maximums	**13,767**	**12,645**	**11,763**	**10,714**	**9,989**	**9,268**	**8,770**	**8,380**	**7,877**	**7,134**	**6,353**	**5,983**	**5,613**	**5,168**	**4,685**	**4,557**	**4,429**	**3,890**	**3,352**	**2,888**	**3,191**	**3,544**	**4,085**	**4,625**	**5,295**	**5,965**	**6,674**	**7,195**	**7,716**	**8,649**	**9,688**	**11,041**	**11,743**	**12,480**	**12,975**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite VOC Emissions

	VOC Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	194.99																																		
Total (lbs/day)	8.48																																		
Block 1 Construction																																			
Total (lbs/month)	83.87	74.10	74.10	74.10	47.67	47.67	41.04	41.04	74.33	74.33																									
Total (lbs/day)	3.65	3.22	3.22	3.22	2.07	2.07	1.78	1.78	3.23	3.23																									
Block 2 Construction																																			
Total (lbs/month)	82.06	203.15	203.15	148.63	172.09	139.18	129.19	128.94	128.94	140.67	128.94	128.42	151.88	140.15	112.34	112.34	112.34	112.34	88.87	72.98	64.65	64.65	64.65	64.65	64.65	40.93	69.74	69.74							
Total (lbs/day)	3.57	8.83	8.83	6.46	7.48	6.05	5.62	5.61	5.61	6.12	5.61	5.58	6.60	6.09	4.88	4.88	4.88	4.88	3.86	3.17	2.81	2.81	2.81	2.81	2.81	1.78	3.03	3.03							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																104.30	104.30	123.73	123.73
Total (lbs/day)																																4.53	4.53	5.38	5.38
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite VOC Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**360.92**	**277.25**	**277.25**	**222.73**	**219.76**	**186.85**	**170.24**	**169.98**	**203.27**	**215.00**	**128.94**	**128.42**	**151.88**	**140.15**	**112.34**	**112.34**	**112.34**	**112.34**	**88.87**	**72.98**	**64.65**	**64.65**	**64.65**	**64.65**	**64.65**	**40.93**	**69.74**	**69.74**	**0.00**	**0.00**	**0.00**	**104.30**	**104.30**	**123.73**	**123.73**
Pounds per Day	**15.69**	**12.05**	**12.05**	**9.68**	**9.55**	**8.12**	**7.40**	**7.39**	**8.84**	**9.35**	**5.61**	**5.58**	**6.60**	**6.09**	**4.88**	**4.88**	**4.88**	**4.88**	**3.86**	**3.17**	**2.81**	**2.81**	**2.81**	**2.81**	**2.81**	**1.78**	**3.03**	**3.03**	**0.00**	**0.00**	**0.00**	**4.53**	**4.53**	**5.38**	**5.38**
Yearly Maximums	**2,561**	**2,352**	**2,214**	**2,050**	**1,939**	**1,832**	**1,757**	**1,676**	**1,579**	**1,440**	**1,290**	**1,226**	**1,162**	**1,075**	**975**	**933**	**890**	**778**	**666**	**577**	**608**	**648**	**707**	**766**	**839**	**911**	**997**	**1,055**	**1,112**	**1,239**	**1,379**	**1,562**	**1,640**	**1,728**	**1,789**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite NOx Emissions

	NOx Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	1,092.85																																		
Total (lbs/day)	47.52																																		
Block 1 Construction																																			
Total (lbs/month)	488.50	436.42	436.42	436.42	251.43	251.43	214.32	214.32	403.84	403.84																									
Total (lbs/day)	21.24	18.97	18.97	18.97	10.93	10.93	9.32	9.32	17.56	17.56																									
Block 2 Construction																																			
Total (lbs/month)	505.06	1,269.88	1,269.88	925.54	1,109.78	892.78	875.27	874.52	874.52	966.64	783.13	781.76	947.25	864.50	695.29	695.29	695.29	695.29	529.80	438.73	390.56	390.56	348.76	348.76	348.76	200.33	356.05	356.05							
Total (lbs/day)	21.96	55.21	55.21	40.24	48.25	38.82	38.06	38.02	38.02	42.03	34.05	33.99	41.18	37.59	30.23	30.23	30.23	30.23	23.03	19.08	16.98	16.98	15.16	15.16	15.16	8.71	15.48	15.48							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																638.75	638.75	744.56	658.30
Total (lbs/day)																																27.77	27.77	32.37	28.62
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite NOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**2,086.42**	**1,706.30**	**1,706.30**	**1,361.96**	**1,361.20**	**1,144.21**	**1,089.59**	**1,088.83**	**1,278.36**	**1,370.48**	**783.13**	**781.76**	**947.25**	**864.50**	**695.29**	**695.29**	**695.29**	**695.29**	**529.80**	**438.73**	**390.56**	**390.56**	**348.76**	**348.76**	**348.76**	**200.33**	**356.05**	**356.05**	**0.00**	**0.00**	**0.00**	**638.75**	**638.75**	**744.56**	**658.30**
Pounds per Day	**90.71**	**74.19**	**74.19**	**59.22**	**59.18**	**49.75**	**47.37**	**47.34**	**55.58**	**59.59**	**34.05**	**33.99**	**41.18**	**37.59**	**30.23**	**30.23**	**30.23**	**30.23**	**23.03**	**19.08**	**16.98**	**16.98**	**15.16**	**15.16**	**15.16**	**8.71**	**15.48**	**15.48**	**0.00**	**0.00**	**0.00**	**27.77**	**27.77**	**32.37**	**28.62**
Yearly Maximums	**15,759**	**14,619**	**13,778**	**12,767**	**12,100**	**11,434**	**10,985**	**10,425**	**9,775**	**8,887**	**7,907**	**7,473**	**7,040**	**6,442**	**5,777**	**5,438**	**5,099**	**4,404**	**3,708**	**3,179**	**3,379**	**3,627**	**3,981**	**4,290**	**4,666**	**5,041**	**5,499**	**5,802**	**6,104**	**6,763**	**7,511**	**8,513**	**8,876**	**9,305**	**9,581**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite SOx Emissions

Construction Step	SOx Emissions by Month																																		
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	2.28																																		
Total (lbs/day)	0.10																																		
Block 1 Construction																																			
Total (lbs/month)	0.98	0.90	0.90	0.90	0.54	0.54	0.47	0.47	0.80	0.80																									
Total (lbs/day)	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.03	0.03																									
Block 2 Construction																																			
Total (lbs/month)	0.97	2.34	2.34	1.81	2.17	1.77	1.76	1.76	1.76	1.94	1.76	1.76	2.11	1.93	1.52	1.52	1.52	1.52	1.17	0.98	0.90	0.90	0.90	0.90	0.90	0.54	0.87	0.87							
Total (lbs/day)	0.04	0.10	0.10	0.08	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	0.07	0.07	0.07	0.07	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.04	0.04							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																1.64	1.64	1.97	1.97
Total (lbs/day)																																0.07	0.07	0.09	0.09
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite SOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	4.23	3.24	3.24	2.71	2.71	2.31	2.24	2.23	2.56	2.74	1.76	1.76	2.11	1.93	1.52	1.52	1.52	1.52	1.17	0.98	0.90	0.90	0.90	0.90	0.90	0.54	0.87	0.87	0.00	0.00	0.00	1.64	1.64	1.97	1.97
Pounds per Day	0.18	0.14	0.14	0.12	0.12	0.10	0.10	0.10	0.11	0.12	0.08	0.08	0.09	0.08	0.07	0.07	0.07	0.07	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.04	0.04	0.00	0.00	0.00	0.07	0.07	0.09	0.09
Yearly Maximums	32	30	28	27	25	24	23	22	21	19	18	17	16	15	13	13	12	10	9	8	8	9	10	11	13	14	15	17	18	20	22	25	26	27	28
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite Exhaust PM_{10} Emissions

Construction Step	Exhaust PM_{10} Emissions by Month																																		
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	55.33																																		
Total (lbs/day)	2.41																																		
Block 1 Construction																																			
Total (lbs/month)	23.38	19.50	19.50	19.50	13.15	13.15	10.84	10.84	22.59	22.59																									
Total (lbs/day)	1.02	0.85	0.85	0.85	0.57	0.57	0.47	0.47	0.98	0.98																									
Block 2 Construction																																			
Total (lbs/month)	29.24	78.19	78.19	54.34	60.65	48.69	41.65	41.61	41.61	44.77	36.25	36.19	41.85	39.02	31.79	31.79	31.79	31.79	26.13	20.40	16.98	16.98	14.81	14.81	14.81	9.72	19.01	19.01							
Total (lbs/day)	1.27	3.40	3.40	2.36	2.64	2.12	1.81	1.81	1.81	1.95	1.58	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																29.66	29.66	34.92	30.19
Total (lbs/day)																																1.29	1.29	1.52	1.31
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	107.94	97.69	97.69	73.84	73.80	61.84	52.49	52.45	64.20	67.36	36.25	36.19	41.85	39.02	31.79	31.79	31.79	31.79	26.13	20.40	16.98	16.98	14.81	14.81	14.81	9.72	19.01	19.01	0.00	0.00	0.00	29.66	29.66	34.92	30.19
Pounds per Day	4.69	4.25	4.25	3.21	3.21	2.69	2.28	2.28	2.79	2.93	1.58	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83	0.00	0.00	0.00	1.29	1.29	1.52	1.31
Yearly Maximums	822	756	697	631	589	547	517	491	459	411	361	340	318	291	262	249	236	204	173	147	156	168	186	202	220	239	261	273	285	316	353	405	428	453	470
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite Fugitive PM_{10} Emissions

Construction Step	Fugitive PM_{10} Emissions by Month																																		
	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	234.19																																		
Total (lbs/day)	10.18																																		
Block 1 Construction																																			
Total (lbs/month)	136.09	136.09	136.09	136.09	116.64	116.64	116.64	116.64	117.20	117.20																									
Total (lbs/day)	5.92	5.92	5.92	5.92	5.07	5.07	5.07	5.07	5.10	5.10																									
Block 2 Construction																																			
Total (lbs/month)	340.32	680.36	680.36	437.52	437.52	437.25	194.41	174.97	174.97	174.97	174.97	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	116.64	116.92	116.92							
Total (lbs/day)	14.80	29.58	29.58	19.02	19.02	19.01	8.45	7.61	7.61	7.61	7.61	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.07	5.08	5.08							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																261.17	261.17	261.17	261.17
Total (lbs/day)																																11.36	11.36	11.36	11.36
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	710.59	816.45	816.45	573.61	554.17	553.90	311.05	291.61	292.16	292.16	174.97	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	136.09	116.64	116.92	116.92	0.00	0.00	0.00	261.17	261.17	261.17	261.17
Pounds per Day	30.90	35.50	35.50	24.94	24.09	24.08	13.52	12.68	12.70	12.70	7.61	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.92	5.07	5.08	5.08	0.00	0.00	0.00	11.36	11.36	11.36	11.36
Yearly Maximums	5,523	4,949	4,268	3,588	3,150	2,732	2,315	2,140	1,984	1,828	1,672	1,633	1,633	1,633	1,614	1,594	1,575	1,439	1,303	1,167	1,292	1,417	1,542	1,667	1,792	1,918	2,062	2,206	2,351	2,612	2,951	3,552	3,892	4,233	4,553
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Table 5.1A.58R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite PM_{10} Emissions (Exhaust and Fugitive)

	Total PM_{10} Emissions by Month																																
Parameter	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Pounds per Month	818.53	914.14	914.14	647.45	627.97	615.73	363.54	344.06	356.37	359.52	211.22	172.27	177.93	175.10	167.88	167.88	167.88	167.88	162.22	156.48	153.06	153.06	150.90	150.90	150.90	126.36	135.93	135.93	0.00	0.00	0.00	290.84	290.84	296.10	291.36
Pounds per Day	35.59	39.75	39.75	28.15	27.30	26.77	15.81	14.96	15.49	15.63	9.18	7.49	7.74	7.61	7.30	7.30	7.30	7.30	7.05	6.80	6.65	6.65	6.56	6.56	6.56	5.49	5.91	5.91	0.00	0.00	0.00	12.65	12.65	12.87	12.67
Yearly Maximums	6,345	5,704	4,965	4,219	3,739	3,279	2,832	2,630	2,443	2,239	2,033	1,973	1,951	1,924	1,875	1,843	1,811	1,644	1,476	1,314	1,448	1,586	1,729	1,869	2,013	2,157	2,323	2,479	2,636	2,928	3,304	3,957	4,320	4,686	5,023
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [a]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite Exhaust $PM_{2.5}$ Emissions

	Exhaust $PM_{2.5}$ Emissions by Month																																
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	55.31																																		
Total (lbs/day)	2.40																																		
Block 1 Construction																																			
Total (lbs/month)	23.36	19.48	19.48	19.48	13.14	13.14	10.83	10.83	22.58	22.58																									
Total (lbs/day)	1.02	0.85	0.85	0.85	0.57	0.57	0.47	0.47	0.98	0.98																									
Block 2 Construction																																			
Total (lbs/month)	29.22	78.15	78.15	54.31	60.62	48.65	41.61	41.58	41.58	44.74	36.22	36.17	41.83	39.00	31.77	31.77	31.77	31.77	26.11	20.38	16.96	16.96	14.80	14.80	14.80	9.71	19.00	19.00							
Total (lbs/day)	1.27	3.40	3.40	2.36	2.64	2.12	1.81	1.81	1.81	1.95	1.57	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																29.65	29.65	34.91	30.17
Total (lbs/day)																																1.29	1.29	1.52	1.31
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	107.89	97.63	97.63	73.79	73.76	61.79	52.44	52.41	64.16	67.31	36.22	36.17	41.83	39.00	31.77	31.77	31.77	31.77	26.11	20.38	16.96	16.96	14.80	14.80	14.80	9.71	19.00	19.00	0.00	0.00	0.00	29.65	29.65	34.91	30.17
Pounds per Day	4.69	4.24	4.24	3.21	3.21	2.69	2.28	2.28	2.79	2.93	1.57	1.57	1.82	1.70	1.38	1.38	1.38	1.38	1.14	0.89	0.74	0.74	0.64	0.64	0.64	0.42	0.83	0.83	0.00	0.00	0.00	1.29	1.29	1.52	1.31
Yearly Maximums	821	755	697	631	589	547	517	490	458	411	361	339	318	291	262	249	236	204	173	146	156	168	186	202	220	239	260	273	285	316	353	405	428	453	470
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [a]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions by Month																																
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	30.46																																		
Total (lbs/day)	1.32																																		
Block 1 Construction																																			
Total (lbs/month)	13.61	13.61	13.61	13.61	11.66	11.66	11.66	11.66	11.72	11.72																									
Total (lbs/day)	0.59	0.59	0.59	0.59	0.51	0.51	0.51	0.51	0.51	0.51																									
Block 2 Construction																																			
Total (lbs/month)	68.57	137.12	137.12	78.29	78.29	78.27	19.44	17.50	17.50	17.50	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	11.66	11.69	11.69							
Total (lbs/day)	2.98	5.96	5.96	3.40	3.40	3.40	0.85	0.76	0.76	0.76	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																34.55	34.55	34.55	34.55
Total (lbs/day)																																1.50	1.50	1.50	1.50
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	112.65	150.73	150.73	91.90	89.96	89.93	31.11	29.16	29.22	29.22	17.50	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	13.61	11.66	11.69	11.69	0.00	0.00	0.00	34.55	34.55	34.55	34.55
Pounds per Day	4.90	6.55	6.55	4.00	3.91	3.91	1.35	1.27	1.27	1.27	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51	0.00	0.00	0.00	1.50	1.50	1.50	1.50
Yearly Maximums	836	737	600	462	384	308	231	214	198	183	167	163	163	163	161	159	158	144	130	117	138	159	180	200	221	242	265	288	311	345	388	491	560	628	695
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [a]																																			
Year with Maximum																																			
Tons per Year																																			

Table 5.1A.58R Onsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

	Total $PM_{2.5}$ Emissions by Month																																		
Parameter	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Pounds per Month	220.53	248.36	248.36	165.69	163.72	151.72	83.55	81.57	93.38	96.53	53.72	49.78	55.44	52.61	45.38	45.38	45.38	45.38	39.72	33.99	30.57	30.57	28.41	28.41	28.41	21.37	30.69	30.69	0.00	0.00	0.00	64.20	64.20	69.46	64.72
Pounds per Day	9.59	10.80	10.80	7.20	7.12	6.60	3.63	3.55	4.06	4.20	2.34	2.16	2.41	2.29	1.97	1.97	1.97	1.97	1.73	1.48	1.33	1.33	1.24	1.24	1.24	0.93	1.33	1.33	0.00	0.00	0.00	2.79	2.79	3.02	2.81
Yearly Maximums	1,657	1,492	1,296	1,093	973	854	748	704	657	594	528	503	481	454	423	408	394	348	303	263	293	327	366	402	442	481	526	561	596	662	741	896	987	1,081	1,164
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite CO_2 Emissions

	CO_2 Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	102.87																																		
Total (lbs/day)	4.47																																		
Block 1 Construction																																			
Total (metric tons/month)	45.42	41.94	41.94	41.94	26.34	26.34	23.30	23.30	37.71	37.71																									
Total (metric tons/day)	1.97	1.82	1.82	1.82	1.15	1.15	1.01	1.01	1.64	1.64																									
Block 2 Construction																																			
Total (metric tons/month)	45.05	105.81	105.81	82.28	97.79	80.22	79.87	79.78	79.78	87.54	79.78	79.60	95.11	87.36	69.40	69.40	69.40	69.40	53.90	45.38	41.91	41.91	41.91	41.91	41.91	26.31	40.72	40.72							
Total (metric tons/day)	1.96	4.60	4.60	3.58	4.25	3.49	3.47	3.47	3.47	3.81	3.47	3.46	4.14	3.80	3.02	3.02	3.02	3.02	2.34	1.97	1.82	1.82	1.82	1.82	1.82	1.14	1.77	1.77							
Units 1 & 2 Demolition																																74.46	74.46	89.15	89.15
Total (metric tons/month)																																3.24	3.24	3.88	3.88
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite CO_2 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	193.33	147.75	147.75	124.22	124.13	106.56	103.17	103.08	117.50	125.25	79.78	79.60	95.11	87.36	69.40	69.40	69.40	69.40	53.90	45.38	41.91	41.91	41.91	41.91	41.91	26.31	40.72	40.72	0.00	0.00	0.00	74.46	74.46	89.15	89.15
Metric Tons per Day	8.41	6.42	6.42	5.40	5.40	4.63	4.49	4.48	5.11	5.45	3.47	3.46	4.14	3.80	3.02	3.02	3.02	3.02	2.34	1.97	1.82	1.82	1.82	1.82	1.82	1.14	1.77	1.77	0.00	0.00	0.00	3.24	3.24	3.88	3.88
Yearly Maximums	1,452	1,354	1,294	1,215	1,160	1,106	1,068	1,019	962	886	803	765	727	674	613	584	555	486	417	363	392	424	472	519	576	634	699	750	801	892	992	1,114	1,162	1,218	1,255
Maximum Metric Tons per Day																																			
Maximum Metric Tons per Hour [a]																																			
Maximum Metric Tons per Month																																			
Month with Maximum																																			
Maximum Metric Tons per Year																																			
Maximum Average Metric Tons per Hour [b]																																			
Year with Maximum																																			

Onsite N_2O Emissions

	N_2O Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	0.00261																																		
Total (lbs/day)	0.00011																																		
Block 1 Construction																																			
Total (metric tons/month)	0.00115	0.00106	0.00106	0.00106	0.00066	0.00066	0.00059	0.00059	0.00095	0.00095																									
Total (metric tons/day)	0.00005	0.00005	0.00005	0.00005	0.00003	0.00003	0.00003	0.00003	0.00004	0.00004																									
Block 2 Construction																																			
Total (metric tons/month)	0.00114	0.00268	0.00268	0.00208	0.00247	0.00203	0.00202	0.00202	0.00202	0.00222	0.00202	0.00202	0.00241	0.00222	0.00176	0.00176	0.00176	0.00176	0.00136	0.00115	0.00106	0.00106	0.00106	0.00106	0.00106	0.00066	0.00103	0.00103							
Total (metric tons/day)	0.00005	0.00012	0.00012	0.00009	0.00011	0.00009	0.00009	0.00009	0.00009	0.00010	0.00009	0.00009	0.00010	0.00010	0.00008	0.00008	0.00008	0.00008	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00003	0.00004	0.00004							
Units 1 & 2 Demolition																																0.00189	0.00189	0.00226	0.00226
Total (metric tons/month)																																0.00008	0.00008	0.00010	0.00010
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite N_2O Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.00490	0.00374	0.00374	0.00314	0.00314	0.00269	0.00261	0.00261	0.00297	0.00317	0.00202	0.00202	0.00241	0.00222	0.00176	0.00176	0.00176	0.00176	0.00136	0.00115	0.00106	0.00106	0.00106	0.00106	0.00106	0.00066	0.00103	0.00103	0.00000	0.00000	0.00000	0.00189	0.00189	0.00226	0.00226
Metric Tons per Day	0.00021	0.00016	0.00016	0.00014	0.00014	0.00012	0.00011	0.00011	0.00013	0.00014	0.00009	0.00009	0.00010	0.00010	0.00008	0.00008	0.00008	0.00008	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00003	0.00004	0.00004	0.00000	0.00000	0.00000	0.00008	0.00008	0.00010	0.00010
Yearly Maximums	0.03674	0.03425	0.03273	0.03075	0.02937	0.02799	0.02705	0.02581	0.02435	0.02244	0.02033	0.01937	0.01841	0.01705	0.01550	0.01477	0.01405	0.01229	0.01053	0.00916	0.00991	0.01074	0.01194	0.01314	0.01461	0.01607	0.01773	0.01903	0.02032	0.02265	0.02516	0.02827	0.02948	0.03090	0.03183
Maximum Metric Tons per Day																																			
Maximum Metric Tons per Hour [a]																																			
Maximum Metric Tons per Month																																			
Month with Maximum																																			
Maximum Metric Tons per Year																																			
Maximum Average Metric Tons per Hour [b]																																			
Year with Maximum																																			

Onsite CH_4 Emissions

	CH_4 Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	0.00583																																		
Total (lbs/day)	0.00025																																		
Block 1 Construction																																			
Total (metric tons/month)	0.00256	0.00236	0.00236	0.00236	0.00148	0.00148	0.00131	0.00131	0.00213	0.00213																									
Total (metric tons/day)	0.00011	0.00010	0.00010	0.00010	0.00006	0.00006	0.00006	0.00006	0.00009	0.00009																									
Block 2 Construction																																			
Total (metric tons/month)	0.00254	0.00598	0.00598	0.00464	0.00552	0.00452	0.00450	0.00450	0.00450	0.00494	0.00450	0.00450	0.00538	0.00494	0.00392	0.00392	0.00392	0.00392	0.00304	0.00256	0.00236	0.00236	0.00236	0.00236	0.00236	0.00148	0.00230	0.00230							
Total (metric tons/day)	0.00011	0.00026	0.00026	0.00020	0.00024	0.00020	0.00020	0.00020	0.00020	0.00021	0.00020	0.00020	0.00023	0.00021	0.00017	0.00017	0.00017	0.00017	0.00013	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00006	0.00010	0.00010							
Units 1 & 2 Demolition																																0.00421	0.00421	0.00505	0.00505
Total (metric tons/month)																																0.00018	0.00018	0.00022	0.00022
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite CH_4 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.01093	0.00834	0.00834	0.00700	0.00700	0.00600	0.00581	0.00581	0.00663	0.00707	0.00450	0.00450	0.00538	0.00494	0.00392	0.00392	0.00392	0.00392	0.00304	0.00256	0.00236	0.00236	0.00236	0.00236	0.00236	0.00148	0.00230	0.00230	0.00000	0.00000	0.00000	0.00421	0.00421	0.00505	0.00505
Metric Tons per Day	0.00048	0.00036	0.00036	0.00030	0.00030	0.00026	0.00025	0.00025	0.00029	0.00031	0.00020	0.00020	0.00023	0.00021	0.00017	0.00017	0.00017	0.00017	0.00013	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00006	0.00010	0.00010	0.00000	0.00000	0.00000	0.00018	0.00018	0.00022	0.00022
Yearly Maximums	0.08195	0.07640	0.07300	0.06859	0.06551	0.06243	0.06035	0.05758	0.05433	0.05006	0.04535	0.04321	0.04106	0.03804	0.03458	0.03295	0.03133	0.02741	0.02348	0.02044	0.02210	0.02395	0.02663	0.02932	0.03258	0.03585	0.03955	0.04244	0.04533	0.05052	0.05613	0.06305	0.06576	0.06892	0.07100
Maximum Metric Tons per Day																																			
Maximum Metric Tons per Hour [a]																																			
Maximum Metric Tons per Month																																			
Month with Maximum																																			
Maximum Metric Tons per Year																																			
Maximum Average Metric Tons per Hour [b]																																			
Year with Maximum																																			

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Bi
[b] The hours per year are assumed to allow operation 24 hours per

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite CO Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	968.63	968.63	932.20	932.20	932.20	932.20	932.20	932.20	932.20	932.20	932.20	932.20	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89	1,018.89
Total (lbs/day)	42.11	42.11	40.53	40.53	40.53	40.53	40.53	40.53	40.53	40.53	40.53	40.53	44.30	44.30	44.30	44.30	44.30	44.30	44.30	44.30
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							106.76	421.56	421.56	457.49	401.39	401.39	86.95	86.95	86.95	86.95	86.95	86.95	86.95	86.95
Total (lbs/day)							4.64	18.33	18.33	19.89	17.45	17.45	3.78	3.78	3.78	3.78	3.78	3.78	3.78	3.78
Total Onsite CO Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**968.63**	**968.63**	**932.20**	**932.20**	**932.20**	**932.20**	**1,038.95**	**1,353.76**	**1,353.76**	**1,389.69**	**1,333.59**	**1,333.59**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**	**1,105.84**
Pounds per Day	**42.11**	**42.11**	**40.53**	**40.53**	**40.53**	**40.53**	**45.17**	**58.86**	**58.86**	**60.42**	**57.98**	**57.98**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**	**48.08**
Yearly Maximums	**13,469**	**13,607**	**13,744**	**13,917**	**14,091**	**14,265**	**14,438**	**14,505**	**14,257**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Onsite VOC Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	137.43	137.43	126.93	126.93	126.93	126.93	126.93	126.93	126.93	126.93	126.93	126.93	144.53	144.53	144.53	144.53	144.53	144.53	144.53	144.53
Total (lbs/day)	5.98	5.98	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	5.52	6.28	6.28	6.28	6.28	6.28	6.28	6.28	6.28
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							13.69	55.46	55.46	65.39	58.48	58.48	16.91	16.91	16.91	16.91	16.91	16.91	16.91	16.91
Total (lbs/day)							0.60	2.41	2.41	2.84	2.54	2.54	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Total Onsite VOC Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**137.43**	**137.43**	**126.93**	**126.93**	**126.93**	**126.93**	**140.62**	**182.39**	**182.39**	**192.32**	**185.41**	**185.41**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**	**161.43**
Pounds per Day	**5.98**	**5.98**	**5.52**	**5.52**	**5.52**	**5.52**	**6.11**	**7.93**	**7.93**	**8.36**	**8.06**	**8.06**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**	**7.02**
Yearly Maximums	**1,851**	**1,875**	**1,899**	**1,934**	**1,968**	**2,003**	**2,037**	**2,058**	**2,037**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Onsite NOx Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	724.25	724.25	658.49	658.49	658.49	658.49	658.49	658.49	658.49	658.49	658.49	582.51	679.22	679.22	679.22	679.22	679.22	679.22	679.22	679.22
Total (lbs/day)	31.49	31.49	28.63	28.63	28.63	28.63	28.63	28.63	28.63	28.63	28.63	25.33	29.53	29.53	29.53	29.53	29.53	29.53	29.53	29.53
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							89.32	343.70	343.70	409.47	362.08	330.56	97.79	97.79	97.79	97.79	97.79	97.79	97.79	97.79
Total (lbs/day)							3.88	14.94	14.94	17.80	15.74	14.37	4.25	4.25	4.25	4.25	4.25	4.25	4.25	4.25
Total Onsite NOx Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**724.25**	**724.25**	**658.49**	**658.49**	**658.49**	**658.49**	**747.81**	**1,002.19**	**1,002.19**	**1,067.96**	**1,020.56**	**913.07**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**	**777.01**
Pounds per Day	**31.49**	**31.49**	**28.63**	**28.63**	**28.63**	**28.63**	**32.51**	**43.57**	**43.57**	**46.43**	**44.37**	**39.70**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**	**33.78**
Yearly Maximums	**9,836**	**9,889**	**9,942**	**10,060**	**10,179**	**10,297**	**10,416**	**10,445**	**10,220**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Onsite SOx Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	2.20	2.20	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.28	2.28	2.28	2.28	2.28	2.28	2.28	2.28
Total (lbs/day)	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							0.17	0.70	0.70	0.88	0.78	0.78	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Total (lbs/day)							0.01	0.03	0.03	0.04	0.03	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Onsite SOx Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**2.20**	**2.20**	**2.03**	**2.03**	**2.03**	**2.03**	**2.20**	**2.73**	**2.73**	**2.90**	**2.81**	**2.81**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**	**2.54**
Pounds per Day	**0.10**	**0.10**	**0.09**	**0.09**	**0.09**	**0.09**	**0.10**	**0.12**	**0.12**	**0.13**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**	**0.11**
Yearly Maximums	**29**	**29**	**29**	**30**	**30**	**31**	**31**	**32**	**32**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Onsite Exhaust PM_{10} Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	33.47	33.47	31.20	31.20	31.20	31.20	31.20	31.20	31.20	31.20	31.20	26.80	31.04	31.04	31.04	31.04	31.04	31.04	31.04	31.04
Total (lbs/day)	1.46	1.46	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.17	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							5.54	21.24	21.24	23.51	20.60	18.15	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30
Total (lbs/day)							0.24	0.92	0.92	1.02	0.90	0.79	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Total Onsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**33.47**	**33.47**	**31.20**	**31.20**	**31.20**	**31.20**	**36.73**	**52.44**	**52.44**	**54.71**	**51.80**	**44.94**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**	**35.34**
Pounds per Day	**1.46**	**1.46**	**1.36**	**1.36**	**1.36**	**1.36**	**1.60**	**2.28**	**2.28**	**2.38**	**2.25**	**1.95**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**	**1.54**
Yearly Maximums	**485**	**487**	**489**	**493**	**497**	**501**	**505**	**504**	**487**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Onsite Fugitive PM_{10} Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17
Total (lbs/day)	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							77.76	340.24	340.24	340.24	320.80	320.80	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Total (lbs/day)							3.38	14.79	14.79	14.79	13.95	13.95	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Total Onsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																				
Pounds per Month	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**338.94**	**601.42**	**601.42**	**601.42**	**581.98**	**581.98**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**
Pounds per Day	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**14.74**	**26.15**	**26.15**	**26.15**	**25.30**	**25.30**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**
Yearly Maximums	**4,874**	**4,952**	**5,030**	**5,107**	**5,185**	**5,263**	**5,341**	**5,341**	**5,078**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Total Onsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	294.64	294.64	292.37	292.37	292.37	292.37	375.67	653.86	653.86	656.13	633.78	626.92	374.27	374.27	374.27	374.27	374.27	374.27	374.27	374.27
Pounds per Day	12.81	12.81	12.71	12.71	12.71	12.71	16.33	28.43	28.43	28.53	27.56	27.26	16.27	16.27	16.27	16.27	16.27	16.27	16.27	16.27
Yearly Maximums	5,359	5,439	5,518	5,600	5,682	5,764	5,846	5,844	5,565											
Maximum Pounds per Day																				
Maximum Pounds per Hour *																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour *																				
Year with Maximum																				
Tons per Year																				

Onsite Exhaust $PM_{2.5}$ Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	33.45	33.45	31.18	31.18	31.18	31.18	31.18	31.18	31.18	31.18	31.18	26.78	31.03	31.03	31.03	31.03	31.03	31.03	31.03	31.03
Total (lbs/day)	1.45	1.45	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.16	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							5.53	21.23	21.23	23.50	20.60	18.14	4.29	4.29	4.29	4.29	4.29	4.29	4.29	4.29
Total (lbs/day)							0.24	0.92	0.92	1.02	0.90	0.79	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Total Onsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	33.45	33.45	31.18	31.18	31.18	31.18	36.71	52.41	52.41	54.68	51.78	44.92	35.31	35.31	35.31	35.31	35.31	35.31	35.31	35.31
Pounds per Day	1.45	1.45	1.36	1.36	1.36	1.36	1.60	2.28	2.28	2.38	2.25	1.95	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Yearly Maximums	485	486	488	492	497	501	505	503	486											
Maximum Pounds per Day																				
Maximum Pounds per Hour *																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour *																				
Year with Maximum																				
Tons per Year																				

Onsite Fugitive $PM_{2.5}$ Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55	34.55
Total (lbs/day)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							7.78	68.57	68.57	68.57	66.62	66.62	7.78	7.78	7.78	7.78	7.78	7.78	7.78	7.78
Total (lbs/day)							0.34	2.98	2.98	2.98	2.90	2.90	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Total Onsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																				
Pounds per Month	34.55	34.55	34.55	34.55	34.55	34.55	42.33	103.12	103.12	103.12	101.17	101.17	42.33	42.33	42.33	42.33	42.33	42.33	42.33	42.33
Pounds per Day	1.50	1.50	1.50	1.50	1.50	1.50	1.84	4.48	4.48	4.48	4.40	4.40	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Yearly Maximums	761	769	777	785	792	800	808	808	747											
Maximum Pounds per Day																				
Maximum Pounds per Hour *																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour *																				
Year with Maximum																				
Tons per Year																				

Table 5.1A.58R Onsite Construction
Exhaust and Fugitive Emissions Summary

Total Onsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	68.00	68.00	65.73	65.73	65.73	65.73	79.04	155.53	155.53	157.80	152.95	146.10	77.64	77.64	77.64	77.64	77.64	77.64	77.64	77.64
Pounds per Day	2.96	2.96	2.86	2.86	2.86	2.86	3.44	6.76	6.76	6.86	6.65	6.35	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Yearly Maximums	1,246	1,256	1,265	1,277	1,289	1,301	1,313	1,311	1,234											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Onsite CO_2 Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Block 2 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 1 & 2 Demolition																				
Total (metric tons/month)	99.35	99.35	91.59	91.59	91.59	91.59	91.59	91.59	91.59	91.59	91.59	91.59	102.82	102.82	102.82	102.82	102.82	102.82	102.82	102.82
Total (metric tons/day)	4.32	4.32	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	4.47	4.47	4.47	4.47	4.47	4.47	4.47	4.47
Bldgs. 33 & 34 Construction																				
Total (metric tons/month)							7.73	30.91	30.91	38.64	34.53	34.53	11.45	11.45	11.45	11.45	11.45	11.45	11.45	11.45
Total (metric tons/day)							0.34	1.34	1.34	1.68	1.50	1.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Total Onsite CO_2 Emissions (Construction Equipment and Vehicles)																				
Metric Tons per Month	99.35	99.35	91.59	91.59	91.59	91.59	99.32	122.50	122.50	130.24	126.13	126.13	114.27	114.27	114.27	114.27	114.27	114.27	114.27	114.27
Metric Tons per Day	4.32	4.32	3.98	3.98	3.98	3.98	4.32	5.33	5.33	5.66	5.48	5.48	4.97	4.97	4.97	4.97	4.97	4.97	4.97	4.97
Yearly Maximums	1,292	1,307	1,322	1,344	1,367	1,390	1,412	1,427	1,419											
Maximum Metric Tons per Day																				
Maximum Metric Tons per Hour [a]																				
Maximum Metric Tons per Month																				
Month with Maximum																				
Maximum Metric Tons per Year																				
Maximum Average Metric Tons per Hour [b]																				
Year with Maximum																				

Onsite N_2O Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Block 2 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 1 & 2 Demolition																				
Total (metric tons/month)	0.00252	0.00252	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00232	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261	0.00261
Total (metric tons/day)	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
Bldgs. 33 & 34 Construction																				
Total (metric tons/month)							0.00019	0.00078	0.00078	0.00098	0.00087	0.00087	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029
Total (metric tons/day)							0.00001	0.00003	0.00003	0.00004	0.00004	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Total Onsite N_2O Emissions (Construction Equipment and Vehicles)																				
Metric Tons per Month	0.00252	0.00252	0.00232	0.00232	0.00232	0.00232	0.00252	0.00310	0.00310	0.00330	0.00320	0.00320	0.00290	0.00290	0.00290	0.00290	0.00290	0.00290	0.00290	0.00290
Metric Tons per Day	0.00011	0.00011	0.00010	0.00010	0.00010	0.00010	0.00011	0.00013	0.00013	0.00014	0.00014	0.00014	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
Yearly Maximums	0.03277	0.03314	0.03352	0.03409	0.03466	0.03523	0.03581	0.03619	0.03598											
Maximum Metric Tons per Day																				
Maximum Metric Tons per Hour [a]																				
Maximum Metric Tons per Month																				
Month with Maximum																				
Maximum Metric Tons per Year																				
Maximum Average Metric Tons per Hour [b]																				
Year with Maximum																				

Onsite CH_4 Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Block 2 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 1 & 2 Demolition																				
Total (metric tons/month)	0.00563	0.00563	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00519	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582	0.00582
Total (metric tons/day)	0.00024	0.00024	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
Bldgs. 33 & 34 Construction																				
Total (metric tons/month)							0.00043	0.00174	0.00174	0.00218	0.00195	0.00195	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064
Total (metric tons/day)							0.00002	0.00008	0.00008	0.00009	0.00008	0.00008	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
Total Onsite CH_4 Emissions (Construction Equipment and Vehicles)																				
Metric Tons per Month	0.00563	0.00563	0.00519	0.00519	0.00519	0.00519	0.00561	0.00692	0.00692	0.00736	0.00714	0.00714	0.00646	0.00646	0.00646	0.00646	0.00646	0.00646	0.00646	0.00646
Metric Tons per Day	0.00024	0.00024	0.00023	0.00023	0.00023	0.00023	0.00024	0.00030	0.00030	0.00032	0.00031	0.00031	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
Yearly Maximums	0.07309	0.07393	0.07476	0.07604	0.07731	0.07859	0.07987	0.08072	0.08025											
Maximum Metric Tons per Day																				
Maximum Metric Tons per Hour [a]																				
Maximum Metric Tons per Month																				
Month with Maximum																				
Maximum Metric Tons per Year																				
Maximum Average Metric Tons per Hour [b]																				
Year with Maximum																				

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington B
[b] The hours per year are assumed to allow operation 24 hours per

Huntington Beach Energy Project
Construction Emission Estimates - Cumulative Project
October 2013

Table 5.1A.59R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite CO Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)	0.94	18.82	22.21	42.82	67.17	74.41	104.74	111.23	119.71	117.72	110.66	76.48	69.99	40.34	30.17																										
Total (lbs/day)	0.04	0.82	0.97	1.86	2.92	3.24	4.55	4.84	5.20	5.12	4.81	3.33	3.04	1.75	1.31																										
Units 3 & 4 Demolition																																									
Total (lbs/month)										41.26	46.49	70.05	94.14	98.68	108.10	110.19	110.19	120.65	120.65	136.33	136.33	141.56	146.79	146.79	146.79	146.79	146.79	146.79	133.19	129.88	89.57	79.63	53.19	146.79	146.79	146.79					
Total (lbs/day)										1.79	2.02	3.05	4.09	4.29	4.70	4.79	4.79	5.25	5.25	5.93	5.93	6.15	6.38	6.38	6.38	6.38	6.38	6.38	5.79	5.65	3.89	3.46	2.31	6.38	6.38	6.38					
Block 1 Construction																																									
Total (lbs/month)																5.08	62.73	71.08	84.90	117.30	123.58	131.69	138.95	164.22	183.08	217.47	215.31	246.99	253.04	261.99	267.54	303.91	320.33	321.77	343.77	346.06	364.91	342.59	358.17	358.17	367.60
Total (lbs/day)																0.22	2.73	3.09	3.69	5.10	5.37	5.73	6.04	7.14	7.96	9.46	9.36	10.74	11.00	11.39	11.63	13.21	13.93	13.99	14.95	15.05	15.87	14.90	15.57	15.57	15.98
Block 2 Construction																																									
Total (lbs/month)																																				51.40	67.56	95.52	128.18	156.17	177.12
Total (lbs/day)																																				2.23	2.94	4.15	5.57	6.79	7.70
Units 1 & 2 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite CO Emissions (Construction Vehicles)																																									
Pounds per Month	**0.94**	**18.82**	**22.21**	**42.82**	**67.17**	**74.41**	**104.74**	**111.23**	**119.71**	**158.98**	**157.15**	**146.53**	**164.12**	**139.02**	**138.28**	**115.27**	**172.92**	**191.72**	**205.54**	**253.63**	**259.92**	**273.25**	**285.74**	**311.01**	**329.86**	**364.26**	**362.10**	**393.78**	**386.23**	**391.86**	**357.11**	**383.54**	**373.53**	**468.56**	**490.56**	**544.25**	**432.47**	**438.12**	**486.35**	**514.34**	**544.72**
Pounds per Day	**0.04**	**0.82**	**0.97**	**1.86**	**2.92**	**3.24**	**4.55**	**4.84**	**5.20**	**6.91**	**6.83**	**6.37**	**7.14**	**6.04**	**6.01**	**5.01**	**7.52**	**8.34**	**8.94**	**11.03**	**11.30**	**11.88**	**12.42**	**13.52**	**14.34**	**15.84**	**15.74**	**17.12**	**16.79**	**17.04**	**15.53**	**16.68**	**16.24**	**20.37**	**21.33**	**23.66**	**18.80**	**19.05**	**21.15**	**22.36**	**23.68**
Yearly Maximums	**1,025**	**1,188**	**1,308**	**1,424**	**1,497**	**1,602**	**1,720**	**1,820**	**1,963**	**2,103**	**2,217**	**2,346**	**2,510**	**2,676**	**2,901**	**3,125**	**3,404**	**3,617**	**3,817**	**3,969**	**4,099**	**4,212**	**4,408**	**4,612**	**4,846**	**4,948**	**5,022**	**5,146**	**5,267**	**5,425**	**5,579**	**5,785**	**5,929**	**6,097**	**5,881**	**5,679**	**5,496**	**5,427**	**5,349**	**5,218**	**5,058**
Maximum Pounds per Day	**24.49**																																								
Maximum Pounds per Hour [a]	**2.45**																																								
Maximum Pounds per Month	**563.18**																																								
Month with Maximum	**43**																																								
Maximum Pounds per Year	**6,097**																																								
Maximum Average Pounds per Hour [b]	**0.70**																																								
Year with Maximum	**Months 34-45**																																								
Tons per Year	**3.05**																																								

Offsite VOC Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)	0.16	0.68	0.75	1.00	3.12	3.35	7.01	7.35	7.53	7.70	7.76	7.24	6.89	2.34	2.13																										
Total (lbs/day)	0.01	0.03	0.03	0.04	0.14	0.15	0.30	0.32	0.33	0.33	0.34	0.31	0.30	0.10	0.09																										
Units 3 & 4 Demolition																																									
Total (lbs/month)										3.98	4.86	5.33	6.58	6.41	6.60	7.42	7.42	9.19	9.19	11.83	11.83	12.72	13.60	13.60	13.60	13.60	13.60	13.60	11.77	11.45	9.09	8.11	5.47	13.60	13.60	13.60					
Total (lbs/day)										0.17	0.21	0.23	0.29	0.28	0.29	0.32	0.32	0.40	0.40	0.51	0.51	0.55	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.50	0.40	0.35	0.24	0.59	0.59	0.59					
Block 1 Construction																																									
Total (lbs/month)																0.39	1.70	2.40	2.91	4.63	4.76	5.19	6.41	7.64	8.01	9.85	10.89	12.96	13.52	13.62	13.62	13.91	12.94	12.25	12.69	12.37	12.75	9.41	8.99	8.99	9.18
Total (lbs/day)																0.02	0.07	0.10	0.13	0.20	0.21	0.23	0.28	0.33	0.35	0.43	0.47	0.56	0.59	0.59	0.59	0.60	0.56	0.53	0.55	0.54	0.55	0.41	0.39	0.39	0.40
Block 2 Construction																																									
Total (lbs/month)																																				1.12	1.39	2.07	5.48	6.12	7.19
Total (lbs/day)																																				0.05	0.06	0.09	0.24	0.27	0.31
Units 1 & 2 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite VOC Emissions (Construction Vehicles)																																									
Pounds per Month	**0.16**	**0.68**	**0.75**	**1.00**	**3.12**	**3.35**	**7.01**	**7.35**	**7.53**	**11.68**	**12.62**	**12.57**	**13.48**	**8.76**	**8.73**	**7.81**	**9.12**	**11.59**	**12.09**	**16.46**	**16.59**	**17.90**	**20.01**	**21.23**	**21.61**	**23.45**	**24.49**	**26.56**	**25.29**	**25.07**	**22.71**	**22.03**	**18.41**	**25.85**	**26.28**	**27.08**	**14.14**	**11.47**	**14.47**	**15.11**	**16.37**
Pounds per Day	**0.01**	**0.03**	**0.03**	**0.04**	**0.14**	**0.15**	**0.30**	**0.32**	**0.33**	**0.51**	**0.55**	**0.55**	**0.59**	**0.38**	**0.38**	**0.34**	**0.40**	**0.50**	**0.53**	**0.72**	**0.72**	**0.78**	**0.87**	**0.92**	**0.94**	**1.02**	**1.06**	**1.15**	**1.10**	**1.09**	**0.99**	**0.96**	**0.80**	**1.12**	**1.14**	**1.18**	**0.61**	**0.50**	**0.63**	**0.66**	**0.71**
Yearly Maximums	**68**	**81**	**89**	**97**	**104**	**110**	**118**	**123**	**132**	**141**	**148**	**155**	**164**	**172**	**187**	**202**	**221**	**237**	**251**	**261**	**267**	**269**	**277**	**283**	**289**	**281**	**269**	**259**	**248**	**239**	**231**	**222**	**215**	**213**	**200**	**187**	**173**	**173**	**176**	**174**	**171**
Maximum Pounds per Day	**1.18**																																								
Maximum Pounds per Hour [a]	**0.12**																																								
Maximum Pounds per Month	**27.08**																																								
Month with Maximum	**36**																																								
Maximum Pounds per Year	**289**																																								
Maximum Average Pounds per Hour [b]	**0.03**																																								
Year with Maximum	**Months 25 - 36**																																								
Tons per Year	**0.14**																																								

Offsite NOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)	2.92	7.47	7.79	5.48	40.35	42.46	106.18	111.05	111.87	102.74	105.87	106.60	102.28	29.72	28.83																										
Total (lbs/day)	0.13	0.32	0.34	0.24	1.75	1.85	4.62	4.83	4.86	4.47	4.60	4.63	4.45	1.29	1.25																										
Units 3 & 4 Demolition																																									
Total (lbs/month)										63.62	79.11	81.35	98.62	94.06	94.95	110.14	110.14	141.11	141.11	187.57	187.57	180.75	194.53	194.53	194.53	194.53	194.53	194.53	166.70	161.98	131.84	117.65	80.10	173.91	173.91	173.91					
Total (lbs/day)										2.77	3.44	3.54	4.29	4.09	4.13	4.79	4.79	6.14	6.14	8.16	8.16	7.86	8.46	8.46	8.46	8.46	8.46	8.46	7.25	7.04	5.73	5.12	3.48	7.56	7.56	7.56					
Block 1 Construction																																									
Total (lbs/month)																6.04	14.64	25.85	30.72	54.63	55.23	54.68	73.83	88.36	90.00	112.55	130.87	158.31	166.24	165.79	164.41	160.16	139.37	114.04	115.78	110.45	111.94	66.61	56.82	56.82	57.57
Total (lbs/day)																0.26	0.64	1.12	1.34	2.38	2.40	2.38	3.21	3.84	3.91	4.89	5.69	6.88	7.23	7.21	7.15	6.96	6.06	4.96	5.03	4.80	4.87	2.90	2.47	2.47	2.50
Block 2 Construction																																									
Total (lbs/month)																																				8.88	10.37	15.74	68.30	73.64	87.96
Total (lbs/day)																																				0.39	0.45	0.68	2.97	3.20	3.82
Units 1 & 2 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite NOx Emissions (Construction Vehicles)																																									
Pounds per Month	**2.92**	**7.47**	**7.79**	**5.48**	**40.35**	**42.46**	**106.18**	**111.05**	**111.87**	**166.36**	**184.97**	**187.95**	**200.91**	**123.78**	**123.78**	**116.18**	**124.78**	**166.96**	**171.83**	**242.20**	**242.79**	**235.43**	**268.35**	**282.89**	**284.53**	**307.07**	**325.40**	**352.84**	**332.95**	**327.76**	**296.25**	**277.82**	**219.47**	**287.95**	**289.69**	**293.24**	**122.31**	**82.35**	**125.13**	**130.46**	**145.53**
Pounds per Day	**0.13**	**0.32**	**0.34**	**0.24**	**1.75**	**1.85**	**4.62**	**4.83**	**4.86**	**7.23**	**8.04**	**8.17**	**8.74**	**5.38**	**5.38**	**5.05**	**5.43**	**7.26**	**7.47**	**10.53**	**10.56**	**10.24**	**11.67**	**12.30**	**12.37**	**13.35**	**14.15**	**15.34**	**14.48**	**14.25**	**12.88**	**12.08**	**9.54**	**12.52**	**12.60**	**12.75**	**5.32**	**3.58**	**5.44**	**5.67**	**6.33**
Yearly Maximums	**975**	**1,173**	**1,289**	**1,405**	**1,516**	**1,600**	**1,725**	**1,790**	**1,922**	**2,052**	**2,122**	**2,205**	**2,300**	**2,383**	**2,567**	**2,768**	**3,005**	**3,213**	**3,374**	**3,498**	**3,534**	**3,511**	**3,563**	**3,585**	**3,595**	**3,433**	**3,208**	**3,008**	**2,785**	**2,598**	**2,421**	**2,234**	**2,084**	**2,022**	**1,886**	**1,740**	**1,598**	**1,631**	**1,696**	**1,708**	**1,697**
Maximum Pounds per Day	**15.34**																																								
Maximum Pounds per Hour [a]	**1.53**																																								
Maximum Pounds per Month	**352.84**																																								
Month with Maximum	**28**																																								
Maximum Pounds per Year	**3,595**																																								
Maximum Average Pounds per Hour [b]	**0.41**																																								
Year with Maximum	**Months 25 - 36**																																								
Tons per Year	**1.80**																																								

Table 5.1A.59R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite SOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)	0.008	0.054	0.062	0.099	0.220	0.239	0.431	0.455	0.474	0.478	0.470	0.402	0.378	0.151	0.128																										
Total (lbs/day)	0.000	0.002	0.003	0.004	0.010	0.010	0.019	0.020	0.021	0.021	0.020	0.017	0.016	0.007	0.006																										
Units 3 & 4 Demolition																																									
Total (lbs/month)										0.24	0.28	0.34	0.43	0.43	0.46	0.50	0.50	0.59	0.59	0.73	0.73	0.78	0.83	0.83	0.83	0.83	0.83	0.83	0.72	0.70	0.54	0.48	0.32	0.83	0.83	0.83						
Total (lbs/day)										0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.01	0.04	0.04	0.04						
Block 1 Construction																																									
Total (lbs/month)																0.025	0.173	0.217	0.257	0.384	0.400	0.431	0.497	0.590	0.636	0.770	0.813	0.954	0.988	1.006	1.015	1.085	1.067	1.039	1.093	1.082	1.128	0.950	0.956	0.956	0.979
Total (lbs/day)																0.001	0.008	0.009	0.011	0.017	0.017	0.019	0.022	0.026	0.028	0.033	0.035	0.041	0.043	0.044	0.044	0.047	0.046	0.045	0.048	0.047	0.049	0.041	0.042	0.042	0.043
Block 2 Construction																																									
Total (lbs/month)																																				0.148	0.191	0.271	0.504	0.586	0.678
Total (lbs/day)																																				0.006	0.008	0.012	0.022	0.025	0.029
Units 1 & 2 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite SOx Emissions (Construction Vehicles)																																									
Pounds per Month	**0.008**	**0.054**	**0.062**	**0.099**	**0.220**	**0.239**	**0.431**	**0.455**	**0.474**	**0.713**	**0.753**	**0.742**	**0.812**	**0.583**	**0.583**	**0.520**	**0.668**	**0.807**	**0.847**	**1.115**	**1.131**	**1.209**	**1.322**	**1.416**	**1.462**	**1.596**	**1.638**	**1.779**	**1.711**	**1.710**	**1.552**	**1.563**	**1.392**	**1.864**	**1.918**	**2.056**	**1.319**	**1.221**	**1.459**	**1.542**	**1.656**
Pounds per Day	**0.000**	**0.002**	**0.003**	**0.004**	**0.010**	**0.010**	**0.019**	**0.020**	**0.021**	**0.031**	**0.033**	**0.032**	**0.035**	**0.025**	**0.025**	**0.023**	**0.029**	**0.035**	**0.037**	**0.048**	**0.049**	**0.053**	**0.057**	**0.062**	**0.064**	**0.069**	**0.071**	**0.077**	**0.074**	**0.074**	**0.067**	**0.068**	**0.061**	**0.081**	**0.083**	**0.089**	**0.057**	**0.053**	**0.063**	**0.067**	**0.072**
Yearly Maximums	**4.2**	**5.1**	**5.6**	**6.1**	**6.5**	**7.0**	**7.5**	**8.0**	**8.6**	**9.3**	**9.8**	**10.3**	**11.0**	**11.7**	**12.7**	**13.7**	**15.0**	**16.0**	**16.9**	**17.6**	**18.1**	**18.3**	**19.0**	**19.6**	**20.2**	**20.1**	**19.7**	**19.5**	**19.3**	**19.3**	**19.2**	**19.3**	**19.3**	**19.6**	**18.8**	**18.0**	**17.3**	**17.4**	**17.5**	**17.3**	**17.0**

Maximum Pounds per Day	**0.09**
Maximum Pounds per Hour [a]	**0.01**
Maximum Pounds per Month	**2.06**
Month with Maximum	**36**
Maximum Pounds per Year	**20**
Maximum Average Pounds per Hour [b]	**0.002**
Year with Maximum	**Months 25 - 36**
Tons per Year	**0.01**

Offsite Exhaust PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)	0.28	4.21	4.94	9.23	15.39	16.99	25.23	26.75	28.57	27.91	26.49	19.24	17.74	9.40	7.21																										
Total (lbs/day)	0.01	0.18	0.21	0.40	0.67	0.74	1.10	1.16	1.24	1.21	1.15	0.84	0.77	0.41	0.31																										
Units 3 & 4 Demolition																																									
Total (lbs/month)										11.17	12.80	18.27	24.28	25.19	27.38	28.28	28.28	31.55	31.55	36.45	36.45	37.45	39.03	39.03	39.03	39.03	39.03	39.03	35.14	34.25	24.15	21.47	14.44	38.45	38.45	38.45						
Total (lbs/day)										0.49	0.56	0.79	1.06	1.10	1.19	1.23	1.23	1.37	1.37	1.58	1.58	1.63	1.70	1.70	1.70	1.70	1.70	1.70	1.53	1.49	1.05	0.93	0.63	1.67	1.67	1.67						
Block 1 Construction																																									
Total (lbs/month)																1.33	14.80	17.03	20.28	28.39	29.84	31.72	33.92	40.13	44.51	53.02	53.03	61.07	62.68	64.72	65.96	74.21	77.41	77.08	82.19	82.57	86.95	80.64	83.96	83.96	86.15
Total (lbs/day)																0.03	0.60	0.65	0.78	1.03	1.09	1.16	1.16	1.36	1.56	1.82	1.73	1.95	1.98	2.08	2.14	2.54	2.79	2.86	3.08	3.13	3.32	3.28	3.49	3.49	3.59
Block 2 Construction																																									
Total (lbs/month)																																				14.04	18.42	26.02	36.09	43.75	49.73
Total (lbs/day)																																				0.61	0.80	1.13	1.57	1.90	2.16
Units 1 & 2 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite Exhaust PM_{10} Emissions (Construction Vehicles)																																									
Pounds per Month	**0.28**	**4.21**	**4.94**	**9.23**	**15.39**	**16.99**	**25.23**	**26.75**	**28.57**	**39.08**	**39.29**	**37.51**	**42.02**	**34.59**	**34.59**	**29.62**	**43.09**	**48.58**	**51.83**	**64.83**	**66.29**	**69.17**	**72.96**	**79.17**	**83.55**	**92.05**	**92.06**	**100.11**	**97.82**	**98.97**	**90.11**	**95.68**	**91.85**	**115.53**	**120.64**	**135.06**	**105.37**	**106.66**	**120.05**	**127.71**	**135.88**
Pounds per Day	**0.01**	**0.18**	**0.21**	**0.40**	**0.67**	**0.74**	**1.10**	**1.16**	**1.24**	**1.70**	**1.71**	**1.63**	**1.83**	**1.50**	**1.50**	**1.26**	**1.83**	**2.02**	**2.15**	**2.62**	**2.68**	**2.79**	**2.86**	**3.06**	**3.25**	**3.52**	**3.43**	**3.65**	**3.51**	**3.57**	**3.19**	**3.47**	**3.42**	**4.53**	**4.75**	**5.41**	**4.12**	**4.42**	**5.06**	**5.39**	**5.75**
Yearly Maximums	**247**	**289**	**320**	**349**	**370**	**397**	**429**	**456**	**494**	**531**	**561**	**595**	**637**	**678**	**736**	**793**	**864**	**918**	**969**	**1,007**	**1,038**	**1,064**	**1,110**	**1,158**	**1,213**	**1,235**	**1,250**	**1,278**	**1,305**	**1,344**	**1,381**	**1,431**	**1,468**	**1,513**	**1,469**	**1,430**	**1,395**	**1,391**	**1,385**	**1,364**	**1,335**

Maximum Pounds per Day	**6.05**
Maximum Pounds per Hour [a]	**0.61**
Maximum Pounds per Month	**140.01**
Month with Maximum	**43**
Maximum Pounds per Year	**1,513**
Maximum Average Pounds per Hour [b]	**0.17**
Year with Maximum	**Months 34 - 45**
Tons per Year	**0.76**

Offsite Fugitive PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Units 3 & 4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)																0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
Total (lbs/day)																0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Block 2 Construction																																									
Total (lbs/month)																																				0.35	0.35	0.35	0.35	0.35	0.35
Total (lbs/day)																																				0.02	0.02	0.02	0.02	0.02	0.02
Units 1 & 2 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite Fugitive PM_{10} Emissions (Grading)																																									
Pounds per Month	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.71**	**0.71**	**0.71**	**0.71**	**0.71**	**0.71**
Pounds per Day	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**	**0.03**
Yearly Maximums	**0.0**	**0.0**	**0.0**	**0.0**	**0.4**	**0.7**	**1.1**	**1.4**	**1.8**	**2.1**	**2.5**	**2.8**	**3.2**	**3.5**	**3.9**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.6**	**4.9**	**5.3**	**5.7**	**6.0**	**6.4**	**6.7**	**7.1**	**7.4**	**7.8**	**7.8**	**7.8**	**7.4**	**7.1**	**6.7**	**6.4**	**6.0**

Maximum Pounds per Day	**0.03**
Maximum Pounds per Hour [a]	**0.003**
Maximum Pounds per Month	**0.71**
Month with Maximum	**36 - 45**
Maximum Pounds per Year	**7.8**
Maximum Average Pounds per Hour [b]	**0.0009**
Year with Maximum	**Months 34 - 45, 35 - 46, or 36 - 47**
Tons per Year	**0.004**

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Pounds per Month	0.28	4.21	4.94	9.23	15.39	16.99	25.23	26.75	28.57	39.08	39.29	37.51	42.02	34.59	34.59	29.97	43.44	48.93	52.18	65.18	66.64	69.53	73.31	79.52	83.90	92.41	92.42	100.46	98.17	99.33	90.47	96.03	92.20	115.89	121.00	135.77	106.08	107.37	120.76	128.41	136.59
Pounds per Day	0.01	0.18	0.21	0.40	0.67	0.74	1.10	1.16	1.24	1.70	1.71	1.63	1.83	1.50	1.50	1.28	1.85	2.04	2.16	2.63	2.69	2.80	2.87	3.08	3.27	3.54	3.44	3.66	3.53	3.58	3.21	3.49	3.44	4.54	4.77	5.44	4.15	4.45	5.09	5.42	5.78
Yearly Maximums	247	289	320	349	370	398	430	457	495	533	564	598	640	682	740	797	868	923	973	1,011	1,042	1,068	1,114	1,162	1,218	1,240	1,255	1,284	1,311	1,350	1,388	1,438	1,475	1,521	1,477	1,437	1,403	1,398	1,392	1,370	1,341
Maximum Pounds per Day	6.08																																								
Maximum Pounds per Hour [a]	0.61																																								
Maximum Pounds per Month	140.72																																								
Month with Maximum	43																																								
Maximum Pounds per Year	1,521																																								
Maximum Average Pounds per Hour [b]	0.17																																								
Year with Maximum	Months 34 - 45																																								
Tons per Year	0.76																																								

Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (lbs/month)	0.14	1.30	1.50	2.60	5.06	5.54	9.23	9.75	10.26	9.97	9.66	7.72	7.22	3.24	2.63																										
Total (lbs/day)	0.01	0.06	0.07	0.11	0.22	0.24	0.40	0.42	0.45	0.43	0.42	0.34	0.31	0.14	0.11																										
Units 3 & 4 Demolition																																									
Total (lbs/month)										4.52	5.33	6.86	8.89	9.03	9.64	10.24	10.24	11.86	11.86	14.28	14.28	14.51	15.27	15.27	15.27	15.27	15.27	15.27	13.54	13.19	9.73	8.66	5.85	14.73	14.73	14.73					
Total (lbs/day)										0.20	0.23	0.30	0.39	0.39	0.42	0.45	0.45	0.52	0.52	0.62	0.62	0.63	0.66	0.66	0.66	0.66	0.66	0.66	0.59	0.57	0.42	0.38	0.25	0.64	0.64	0.64					
Block 1 Construction																																									
Total (lbs/month)																0.50	4.34	5.21	6.20	8.95	9.36	9.90	10.96	12.99	14.22	17.06	17.51	20.35	20.98	21.52	21.82	23.95	24.31	23.71	25.14	25.11	26.34	23.51	24.16	24.16	24.77
Total (lbs/day)																0.02	0.19	0.23	0.27	0.39	0.41	0.43	0.48	0.56	0.62	0.74	0.76	0.88	0.91	0.94	0.95	1.04	1.06	1.03	1.09	1.09	1.15	1.02	1.05	1.05	1.08
Block 2 Construction																																									
Total (lbs/month)																																				4.02	5.25	7.44	11.47	13.68	15.65
Total (lbs/day)																																				0.17	0.23	0.32	0.50	0.59	0.68
Units 1 & 2 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite Exhaust $PM_{2.5}$ Emissions (Construction Vehicles)																																									
Pounds per Month	0.14	1.30	1.50	2.60	5.06	5.54	9.23	9.75	10.26	14.49	14.99	14.58	16.10	12.27	12.27	10.75	14.59	17.07	18.06	23.24	23.65	24.41	26.23	28.27	29.49	32.34	32.78	35.63	34.52	34.71	31.55	32.61	30.16	38.44	39.87	43.87	31.58	30.94	35.63	37.84	40.43
Pounds per Day	0.01	0.06	0.07	0.11	0.22	0.24	0.40	0.42	0.45	0.63	0.65	0.63	0.70	0.53	0.53	0.47	0.63	0.74	0.79	1.01	1.03	1.06	1.14	1.23	1.28	1.41	1.43	1.55	1.50	1.51	1.37	1.42	1.31	1.67	1.73	1.91	1.37	1.35	1.55	1.65	1.76
Yearly Maximums	89	105	116	127	135	145	156	165	179	192	202	213	227	240	260	281	306	326	343	357	366	373	387	400	416	418	417	420	422	428	434	443	449	460	445	430	417	417	417	411	403
Maximum Pounds per Day	1.91																																								
Maximum Pounds per Hour [a]	0.19																																								
Maximum Pounds per Month	43.87																																								
Month with Maximum	36																																								
Maximum Pounds per Year	460																																								
Maximum Average Pounds per Hour [b]	0.05																																								
Year with Maximum	Months 34 - 45																																								
Tons per Year	0.23																																								

Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Units 3 & 4 Demolition																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Block 1 Construction																																									
Total (lbs/month)																0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038
Total (lbs/day)																0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Block 2 Construction																																									
Total (lbs/month)																																				0.038	0.038	0.038	0.038	0.038	0.038
Total (lbs/day)																																				0.002	0.002	0.002	0.002	0.002	0.002
Units 1 & 2 Demolition [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Bldgs. 33 & 34 Construction [c]																																									
Total (lbs/month)																																									
Total (lbs/day)																																									
Total Offsite Fugitive $PM_{2.5}$ Emissions (Grading)																																									
Pounds per Month	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.076	0.076	0.076	0.076	0.076	0.076
Pounds per Day	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003
Yearly Maximums	0.00	0.00	0.00	0.00	0.04	0.08	0.11	0.15	0.19	0.23	0.27	0.31	0.34	0.38	0.42	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.50	0.53	0.57	0.61	0.65	0.69	0.73	0.76	0.80	0.84	0.84	0.84	0.80	0.76	0.73	0.69	0.65
Maximum Pounds per Day	0.003																																								
Maximum Pounds per Hour [a]	0.0003																																								
Maximum Pounds per Month	0.08																																								
Month with Maximum	36 - 45																																								
Maximum Pounds per Year	0.84																																								
Maximum Average Pounds per Hour [b]	0.0001																																								
Year with Maximum	Months 34 - 45, 35 - 46, or 36 - 47																																								
Tons per Year	0.0004																																								

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Pounds per Month	0.14	1.30	1.50	2.60	5.06	5.54	9.23	9.75	10.26	14.49	14.99	14.58	16.10	12.27	12.27	10.78	14.62	17.11	18.10	23.28	23.68	24.45	26.27	28.30	29.53	32.37	32.82	35.66	34.56	34.75	31.59	32.64	30.20	38.48	39.91	43.94	31.66	31.02	35.71	37.91	40.50
Pounds per Day	0.01	0.06	0.07	0.11	0.22	0.24	0.40	0.42	0.45	0.63	0.65	0.63	0.70	0.53	0.53	0.47	0.64	0.74	0.79	1.01	1.03	1.06	1.14	1.23	1.28	1.41	1.43	1.55	1.50	1.51	1.37	1.42	1.31	1.67	1.74	1.91	1.38	1.35	1.55	1.65	1.76
Yearly Maximums	89	105	116	127	135	145	156	165	179	192	202	214	227	241	261	281	306	326	344	357	367	373	387	401	416	419	417	420	422	428	434	443	450	461	446	431	418	418	417	412	403

Maximum Pounds per Day	1.91
Maximum Pounds per Hour [a]	0.191
Maximum Pounds per Month	43.94
Month with Maximum	36
Maximum Pounds per Year	461
Maximum Average Pounds per Hour [b]	0.053
Year with Maximum	Months 34 - 45
Tons per Year	0.23

Offsite CO_2 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																										
Total (metric tons/month)	0.38	2.35	2.67	4.15	9.77	10.59	19.67	20.71	21.51	21.76	21.52	18.73	17.69	6.80	5.84																											
Total (metric tons/day)	0.02	0.10	0.12	0.18	0.42	0.46	0.86	0.90	0.94	0.95	0.94	0.81	0.77	0.30	0.25																											
Units 3 & 4 Demolition																																									
Total (lbs/month)										10.97	13.24	15.63	19.81	19.69	20.65	22.60	22.60	27.13	27.13	33.92	33.92	36.18	38.44	38.44	38.44	38.44	38.44	38.44	33.60	32.68	25.12	22.38	15.22	38.44	38.44	38.44						
Total (lbs/day)										0.48	0.58	0.68	0.86	0.86	0.90	0.98	0.98	1.18	1.18	1.47	1.47	1.57	1.67	1.67	1.67	1.67	1.67	1.67	1.46	1.42	1.09	0.97	0.66	1.67	1.67	1.67						
Block 1 Construction																																									
Total (metric tons/month)																1.16	7.38	9.43	11.15	16.85	17.49	18.92	22.07	26.24	28.15	34.16	36.35	42.78	44.36	45.11	45.43	48.17	46.94	45.48	47.72	47.15	49.06	40.54	40.51	40.51	41.47
Total (metric tons/day)																0.05	0.32	0.41	0.48	0.73	0.76	0.82	0.96	1.14	1.22	1.49	1.58	1.86	1.93	1.96	1.98	2.09	2.04	1.98	2.07	2.05	2.13	1.76	1.76	1.76	1.80
Block 2 Construction																																									
Total (metric tons/month)																																				6.67	8.58	12.21	23.24	26.95	31.22
Total (metric tons/day)																																				0.29	0.37	0.53	1.01	1.17	1.36
Units 1 & 2 Demolition																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Total Offsite CO_2 Emissions (Construction Vehicles)																																									
Metric Tons per Month	0.38	2.35	2.67	4.15	9.77	10.59	19.67	20.71	21.51	32.73	34.76	34.36	37.50	26.50	26.49	23.76	29.97	36.55	38.28	50.77	51.41	55.10	60.51	64.68	66.60	72.61	74.80	81.23	77.96	77.79	70.56	70.55	62.17	83.93	86.16	92.27	57.65	52.75	63.76	67.46	72.69
Metric Tons per Day	0.02	0.10	0.12	0.18	0.42	0.46	0.86	0.90	0.94	1.42	1.51	1.49	1.63	1.15	1.15	1.03	1.30	1.59	1.66	2.21	2.24	2.40	2.63	2.81	2.90	3.16	3.25	3.53	3.39	3.38	3.07	3.07	2.70	3.65	3.75	4.01	2.51	2.29	2.77	2.93	3.16
Yearly Maximums	194	231	255	279	298	319	345	363	393	423	445	471	502	531	577	625	683	731	772	804	824	835	863	889	917	908	888	877	863	858	854	852	851	864	830	797	767	772	781	777	765

Maximum Metric Tons per Day	4.01
Maximum Metric Tons per Hour [a]	0.40
Maximum Metric Tons per Month	92.27
Month with Maximum	36
Maximum Metric Tons per Year	917
Maximum Average Metric Tons per Hour [b]	0.10
Year with Maximum	Months 25 - 36

Offsite N_2O Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (metric tons/month)	0.0000011	0.0000201	0.0000237	0.0000451	0.0000721	0.0000798	0.0001143	0.0001213	0.0001303	0.0001283	0.0001210	0.0000851	0.0000781	0.0000436	0.0000329																											
Total (metric tons/day)	0.0000000	0.0000009	0.0000010	0.0000020	0.0000031	0.0000035	0.0000050	0.0000053	0.0000057	0.0000056	0.0000053	0.0000037	0.0000034	0.0000019	0.0000014																											
Units 3 & 4 Demolition																																									
Total (lbs/month)										0.000049	0.000056	0.000083	0.000111	0.000116	0.000126	0.000129	0.000129	0.000143	0.000143	0.000163	0.000163	0.000169	0.000176	0.000176	0.000176	0.000176	0.000176	0.000176	0.000159	0.000155	0.000108	0.000096	0.000064	0.000176	0.000176	0.000176						
Total (lbs/day)										0.000002	0.000002	0.000004	0.000005	0.000005	0.000005	0.000006	0.000006	0.000006	0.000006	0.000007	0.000007	0.000007	0.000008	0.000008	0.000008	0.000008	0.000008	0.000008	0.000007	0.000007	0.000005	0.000004	0.000003	0.000008	0.000008	0.000008						
Block 1 Construction																																									
Total (metric tons/month)																0.0000060	0.0000718	0.0000818	0.0000973	0.0001351	0.0001423	0.0001517	0.0001609	0.0001903	0.0002118	0.0002518	0.0002503	0.0002876	0.0002948	0.0003050	0.0003112	0.0003522	0.0003698	0.0003708	0.0003958	0.0003981	0.0004196	0.0003921	0.0004092	0.0004092	0.0004199
Total (metric tons/day)																0.0000003	0.0000031	0.0000036	0.0000042	0.0000059	0.0000062	0.0000066	0.0000070	0.0000083	0.0000092	0.0000109	0.0000109	0.0001125	0.0000128	0.0000133	0.0000135	0.0000153	0.0000161	0.0000161	0.0001172	0.0000173	0.0000182	0.0000170	0.0000178	0.0000178	0.0000183
Block 2 Construction																																									
Total (metric tons/month)																																				0.0000685	0.0000899	0.0001269	0.0001724	0.0002097	0.0002381
Total (metric tons/day)																																				0.0000030	0.0000039	0.0000055	0.0000075	0.0000091	0.0000104
Units 1 & 2 Demolition																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Total Offsite N_2O Emissions (Construction Vehicles)																																									
Metric Tons per Month	0.00000	0.00002	0.00002	0.00005	0.00007	0.00008	0.00011	0.00012	0.00013	0.00018	0.00018	0.00017	0.00019	0.00016	0.00016	0.00014	0.00020	0.00022	0.00024	0.00030	0.00030	0.00032	0.00034	0.00037	0.00039	0.00043	0.00043	0.00046	0.00045	0.00046	0.00042	0.00045	0.00043	0.00055	0.00057	0.00064	0.00051	0.00052	0.00058	0.00062	0.00066
Metric Tons per Day	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00003	0.00002	0.00002	0.00003	0.00003	0.00003
Yearly Maximums	0.00113	0.00132	0.00146	0.00159	0.00168	0.00181	0.00196	0.00208	0.00226	0.00243	0.00258	0.00274	0.00293	0.00313	0.00340	0.00367	0.00400	0.00425	0.00448	0.00466	0.00481	0.00494	0.00517	0.00540	0.00568	0.00580	0.00589	0.00605	0.00620	0.00641	0.00661	0.00687	0.00707	0.00730	0.00709	0.00691	0.00675	0.00673	0.00669	0.00659	0.00645

Maximum Metric Tons per Day	0.000030
Maximum Metric Tons per Hour [a]	0.0000030
Maximum Metric Tons per Month	0.00068
Month with Maximum	43
Maximum Metric Tons per Year	0.00730
Maximum Average Metric Tons per Hour [b]	0.00000083
Year with Maximum	Months 34 - 45

Offsite CH_4 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Peaker and Tank Area and Stack 3&4 Demolition																																									
Total (metric tons/month)	0.0000012	0.0000883	0.0001055	0.0002153	0.0002975	0.0003325	0.0004093	0.0004368	0.0004798	0.0004644	0.0004232	0.0002444	0.0002169	0.0001669	0.0001153																											
Total (metric tons/day)	0.0000001	0.0000038	0.0000046	0.0000094	0.0000129	0.0000145	0.0000178	0.0000190	0.0000209	0.0000202	0.0000184	0.0000106	0.0000094	0.0000073	0.0000050																											
Units 3 & 4 Demolition																																									
Total (lbs/month)										0.000139	0.000146	0.000275	0.000385	0.000417	0.000469	0.000459	0.000459	0.000473	0.000473	0.000494	0.000494	0.000501	0.000508	0.000508	0.000508	0.000508	0.000508	0.000508	0.000477	0.000466	0.000289	0.000256	0.000169	0.000508	0.000508	0.000508						
Total (lbs/day)										0.000006	0.000006	0.000012	0.000017	0.000018	0.000020	0.000020	0.000020	0.000021	0.000021	0.000021	0.000021	0.000022	0.000022	0.000022	0.000022	0.000022	0.000022	0.000022	0.000021	0.000020	0.000013	0.000011	0.000007	0.000022	0.000022	0.000022						
Block 1 Construction																																									
Total (metric tons/month)																0.0000198	0.0003307	0.0003613	0.0004314	0.0005787	0.0006131	0.0006499	0.0006597	0.0007779	0.0008811	0.0010374	0.0009956	0.0011290	0.0011501	0.0012010	0.0012344	0.0014453	0.0015711	0.0015990	0.0017193	0.0017418	0.0018449	0.0018023	0.0019076	0.0019076	0.0019591
Total (metric tons/day)																0.0000009	0.0000144	0.0000157	0.0000188	0.0000252	0.0000267	0.0000283	0.0000287	0.0000338	0.0000383	0.0000451	0.0000433	0.0000491	0.0000500	0.0000522	0.0000537	0.0000628	0.0000683	0.0000695	0.0000748	0.0000757	0.0000802	0.0000784	0.0000829	0.0000829	0.0000852
Block 2 Construction																																									
Total (metric tons/month)																																				0.0003204	0.0004236	0.0005968	0.0007121	0.0008856	0.0009961
Total (metric tons/day)																																				0.0000139	0.0000184	0.0000259	0.0000310	0.0000385	0.0000433
Units 1 & 2 Demolition																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Bldgs. 33 & 34 Construction																																									
Total (metric tons/month)																																									
Total (metric tons/day)																																									
Total Offsite CH_4 Emissions (Construction Vehicles)																																									
Metric Tons per Month	0.00000	0.00009	0.00011	0.00022	0.00030	0.00033	0.00041	0.00044	0.00048	0.00060	0.00057	0.00052	0.00060	0.00058	0.00058	0.00048	0.00079	0.00083	0.00090	0.00107	0.00111	0.00115	0.00117	0.00129	0.00139	0.00155	0.00150	0.00164	0.00163	0.00167	0.00152	0.00170	0.00174	0.00211	0.00223	0.00257	0.00227	0.00240	0.00262	0.00279	0.00296
Metric Tons per Day	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00003	0.00002	0.00002	0.00003	0.00003	0.00003	0.00002	0.00003	0.00004	0.00004	0.00005	0.00005	0.00005	0.00005	0.00006	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00008	0.00009	0.00010	0.00011	0.00010	0.00010	0.00011	0.00012	0.00013
Yearly Maximums	0.00406	0.00466	0.00516	0.00563	0.00590	0.00639	0.00689	0.00739	0.00802	0.00865	0.00920	0.00980	0.01056	0.01135	0.01231	0.01323	0.01439	0.01523	0.01606	0.01668	0.01730	0.01794	0.01889	0.01995	0.02124	0.02212	0.02297	0.02409	0.02524	0.02657	0.02785	0.02948	0.03070	0.03192	0.03115	0.03052	0.03000	0.02979	0.02945	0.02887	0.02816

Maximum Metric Tons per Day	0.000137
Maximum Metric Tons per Hour [a]	0.0000137
Maximum Metric Tons per Month	0.00315
Month with Maximum	43
Maximum Metric Tons per Year	0.03192
Maximum Average Metric Tons per Hour [b]	0.0000036
Year with Maximum	Months 34 - 45

Notes:
[a] The hours per day are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 10 hours/day
[b] The hours per year are assumed to allow operation 24 hours per day, 7 days per week despite the actual construction schedule per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 8,760 hours/year
[c] There are no offsite activities generating fugitive dust during Peaker and Tank Area and Stack 3&4 Demolition, Units 1&2 Demolition and Bldgs. 33 & 34 Construction.

Huntington Beach Energy Project
Construction Emission Estimates - Cumulative Project
October 2013

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Offsite CO Emissions

CO Emissions by Month (Months 42–63)

Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Peaker and Tank Area and Stack 3&4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 3 & 4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 1 Construction																						
Total (lbs/month)	367.60	364.20	317.06	309.21																		
Total (lbs/day)	15.98	15.83	13.79	13.44																		
Block 2 Construction																						
Total (lbs/month)	177.90	198.99	210.21	231.99	252.73	288.42	361.53	363.24	360.04	355.77	354.83	351.91	356.17	336.65	349.44	332.38	328.12	252.74	202.71	134.06	132.94	128.67
Total (lbs/day)	7.73	8.65	9.14	10.09	10.99	12.54	15.72	15.79	15.65	15.47	15.43	15.30	15.49	14.64	15.19	14.45	14.27	10.99	8.81	5.83	5.78	5.59
Units 1 & 2 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Bldgs. 33 & 34 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Total Offsite CO Emissions (Construction Vehicles)																						
Pounds per Month	**545.51**	**563.18**	**527.27**	**541.20**	**252.73**	**288.42**	**361.53**	**363.24**	**360.04**	**355.77**	**354.83**	**351.91**	**356.17**	**336.65**	**349.44**	**332.38**	**328.12**	**252.74**	**202.71**	**134.06**	**132.94**	**128.67**
Pounds per Day	**23.72**	**24.49**	**22.92**	**23.53**	**10.99**	**12.54**	**15.72**	**15.79**	**15.65**	**15.47**	**15.43**	**15.30**	**15.49**	**14.64**	**15.19**	**14.45**	**14.27**	**10.99**	**8.81**	**5.83**	**5.78**	**5.59**
Yearly Maximums	**4,866**	**4,676**	**4,450**	**4,272**	**4,063**	**4,139**	**4,103**	**3,944**	**3,715**	**3,488**	**3,261**	**2,906**	**2,554**	**2,198**	**1,893**	**1,579**	**1,300**	**1,044**	**866**	**746**	**696**	**647**
Maximum Pounds per Day																						
Maximum Pounds per Hour [a]																						
Maximum Pounds per Month																						
Month with Maximum																						
Maximum Pounds per Year																						
Maximum Average Pounds per Hour [b]																						
Year with Maximum																						
Tons per Year																						

CO Emissions by Month (Months 64–85)

Construction Step	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 3 & 4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 1 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 2 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 1 & 2 Demolition																						
Total (lbs/month)				31.70	35.83	53.52	71.81	75.15	82.23	84.01	84.01	92.28	92.28	104.68	104.68	108.81	112.95	112.95	112.95	112.95	112.95	112.95
Total (lbs/day)				1.38	1.56	2.33	3.12	3.27	3.58	3.65	3.65	4.01	4.01	4.55	4.55	4.73	4.91	4.91	4.91	4.91	4.91	4.91
Bldgs. 33 & 34 Construction																						
Total (lbs/month)														40.38	60.60	62.30	64.92	65.86	61.31	68.68	69.26	75.93
Total (lbs/day)														1.76	2.63	2.71	2.82	2.86	2.67	2.99	3.01	3.30
Total Offsite CO Emissions (Construction Vehicles)																						
Pounds per Month	**0.00**	**0.00**	**0.00**	**31.70**	**35.83**	**53.52**	**71.81**	**75.15**	**82.23**	**84.01**	**84.01**	**92.28**	**92.28**	**145.05**	**165.28**	**171.11**	**177.87**	**178.80**	**174.25**	**181.63**	**182.21**	**188.88**
Pounds per Day	**0.00**	**0.00**	**0.00**	**1.38**	**1.56**	**2.33**	**3.12**	**3.27**	**3.58**	**3.65**	**3.65**	**4.01**	**4.01**	**6.31**	**7.19**	**7.44**	**7.73**	**7.77**	**7.58**	**7.90**	**7.92**	**8.21**
Yearly Maximums	**611**	**703**	**848**	**1,013**	**1,153**	**1,295**	**1,420**	**1,522**	**1,629**	**1,729**	**1,834**	**1,927**	**1,997**	**2,054**	**2,047**	**1,923**						

Offsite VOC Emissions

VOC Emissions by Month (Months 42–63)

Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Peaker and Tank Area and Stack 3&4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 3 & 4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 1 Construction																						
Total (lbs/month)	9.18	7.67	6.74	6.58																		
Total (lbs/day)	0.40	0.33	0.29	0.29																		
Block 2 Construction																						
Total (lbs/month)	7.52	6.61	8.07	10.10	12.74	12.65	13.96	14.24	13.71	13.00	11.85	11.16	11.87	9.63	11.75	8.92	8.22	6.93	5.44	4.26	4.88	4.17
Total (lbs/day)	0.33	0.29	0.35	0.44	0.55	0.55	0.61	0.62	0.60	0.57	0.52	0.49	0.52	0.42	0.51	0.39	0.36	0.30	0.24	0.19	0.21	0.18
Units 1 & 2 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Bldgs. 33 & 34 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Total Offsite VOC Emissions (Construction Vehicles)																						
Pounds per Month	**16.70**	**14.28**	**14.81**	**16.68**	**12.74**	**12.65**	**13.96**	**14.24**	**13.71**	**13.00**	**11.85**	**11.16**	**11.87**	**9.63**	**11.75**	**8.92**	**8.22**	**6.93**	**5.44**	**4.26**	**4.88**	**4.17**
Pounds per Day	**0.73**	**0.62**	**0.64**	**0.73**	**0.55**	**0.55**	**0.61**	**0.62**	**0.60**	**0.57**	**0.52**	**0.49**	**0.52**	**0.42**	**0.51**	**0.39**	**0.36**	**0.30**	**0.24**	**0.19**	**0.21**	**0.18**
Yearly Maximums	**166**	**161**	**156**	**153**	**145**	**141**	**135**	**127**	**117**	**108**	**99**	**87**	**76**	**64**	**58**	**49**	**44**	**41**	**39**	**38**	**39**	**40**
Maximum Pounds per Day																						
Maximum Pounds per Hour [a]																						
Maximum Pounds per Month																						
Month with Maximum																						
Maximum Pounds per Year																						
Maximum Average Pounds per Hour [b]																						
Year with Maximum																						
Tons per Year																						

VOC Emissions by Month (Months 64–85)

Construction Step	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 3 & 4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 1 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 2 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 1 & 2 Demolition																						
Total (lbs/month)				2.95	3.63	3.91	4.80	4.65	4.76	5.40	5.40	6.74	6.74	8.76	8.76	9.43	10.10	10.10	10.10	10.10	10.10	10.10
Total (lbs/day)				0.13	0.16	0.17	0.21	0.20	0.21	0.23	0.23	0.29	0.29	0.38	0.38	0.41	0.44	0.44	0.44	0.44	0.44	0.44
Bldgs. 33 & 34 Construction																						
Total (lbs/month)														0.69	1.85	1.80	2.22	2.70	1.47	1.20	1.14	1.24
Total (lbs/day)														0.03	0.08	0.08	0.10	0.12	0.06	0.05	0.05	0.05
Total Offsite VOC Emissions (Construction Vehicles)																						
Pounds per Month	**0.00**	**0.00**	**0.00**	**2.95**	**3.63**	**3.91**	**4.80**	**4.65**	**4.76**	**5.40**	**5.40**	**6.74**	**6.74**	**9.45**	**10.61**	**11.23**	**12.33**	**12.80**	**11.58**	**11.31**	**11.24**	**11.34**
Pounds per Day	**0.00**	**0.00**	**0.00**	**0.13**	**0.16**	**0.17**	**0.21**	**0.20**	**0.21**	**0.23**	**0.23**	**0.29**	**0.29**	**0.41**	**0.46**	**0.49**	**0.54**	**0.56**	**0.50**	**0.49**	**0.49**	**0.49**
Yearly Maximums	**42**	**49**	**58**	**69**	**77**	**86**	**95**	**102**	**108**	**115**	**121**	**124**	**126**	**126**	**122**	**116**						

Offsite NOx Emissions

NOx Emissions by Month (Months 42–63)

Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
Peaker and Tank Area and Stack 3&4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 3 & 4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 1 Construction																						
Total (lbs/month)	57.57	35.25	31.53	30.90																		
Total (lbs/day)	2.50	1.53	1.37	1.34																		
Block 2 Construction																						
Total (lbs/month)	93.54	73.47	96.53	126.99	151.67	143.83	151.02	155.12	147.44	137.20	119.34	109.22	119.46	88.17	118.89	77.93	61.78	55.84	43.00	37.59	46.41	37.17
Total (lbs/day)	4.07	3.19	4.20	5.52	6.59	6.25	6.57	6.74	6.41	5.97	5.19	4.75	5.19	3.83	5.17	3.39	2.69	2.43	1.87	1.63	2.02	1.62
Units 1 & 2 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Bldgs. 33 & 34 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Total Offsite NOx Emissions (Construction Vehicles)																						
Pounds per Month	**151.11**	**108.72**	**128.05**	**157.90**	**151.67**	**143.83**	**151.02**	**155.12**	**147.44**	**137.20**	**119.34**	**109.22**	**119.46**	**88.17**	**118.89**	**77.93**	**61.78**	**55.84**	**43.00**	**37.59**	**46.41**	**37.17**
Pounds per Day	**6.57**	**4.73**	**5.57**	**6.87**	**6.59**	**6.25**	**6.57**	**6.74**	**6.41**	**5.97**	**5.19**	**4.75**	**5.19**	**3.83**	**5.17**	**3.39**	**2.69**	**2.43**	**1.87**	**1.63**	**2.02**	**1.62**
Yearly Maximums	**1,661**	**1,629**	**1,608**	**1,599**	**1,519**	**1,429**	**1,341**	**1,233**	**1,116**	**1,015**	**915**	**795**	**686**	**567**	**520**	**452**	**426**	**423**	**422**	**435**	**462**	**481**
Maximum Pounds per Day																						
Maximum Pounds per Hour [a]																						
Maximum Pounds per Month																						
Month with Maximum																						
Maximum Pounds per Year																						
Maximum Average Pounds per Hour [b]																						
Year with Maximum																						
Tons per Year																						

NOx Emissions by Month (Months 64–85)

Construction Step	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 3 & 4 Demolition																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 1 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Block 2 Construction																						
Total (lbs/month)																						
Total (lbs/day)																						
Units 1 & 2 Demolition																						
Total (lbs/month)				41.05	51.02	52.61	57.99	55.37	55.96	64.81	64.81	82.90	82.90	110.03	110.03	119.07	128.11	128.11	130.29	130.29	130.29	130.29
Total (lbs/day)				1.78	2.22	2.29	2.52	2.41	2.43	2.82	2.82	3.60	3.60	4.78	4.78	5.18	5.57	5.57	5.66	5.66	5.66	5.66
Bldgs. 33 & 34 Construction																						
Total (lbs/month)														4.42	18.96	17.96	23.98	31.02	26.19	24.25	23.56	25.77
Total (lbs/day)														0.19	0.82	0.78	1.04	1.35	1.14	1.05	1.02	1.12
Total Offsite NOx Emissions (Construction Vehicles)																						
Pounds per Month	**0.00**	**0.00**	**0.00**	**41.05**	**51.02**	**52.61**	**57.99**	**55.37**	**55.96**	**64.81**	**64.81**	**82.90**	**82.90**	**114.45**	**128.99**	**137.02**	**152.10**	**159.14**	**156.47**	**154.53**	**153.85**	**156.06**
Pounds per Day	**0.00**	**0.00**	**0.00**	**1.78**	**2.22**	**2.29**	**2.52**	**2.41**	**2.43**	**2.82**	**2.82**	**3.60**	**3.60**	**4.98**	**5.61**	**5.96**	**6.61**	**6.92**	**6.80**	**6.72**	**6.69**	**6.79**
Yearly Maximums	**527**	**609**	**724**	**853**	**949**	**1,050**	**1,156**	**1,255**	**1,354**	**1,452**	**1,543**	**1,603**	**1,638**	**1,655**	**1,629**	**1,553**						

Table 5.1A.59R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite SOx Emissions

Construction Step	SOx Emissions by Month																																											
	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Units 3 & 4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (lbs/month)	0.979	0.907	0.792	0.772																																								
Total (lbs/day)	0.043	0.039	0.034	0.034																																								
Block 2 Construction																																												
Total (lbs/month)	0.696	0.687	0.781	0.922	1.094	1.153	1.349	1.367	1.334	1.290	1.229	1.189	1.233	1.084	1.215	1.040	0.997	0.797	0.632	0.451	0.480	0.437																						
Total (lbs/day)	0.030	0.030	0.034	0.040	0.048	0.050	0.059	0.059	0.058	0.056	0.053	0.052	0.054	0.047	0.053	0.045	0.043	0.035	0.027	0.020	0.021	0.019																						
Units 1 & 2 Demolition																										0.232	0.279	0.332	0.422	0.421	0.442	0.482	0.482	0.576	0.576	0.718	0.718	0.765	0.812	0.812	0.812	0.812	0.812	0.812
Total (lbs/month)																										0.010	0.012	0.014	0.018	0.018	0.019	0.021	0.021	0.025	0.025	0.031	0.031	0.033	0.035	0.035	0.035	0.035	0.035	0.035
Bldgs. 33 & 34 Construction																																				0.133	0.248	0.249	0.280	0.311	0.227	0.228	0.225	0.246
Total (lbs/month)																																				0.006	0.011	0.011	0.012	0.014	0.010	0.010	0.010	0.011
Total (lbs/day)																																												
Total Offsite SOx Emissions (Construction Vehicles)																																												
Pounds per Month	**1.675**	**1.594**	**1.573**	**1.695**	**1.094**	**1.153**	**1.349**	**1.367**	**1.334**	**1.290**	**1.229**	**1.189**	**1.233**	**1.084**	**1.215**	**1.040**	**0.997**	**0.797**	**0.632**	**0.451**	**0.480**	**0.437**	**0.000**	**0.000**	**0.000**	**0.232**	**0.279**	**0.332**	**0.422**	**0.421**	**0.442**	**0.482**	**0.482**	**0.576**	**0.576**	**0.850**	**0.966**	**1.014**	**1.092**	**1.123**	**1.039**	**1.040**	**1.037**	**1.059**
Pounds per Day	**0.073**	**0.069**	**0.068**	**0.074**	**0.048**	**0.050**	**0.059**	**0.059**	**0.058**	**0.056**	**0.053**	**0.052**	**0.054**	**0.047**	**0.053**	**0.045**	**0.043**	**0.035**	**0.027**	**0.020**	**0.021**	**0.019**	**0.000**	**0.000**	**0.000**	**0.010**	**0.012**	**0.014**	**0.018**	**0.018**	**0.019**	**0.021**	**0.021**	**0.025**	**0.025**	**0.037**	**0.042**	**0.044**	**0.047**	**0.049**	**0.045**	**0.045**	**0.045**	**0.046**
Yearly Maximums	**16.5**	**16.1**	**15.6**	**15.2**	**14.6**	**14.5**	**14.1**	**13.4**	**12.5**	**11.6**	**10.8**	**9.6**	**8.4**	**7.1**	**6.3**	**5.3**	**4.6**	**4.1**	**3.7**	**3.5**	**3.5**	**3.5**	**3.7**	**4.2**	**5.1**	**6.1**	**6.8**	**7.7**	**8.4**	**9.1**	**9.7**	**10.3**	**10.9**	**11.3**	**11.5**	**11.7**	**11.5**	**10.8**						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [b]																																												
Year with Maximum																																												
Tons per Year																																												

Offsite Exhaust PM_{10} Emissions

Construction Step	Exhaust PM_{10} Emissions by Month																																											
	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Units 3 & 4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (lbs/month)	86.15	84.76	73.81	71.98																																								
Total (lbs/day)	3.59	3.65	3.17	3.09																																								
Block 2 Construction																																												
Total (lbs/month)	50.08	55.26	58.84	65.43	71.57	80.99	100.84	101.39	100.35	98.96	98.27	97.25	98.64	92.64	96.82	91.24	89.74	69.30	55.53	36.91	36.82	35.45																						
Total (lbs/day)	2.18	2.40	2.56	2.84	3.11	3.52	4.38	4.41	4.36	4.30	4.27	4.23	4.29	4.03	4.21	3.97	3.90	3.01	2.41	1.60	1.60	1.54																						
Units 1 & 2 Demolition																										10.52	12.00	17.47	23.17	24.14	26.33	27.05	27.05	29.94	29.94	34.28	34.28	35.73	37.18	37.18	36.88	36.88	36.88	36.88
Total (lbs/month)																										0.46	0.52	0.76	1.01	1.05	1.14	1.18	1.18	1.30	1.30	1.49	1.49	1.55	1.62	1.62	1.60	1.60	1.60	1.60
Bldgs. 33 & 34 Construction																																				13.27	20.14	20.68	21.64	22.07	20.26	22.60	22.78	24.97
Total (lbs/month)																																				0.58	0.88	0.90	0.94	0.96	0.88	0.98	0.99	1.09
Total Offsite Exhaust PM_{10} Emissions (Construction Vehicles)																																												
Pounds per Month	**136.23**	**140.01**	**132.65**	**137.41**	**71.57**	**80.99**	**100.84**	**101.39**	**100.35**	**98.96**	**98.27**	**97.25**	**98.64**	**92.64**	**96.82**	**91.24**	**89.74**	**69.30**	**55.53**	**36.91**	**36.82**	**35.45**	**0.00**	**0.00**	**0.00**	**10.52**	**12.00**	**17.47**	**23.17**	**24.14**	**26.33**	**27.05**	**27.05**	**29.94**	**29.94**	**47.56**	**54.42**	**56.41**	**58.82**	**59.24**	**57.14**	**59.48**	**59.65**	**61.85**
Pounds per Day	**5.76**	**6.05**	**5.73**	**5.94**	**3.11**	**3.52**	**4.38**	**4.41**	**4.36**	**4.30**	**4.27**	**4.23**	**4.29**	**4.03**	**4.21**	**3.97**	**3.90**	**3.01**	**2.41**	**1.60**	**1.60**	**1.54**	**0.00**	**0.00**	**0.00**	**0.46**	**0.52**	**0.76**	**1.01**	**1.05**	**1.14**	**1.18**	**1.18**	**1.30**	**1.30**	**2.07**	**2.37**	**2.45**	**2.56**	**2.58**	**2.48**	**2.59**	**2.59**	**2.69**
Yearly Maximums	**1,296**	**1,258**	**1,211**	**1,175**	**1,129**	**1,147**	**1,135**	**1,090**	**1,026**	**962**	**899**	**800**	**703**	**604**	**522**	**438**	**364**	**297**	**252**	**223**	**213**	**203**	**198**	**228**	**275**	**330**	**375**	**422**	**464**	**498**	**533**	**567**	**602**	**632**	**655**	**674**	**672**	**631**						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [b]																																												
Year with Maximum																																												
Tons per Year																																												

Offsite Fugitive PM_{10} Emissions

Construction Step	Fugitive PM_{10} Emissions by Month																																											
	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition [c]																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Units 3 & 4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (lbs/month)	0.35	0.35	0.35	0.35																																								
Total (lbs/day)	0.02	0.02	0.02	0.02																																								
Block 2 Construction																																												
Total (lbs/month)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35																						
Total (lbs/day)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02																						
Units 1 & 2 Demolition [c]																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Bldgs. 33 & 34 Construction [c]																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Total Offsite Fugitive PM_{10} Emissions (Grading)																																												
Pounds per Month	**0.71**	**0.71**	**0.71**	**0.71**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.35**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Pounds per Day	**0.03**	**0.03**	**0.03**	**0.03**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Yearly Maximums	**5.7**	**5.3**	**4.9**	**4.6**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**4.2**	**3.9**	**3.5**	**3.2**	**2.8**	**2.5**	**2.1**	**1.8**	**1.4**	**1.1**	**0.7**	**0.4**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [b]																																												
Year with Maximum																																												
Tons per Year																																												

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite PM_{10} Emissions (Exhaust and Fugitive)

	Total PM_{10} Emissions by Month																																									
Parameter	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Pounds per Month	136.94	140.72	133.35	138.12	71.93	81.34	101.19	101.75	100.70	99.31	98.63	97.60	96.99	92.99	97.17	91.60	90.09	69.65	55.88	37.27	37.17	35.81	0.00	0.00	0.00	10.52	12.00	17.47	23.17	24.14	26.33	27.05	27.05	29.94	29.94	47.56	54.42	56.41	58.82	59.24	57.14	59.48	59.65	61.85
Pounds per Day	5.79	6.08	5.76	5.97	3.13	3.54	4.40	4.42	4.38	4.32	4.29	4.24	4.30	4.04	4.22	3.98	3.92	3.03	2.43	1.62	1.62	1.56	0.00	0.00	0.00	0.46	0.52	0.76	1.01	1.05	1.14	1.18	1.18	1.30	1.30	2.07	2.37	2.45	2.56	2.58	2.48	2.59	2.59	2.69
Yearly Maximums	1,302	1,264	1,216	1,180	1,133	1,151	1,140	1,094	1,030	966	903	804	707	608	525	440	366	299	253	224	214	204	198	228	275	330	375	422	464	498	533	567	602	632	655	674	672	631						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [a]																																												
Year with Maximum																																												
Tons per Year																																												

Offsite Exhaust $PM_{2.5}$ Emissions

	Exhaust $PM_{2.5}$ Emissions by Month																																										
Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Units 3 & 4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (lbs/month)	24.77	23.84	20.78	20.27																																								
Total (lbs/day)	1.08	1.04	0.90	0.88																																								
Block 2 Construction																																												
Total (lbs/month)	15.89	16.79	18.34	20.88	22.96	25.36	30.94	31.19	30.73	30.12	29.53	29.02	29.63	27.29	29.12	26.68	26.07	20.34	16.25	11.03	11.24	10.62																						
Total (lbs/day)	0.69	0.73	0.80	0.91	1.00	1.10	1.35	1.36	1.34	1.31	1.28	1.26	1.29	1.19	1.27	1.16	1.13	0.88	0.71	0.48	0.49	0.46																						
Units 1 & 2 Demolition																																												
Total (lbs/month)																										3.93	4.59	6.13	7.87	8.07	8.68	9.11	9.11	10.39	10.39	12.30	12.30	12.94	13.58	13.58	13.31	13.31	13.31	13.31
Total (lbs/day)																										0.17	0.20	0.27	0.34	0.35	0.38	0.40	0.40	0.45	0.45	0.53	0.53	0.56	0.59	0.59	0.58	0.58	0.58	0.58
Bldgs. 33 & 34 Construction																																												
Total (lbs/month)																																				3.74	6.01	6.12	6.55	6.86	5.87	6.38	6.40	7.01
Total (lbs/day)																																				0.16	0.26	0.27	0.28	0.30	0.26	0.28	0.28	0.30
Total Offsite Exhaust $PM_{2.5}$ Emissions (Construction Vehicles)																																												
Pounds per Month	40.66	40.63	39.12	41.15	22.96	25.36	30.94	31.19	30.73	30.12	29.53	29.02	29.63	27.29	29.12	26.68	26.07	20.34	16.25	11.03	11.24	10.62	0.00	0.00	0.00	3.93	4.59	6.13	7.87	8.07	8.68	9.11	9.11	10.39	10.39	16.04	18.31	19.06	20.13	20.43	19.17	19.68	19.70	20.32
Pounds per Day	1.77	1.77	1.70	1.79	1.00	1.10	1.35	1.36	1.34	1.31	1.28	1.26	1.29	1.19	1.27	1.16	1.13	0.88	0.71	0.48	0.49	0.46	0.00	0.00	0.00	0.17	0.20	0.27	0.34	0.35	0.38	0.40	0.40	0.45	0.45	0.70	0.80	0.83	0.88	0.89	0.83	0.86	0.86	0.88
Yearly Maximums	391	380	367	357	343	346	341	326	306	286	267	237	208	179	155	131	110	92	80	72	70	68	68	78	94	113	128	143	158	169	181	192	203	212	218	223	221	208						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [a]																																												
Year with Maximum																																												
Tons per Year																																												

Offsite Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions by Month																																										
Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition [c]																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Units 3 & 4 Demolition																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (lbs/month)	0.038	0.038	0.038	0.038																																								
Total (lbs/day)	0.002	0.002	0.002	0.002																																								
Block 2 Construction																																												
Total (lbs/month)	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038																						
Total (lbs/day)	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002																						
Units 1 & 2 Demolition [b]																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Bldgs. 33 & 34 Construction [c]																																												
Total (lbs/month)																																												
Total (lbs/day)																																												
Total Offsite Fugitive $PM_{2.5}$ Emissions (Grading)																																												
Pounds per Month	0.076	0.076	0.076	0.076	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pounds per Day	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Yearly Maximums	0.61	0.57	0.53	0.50	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.42	0.38	0.34	0.31	0.27	0.23	0.19	0.15	0.11	0.08	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [a]																																												
Year with Maximum																																												
Tons per Year																																												

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

	Total $PM_{2.5}$ Emissions by Month																																								
Parameter	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Pounds per Month	40.74	40.71	39.19	41.22	23.00	25.40	30.98	31.22	30.77	30.15	29.57	29.06	29.67	27.33	29.16	26.71	26.10	20.38	16.29	11.07	11.28	10.66	0.00	0.00	0.00	3.93	4.59	6.13	7.87	8.07	8.68	9.11	9.11	10.39	10.39	16.04	18.31	19.06	20.13	20.43	19.17	19.68	19.70	20.32
Pounds per Day	1.77	1.77	1.70	1.79	1.00	1.10	1.35	1.36	1.34	1.31	1.29	1.26	1.29	1.19	1.27	1.16	1.13	0.89	0.71	0.48	0.49	0.46	0.00	0.00	0.00	0.17	0.20	0.27	0.34	0.35	0.38	0.40	0.40	0.45	0.45	0.70	0.80	0.83	0.88	0.89	0.83	0.86	0.86	0.88
Yearly Maximums	392	381	368	358	343	346	341	326	306	287	267	238	209	179	156	131	110	92	80	72	70	68	68	78	94	113	128	143	158	169	181	192	203	212	218	223	221	208						
Maximum Pounds per Day																																												
Maximum Pounds per Hour [a]																																												
Maximum Pounds per Month																																												
Month with Maximum																																												
Maximum Pounds per Year																																												
Maximum Average Pounds per Hour [b]																																												
Year with Maximum																																												
Tons per Year																																												

Offsite CO_2 Emissions

	CO_2 Emissions by Month																																									
Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																																											
Total (metric tons/month)																																												
Total (metric tons/day)																																												
Units 3 & 4 Demolition																																											
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (metric tons/month)	41.47	37.91	33.12	32.33																																							
Total (metric tons/day)	1.80	1.65	1.44	1.41																																							
Block 2 Construction																																												
Total (metric tons/month)	32.11	31.41	35.93	42.59	50.78	53.25	62.05	62.89	61.31	59.21	56.23	54.29	56.39	49.30	55.60	47.20	45.11	36.20	28.69	20.58	22.04	19.94																						
Total (metric tons/day)	1.40	1.37	1.56	1.85	2.21	2.32	2.70	2.73	2.67	2.57	2.44	2.36	2.45	2.14	2.42	2.05	1.96	1.57	1.25	0.89	0.96	0.87																						
Units 1 & 2 Demolition																										10.96	13.22	15.60	19.77	19.65	20.60	22.55	22.55	27.08	27.08	33.87	33.87	36.13	38.40	38.40	38.40	38.40	38.40	38.40
Total (metric tons/day)																										0.48	0.57	0.68	0.86	0.85	0.90	0.98	0.98	1.18	1.18	1.47	1.47	1.57	1.67	1.67	1.67	1.67	1.67	1.67
Bldgs. 33 & 34 Construction																																				0.21	3.53	3.23	4.74	6.55	2.02	0.51	0.21	0.21
Total (metric tons/month)																																				0.01	0.15	0.14	0.21	0.28	0.09	0.02	0.01	0.01
Total (metric tons/day)																																												
Total Offsite CO_2 Emissions (Construction Vehicles)																																											
Metric Tons per Month	73.58	69.32	69.05	74.92	50.78	53.25	62.05	62.89	61.31	59.21	56.23	54.29	56.39	49.30	55.60	47.20	45.11	36.20	28.69	20.58	22.04	19.94	0.00	0.00	0.00	10.96	13.22	15.60	19.77	19.65	20.60	22.55	22.55	27.08	27.08	34.08	37.40	39.36	43.13	44.94	40.42	38.91	38.61	38.61
Metric Tons per Day	3.20	3.01	3.00	3.26	2.21	2.32	2.70	2.73	2.67	2.57	2.44	2.36	2.45	2.14	2.42	2.05	1.96	1.57	1.25	0.89	0.96	0.87	0.00	0.00	0.00	0.48	0.57	0.68	0.86	0.85	0.90	0.98	0.98	1.18	1.18	1.48	1.63	1.71	1.88	1.95	1.76	1.69	1.68	1.68
Yearly Maximums	747	730	710	696	669	663	646	612	570	531	492	435	381	325	286	244	212	187	170	162	164	165	172	199	233	271	299	329	358	379	398	416	432	439	440	434	418	396						
Maximum Metric Tons per Day																																												
Maximum Metric Tons per Hour [a]																																												
Maximum Metric Tons per Month																																												
Month with Maximum																																												
Maximum Metric Tons per Year																																												
Maximum Average Metric Tons per Hour [b]																																												
Year with Maximum																																												

Offsite N_2O Emissions

	N_2O Emissions by Month																																									
Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																																											
Total (metric tons/month)																																												
Total (metric tons/day)																																												
Units 3 & 4 Demolition																																											
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (metric tons/month)	0.0004199	0.0004148	0.0003612	0.0003522																																								
Total (metric tons/day)	0.0000183	0.0000180	0.0000157	0.0000153																																								
Block 2 Construction																																												
Total (metric tons/month)	0.0002394	0.0002664	0.0002823	0.0003124	0.0003416	0.0003885	0.0004857	0.0004882	0.0004836	0.0004774	0.0004753	0.0004710	0.0004771	0.0004497	0.0004682	0.0004436	0.0004375	0.0003373	0.0002704	0.0001791	0.0001781	0.0001720																						
Total (metric tons/day)	0.0000104	0.0000116	0.0000123	0.0000136	0.0000149	0.0000169	0.0000211	0.0000212	0.0000210	0.0000208	0.0000207	0.0000205	0.0000207	0.0000196	0.0000204	0.0000193	0.0000190	0.0000147	0.0000118	0.0000078	0.0000077	0.0000075																						
Units 1 & 2 Demolition																										0.0000492	0.0000558	0.0000826	0.0001107	0.0001156	0.0001264	0.0001294	0.0001294	0.0001427	0.0001427	0.0001625	0.0001625	0.0001692	0.0001758	0.0001758	0.0001758	0.0001758	0.0001758	0.0001758
Total (metric tons/day)																										0.0000021	0.0000024	0.0000036	0.0000048	0.0000050	0.0000055	0.0000056	0.0000056	0.0000062	0.0000062	0.0000071	0.0000071	0.0000074	0.0000076	0.0000076	0.0000076	0.0000076	0.0000076	0.0000076
Bldgs. 33 & 34 Construction																																				0.0000650	0.0000980	0.0001006	0.0001051	0.0001068	0.0000989	0.0001106	0.0001115	0.0001222
Total (metric tons/day)																																				0.0000028	0.0000043	0.0000044	0.0000046	0.0000046	0.0000043	0.0000048	0.0000048	0.0000053
Total Offsite N_2O Emissions (Construction Vehicles)																																												
Metric Tons per Month	0.00066	0.00068	0.00064	0.00066	0.00034	0.00039	0.00049	0.00049	0.00048	0.00048	0.00048	0.00047	0.00048	0.00045	0.00047	0.00044	0.00044	0.00034	0.00027	0.00018	0.00018	0.00017	0.00000	0.00000	0.00000	0.00005	0.00006	0.00008	0.00011	0.00012	0.00013	0.00013	0.00013	0.00014	0.00014	0.00023	0.00026	0.00027	0.00028	0.00028	0.00027	0.00029	0.00029	0.00030
Metric Tons per Day	0.00003	0.00003	0.00003	0.00003	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
Yearly Maximums	0.00626	0.00608	0.00585	0.00567	0.00545	0.00555	0.00549	0.00528	0.00497	0.00466	0.00436	0.00388	0.00341	0.00294	0.00254	0.00212	0.00176	0.00144	0.00121	0.00107	0.00102	0.00097	0.00094	0.00108	0.00131	0.00157	0.00179	0.00202	0.00222	0.00238	0.00255	0.00271	0.00288	0.00303	0.00315	0.00324	0.00323	0.00304						
Maximum Metric Tons per Day																																												
Maximum Metric Tons per Hour [a]																																												
Maximum Metric Tons per Month																																												
Month with Maximum																																												
Maximum Metric Tons per Year																																												
Maximum Average Metric Tons per Hour [b]																																												
Year with Maximum																																												

Offsite CH_4 Emissions

	CH_4 Emissions by Month																																									
Construction Step	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85
Peaker and Tank Area and Stack 3&4 Demolition																																											
Total (metric tons/month)																																												
Total (metric tons/day)																																												
Units 3 & 4 Demolition																																											
Total (lbs/month)																																												
Total (lbs/day)																																												
Block 1 Construction																																												
Total (metric tons/month)	0.0019591	0.0019805	0.0017226	0.0016796																																								
Total (metric tons/day)	0.0000852	0.0000861	0.0000749	0.0000730																																								
Block 2 Construction																																												
Total (metric tons/month)	0.0009907	0.0011668	0.0011970	0.0012825	0.0013403	0.0015910	0.0020558	0.0020584	0.0020535	0.0020470	0.0020782	0.0020803	0.0020868	0.0020242	0.0020438	0.0020177	0.0020112	0.0015299	0.0012312	0.0007928	0.0007650	0.0007585																						
Total (metric tons/day)	0.0000431	0.0000507	0.0000520	0.0000558	0.0000583	0.0000692	0.0000894	0.0000895	0.0000893	0.0000890	0.0000904	0.0000904	0.0000907	0.0000880	0.0000889	0.0000877	0.0000874	0.0000665	0.0000535	0.0000345	0.0000333	0.0000330																						
Units 1 & 2 Demolition																										0.0001392	0.0001463	0.0002752	0.0003854	0.0004174	0.0004690	0.0004588	0.0004588	0.0004729	0.0004729	0.0004940	0.0004940	0.0005011	0.0005081	0.0005081	0.0005081	0.0005081	0.0005081	0.0005081
Total (metric tons/day)																										0.0000061	0.0000064	0.0000120	0.0000168	0.0000181	0.0000204	0.0000199	0.0000199	0.0000206	0.0000206	0.0000215	0.0000215	0.0000218	0.0000221	0.0000221	0.0000221	0.0000221	0.0000221	0.0000221
Bldgs. 33 & 34 Construction																																				0.0003100	0.0004321	0.0004484	0.0004530	0.0004415	0.0004532	0.0005259	0.0005335	0.0005851
Total (metric tons/day)																																				0.0000135	0.0000188	0.0000195	0.0000197	0.0000192	0.0000197	0.0000229	0.0000232	0.0000254
Total Offsite CH_4 Emissions (Construction Vehicles)																																												
Metric Tons per Month	0.00295	0.00315	0.00292	0.00296	0.00134	0.00159	0.00206	0.00206	0.00205	0.00205	0.00208	0.00208	0.00209	0.00202	0.00204	0.00202	0.00201	0.00153	0.00123	0.00079	0.00076	0.00076	0.00000	0.00000	0.00000	0.00014	0.00015	0.00028	0.00039	0.00042	0.00047	0.00046	0.00046	0.00047	0.00047	0.00080	0.00093	0.00095	0.00096	0.00095	0.00096	0.00103	0.00104	0.00109
Metric Tons per Day	0.00013	0.00014	0.00013	0.00013	0.00006	0.00007	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00007	0.00005	0.00003	0.00003	0.00003	0.00000	0.00000	0.00000	0.00001	0.00001	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00003	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00005	0.00005
Yearly Maximums	0.02728	0.02642	0.02530	0.02442	0.02348	0.02415	0.02409	0.02326	0.02200	0.02071	0.01942	0.01734	0.01526	0.01317	0.01129	0.00939	0.00765	0.00602	0.00491	0.00415	0.00381	0.00351	0.00322	0.00370	0.00450	0.00543	0.00624	0.00705	0.00773	0.00830	0.00892	0.00949	0.01012	0.01077	0.01130	0.01178	0.01187	0.01111						
Maximum Metric Tons per Day																																												
Maximum Metric Tons per Hour [a]																																												
Maximum Metric Tons per Month																																												
Month with Maximum																																												
Maximum Metric Tons per Year																																												
Maximum Average Metric Tons per Hour [b]																																												
Year with Maximum																																												

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington
[b] The hours per year are assumed to allow operation 24 hours
[c] There are no offsite activities generating fugitive dust during F

Table 5.1A.59R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite CO Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition					
Total (lbs/month)	94.05	91.49	60.81	53.14	41.12
Total (lbs/day)	4.09	3.98	2.64	2.31	1.79
Bldgs. 33 & 34 Construction					
Total (lbs/month)	83.71	70.38	88.15	84.82	0.37
Total (lbs/day)	3.64	3.06	3.83	3.69	0.02
Total Offsite CO Emissions (Construction Vehicles)					
Pounds per Month	**177.76**	**161.87**	**148.97**	**137.96**	**41.50**
Pounds per Day	**7.73**	**7.04**	**6.48**	**6.00**	**1.80**
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Offsite VOC Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition					
Total (lbs/month)	7.38	7.14	5.44	4.71	4.09
Total (lbs/day)	0.32	0.31	0.24	0.20	0.18
Bldgs. 33 & 34 Construction					
Total (lbs/month)	1.36	1.15	1.43	1.38	0.07
Total (lbs/day)	0.06	0.05	0.06	0.06	0.00
Total Offsite VOC Emissions (Construction Vehicles)					
Pounds per Month	**8.74**	**8.29**	**6.87**	**6.09**	**4.15**
Pounds per Day	**0.38**	**0.36**	**0.30**	**0.26**	**0.18**
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Offsite NOx Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition					
Total (lbs/month)	96.53	93.41	69.92	60.56	52.29
Total (lbs/day)	4.20	4.06	3.04	2.63	2.27
Bldgs. 33 & 34 Construction					
Total (lbs/month)	28.34	23.93	29.81	28.71	0.78
Total (lbs/day)	1.23	1.04	1.30	1.25	0.03
Total Offsite NOx Emissions (Construction Vehicles)					
Pounds per Month	**124.87**	**117.34**	**99.73**	**89.27**	**53.07**
Pounds per Day	**5.43**	**5.10**	**4.34**	**3.88**	**2.31**
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Table 5.1A.59R Offsite Construction
Exhaust and Fugitive Emissions
Summary

Offsite SOx Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition					
Total (lbs/month)	0.616	0.597	0.435	0.377	0.321
Total (lbs/day)	0.027	0.026	0.019	0.016	0.014
Bldgs. 33 & 34 Construction					
Total (lbs/month)	0.271	0.229	0.286	0.275	0.004
Total (lbs/day)	0.012	0.010	0.012	0.012	0.000
Total Offsite SOx Emissions (Construction Vehicles)					
Pounds per Month	**0.888**	**0.826**	**0.721**	**0.652**	**0.325**
Pounds per Day	**0.039**	**0.036**	**0.031**	**0.028**	**0.014**
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Offsite Exhaust PM_{10} Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition					
Total (lbs/month)	30.45	29.61	19.83	17.31	13.55
Total (lbs/day)	1.32	1.29	0.86	0.75	0.59
Bldgs. 33 & 34 Construction					
Total (lbs/month)	27.52	23.14	28.99	27.89	0.13
Total (lbs/day)	1.20	1.01	1.26	1.21	0.01
Total Offsite Exhaust PM_{10} Emissions (Construction Vehicles)					
Pounds per Month	**57.98**	**52.75**	**48.81**	**45.20**	**13.68**
Pounds per Day	**2.52**	**2.29**	**2.12**	**1.97**	**0.59**
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Offsite Fugitive PM_{10} Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition [c]					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition [c]					
Total (lbs/month)					
Total (lbs/day)					
Bldgs. 33 & 34 Construction [c]					
Total (lbs/month)					
Total (lbs/day)					
Total Offsite Fugitive PM_{10} Emissions (Grading)					
Pounds per Month	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Pounds per Day	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	86	87	88	89	90
Pounds per Month	57.98	52.75	48.81	45.20	13.68
Pounds per Day	2.52	2.29	2.12	1.97	0.59
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [a]					
Year with Maximum					
Tons per Year					

Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition					
Total (lbs/month)	10.63	10.32	7.14	6.22	5.04
Total (lbs/day)	0.46	0.45	0.31	0.27	0.22
Bldgs. 33 & 34 Construction					
Total (lbs/month)	7.73	6.50	8.14	7.83	0.06
Total (lbs/day)	0.34	0.28	0.35	0.34	0.00
Total Offsite Exhaust $PM_{2.5}$ Emissions (Construction Vehicles)					
Pounds per Month	18.36	16.82	15.28	14.05	5.09
Pounds per Day	0.80	0.73	0.66	0.61	0.22
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [a]					
Year with Maximum					
Tons per Year					

Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition [a]					
Total (lbs/month)					
Total (lbs/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (lbs/month)					
Total (lbs/day)					
Block 2 Construction					
Total (lbs/month)					
Total (lbs/day)					
Units 1 & 2 Demolition [a]					
Total (lbs/month)					
Total (lbs/day)					
Bldgs. 33 & 34 Construction [a]					
Total (lbs/month)					
Total (lbs/day)					
Total Offsite Fugitive $PM_{2.5}$ Emissions (Grading)					
Pounds per Month	0.000	0.000	0.000	0.000	0.000
Pounds per Day	0.000	0.000	0.000	0.000	0.000
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [a]					
Year with Maximum					
Tons per Year					

Table 5.1A.59R Offsite Construction Exhaust and Fugitive Emissions Summary

Total Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	86	87	88	89	90
Pounds per Month	18.36	16.82	15.28	14.05	5.09
Pounds per Day	0.80	0.73	0.66	0.61	0.22
Yearly Maximums					
Maximum Pounds per Day					
Maximum Pounds per Hour [a]					
Maximum Pounds per Month					
Month with Maximum					
Maximum Pounds per Year					
Maximum Average Pounds per Hour [b]					
Year with Maximum					
Tons per Year					

Offsite CO_2 Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (metric tons/month)					
Total (metric tons/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (metric tons/month)					
Total (metric tons/day)					
Block 2 Construction					
Total (metric tons/month)					
Total (metric tons/day)					
Units 1 & 2 Demolition					
Total (metric tons/month)	29.02	28.11	20.57	17.83	15.21
Total (metric tons/day)	1.26	1.22	0.89	0.78	0.66
Bldgs. 33 & 34 Construction					
Total (metric tons/month)	0.21	0.21	0.21	0.21	0.21
Total (metric tons/day)	0.01	0.01	0.01	0.01	0.01
Total Offsite CO_2 Emissions (Construction Vehicles)					
Metric Tons per Month	29.23	28.32	20.78	18.04	15.42
Metric Tons per Day	1.27	1.23	0.90	0.78	0.67
Yearly Maximums					
Maximum Metric Tons per Day					
Maximum Metric Tons per Hour [a]					
Maximum Metric Tons per Month					
Month with Maximum					
Maximum Metric Tons per Year					
Maximum Average Metric Tons per Hour [b]					
Year with Maximum					

Offsite N_2O Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (metric tons/month)					
Total (metric tons/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (metric tons/month)					
Total (metric tons/day)					
Block 2 Construction					
Total (metric tons/month)					
Total (metric tons/day)					
Units 1 & 2 Demolition					
Total (metric tons/month)	0.0001457	0.0001417	0.0000945	0.0000825	0.0000644
Total (metric tons/day)	0.0000063	0.0000062	0.0000041	0.0000036	0.0000028
Bldgs. 33 & 34 Construction					
Total (metric tons/month)	0.0001347	0.0001133	0.0001419	0.0001365	0.0000006
Total (metric tons/day)	0.0000059	0.0000049	0.0000062	0.0000059	0.0000000
Total Offsite N_2O Emissions (Construction Vehicles)					
Metric Tons per Month	0.00028	0.00025	0.00024	0.00022	0.00006
Metric Tons per Day	0.00001	0.00001	0.00001	0.00001	0.00000
Yearly Maximums					
Maximum Metric Tons per Day					
Maximum Metric Tons per Hour [a]					
Maximum Metric Tons per Month					
Month with Maximum					
Maximum Metric Tons per Year					
Maximum Average Metric Tons per Hour [b]					
Year with Maximum					

Offsite CH_4 Emissions

Construction Step	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition					
Total (metric tons/month)					
Total (metric tons/day)					
Units 3 & 4 Demolition					
Total (lbs/month)					
Total (lbs/day)					
Block 1 Construction					
Total (metric tons/month)					
Total (metric tons/day)					
Block 2 Construction					
Total (metric tons/month)					
Total (metric tons/day)					
Units 1 & 2 Demolition					
Total (metric tons/month)	0.0004628	0.0004518	0.0002744	0.0002416	0.0001688
Total (metric tons/day)	0.0000201	0.0000196	0.0000119	0.0000105	0.0000073
Bldgs. 33 & 34 Construction					
Total (metric tons/month)	0.0006452	0.0005421	0.0006796	0.0006538	0.0000006
Total (metric tons/day)	0.0000281	0.0000236	0.0000295	0.0000284	0.0000000
Total Offsite CH_4 Emissions (Construction Vehicles)					
Metric Tons per Month	0.00111	0.00099	0.00095	0.00090	0.00017
Metric Tons per Day	0.00005	0.00004	0.00004	0.00004	0.00001
Yearly Maximums					
Maximum Metric Tons per Day					
Maximum Metric Tons per Hour [a]					
Maximum Metric Tons per Month					
Month with Maximum					
Maximum Metric Tons per Year					
Maximum Average Metric Tons per Hour [b]					
Year with Maximum					

Notes:
[a] The hours per day are per "Manpower Schedule Huntington
[b] The hours per year are assumed to allow operation 24 hours
[c] There are no offsite activities generating fugitive dust during F

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite CO Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	642.99	660.88	663.01	854.07	935.47	942.72	973.05	979.54	1,117.96	1,075.47	1,068.40	1,040.28	1,168.32	1,138.67	1,128.50																				
Total (lbs/day)	27.96	28.73	28.83	37.13	40.67	40.99	42.31	42.59	48.61	46.76	46.45	45.23	50.80	49.51	49.07																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										263.52	268.75	292.32	316.40	320.94	330.37	332.45	332.45	751.55	751.55	993.54	993.54	1,128.59	1,133.82	1,094.50	1,094.50	1,094.50	1,094.50	1,094.50	1,080.90	1,077.58	1,037.28	1,027.33	1,000.90	1,185.17	1,185.17
Total (lbs/day)										11.46	11.68	12.71	13.76	13.95	14.36	14.45	14.45	32.68	32.68	43.20	43.20	49.07	49.30	47.59	47.59	47.59	47.59	47.59	47.00	46.85	45.10	44.67	43.52	51.53	51.53
Block 1 Construction																																			
Total (lbs/month)																1,297.31	1,354.96	1,224.85	1,317.31	938.18	727.52	813.73	820.99	885.59	904.44	898.41	896.26	967.26	843.49	813.11	818.66	855.03	871.45	794.24	816.24
Total (lbs/day)																56.40	58.91	53.25	57.27	40.79	31.63	35.38	35.70	38.50	39.32	39.06	38.97	42.05	36.67	35.35	35.59	37.18	37.89	34.53	35.49
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite CO Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**642.99**	**660.88**	**663.01**	**854.07**	**935.47**	**942.72**	**973.05**	**979.54**	**1,117.96**	**1,338.99**	**1,337.15**	**1,332.60**	**1,484.72**	**1,459.61**	**1,458.87**	**1,629.76**	**1,687.41**	**1,976.40**	**2,068.86**	**1,931.71**	**1,721.06**	**1,942.32**	**1,954.81**	**1,980.08**	**1,998.94**	**1,992.91**	**1,990.75**	**2,061.76**	**1,924.38**	**1,890.69**	**1,855.94**	**1,882.37**	**1,872.35**	**1,979.41**	**2,001.40**
Pounds per Day	**27.96**	**28.73**	**28.83**	**37.13**	**40.67**	**40.99**	**42.31**	**42.59**	**48.61**	**58.22**	**58.14**	**57.94**	**64.55**	**63.46**	**63.43**	**70.86**	**73.37**	**85.93**	**89.95**	**83.99**	**74.83**	**84.45**	**84.99**	**86.09**	**86.91**	**86.65**	**86.55**	**89.64**	**83.67**	**82.20**	**80.69**	**81.84**	**81.41**	**86.06**	**87.02**
Yearly Maximums	**11,778**	**12,620**	**13,419**	**14,215**	**14,990**	**15,742**	**16,776**	**17,872**	**18,824**	**19,427**	**20,030**	**20,648**	**21,296**	**21,810**	**22,343**	**22,875**	**23,307**	**23,544**	**23,458**	**23,245**	**23,196**	**23,347**	**23,384**	**23,431**	**23,861**	**23,882**	**23,916**	**23,675**	**23,387**	**23,045**	**22,553**	**22,113**	**21,799**	**21,548**	**20,490**

Maximum Pounds per Day	**104.77**
Maximum Pounds per Hour [a]	**10.48**
Maximum Pounds per Month	**2,409.72**
Month with Maximum	**36**
Maximum Pounds per Year	**23,916**
Maximum Average Pounds per Hour [b]	**2.73**
Year with Maximum	**Months 27 - 38**
Tons per Year	**11.96**

Onsite and Offsite VOC Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	133.56	134.08	145.58	180.13	190.54	190.77	194.42	194.77	215.47	201.84	201.90	206.17	229.67	225.12	224.90																				
Total (lbs/day)	5.81	5.83	6.33	7.83	8.28	8.29	8.45	8.47	9.37	8.78	8.78	8.96	9.99	9.79	9.78																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										58.05	58.94	59.40	60.66	60.49	60.68	61.50	61.50	135.65	135.65	178.09	178.09	197.95	198.83	185.77	185.77	185.77	185.77	185.77	183.94	183.62	181.26	180.28	177.64	208.59	208.59
Total (lbs/day)										2.52	2.56	2.58	2.64	2.63	2.64	2.67	2.67	5.90	5.90	7.74	7.74	8.61	8.64	8.08	8.08	8.08	8.08	8.08	8.00	7.98	7.88	7.84	7.72	9.07	9.07
Block 1 Construction																																			
Total (lbs/month)																236.31	237.62	208.85	235.47	166.17	127.60	153.83	155.06	169.34	169.72	157.86	158.90	174.03	155.61	142.66	142.66	142.95	141.98	115.17	115.60
Total (lbs/day)																10.27	10.33	9.08	10.24	7.22	5.55	6.69	6.74	7.36	7.38	6.86	6.91	7.57	6.77	6.20	6.20	6.22	6.17	5.01	5.03
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite VOC Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**133.56**	**134.08**	**145.58**	**180.13**	**190.54**	**190.77**	**194.42**	**194.77**	**215.47**	**259.90**	**260.84**	**265.57**	**290.33**	**285.61**	**285.58**	**297.81**	**299.12**	**344.51**	**371.12**	**344.25**	**305.69**	**351.78**	**353.89**	**355.11**	**355.49**	**343.63**	**344.67**	**359.80**	**339.55**	**326.27**	**323.92**	**323.23**	**319.62**	**323.75**	**324.19**
Pounds per Day	**5.81**	**5.83**	**6.33**	**7.83**	**8.28**	**8.29**	**8.45**	**8.47**	**9.37**	**11.30**	**11.34**	**11.55**	**12.62**	**12.42**	**12.42**	**12.95**	**13.01**	**14.98**	**16.14**	**14.97**	**13.29**	**15.29**	**15.39**	**15.44**	**15.46**	**14.94**	**14.99**	**15.64**	**14.76**	**14.19**	**14.08**	**14.05**	**13.90**	**14.08**	**14.10**
Yearly Maximums	**2,366**	**2,522**	**2,674**	**2,814**	**2,932**	**3,040**	**3,194**	**3,371**	**3,520**	**3,610**	**3,702**	**3,795**	**3,885**	**3,950**	**4,008**	**4,067**	**4,129**	**4,170**	**4,151**	**4,104**	**4,083**	**4,097**	**4,069**	**4,039**	**4,072**	**4,008**	**3,953**	**3,846**	**3,721**	**3,584**	**3,445**	**3,305**	**3,200**	**3,112**	**2,930**

Maximum Pounds per Day	**16.87**
Maximum Pounds per Hour [a]	**1.69**
Maximum Pounds per Month	**388.00**
Month with Maximum	**18**
Maximum Pounds per Year	**4,170**
Maximum Average Pounds per Hour [b]	**0.48**
Year with Maximum	**Months 36-47**
Tons per Year	**2.08**

Onsite and Offsite NOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	897.45	902.00	1,025.80	1,291.88	1,385.50	1,387.61	1,451.33	1,456.20	1,601.69	1,334.39	1,337.52	1,366.54	1,520.76	1,448.19	1,447.30																				
Total (lbs/day)	39.02	39.22	44.60	56.17	60.24	60.33	63.10	63.31	69.64	58.02	58.15	59.41	66.12	62.96	62.93																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										446.76	462.25	464.49	481.76	477.20	478.09	493.28	493.28	1,027.84	1,027.84	1,367.07	1,367.07	1,349.98	1,363.76	1,261.70	1,261.70	1,261.70	1,261.70	1,261.70	1,233.88	1,229.16	1,199.02	1,184.83	1,147.28	1,266.76	1,266.76
Total (lbs/day)										19.42	20.10	20.20	20.95	20.75	20.79	21.45	21.45	44.69	44.69	59.44	59.44	58.69	59.29	54.86	54.86	54.86	54.86	54.86	53.65	53.44	52.13	51.51	49.88	55.08	55.08
Block 1 Construction																																			
Total (lbs/month)																1,447.99	1,456.59	1,289.53	1,519.50	1,158.11	913.29	1,029.53	1,048.68	1,165.27	1,166.90	1,085.71	1,104.03	1,233.53	1,128.52	1,026.01	1,024.64	1,020.39	999.60	703.80	705.54
Total (lbs/day)																62.96	63.33	56.07	66.07	50.35	39.71	44.76	45.59	50.66	50.73	47.20	48.00	53.63	49.07	44.61	44.55	44.36	43.46	30.60	30.68
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite NOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**897.45**	**902.00**	**1,025.80**	**1,291.88**	**1,385.50**	**1,387.61**	**1,451.33**	**1,456.20**	**1,601.69**	**1,781.15**	**1,799.76**	**1,831.02**	**2,002.52**	**1,925.39**	**1,925.39**	**1,941.27**	**1,949.87**	**2,317.38**	**2,547.34**	**2,525.18**	**2,280.35**	**2,379.51**	**2,412.43**	**2,426.97**	**2,428.61**	**2,347.41**	**2,365.74**	**2,495.23**	**2,362.41**	**2,255.17**	**2,223.66**	**2,205.23**	**2,146.88**	**1,970.56**	**1,972.30**
Pounds per Day	**39.02**	**39.22**	**44.60**	**56.17**	**60.24**	**60.33**	**63.10**	**63.31**	**69.64**	**77.44**	**78.25**	**79.61**	**87.07**	**83.71**	**83.71**	**84.40**	**84.78**	**100.76**	**110.75**	**109.79**	**99.15**	**103.46**	**104.89**	**105.52**	**105.59**	**102.06**	**102.86**	**108.49**	**102.71**	**98.05**	**96.68**	**95.88**	**93.34**	**85.68**	**85.75**
Yearly Maximums	**16,811**	**17,916**	**18,940**	**19,839**	**20,489**	**21,053**	**21,983**	**23,079**	**24,148**	**24,827**	**25,425**	**26,038**	**26,634**	**27,060**	**27,482**	**27,922**	**28,476**	**28,889**	**28,826**	**28,503**	**28,183**	**28,049**	**27,640**	**27,200**	**27,153**	**26,553**	**25,994**	**25,115**	**24,112**	**23,039**	**22,025**	**20,999**	**20,200**	**19,581**	**18,546**

Maximum Pounds per Day	**110.75**
Maximum Pounds per Hour [a]	**11.08**
Maximum Pounds per Month	**2,547.34**
Month with Maximum	**19**
Maximum Pounds per Year	**28,889**
Maximum Average Pounds per Hour [b]	**3.30**
Year with Maximum	**Months 18 - 29**
Tons per Year	**14.44**

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite SOx Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	1.2315	1.2777	1.4953	1.9408	2.1639	2.1831	2.3751	2.3984	2.6490	2.4762	2.4688	2.3946	2.6118	2.3841	2.3611																				
Total (lbs/day)	0.0535	0.0556	0.0650	0.0844	0.0941	0.0949	0.1033	0.1043	0.1152	0.1077	0.1073	0.1041	0.1136	0.1037	0.1027																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										0.89	0.93	0.99	1.08	1.08	1.11	1.15	1.15	2.05	2.05	2.70	2.70	2.98	3.03	2.85	2.85	2.85	2.85	2.85	2.75	2.73	2.56	2.50	2.35	3.11	3.11
Total (lbs/day)										0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.09	0.09	0.12	0.12	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.10	0.14	0.14
Block 1 Construction																																			
Total (lbs/month)																2.3693	2.5171	2.3550	2.7489	2.1512	1.8074	2.1910	2.2565	2.5269	2.5729	2.5261	2.5687	2.8866	2.6891	2.5309	2.5396	2.6092	2.5919	2.2098	2.2635
Total (lbs/day)																0.1030	0.1094	0.1024	0.1195	0.0935	0.0786	0.0953	0.0981	0.1099	0.1119	0.1098	0.1117	0.1255	0.1169	0.1100	0.1104	0.1134	0.1127	0.0961	0.0984
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite SOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**1.2315**	**1.2777**	**1.4953**	**1.9408**	**2.1639**	**2.1831**	**2.3751**	**2.3984**	**2.6490**	**3.3617**	**3.4015**	**3.3847**	**3.6951**	**3.4670**	**3.4670**	**3.5146**	**3.6625**	**4.4060**	**4.7999**	**4.8540**	**4.5101**	**5.1723**	**5.2850**	**5.3785**	**5.4245**	**5.3778**	**5.4203**	**5.7383**	**5.4387**	**5.2609**	**5.1026**	**5.1135**	**4.9429**	**5.3169**	**5.3706**
Pounds per Day	**0.0535**	**0.0556**	**0.0650**	**0.0844**	**0.0941**	**0.0949**	**0.1033**	**0.1043**	**0.1152**	**0.1462**	**0.1479**	**0.1472**	**0.1607**	**0.1507**	**0.1507**	**0.1528**	**0.1592**	**0.1916**	**0.2087**	**0.2110**	**0.1961**	**0.2249**	**0.2298**	**0.2338**	**0.2358**	**0.2338**	**0.2357**	**0.2495**	**0.2365**	**0.2287**	**0.2219**	**0.2223**	**0.2149**	**0.2312**	**0.2335**
Yearly Maximums	**28**	**30**	**33**	**34**	**36**	**38**	**40**	**42**	**45**	**47**	**48**	**50**	**52**	**54**	**56**	**58**	**60**	**62**	**63**	**63**	**63**	**64**	**64**	**64**	**65**	**64**	**63**	**62**	**60**	**59**	**57**	**56**	**55**	**55**	**52**

Maximum Pounds per Day	**0.27**
Maximum Pounds per Hour [a]	**0.03**
Maximum Pounds per Month	**6.28**
Month with Maximum	**36**
Maximum Pounds per Year	**65**
Maximum Average Pounds per Hour [b]	**0.01**
Year with Maximum	**Months 25 - 36**
Tons per Year	**0.03**

Onsite and Offsite Exhaust PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	57.72	61.64	64.06	80.49	89.85	91.45	99.69	101.21	110.90	97.38	95.96	92.46	99.70	91.36	89.17																				
Total (lbs/day)	2.51	2.68	2.79	3.50	3.91	3.98	4.33	4.40	4.82	4.23	4.17	4.02	4.33	3.97	3.88																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										29.12	30.75	36.22	42.23	43.14	45.33	46.23	46.23	78.13	78.13	96.62	96.62	96.38	97.96	94.48	94.48	94.48	94.48	94.48	90.59	89.70	79.60	76.92	69.89	93.78	93.78
Total (lbs/day)										1.27	1.34	1.57	1.84	1.88	1.97	2.01	2.01	3.40	3.40	4.20	4.20	4.19	4.26	4.11	4.11	4.11	4.11	4.11	3.94	3.90	3.46	3.34	3.04	4.08	4.08
Block 1 Construction																																			
Total (lbs/month)																100.02	113.49	101.04	112.01	90.95	75.71	79.02	81.22	90.91	95.29	100.23	100.24	111.76	107.39	105.96	107.20	115.44	118.64	107.18	112.29
Total (lbs/day)																4.32	4.89	4.30	4.77	3.75	3.09	3.21	3.21	3.57	3.76	3.88	3.78	4.16	3.93	3.87	3.93	4.33	4.59	4.16	4.39
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**57.72**	**61.64**	**64.06**	**80.49**	**89.85**	**91.45**	**99.69**	**101.21**	**110.90**	**126.49**	**126.71**	**128.68**	**141.93**	**134.50**	**134.50**	**146.26**	**159.72**	**179.17**	**190.15**	**187.57**	**172.33**	**175.40**	**179.18**	**185.39**	**189.77**	**194.71**	**194.72**	**206.24**	**197.98**	**195.65**	**186.80**	**192.36**	**188.53**	**200.96**	**206.07**
Pounds per Day	**2.51**	**2.68**	**2.79**	**3.50**	**3.91**	**3.98**	**4.33**	**4.40**	**4.82**	**5.50**	**5.51**	**5.59**	**6.17**	**5.85**	**5.85**	**6.33**	**6.90**	**7.70**	**8.16**	**7.95**	**7.29**	**7.41**	**7.47**	**7.68**	**7.87**	**7.99**	**7.89**	**8.26**	**7.87**	**7.77**	**7.40**	**7.68**	**7.62**	**8.24**	**8.46**
Yearly Maximums	**1,139**	**1,223**	**1,296**	**1,366**	**1,432**	**1,502**	**1,590**	**1,680**	**1,767**	**1,828**	**1,877**	**1,929**	**1,986**	**2,034**	**2,094**	**2,154**	**2,214**	**2,253**	**2,269**	**2,266**	**2,271**	**2,287**	**2,312**	**2,339**	**2,397**	**2,410**	**2,420**	**2,419**	**2,414**	**2,414**	**2,407**	**2,413**	**2,417**	**2,433**	**2,340**

Maximum Pounds per Day	**10.10**
Maximum Pounds per Hour [a]	**1.01**
Maximum Pounds per Month	**243.00**
Month with Maximum	**36**
Maximum Pounds per Year	**2,433**
Maximum Average Pounds per Hour [b]	**0.28**
Year with Maximum	**Months 34 - 45**
Tons per Year	**1.22**

Onsite and Offsite Fugitive PM_{10} Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	209.69	209.69	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	248.57	209.69	209.69	209.69	209.69																				
Total (lbs/day)	9.12	9.12	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.81	9.12	9.12	9.12	9.12																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										214.75	214.75	214.75	214.75	214.75	214.75	214.75	214.75	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19	234.19
Total (lbs/day)										9.34	9.34	9.34	9.34	9.34	9.34	9.34	9.34	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18	10.18
Block 1 Construction																																			
Total (lbs/month)																681.00	681.00	438.16	438.16	437.60	194.76	175.32	175.32	175.32	175.32	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44
Total (lbs/day)																29.61	29.61	19.05	19.05	19.03	8.47	7.62	7.62	7.62	7.62	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	**209.69**	**209.69**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**248.57**	**463.32**	**463.32**	**424.44**	**424.44**	**424.44**	**424.44**	**895.75**	**895.75**	**672.35**	**672.35**	**671.79**	**428.95**	**409.51**	**409.51**	**409.51**	**409.51**	**370.63**	**370.63**	**370.63**	**370.63**	**370.63**	**370.63**	**370.63**	**370.63**	**370.63**	**370.63**
Pounds per Day	**9.12**	**9.12**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**10.81**	**20.14**	**20.14**	**18.45**	**18.45**	**18.45**	**18.45**	**38.95**	**38.95**	**29.23**	**29.23**	**29.21**	**18.65**	**17.80**	**17.80**	**17.80**	**17.80**	**16.11**	**16.11**	**16.11**	**16.11**	**16.11**	**16.11**	**16.11**	**16.11**	**16.11**	**16.11**
Yearly Maximums	**3,510**	**3,725**	**3,940**	**4,116**	**4,763**	**5,410**	**5,834**	**6,258**	**6,681**	**6,861**	**6,807**	**6,754**	**6,739**	**6,724**	**6,670**	**6,616**	**6,091**	**5,566**	**5,264**	**4,963**	**4,661**	**4,603**	**4,564**	**4,525**	**4,827**	**5,235**	**5,681**	**5,885**	**6,069**	**6,253**	**6,194**	**6,116**	**6,038**	**5,960**	**5,765**

Maximum Pounds per Day	**38.95**
Maximum Pounds per Hour [a]	**3.89**
Maximum Pounds per Month	**895.75**
Month with Maximum	**16 or 17**
Maximum Pounds per Year	**6,861**
Maximum Average Pounds per Hour [b]	**0.78**
Year with Maximum	**Months 10 - 21**
Tons per Year	**3.43**

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite PM_{10} Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Pounds per Month	267.40	271.33	312.63	329.06	338.41	340.01	348.26	349.77	359.47	589.81	590.03	553.12	566.36	558.93	558.93	1,042.00	1,055.47	851.52	862.49	859.36	601.28	584.91	588.69	594.90	599.28	565.34	565.35	576.87	568.61	568.28	557.42	562.99	559.16	573.59	576.70
Pounds per Day	11.63	11.80	13.59	14.31	14.71	14.78	15.14	15.21	15.63	25.64	25.65	24.05	24.62	24.30	24.30	45.28	45.85	36.93	37.39	37.16	25.94	25.21	25.28	25.48	25.68	24.10	24.00	24.38	23.98	23.89	23.51	23.79	23.74	24.36	24.58
Yearly Maximums	4,649	4,948	5,236	5,482	6,195	6,912	7,424	7,938	8,447	8,689	8,684	8,683	8,725	8,758	8,764	8,771	8,305	7,819	7,533	7,228	6,932	6,890	6,876	6,865	7,224	7,645	8,101	8,304	8,483	8,667	8,601	8,529	8,455	8,394	8,105

Maximum Pounds per Day	45.85
Maximum Pounds per Hour [a]	4.58
Maximum Pounds per Month	1,055.47
Month with Maximum	17
Maximum Pounds per Year	8,771
Maximum Average Pounds per Hour [b]	1.00
Year with Maximum	Months 16 - 27
Tons per Year	4.39

Onsite and Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	57.55	58.70	60.58	73.81	79.47	79.95	83.65	84.16	92.54	79.40	79.09	80.92	89.15	85.17	84.56																				
Total (lbs/day)	2.50	2.55	2.63	3.21	3.46	3.48	3.64	3.66	4.02	3.45	3.44	3.52	3.88	3.70	3.68																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										22.45	23.26	24.79	26.82	26.96	27.57	28.18	28.18	58.42	58.42	74.44	74.44	73.42	74.18	70.70	70.70	70.70	70.70	70.70	68.98	68.62	65.16	64.09	61.28	70.04	70.04
Total (lbs/day)										0.98	1.01	1.08	1.17	1.17	1.20	1.23	1.23	2.54	2.54	3.24	3.24	3.19	3.23	3.07	3.07	3.07	3.07	3.07	3.00	2.98	2.83	2.79	2.66	3.05	3.05
Block 1 Construction																																			
Total (lbs/month)																99.15	102.99	89.18	97.89	71.48	55.19	57.17	58.22	63.74	64.96	64.25	64.70	71.02	65.67	62.73	63.03	65.16	65.52	53.79	55.22
Total (lbs/day)																4.31	4.48	3.88	4.26	3.11	2.40	2.49	2.53	2.77	2.82	2.79	2.81	3.09	2.86	2.73	2.74	2.83	2.85	2.34	2.40
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	57.55	58.70	60.58	73.81	79.47	79.95	83.65	84.16	92.54	101.85	102.35	105.71	115.97	112.13	112.13	127.33	131.17	147.60	156.32	145.91	129.62	130.59	132.41	134.44	135.66	134.96	135.41	141.73	134.65	131.35	128.19	129.25	126.80	123.84	125.26
Pounds per Day	2.50	2.55	2.63	3.21	3.46	3.48	3.64	3.66	4.02	4.43	4.45	4.60	5.04	4.88	4.88	5.54	5.70	6.42	6.80	6.34	5.64	5.68	5.76	5.85	5.90	5.87	5.89	6.16	5.85	5.71	5.57	5.62	5.51	5.38	5.45
Yearly Maximums	980	1,039	1,092	1,144	1,197	1,249	1,317	1,389	1,451	1,488	1,517	1,547	1,576	1,595	1,618	1,641	1,656	1,659	1,643	1,615	1,598	1,595	1,589	1,582	1,599	1,592	1,586	1,560	1,530	1,497	1,459	1,424	1,398	1,380	1,315

Maximum Pounds per Day	6.80
Maximum Pounds per Hour [a]	0.68
Maximum Pounds per Month	156.32
Month with Maximum	19
Maximum Pounds per Year	1,659
Maximum Average Pounds per Hour [b]	0.19
Year with Maximum	Months 18 - 29
Tons per Year	0.83

Onsite and Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)	23,754	23,754	27,642	27,642	27,642	27,642	27,642	27,642	27,642	27,642	27,642	23,754	23,754	23,754	23,754																				
Total (lbs/day)	1,033	1,033	1,202	1,202	1,202	1,202	1,202	1,202	1,202	1,202	1,202	1,033	1,033	1,033	1,033																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										28,52	28,52	28,52	28,52	28,52	28,52	28,52	28,52	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46	30,46
Total (lbs/day)										1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.24	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32
Block 1 Construction																																			
Total (lbs/month)																137.188	137.188	78.363	78.363	78.304	19.479	17.535	17.535	17.535	17.535	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647
Total (lbs/day)																5.965	5.965	3.407	3.407	3.405	0.847	0.762	0.762	0.762	0.762	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593
Block 2 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 1 & 2 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	23.75	23.75	27.64	27.64	27.64	27.64	27.64	27.64	27.64	56.16	56.16	52.27	52.27	52.27	52.27	165.71	165.71	108.83	108.83	108.77	49.94	48.00	48.00	48.00	48.00	44.11	44.11	44.11	44.11	44.11	44.11	44.11	44.11	44.11	44.11
Pounds per Day	1.03	1.03	1.20	1.20	1.20	1.20	1.20	1.20	1.20	2.44	2.44	2.27	2.27	2.27	2.27	7.20	7.20	4.73	4.73	4.73	2.17	2.09	2.09	2.09	2.09	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Yearly Maximums	406	434	463	487	625	763	845	926	1,007	1,029	1,021	1,013	1,009	1,004	996	988	866	745	680	615	551	545	541	537	602	705	811	859	905	951	938	923	908	894	867

Maximum Pounds per Day	7.20
Maximum Pounds per Hour [a]	0.72
Maximum Pounds per Month	165.71
Month with Maximum	16 or 17
Maximum Pounds per Year	1,029
Maximum Average Pounds per Hour [b]	0.12
Year with Maximum	Months 10 - 21
Tons per Year	0.51

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Pounds per Month	81.30	82.46	88.22	101.46	107.11	107.59	111.29	111.81	120.18	158.01	158.51	157.98	168.24	164.41	164.41	293.04	296.88	256.43	265.14	254.68	179.57	178.58	180.41	182.44	183.66	179.07	179.52	185.84	178.76	175.46	172.30	173.36	170.91	167.95	169.37
Pounds per Day	3.53	3.59	3.84	4.41	4.66	4.68	4.84	4.86	5.23	6.87	6.89	6.87	7.31	7.15	7.15	12.74	12.91	11.15	11.53	11.07	7.81	7.76	7.84	7.93	7.99	7.79	7.81	8.08	7.77	7.63	7.49	7.54	7.43	7.30	7.36
Yearly Maximums	1,386	1,473	1,555	1,631	1,823	2,012	2,161	2,315	2,458	2,517	2,538	2,560	2,584	2,600	2,614	2,629	2,522	2,404	2,323	2,230	2,149	2,140	2,130	2,119	2,201	2,297	2,397	2,419	2,435	2,448	2,397	2,347	2,307	2,273	2,182

Maximum Pounds per Day	12.91
Maximum Pounds per Hour [a]	1.291
Maximum Pounds per Month	296.88
Month with Maximum	17
Maximum Pounds per Year	2,629
Maximum Average Pounds per Hour [b]	0.300
Year with Maximum	Months 16 - 27
Tons per Year	1.31

Onsite and Offsite CO_2 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)	56.81	58.79	68.27	87.70	97.81	98.64	107.71	108.75	119.75	112.24	112.01	108.99	118.56	107.67	106.71																				
Total (metric tons/day)	2.47	2.56	2.97	3.81	4.25	4.29	4.68	4.73	5.21	4.88	4.87	4.74	5.15	4.68	4.64																				
Units 3 & 4 Demolition																																			
Total (lbs/month)										41.97	44.23	46.63	50.81	50.69	51.65	53.59	53.59	93.88	93.88	123.11	123.11	135.58	137.84	130.09	130.09	130.09	130.09	130.09	125.24	124.33	116.77	114.02	106.87	141.32	141.32
Total (lbs/day)										1.82	1.92	2.03	2.21	2.20	2.25	2.33	2.33	4.08	4.08	5.35	5.35	5.89	5.99	5.66	5.66	5.66	5.66	5.66	5.45	5.41	5.08	4.96	4.65	6.14	6.14
Block 1 Construction																																			
Total (metric tons/month)																107.03	113.25	106.17	123.40	97.12	81.91	98.75	101.90	113.83	115.74	113.82	116.01	130.19	121.57	114.56	114.89	117.62	116.40	99.43	101.66
Total (metric tons/day)																4.65	4.92	4.62	5.37	4.22	3.56	4.29	4.43	4.95	5.03	4.95	5.04	5.66	5.29	4.98	5.00	5.11	5.06	4.32	4.42
Block 2 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite and Offsite CO_2 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	56.81	58.79	68.27	87.70	97.81	98.64	107.71	108.75	119.75	154.21	156.24	155.61	169.36	158.36	158.36	160.62	166.84	200.05	217.28	220.24	205.02	234.33	239.74	243.91	245.83	243.91	246.09	260.28	246.81	238.89	231.65	231.64	223.26	240.75	242.98
Metric Tons per Day	2.47	2.56	2.97	3.81	4.25	4.29	4.68	4.73	5.21	6.70	6.79	6.77	7.36	6.89	6.89	6.98	7.25	8.70	9.45	9.58	8.91	10.19	10.42	10.60	10.69	10.60	10.70	11.32	10.73	10.39	10.07	10.07	9.71	10.47	10.56
Yearly Maximums	1,270	1,383	1,482	1,573	1,645	1,714	1,816	1,925	2,037	2,122	2,202	2,286	2,374	2,451	2,536	2,624	2,724	2,803	2,842	2,857	2,868	2,886	2,893	2,896	2,938	2,897	2,854	2,796	2,727	2,659	2,597	2,538	2,493	2,470	2,360

Maximum Metric Tons per Day	12.42
Maximum Metric Tons per Hour [a]	1.24
Maximum Metric Tons per Month	285.60
Month with Maximum	36
Maximum Metric Tons per Year	2,938
Maximum Average Metric Tons per Hour [b]	0.34
Year with Maximum	Months 25 - 36

Onsite and Offsite N_2O Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)	0.00142731	0.00144630	0.00167892	0.00215756	0.00229894	0.00230664	0.00234111	0.00234813	0.00261681	0.00241743	0.00241015	0.00237268	0.00263595	0.00260146	0.00259073																					
Total (metric tons/day)	0.00006206	0.00006288	0.00007300	0.00009381	0.00009995	0.00010029	0.00010179	0.00010209	0.00011377	0.00010511	0.00010479	0.00010316	0.00011461	0.00011311	0.00011264																					
Units 3 & 4 Demolition																																			
Total (lbs/month)										0.000833	0.000840	0.000866	0.000895	0.000900	0.000910	0.000913	0.000913	0.001835	0.001835	0.002426	0.002426	0.002693	0.002699	0.002502	0.002502	0.002502	0.002502	0.002502	0.002485	0.002481	0.002434	0.002422	0.002390	0.002788	0.002788
Total (lbs/day)										0.000036	0.000037	0.000038	0.000039	0.000039	0.000040	0.000040	0.000040	0.000080	0.000080	0.000105	0.000105	0.000117	0.000117	0.000109	0.000109	0.000109	0.000109	0.000109	0.000108	0.000108	0.000106	0.000105	0.000104	0.000121	0.000121
Block 1 Construction																																			
Total (metric tons/month)																0.00268688	0.00275265	0.00253014	0.00294058	0.00216399	0.00176740	0.00217166	0.00218087	0.00240772	0.00242918	0.00227152	0.00226999	0.00250477	0.00225229	0.00206494	0.00207118	0.00211221	0.00212977	0.00173587	0.00176091
Total (metric tons/day)																0.00011682	0.00011968	0.00011001	0.00012785	0.00009409	0.00007684	0.00009442	0.00009482	0.00010468	0.00010562	0.00009876	0.00009870	0.00010890	0.00009793	0.00008978	0.00009005	0.00009184	0.00009260	0.00007547	0.00007656
Block 2 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite and Offsite N_2O Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.00142731	0.00144630	0.00167892	0.00215756	0.00229894	0.00230664	0.00234111	0.00234813	0.00261681	0.00325046	0.00324979	0.00323915	0.00353051	0.00350097	0.00350097	0.00360017	0.00366593	0.00436506	0.00477550	0.00459034	0.00419376	0.00486439	0.00488022	0.00490961	0.00493107	0.00477340	0.00477188	0.00500665	0.00473735	0.00454601	0.00450501	0.00453405	0.00452024	0.00452369	0.00454873
Metric Tons per Day	0.00006206	0.00006288	0.00007300	0.00009381	0.00009995	0.00010029	0.00010179	0.00010209	0.00011377	0.00014132	0.00014130	0.00014083	0.00015350	0.00015222	0.00015222	0.00015653	0.00015939	0.00018979	0.00020763	0.00019958	0.00018234	0.00021150	0.00021218	0.00021346	0.00021439	0.00020754	0.00020747	0.00021768	0.00020597	0.00019765	0.00019587	0.00019713	0.00019653	0.00019668	0.00019777
Yearly Maximums	0.02836	0.03046	0.03252	0.03434	0.03578	0.03715	0.03921	0.04164	0.04389	0.04546	0.04708	0.04871	0.05038	0.05178	0.05305	0.05432	0.05573	0.05680	0.05698	0.05671	0.05665	0.05698	0.05664	0.05631	0.05694	0.05626	0.05574	0.05469	0.05344	0.05205	0.05077	0.04956	0.04864	0.04795	0.04579

Maximum Metric Tons per Day	0.000241
Maximum Metric Tons per Hour [a]	0.0000241
Maximum Metric Tons per Month	0.00554
Month with Maximum	36
Maximum Metric Tons per Year	0.05698
Maximum Average Metric Tons per Hour [b]	0.00000650
Year with Maximum	Months 19 - 30

Onsite and Offsite CH_4 Emissions

Construction Step	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)	0.0031823	0.0032695	0.0037973	0.0049271	0.0052644	0.0052994	0.0053762	0.0054037	0.0060261	0.0055702	0.0055290	0.0053470	0.0059224	0.0058724	0.0058208																					
Total (metric tons/day)	0.0001384	0.0001422	0.0001651	0.0002142	0.0002289	0.0002304	0.0002337	0.0002349	0.0002620	0.0002422	0.0002404	0.0002325	0.0002575	0.0002553	0.0002531																					
Units 3 & 4 Demolition																																			
Total (lbs/month)										0.001888	0.001895	0.002024	0.002134	0.002166	0.002217	0.002207	0.002207	0.004248	0.004248	0.005544	0.005544	0.006130	0.006137	0.005697	0.005697	0.005697	0.005697	0.005697	0.005666	0.005655	0.005477	0.005444	0.005357	0.006335	0.006335
Total (lbs/day)										0.000082	0.000082	0.000088	0.000093	0.000094	0.000096	0.000096	0.000096	0.000185	0.000185	0.000241	0.000241	0.000267	0.000267	0.000248	0.000248	0.000248	0.000248	0.000248	0.000246	0.000246	0.000238	0.000237	0.000233	0.000275	0.000275
Block 1 Construction																																			
Total (metric tons/month)																0.0059995	0.0063104	0.0058225	0.0067735	0.0051040	0.0042377	0.0051554	0.0051652	0.0057239	0.0058271	0.0055427	0.0055009	0.0060748	0.0055164	0.0051269	0.0051603	0.0053712	0.0054970	0.0046439	0.0047642
Total (metric tons/day)																0.0002608	0.0002744	0.0002532	0.0002945	0.0002219	0.0001842	0.0002241	0.0002246	0.0002489	0.0002534	0.0002410	0.0002392	0.0002641	0.0002398	0.0002229	0.0002244	0.0002335	0.0002390	0.0002019	0.0002071
Block 2 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite and Offsite CH_4 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.00318	0.00327	0.00380	0.00493	0.00526	0.00530	0.00538	0.00540	0.00603	0.00746	0.00742	0.00737	0.00806	0.00804	0.00804	0.00821	0.00852	0.01007	0.01102	0.01065	0.00978	0.01129	0.01130	0.01142	0.01152	0.01124	0.01120	0.01177	0.01118	0.01078	0.01064	0.01082	0.01085	0.01098	0.01110
Metric Tons per Day	0.00014	0.00014	0.00017	0.00021	0.00023	0.00023	0.00023	0.00023	0.00026	0.00032	0.00032	0.00032	0.00035	0.00035	0.00035	0.00036	0.00037	0.00044	0.00048	0.00046	0.00043	0.00049	0.00049	0.00050	0.00050	0.00049	0.00049	0.00051	0.00049	0.00047	0.00046	0.00047	0.00047	0.00048	0.00048
Yearly Maximums	0.06480	0.06967	0.07444	0.07868	0.08196	0.08522	0.08999	0.09563	0.10087	0.10463	0.10846	0.11234	0.11639	0.11985	0.12306	0.12621	0.12978	0.13244	0.13316	0.13277	0.13294	0.13401	0.13371	0.13350	0.13558	0.13466	0.13416	0.13259	0.13061	0.12839	0.12637	0.12469	0.12342	0.12260	0.11747

Maximum Metric Tons per Day	0.000587
Maximum Metric Tons per Hour [a]	0.0000587
Maximum Metric Tons per Month	0.01350
Month with Maximum	36
Maximum Metric Tons per Year	0.13558
Maximum Average Metric Tons per Hour [b]	0.0000155
Year with Maximum	Months 25 - 36

Notes:
[a] The hours per day are per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 10 hours/day
[b] The hours per year are assumed to allow operation 24 hours per day, 7 days per week despite the actual construction schedule per 'Manpower_Schedule_Huntington_Beach 03.13.12.xls': 8,760 hours/year

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite CO Emissions

	CO Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	1,185.17																																		
Total (lbs/day)	51.53																																		
Block 1 Construction																																			
Total (lbs/month)	703.61	671.11	648.80	664.38	585.18	594.61	550.90	547.49	689.46	681.61																									
Total (lbs/day)	30.59	29.18	28.21	28.89	25.44	25.85	23.95	23.80	29.98	29.64																									
Block 2 Construction																																			
Total (lbs/month)	520.95	1,349.65	1,377.62	1,085.41	1,188.69	987.35	847.74	868.37	879.59	939.02	922.11	956.89	1,105.29	1,069.35	898.84	894.57	893.62	890.71	819.68	686.09	648.15	631.09	626.82	551.44	501.41	357.02	544.01	539.74							
Total (lbs/day)	22.65	58.68	59.90	47.19	51.68	42.93	36.86	37.76	38.24	40.83	40.09	41.60	48.06	46.49	39.08	38.89	38.85	38.73	35.64	29.83	28.18	27.44	27.25	23.98	21.80	15.52	23.65	23.47							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																683.95	688.08	892.52	910.81
Total (lbs/day)																																29.74	29.92	38.81	39.60
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite CO Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**2,409.72**	**2,020.76**	**2,026.42**	**1,749.79**	**1,773.87**	**1,581.96**	**1,398.64**	**1,415.86**	**1,569.06**	**1,620.63**	**922.11**	**956.89**	**1,105.29**	**1,069.35**	**898.84**	**894.57**	**893.62**	**890.71**	**819.68**	**686.09**	**648.15**	**631.09**	**626.82**	**551.44**	**501.41**	**357.02**	**544.01**	**539.74**	**0.00**	**0.00**	**0.00**	**683.95**	**688.08**	**892.52**	**910.81**
Pounds per Day	**104.77**	**87.86**	**88.11**	**76.08**	**77.12**	**68.78**	**60.81**	**61.56**	**68.22**	**70.46**	**40.09**	**41.60**	**48.06**	**46.49**	**39.08**	**38.89**	**38.85**	**38.73**	**35.64**	**29.83**	**28.18**	**27.44**	**27.25**	**23.98**	**21.80**	**15.52**	**23.65**	**23.47**	**0.00**	**0.00**	**0.00**	**29.74**	**29.92**	**38.81**	**39.60**
Yearly Maximums	**19,446**	**18,141**	**17,190**	**16,062**	**15,207**	**14,327**	**13,636**	**13,057**	**12,327**	**11,406**	**10,416**	**10,121**	**9,716**	**9,112**	**8,399**	**8,045**	**7,690**	**6,796**	**5,905**	**5,086**	**5,084**	**5,124**	**5,385**	**5,669**	**6,161**	**6,711**	**7,370**	**7,842**	**8,327**	**9,351**	**10,535**	**12,054**	**12,895**	**13,775**	**14,395**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite VOC Emissions

	VOC Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	208.59																																		
Total (lbs/day)	9.07																																		
Block 1 Construction																																			
Total (lbs/month)	96.24	86.85	83.51	83.10	56.66	56.85	50.22	48.71	81.07	80.91																									
Total (lbs/day)	4.18	3.78	3.63	3.61	2.46	2.47	2.18	2.12	3.52	3.52																									
Block 2 Construction																																			
Total (lbs/month)	83.18	204.54	205.21	154.11	178.21	146.37	136.71	135.55	137.01	150.76	141.67	141.07	165.84	154.39	126.05	125.34	124.18	123.50	100.74	82.61	76.40	73.57	72.86	71.58	70.09	45.19	74.62	73.91							
Total (lbs/day)	3.62	8.89	8.92	6.70	7.75	6.36	5.94	5.89	5.96	6.55	6.16	6.13	7.21	6.71	5.48	5.45	5.40	5.37	4.38	3.59	3.32	3.20	3.17	3.11	3.05	1.96	3.24	3.21							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																107.25	107.92	127.64	128.53
Total (lbs/day)																																4.66	4.69	5.55	5.59
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite VOC Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**388.00**	**291.39**	**288.72**	**237.21**	**234.87**	**203.22**	**186.94**	**184.26**	**218.08**	**231.68**	**141.67**	**141.07**	**165.84**	**154.39**	**126.05**	**125.34**	**124.18**	**123.50**	**100.74**	**82.61**	**76.40**	**73.57**	**72.86**	**71.58**	**70.09**	**45.19**	**74.62**	**73.91**	**0.00**	**0.00**	**0.00**	**107.25**	**107.92**	**127.64**	**128.53**
Pounds per Day	**16.87**	**12.67**	**12.55**	**10.31**	**10.21**	**8.84**	**8.13**	**8.01**	**9.48**	**10.07**	**6.16**	**6.13**	**7.21**	**6.71**	**5.48**	**5.45**	**5.40**	**5.37**	**4.38**	**3.59**	**3.32**	**3.20**	**3.17**	**3.11**	**3.05**	**1.96**	**3.24**	**3.21**	**0.00**	**0.00**	**0.00**	**4.66**	**4.69**	**5.55**	**5.59**
Yearly Maximums	**2,747**	**2,525**	**2,388**	**2,225**	**2,113**	**2,003**	**1,923**	**1,837**	**1,735**	**1,593**	**1,435**	**1,367**	**1,297**	**1,201**	**1,092**	**1,041**	**989**	**865**	**742**	**641**	**665**	**697**	**751**	**807**	**877**	**949**	**1,036**	**1,094**	**1,154**	**1,288**	**1,438**	**1,631**	**1,717**	**1,814**	**1,884**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite NOx Emissions

	NOx Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	1,266.76																																		
Total (lbs/day)	55.08																																		
Block 1 Construction																																			
Total (lbs/month)	598.95	548.37	503.03	493.25	308.25	309.00	271.88	249.57	435.37	434.74																									
Total (lbs/day)	26.04	23.84	21.87	21.45	13.40	13.43	11.82	10.85	18.93	18.90																									
Block 2 Construction																																			
Total (lbs/month)	513.94	1,280.25	1,285.61	993.84	1,183.42	980.75	968.82	947.98	971.04	1,093.63	934.80	925.59	1,098.27	1,019.62	842.73	832.49	814.63	804.51	649.25	526.90	509.44	468.49	410.53	404.60	391.76	237.93	402.46	393.22							
Total (lbs/day)	22.35	55.66	55.90	43.21	51.45	42.64	42.12	41.22	42.22	47.55	40.64	40.24	47.75	44.33	36.64	36.20	35.42	34.98	28.23	22.91	22.15	20.37	17.85	17.59	17.03	10.34	17.50	17.10							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																679.80	689.77	797.17	716.29
Total (lbs/day)																																29.56	29.99	34.66	31.14
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite NOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**2,379.66**	**1,828.61**	**1,788.65**	**1,487.09**	**1,491.67**	**1,289.74**	**1,240.70**	**1,197.56**	**1,406.41**	**1,528.37**	**934.80**	**925.59**	**1,098.27**	**1,019.62**	**842.73**	**832.49**	**814.63**	**804.51**	**649.25**	**526.90**	**509.44**	**468.49**	**410.53**	**404.60**	**391.76**	**237.93**	**402.46**	**393.22**	**0.00**	**0.00**	**0.00**	**679.80**	**689.77**	**797.17**	**716.29**
Pounds per Day	**103.46**	**79.50**	**77.77**	**64.66**	**64.86**	**56.08**	**53.94**	**52.07**	**61.15**	**66.45**	**40.64**	**40.24**	**47.75**	**44.33**	**36.64**	**36.20**	**35.42**	**34.98**	**28.23**	**22.91**	**22.15**	**20.37**	**17.85**	**17.59**	**17.03**	**10.34**	**17.50**	**17.10**	**0.00**	**0.00**	**0.00**	**29.56**	**29.99**	**34.66**	**31.14**
Yearly Maximums	**17,499**	**16,217**	**15,408**	**14,463**	**13,808**	**13,131**	**12,646**	**12,054**	**11,384**	**10,487**	**9,427**	**8,902**	**8,381**	**7,675**	**6,893**	**6,453**	**6,014**	**5,199**	**4,395**	**3,745**	**3,898**	**4,079**	**4,407**	**4,713**	**5,088**	**5,476**	**5,962**	**6,283**	**6,631**	**7,372**	**8,234**	**9,366**	**9,825**	**10,355**	**10,738**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite SOx Emissions

	SOx Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	3.11																																		
Total (lbs/day)	0.14																																		
Block 1 Construction																																			
Total (lbs/month)	2.0600	2.0274	1.8486	1.8548	1.4991	1.5221	1.4531	1.3811	1.5924	1.5733																									
Total (lbs/day)	0.0896	0.0881	0.0804	0.0806	0.0652	0.0662	0.0632	0.0600	0.0692	0.0684																									
Block 2 Construction																																			
Total (lbs/month)	1.1157	2.5349	2.6155	2.3151	2.7509	2.4446	2.4575	2.4465	2.5410	2.8588	2.8535	2.9084	3.4587	3.2994	2.8583	2.8146	2.7537	2.7136	2.4036	2.0616	2.1140	1.9392	1.8955	1.6962	1.5315	0.9943	1.3502	1.3065							
Total (lbs/day)	0.0485	0.1102	0.1137	0.1007	0.1196	0.1063	0.1068	0.1064	0.1105	0.1243	0.1241	0.1265	0.1504	0.1435	0.1243	0.1224	0.1197	0.1180	0.1045	0.0896	0.0919	0.0843	0.0824	0.0737	0.0666	0.0432	0.0587	0.0568							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																1.8701	1.9173	2.3041	2.3939
Total (lbs/day)																																0.0813	0.0834	0.1002	0.1041
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite SOx Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**6.2828**	**4.5623**	**4.4642**	**4.1698**	**4.2501**	**3.9668**	**3.9106**	**3.8276**	**4.1335**	**4.4321**	**2.8535**	**2.9084**	**3.4587**	**3.2994**	**2.8583**	**2.8146**	**2.7537**	**2.7136**	**2.4036**	**2.0616**	**2.1140**	**1.9392**	**1.8955**	**1.6962**	**1.5315**	**0.9943**	**1.3502**	**1.3065**	**0.0000**	**0.0000**	**0.0000**	**1.8701**	**1.9173**	**2.3041**	**2.3939**
Pounds per Day	**0.2732**	**0.1984**	**0.1941**	**0.1813**	**0.1848**	**0.1725**	**0.1700**	**0.1664**	**0.1797**	**0.1927**	**0.1241**	**0.1265**	**0.1504**	**0.1435**	**0.1243**	**0.1224**	**0.1197**	**0.1180**	**0.1045**	**0.0896**	**0.0919**	**0.0843**	**0.0824**	**0.0737**	**0.0666**	**0.0432**	**0.0587**	**0.0568**	**0.0000**	**0.0000**	**0.0000**	**0.0813**	**0.0834**	**0.1002**	**0.1041**
Yearly Maximums	**50**	**47**	**46**	**44**	**43**	**41**	**40**	**38**	**37**	**35**	**32**	**31**	**30**	**28**	**26**	**24**	**23**	**20**	**17**	**15**	**15**	**15**	**15**	**15**	**16**	**17**	**19**	**20**	**21**	**24**	**27**	**31**	**33**	**35**	**36**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite Exhaust PM_{10} Emissions

	Exhaust PM_{10} Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	93.78																																		
Total (lbs/day)	4.08																																		
Block 1 Construction																																			
Total (lbs/month)	105.95	106.45	100.14	103.46	97.11	99.30	96.99	95.60	96.40	94.57																									
Total (lbs/day)	4.14	4.16	4.13	4.34	4.06	4.16	4.06	4.12	4.16	4.08																									
Block 2 Construction																																			
Total (lbs/month)	43.27	96.61	104.21	90.43	104.40	98.42	91.73	96.87	100.45	110.19	107.82	117.18	142.68	140.41	132.14	130.75	130.07	129.04	124.77	113.03	113.79	108.22	104.55	84.11	70.34	46.63	55.83	54.46							
Total (lbs/day)	1.88	4.20	4.53	3.93	4.54	4.28	3.99	4.21	4.37	4.79	4.69	5.09	6.20	6.10	5.75	5.68	5.66	5.61	5.42	4.91	4.95	4.71	4.55	3.66	3.06	2.03	2.43	2.37							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																40.19	41.66	52.39	53.35
Total (lbs/day)																																1.75	1.81	2.28	2.32
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	**243.00**	**203.06**	**204.35**	**193.89**	**201.51**	**197.72**	**188.72**	**192.47**	**196.85**	**204.76**	**107.82**	**117.18**	**142.68**	**140.41**	**132.14**	**130.75**	**130.07**	**129.04**	**124.77**	**113.03**	**113.79**	**108.22**	**104.55**	**84.11**	**70.34**	**46.63**	**55.83**	**54.46**	**0.00**	**0.00**	**0.00**	**40.19**	**41.66**	**52.39**	**53.35**
Pounds per Day	**10.10**	**8.36**	**8.66**	**8.27**	**8.60**	**8.44**	**8.05**	**8.33**	**8.52**	**8.87**	**4.69**	**5.09**	**6.20**	**6.10**	**5.75**	**5.68**	**5.66**	**5.61**	**5.42**	**4.91**	**4.95**	**4.71**	**4.55**	**3.66**	**3.06**	**2.03**	**2.43**	**2.37**	**0.00**	**0.00**	**0.00**	**1.75**	**1.81**	**2.28**	**2.32**
Yearly Maximums	**2,251**	**2,151**	**2,088**	**2,016**	**1,953**	**1,882**	**1,813**	**1,749**	**1,670**	**1,586**	**1,490**	**1,487**	**1,454**	**1,381**	**1,287**	**1,211**	**1,135**	**1,005**	**876**	**751**	**678**	**606**	**550**	**499**	**472**	**462**	**474**	**476**	**483**	**544**	**628**	**735**	**804**	**875**	**934**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite Fugitive PM_{10} Emissions

	Fugitive PM_{10} Emissions by Month																																		
Construction Step	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	234.19																																		
Total (lbs/day)	10.18																																		
Block 1 Construction																																			
Total (lbs/month)	136.44	136.44	136.44	136.44	117.00	117.00	117.00	117.00	117.55	117.55																									
Total (lbs/day)	5.93	5.93	5.93	5.93	5.09	5.09	5.09	5.09	5.11	5.11																									
Block 2 Construction																																			
Total (lbs/month)	340.67	680.72	680.72	437.88	437.88	437.60	194.76	175.32	175.32	175.32	175.32	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	136.44	117.00	117.27	117.27							
Total (lbs/day)	14.81	29.60	29.60	19.04	19.04	19.03	8.47	7.62	7.62	7.62	7.62	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.93	5.09	5.10	5.10							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																261.17	261.17	261.17	261.17
Total (lbs/day)																																11.36	11.36	11.36	11.36
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	**711.30**	**817.16**	**817.16**	**574.31**	**554.87**	**554.60**	**311.76**	**292.32**	**292.87**	**292.87**	**175.32**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**136.44**	**117.00**	**117.27**	**117.27**	**0.00**	**0.00**	**0.00**	**261.17**	**261.17**	**261.17**	**261.17**
Pounds per Day	**30.93**	**35.53**	**35.53**	**24.97**	**24.12**	**24.11**	**13.55**	**12.71**	**12.73**	**12.73**	**7.62**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.93**	**5.09**	**5.10**	**5.10**	**0.00**	**0.00**	**0.00**	**11.36**	**11.36**	**11.36**	**11.36**
Yearly Maximums	**5,531**	**4,956**	**4,275**	**3,595**	**3,157**	**2,738**	**2,320**	**2,145**	**1,989**	**1,833**	**1,676**	**1,637**	**1,637**	**1,637**	**1,618**	**1,599**	**1,579**	**1,443**	**1,307**	**1,170**	**1,295**	**1,420**	**1,544**	**1,669**	**1,794**	**1,919**	**2,063**	**2,207**	**2,351**	**2,612**	**2,951**	**3,552**	**3,892**	**4,233**	**4,553**
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite PM_{10} Emissions (Ex

	Total PM_{10} Emissions by Month																																		
Parameter	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Pounds per Month	954.30	1,020.22	1,021.51	768.21	756.39	752.32	500.48	484.78	489.72	497.64	283.14	253.62	279.12	276.85	268.58	267.19	266.50	265.48	261.21	249.47	250.23	244.66	240.99	220.55	206.78	163.63	173.10	171.73	0.00	0.00	0.00	301.36	302.83	313.57	314.53
Pounds per Day	41.03	43.89	44.19	33.24	32.73	32.55	21.60	21.04	21.26	21.60	12.31	11.03	12.14	12.04	11.68	11.62	11.59	11.54	11.36	10.85	10.88	10.64	10.48	9.59	8.99	7.11	7.53	7.47	0.00	0.00	0.00	13.10	13.17	13.63	13.68
Yearly Maximums	7,782	7,107	6,364	5,611	5,110	4,620	4,133	3,894	3,659	3,419	3,166	3,124	3,091	3,018	2,905	2,810	2,714	2,448	2,182	1,921	1,973	2,026	2,095	2,168	2,266	2,381	2,536	2,683	2,833	3,156	3,579	4,287	4,696	5,108	5,487
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite Exhaust $PM_{2.5}$ Emissions

	Exhaust $PM_{2.5}$ Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	70.04																																		
Total (lbs/day)	3.05																																		
Block 1 Construction																																			
Total (lbs/month)	48.47	45.81	42.98	43.64	37.30	37.91	35.60	34.67	43.36	42.85																									
Total (lbs/day)	2.11	1.99	1.87	1.90	1.62	1.65	1.55	1.51	1.89	1.86																									
Block 2 Construction																																			
Total (lbs/month)	33.24	83.40	85.59	65.78	74.29	64.31	57.50	58.37	59.92	65.61	59.18	61.53	72.77	70.19	62.50	61.89	61.30	60.79	55.74	47.67	46.08	43.64	40.86	35.14	31.05	20.74	30.24	29.62							
Total (lbs/day)	1.45	3.63	3.72	2.86	3.23	2.80	2.50	2.54	2.61	2.85	2.57	2.68	3.16	3.05	2.72	2.69	2.67	2.64	2.42	2.07	2.00	1.90	1.78	1.53	1.35	0.90	1.31	1.29							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																33.58	34.24	41.03	38.04
Total (lbs/day)																																1.46	1.49	1.78	1.65
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																																			
Pounds per Month	151.75	129.22	128.57	109.42	111.60	102.22	93.10	93.04	103.28	108.46	59.18	61.53	72.77	70.19	62.50	61.89	61.30	60.79	55.74	47.67	46.08	43.64	40.86	35.14	31.05	20.74	30.24	29.62	0.00	0.00	0.00	33.58	34.24	41.03	38.04
Pounds per Day	6.60	5.62	5.59	4.76	4.85	4.44	4.05	4.05	4.49	4.72	2.57	2.68	3.16	3.05	2.72	2.69	2.67	2.64	2.42	2.07	2.00	1.90	1.78	1.53	1.35	0.90	1.31	1.29	0.00	0.00	0.00	1.46	1.49	1.78	1.65
Yearly Maximums	1,251	1,172	1,113	1,047	1,000	949	908	871	825	768	703	685	659	617	567	535	503	442	381	325	311	299	297	294	300	311	331	341	353	394	447	518	556	596	627
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite Fugitive $PM_{2.5}$ Emissions

	Fugitive $PM_{2.5}$ Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	30.46																																		
Total (lbs/day)	1.32																																		
Block 1 Construction																																			
Total (lbs/month)	13.647	13.647	13.647	13.647	11.703	11.703	11.703	11.703	11.762	11.762																									
Total (lbs/day)	0.593	0.593	0.593	0.593	0.509	0.509	0.509	0.509	0.511	0.511																									
Block 2 Construction																																			
Total (lbs/month)	68.613	137.158	137.158	78.333	78.333	78.304	19.479	17.535	17.535	17.535	17.535	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	13.647	11.703	11.732	11.732							
Total (lbs/day)	2.983	5.963	5.963	3.406	3.406	3.405	0.847	0.762	0.762	0.762	0.762	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.593	0.509	0.510	0.510							
Units 1 & 2 Demolition																																			
Total (lbs/month)																																34.550	34.550	34.550	34.550
Total (lbs/day)																																1.502	1.502	1.502	1.502
Bldgs. 33 & 34 Construction																																			
Total (lbs/month)																																			
Total (lbs/day)																																			
Total Onsite and Offsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																																			
Pounds per Month	112.72	150.80	150.80	91.98	90.04	90.01	31.18	29.24	29.30	29.30	17.53	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	13.65	11.70	11.73	11.73	0.00	0.00	0.00	34.55	34.55	34.55	34.55
Pounds per Day	4.90	6.56	6.56	4.00	3.91	3.91	1.36	1.27	1.27	1.27	0.76	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.51	0.51	0.51	0.00	0.00	0.00	1.50	1.50	1.50	1.50
Yearly Maximums	837	737	600	463	385	308	232	215	199	183	168	164	164	164	162	160	158	144	131	117	138	159	180	201	222	242	265	288	311	345	388	491	560	628	695
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

	Total $PM_{2.5}$ Emissions by Month																																		
Parameter	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Pounds per Month	264.48	280.02	279.38	201.40	201.63	192.23	124.28	122.28	132.57	137.76	76.72	75.17	86.42	83.83	76.15	75.54	74.95	74.44	69.39	61.31	59.73	57.28	54.51	48.78	44.69	32.44	41.97	41.36	0.00	0.00	0.00	68.13	68.79	75.58	72.59
Pounds per Day	11.50	12.17	12.15	8.76	8.77	8.36	5.40	5.32	5.76	5.99	3.34	3.27	3.76	3.64	3.31	3.28	3.26	3.24	3.02	2.67	2.60	2.49	2.37	2.12	1.94	1.41	1.82	1.80	0.00	0.00	0.00	2.96	2.99	3.29	3.16
Yearly Maximums	2,088	1,910	1,714	1,510	1,385	1,258	1,140	1,085	1,024	951	871	849	822	781	729	695	661	586	511	442	449	458	476	494	522	554	596	629	664	740	835	1,009	1,115	1,224	1,322
Maximum Pounds per Day																																			
Maximum Pounds per Hour [a]																																			
Maximum Pounds per Month																																			
Month with Maximum																																			
Maximum Pounds per Year																																			
Maximum Average Pounds per Hour [b]																																			
Year with Maximum																																			
Tons per Year																																			

Onsite and Offsite CO_2 Emissions

	CO_2 Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	141.32																																		
Total (lbs/day)	6.14																																		
Block 1 Construction																																			
Total (metric tons/month)	92.56	91.01	82.48	82.45	66.86	67.81	64.77	61.21	70.84	70.04																									
Total (metric tons/day)	4.02	3.96	3.59	3.58	2.91	2.95	2.82	2.66	3.08	3.05																									
Block 2 Construction																																			
Total (metric tons/month)	51.72	114.39	118.02	105.52	124.74	111.44	111.98	111.19	115.71	130.13	130.56	132.85	157.16	150.24	130.72	128.62	125.64	123.70	110.29	94.69	97.51	89.12	87.02	78.11	70.60	46.89	62.76	60.66							
Total (metric tons/day)	2.25	4.97	5.13	4.59	5.42	4.85	4.87	4.83	5.03	5.66	5.68	5.78	6.83	6.53	5.68	5.59	5.46	5.38	4.80	4.12	4.24	3.87	3.78	3.40	3.07	2.04	2.73	2.64							
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																85.42	87.68	104.75	108.92
Total (metric tons/day)																																3.71	3.81	4.55	4.74
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite and Offsite CO_2 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	285.60	205.40	200.50	187.98	191.59	179.25	176.75	172.40	186.55	200.17	130.56	132.85	157.16	150.24	130.72	128.62	125.64	123.70	110.29	94.69	97.51	89.12	87.02	78.11	70.60	46.89	62.76	60.66	0.00	0.00	0.00	85.42	87.68	104.75	108.92
Metric Tons per Day	12.42	8.93	8.72	8.17	8.33	7.79	7.68	7.50	8.11	8.70	5.68	5.78	6.83	6.53	5.68	5.59	5.46	5.38	4.80	4.12	4.24	3.87	3.78	3.40	3.07	2.04	2.73	2.64	0.00	0.00	0.00	3.71	3.81	4.55	4.74
Yearly Maximums	2,250	2,121	2,066	1,996	1,937	1,871	1,815	1,749	1,671	1,582	1,471	1,428	1,373	1,286	1,183	1,115	1,047	921	798	687	678	668	684	706	747	796	863	915	973	1,091	1,225	1,385	1,461	1,547	1,613
Maximum Metric Tons per Day																																			
Maximum Metric Tons per Hour [a]																																			
Maximum Metric Tons per Month																																			
Month with Maximum																																			
Maximum Metric Tons per Year																																			
Maximum Average Metric Tons per Hour [b]																																			
Year with Maximum																																			

Onsite and Offsite N_2O Emissions

	N_2O Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	0.002788																																		
Total (lbs/day)	0.000121																																		
Block 1 Construction																																			
Total (metric tons/month)	0.00154598	0.00147897	0.00145147	0.00146858	0.00107355	0.00108428	0.00100666	0.00100154	0.00131506	0.00130612																									
Total (metric tons/day)	0.00006722	0.00006430	0.00006311	0.00006385	0.00004668	0.00004714	0.00004377	0.00004355	0.00005718	0.00005679																									
Block 2 Construction																																			
Total (metric tons/month)	0.00120803	0.00276929	0.00280627	0.00225249	0.00268471	0.00226572	0.00225818	0.00228514	0.00230099	0.00252851	0.00236030	0.00240698	0.00289909	0.00270409	0.00224228	0.00223614	0.00223404	0.00222969	0.00184091	0.00159680	0.00152674	0.00150219	0.00149605	0.00139590	0.00132895	0.00084271	0.00120851	0.00120237							
Total (metric tons/day)	0.00005252	0.00012040	0.00012201	0.00009793	0.00011673	0.00009851	0.00009818	0.00009935	0.00010004	0.00010994	0.00010262	0.00010465	0.00012605	0.00011757	0.00009749	0.00009722	0.00009713	0.00009694	0.00008004	0.00006943	0.00006638	0.00006531	0.00006505	0.00006069	0.00005778	0.00003664	0.00005254	0.00005228							
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																0.00193761	0.00194424	0.00234517	0.00237326
Total (metric tons/day)																																0.00008424	0.00008453	0.00010196	0.00010319
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite and Offsite N_2O Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.00554183	0.00424826	0.00425774	0.00372107	0.00375827	0.00335000	0.00326484	0.00328668	0.00361605	0.00383462	0.00236030	0.00240698	0.00289909	0.00270409	0.00224228	0.00223614	0.00223404	0.00222969	0.00184091	0.00159680	0.00152674	0.00150219	0.00149605	0.00139590	0.00132895	0.00084271	0.00120851	0.00120237	0.00000000	0.00000000	0.00000000	0.00193761	0.00194424	0.00234517	0.00237326
Metric Tons per Day	0.00024095	0.00018471	0.00018512	0.00016179	0.00016340	0.00014565	0.00014195	0.00014290	0.00015722	0.00016672	0.00010262	0.00010465	0.00012605	0.00011757	0.00009749	0.00009722	0.00009713	0.00009694	0.00008004	0.00006943	0.00006638	0.00006531	0.00006505	0.00006069	0.00005778	0.00003664	0.00005254	0.00005228	0.00000000	0.00000000	0.00000000	0.00008424	0.00008453	0.00010196	0.00010319
Yearly Maximums	0.04365	0.04100	0.03946	0.03744	0.03596	0.03444	0.03331	0.03189	0.03020	0.02811	0.02578	0.02492	0.02390	0.02233	0.02047	0.01944	0.01840	0.01617	0.01394	0.01210	0.01244	0.01286	0.01370	0.01458	0.01582	0.01714	0.01875	0.02000	0.02126	0.02373	0.02647	0.02984	0.03128	0.03291	0.03405
Maximum Metric Tons per Day																																			
Maximum Metric Tons per Hour [a]																																			
Maximum Metric Tons per Month																																			
Month with Maximum																																			
Maximum Metric Tons per Year																																			
Maximum Average Metric Tons per Hour [b]																																			
Year with Maximum																																			

Onsite and Offsite CH_4 Emissions

	CH_4 Emissions by Month																																		
Construction Step	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Peaker and Tank Area and Stack 3&4 Demolition																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Units 3 & 4 Demolition																																			
Total (lbs/month)	0.006335																																		
Total (lbs/day)	0.000275																																		
Block 1 Construction																																			
Total (metric tons/month)	0.0043021	0.0042079	0.0041653	0.0042705	0.0033894	0.0034410	0.0032678	0.0032892	0.0038504	0.0038074																									
Total (metric tons/day)	0.0001870	0.0001830	0.0001811	0.0001857	0.0001474	0.0001496	0.0001421	0.0001430	0.0001674	0.0001655																									
Block 2 Construction																																			
Total (metric tons/month)	0.0028622	0.0064000	0.0065731	0.0053516	0.0064061	0.0055186	0.0054936	0.0056695	0.0056997	0.0062257	0.0058431	0.0060935	0.0074392	0.0070014	0.0059766	0.0059700	0.0060013	0.0060033	0.0051289	0.0045828	0.0044050	0.0043790	0.0043724	0.0038911	0.0035924	0.0022730	0.0030634	0.0030569							
Total (metric tons/day)	0.0001244	0.0002783	0.0002858	0.0002327	0.0002785	0.0002399	0.0002389	0.0002465	0.0002478	0.0002707	0.0002540	0.0002649	0.0003234	0.0003044	0.0002599	0.0002596	0.0002609	0.0002610	0.0002230	0.0001993	0.0001915	0.0001904	0.0001901	0.0001692	0.0001562	0.0000988	0.0001332	0.0001329							
Units 1 & 2 Demolition																																			
Total (metric tons/month)																																0.0043517	0.0043587	0.0053222	0.0054323
Total (metric tons/day)																																0.0001892	0.0001895	0.0002314	0.0002362
Bldgs. 33 & 34 Construction																																			
Total (metric tons/month)																																			
Total (metric tons/day)																																			
Total Onsite and Offsite CH_4 Emissions (Construction Equipment and Vehicles)																																			
Metric Tons per Month	0.01350	0.01061	0.01074	0.00962	0.00980	0.00896	0.00876	0.00896	0.00955	0.01003	0.00584	0.00609	0.00744	0.00700	0.00598	0.00597	0.00600	0.00600	0.00513	0.00458	0.00441	0.00438	0.00437	0.00389	0.00359	0.00227	0.00306	0.00306	0.00000	0.00000	0.00000	0.00435	0.00436	0.00532	0.00543
Metric Tons per Day	0.00059	0.00046	0.00047	0.00042	0.00043	0.00039	0.00038	0.00039	0.00042	0.00044	0.00025	0.00026	0.00032	0.00030	0.00026	0.00026	0.00026	0.00026	0.00022	0.00020	0.00019	0.00019	0.00019	0.00017	0.00016	0.00010	0.00013	0.00013	0.00000	0.00000	0.00000	0.00019	0.00019	0.00023	0.00024
Yearly Maximums	0.11246	0.10640	0.10280	0.09803	0.09438	0.09059	0.08763	0.08400	0.07962	0.07448	0.06882	0.06735	0.06515	0.06130	0.05658	0.05366	0.05075	0.04475	0.03874	0.03362	0.03338	0.03334	0.03428	0.03534	0.03749	0.04000	0.04337	0.04595	0.04855	0.05421	0.06063	0.06848	0.07200	0.07597	0.07873
Maximum Metric Tons per Day																																			
Maximum Metric Tons per Hour [a]																																			
Maximum Metric Tons per Month																																			
Month with Maximum																																			
Maximum Metric Tons per Year																																			
Maximum Average Metric Tons per Hour [b]																																			
Year with Maximum																																			

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Be
[b] The hours per year are assumed to allow operation 24 hours per

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite CO Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	1,043.79	1,050.86	1,016.20	1,016.20	1,024.47	1,024.47	1,036.88	1,036.88	1,041.01	1,045.15	1,045.15	1,045.15	1,131.84	1,131.84	1,131.84	1,112.94	1,110.38	1,079.70	1,072.03	1,060.01
Total (lbs/day)	45.38	45.69	44.18	44.18	44.54	44.54	45.08	45.08	45.26	45.44	45.44	45.44	49.21	49.21	49.21	48.39	48.28	46.94	46.61	46.09
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							147.13	482.16	483.86	522.42	467.25	462.70	155.63	156.22	162.88	170.66	157.33	175.11	171.77	87.33
Total (lbs/day)							6.40	20.96	21.04	22.71	20.32	20.12	6.77	6.79	7.08	7.42	6.84	7.61	7.47	3.80
Total Onsite and Offsite CO Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**1,043.79**	**1,050.86**	**1,016.20**	**1,016.20**	**1,024.47**	**1,024.47**	**1,184.01**	**1,519.04**	**1,524.87**	**1,567.56**	**1,512.39**	**1,507.84**	**1,287.47**	**1,288.06**	**1,294.72**	**1,283.60**	**1,267.71**	**1,254.81**	**1,243.80**	**1,147.34**
Pounds per Day	**45.38**	**45.69**	**44.18**	**44.18**	**44.54**	**44.54**	**51.48**	**66.05**	**66.30**	**68.15**	**65.76**	**65.56**	**55.98**	**56.00**	**56.29**	**55.81**	**55.12**	**54.56**	**54.08**	**49.88**
Yearly Maximums	**14,992**	**15,235**	**15,473**	**15,751**	**16,019**	**16,262**	**16,492**	**16,552**	**16,180**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Onsite and Offsite VOC Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	142.08	142.19	132.33	132.33	133.67	133.67	135.69	135.69	136.36	137.04	137.04	137.04	154.63	154.63	154.63	151.91	151.66	149.96	149.24	148.62
Total (lbs/day)	6.18	6.18	5.75	5.75	5.81	5.81	5.90	5.90	5.93	5.96	5.96	5.96	6.72	6.72	6.72	6.60	6.59	6.52	6.49	6.46
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							14.37	57.30	57.25	67.61	61.18	59.96	18.11	18.04	18.15	18.27	18.06	18.34	18.28	16.97
Total (lbs/day)							0.62	2.49	2.49	2.94	2.66	2.61	0.79	0.78	0.79	0.79	0.79	0.80	0.79	0.74
Total Onsite and Offsite VOC Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**142.08**	**142.19**	**132.33**	**132.33**	**133.67**	**133.67**	**150.06**	**193.00**	**193.62**	**204.65**	**198.21**	**196.99**	**172.74**	**172.67**	**172.78**	**170.17**	**169.72**	**168.30**	**167.52**	**165.59**
Pounds per Day	**6.18**	**6.18**	**5.75**	**5.75**	**5.81**	**5.81**	**6.52**	**8.39**	**8.42**	**8.90**	**8.62**	**8.56**	**7.51**	**7.51**	**7.51**	**7.40**	**7.38**	**7.32**	**7.28**	**7.20**
Yearly Maximums	**1,953**	**1,983**	**2,014**	**2,054**	**2,092**	**2,128**	**2,163**	**2,180**	**2,153**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Onsite and Offsite NOx Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	779.63	780.22	723.30	723.30	741.38	741.38	768.51	768.51	777.56	786.60	786.60	712.80	809.51	809.51	809.51	775.75	772.63	749.14	739.78	731.51
Total (lbs/day)	33.90	33.92	31.45	31.45	32.23	32.23	33.41	33.41	33.81	34.20	34.20	30.99	35.20	35.20	35.20	33.73	33.59	32.57	32.16	31.80
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							93.74	362.67	361.66	433.45	393.10	356.75	122.03	121.35	123.55	126.13	121.72	127.60	126.49	98.57
Total (lbs/day)							4.08	15.77	15.72	18.85	17.09	15.51	5.31	5.28	5.37	5.48	5.29	5.55	5.50	4.29
Total Onsite and Offsite NOx Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**779.63**	**780.22**	**723.30**	**723.30**	**741.38**	**741.38**	**862.26**	**1,131.18**	**1,139.22**	**1,220.05**	**1,179.70**	**1,069.54**	**931.54**	**930.86**	**933.06**	**901.88**	**894.35**	**876.74**	**866.28**	**830.08**
Pounds per Day	**33.90**	**33.92**	**31.45**	**31.45**	**32.23**	**32.23**	**37.49**	**49.18**	**49.53**	**53.05**	**51.29**	**46.50**	**40.50**	**40.47**	**40.57**	**39.21**	**38.88**	**38.12**	**37.66**	**36.09**
Yearly Maximums	**11,091**	**11,243**	**11,394**	**11,603**	**11,782**	**11,935**	**12,070**	**12,074**	**11,773**											

Maximum Pounds per Day	
Maximum Pounds per Hour [a]	
Maximum Pounds per Month	
Month with Maximum	
Maximum Pounds per Year	
Maximum Average Pounds per Hour [b]	
Year with Maximum	
Tons per Year	

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Onsite and Offsite SOx Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	2.6239	2.6452	2.5084	2.5084	2.6027	2.6027	2.7442	2.7442	2.7913	2.8385	2.8385	2.8385	3.0940	3.0940	3.0940	2.8982	2.8789	2.7170	2.6592	2.6024
Total (lbs/day)	0.1141	0.1150	0.1091	0.1091	0.1132	0.1132	0.1193	0.1193	0.1214	0.1234	0.1234	0.1234	0.1345	0.1345	0.1345	0.1260	0.1252	0.1181	0.1156	0.1131
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							0.3071	0.9476	0.9484	1.1567	1.0943	1.0107	0.4882	0.4854	0.5068	0.5317	0.4890	0.5460	0.5353	0.2647
Total (lbs/day)							0.0134	0.0412	0.0412	0.0503	0.0476	0.0439	0.0212	0.0211	0.0220	0.0231	0.0213	0.0237	0.0233	0.0115
Total Onsite and Offsite SOx Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**2.6239**	**2.6452**	**2.5084**	**2.5084**	**2.6027**	**2.6027**	**3.0513**	**3.6918**	**3.7398**	**3.9952**	**3.9328**	**3.8492**	**3.5821**	**3.5794**	**3.6008**	**3.4299**	**3.3679**	**3.2630**	**3.1944**	**2.8671**
Pounds per Day	**0.1141**	**0.1150**	**0.1091**	**0.1091**	**0.1132**	**0.1132**	**0.1327**	**0.1605**	**0.1626**	**0.1737**	**0.1710**	**0.1674**	**0.1557**	**0.1556**	**0.1566**	**0.1491**	**0.1464**	**0.1419**	**0.1389**	**0.1247**
Yearly Maximums	**38**	**39**	**40**	**41**	**42**	**42**	**43**	**43**	**42**											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Onsite and Offsite Exhaust PM_{10} Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	57.61	59.80	58.25	58.25	61.14	61.14	65.48	65.48	66.93	68.37	68.37	63.67	67.92	67.92	67.92	61.49	60.65	50.87	48.35	44.59
Total (lbs/day)	2.50	2.60	2.53	2.53	2.66	2.66	2.85	2.85	2.91	2.97	2.97	2.77	2.95	2.95	2.95	2.67	2.64	2.21	2.10	1.94
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							18.81	41.38	41.92	45.15	42.67	38.41	26.90	27.07	29.26	31.82	27.44	33.28	32.18	4.43
Total (lbs/day)							0.82	1.80	1.82	1.96	1.86	1.67	1.17	1.18	1.27	1.38	1.19	1.45	1.40	0.19
Total Onsite and Offsite Exhaust PM_{10} Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	**57.61**	**59.80**	**58.25**	**58.25**	**61.14**	**61.14**	**84.29**	**106.86**	**108.84**	**113.53**	**111.05**	**102.09**	**94.81**	**94.99**	**97.18**	**93.31**	**88.09**	**84.15**	**80.53**	**49.01**
Pounds per Day	**2.50**	**2.60**	**2.53**	**2.53**	**2.66**	**2.66**	**3.66**	**4.65**	**4.73**	**4.94**	**4.83**	**4.44**	**4.12**	**4.13**	**4.23**	**4.06**	**3.83**	**3.66**	**3.50**	**2.13**
Yearly Maximums	**983**	**1,020**	**1,055**	**1,094**	**1,129**	**1,156**	**1,179**	**1,175**	**1,118**											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Onsite and Offsite Fugitive PM_{10} Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17	261.17
Total (lbs/day)	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36	11.36
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							77.76	340.24	340.24	340.24	320.80	320.80	77.76	77.76	77.76	77.76	77.76	77.76	77.76	77.76
Total (lbs/day)							3.38	14.79	14.79	14.79	13.95	13.95	3.38	3.38	3.38	3.38	3.38	3.38	3.38	3.38
Total Onsite and Offsite Fugitive PM_{10} Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																				
Pounds per Month	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**261.17**	**338.94**	**601.42**	**601.42**	**601.42**	**581.98**	**581.98**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**	**338.94**
Pounds per Day	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**11.36**	**14.74**	**26.15**	**26.15**	**26.15**	**25.30**	**25.30**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**	**14.74**
Yearly Maximums	**4,874**	**4,952**	**5,030**	**5,107**	**5,185**	**5,263**	**5,341**	**5,341**	**5,078**											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite PM_{10} Emissions (Ex

Parameter	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	318.78	320.97	319.42	319.42	322.31	322.31	423.22	708.28	710.26	714.94	693.02	684.06	433.75	433.93	436.12	432.25	427.03	423.08	419.47	387.95
Pounds per Day	13.86	13.96	13.89	13.89	14.01	14.01	18.40	30.79	30.88	31.08	30.13	29.74	18.86	18.87	18.96	18.79	18.57	18.39	18.24	16.87
Yearly Maximums	5,857	5,972	6,085	6,202	6,314	6,419	6,520	6,516	6,196											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Onsite and Offsite Exhaust $PM_{2.5}$ Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	41.52	42.13	40.29	40.29	41.57	41.57	43.48	43.48	44.12	44.76	44.76	40.09	44.33	44.33	44.33	41.66	41.35	38.17	37.25	36.06
Total (lbs/day)	1.81	1.83	1.75	1.75	1.81	1.81	1.89	1.89	1.92	1.95	1.95	1.74	1.93	1.93	1.93	1.81	1.80	1.66	1.62	1.57
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							9.27	27.23	27.35	30.05	27.45	24.01	10.66	10.68	11.30	12.01	10.79	12.42	12.12	4.34
Total (lbs/day)							0.40	1.18	1.19	1.31	1.19	1.04	0.46	0.46	0.49	0.52	0.47	0.54	0.53	0.19
Total Onsite and Offsite Exhaust $PM_{2.5}$ Emissions (Construction Equipment and Vehicles)																				
Pounds per Month	41.52	42.13	40.29	40.29	41.57	41.57	52.75	70.72	71.47	74.81	72.21	64.10	55.00	55.02	55.63	53.67	52.13	50.59	49.36	40.41
Pounds per Day	1.81	1.83	1.75	1.75	1.81	1.81	2.29	3.07	3.11	3.25	3.14	2.79	2.39	2.39	2.42	2.33	2.27	2.20	2.15	1.76
Yearly Maximums	653	667	680	695	709	719	728	725	694											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Onsite and Offsite Fugitive $PM_{2.5}$ Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 2 Construction																				
Total (lbs/month)																				
Total (lbs/day)																				
Units 1 & 2 Demolition																				
Total (lbs/month)	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550	34.550
Total (lbs/day)	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502	1.502
Bldgs. 33 & 34 Construction																				
Total (lbs/month)							7.776	68.567	68.567	68.567	66.623	66.623	7.776	7.776	7.776	7.776	7.776	7.776	7.776	7.776
Total (lbs/day)							0.338	2.981	2.981	2.981	2.897	2.897	0.338	0.338	0.338	0.338	0.338	0.338	0.338	0.338
Total Onsite and Offsite Fugitive $PM_{2.5}$ Emissions (Dismemberment, Debris Loading, Grading, Bulldozing, and Onsite Construction Vehicles)																				
Pounds per Month	34.55	34.55	34.55	34.55	34.55	34.55	42.33	103.12	103.12	103.12	101.17	101.17	42.33	42.33	42.33	42.33	42.33	42.33	42.33	42.33
Pounds per Day	1.50	1.50	1.50	1.50	1.50	1.50	1.84	4.48	4.48	4.48	4.40	4.40	1.84	1.84	1.84	1.84	1.84	1.84	1.84	1.84
Yearly Maximums	761	769	777	785	792	800	808	808	747											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Table 5.1A.60R Onsite and Offsite Construction Exhaust and Fugitive Emissions Summary

Total Onsite and Offsite $PM_{2.5}$ Emissions (Exhaust and Fugitive)

Parameter	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Pounds per Month	76.07	76.68	74.84	74.84	76.12	76.12	95.08	173.83	174.59	177.92	173.38	165.27	97.32	97.34	97.96	96.00	94.46	92.92	91.69	82.73
Pounds per Day	3.31	3.33	3.25	3.25	3.31	3.31	4.13	7.56	7.59	7.74	7.54	7.19	4.23	4.23	4.26	4.17	4.11	4.04	3.99	3.60
Yearly Maximums	1,415	1,436	1,457	1,480	1,501	1,519	1,536	1,533	1,442											
Maximum Pounds per Day																				
Maximum Pounds per Hour [a]																				
Maximum Pounds per Month																				
Month with Maximum																				
Maximum Pounds per Year																				
Maximum Average Pounds per Hour [b]																				
Year with Maximum																				
Tons per Year																				

Onsite and Offsite CO_2 Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Block 2 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 1 & 2 Demolition																				
Total (metric tons/month)	119.00	119.95	114.14	114.14	118.67	118.67	125.46	125.46	127.72	129.99	129.99	129.99	141.22	141.22	141.22	131.84	130.93	123.39	120.65	118.03
Total (metric tons/day)	5.17	5.22	4.96	4.96	5.16	5.16	5.45	5.45	5.55	5.65	5.65	5.65	6.14	6.14	6.14	5.73	5.69	5.36	5.25	5.13
Bldgs. 33 & 34 Construction																				
Total (metric tons/month)							7.94	34.44	34.14	43.38	41.08	36.56	11.96	11.66	11.66	11.66	11.66	11.66	11.66	11.66
Total (metric tons/day)							0.35	1.50	1.48	1.89	1.79	1.59	0.52	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Total Onsite and Offsite CO_2 Emissions (Construction Equipment and Vehicles)																				
Metric Tons per Month	119.00	119.95	114.14	114.14	118.67	118.67	133.40	159.90	161.86	173.37	171.07	166.54	153.18	152.87	152.87	143.50	142.59	135.05	132.31	129.69
Metric Tons per Day	5.17	5.22	4.96	4.96	5.16	5.16	5.80	6.95	7.04	7.54	7.44	7.24	6.66	6.65	6.65	6.24	6.20	5.87	5.75	5.64
Yearly Maximums	1,671	1,705	1,738	1,777	1,806	1,830	1,846	1,845	1,815											
Maximum Metric Tons per Day																				
Maximum Metric Tons per Hour [a]																				
Maximum Metric Tons per Month																				
Month with Maximum																				
Maximum Metric Tons per Year																				
Maximum Average Metric Tons per Hour [b]																				
Year with Maximum																				

Onsite and Offsite N_2O Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Block 2 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 1 & 2 Demolition																				
Total (metric tons/month)	0.00263794	0.00264867	0.00245426	0.00245426	0.00246751	0.00246751	0.00248738	0.00248738	0.00249401	0.00250063	0.00250063	0.00250063	0.00278656	0.00278656	0.00278656	0.00275649	0.00275249	0.00270527	0.00269328	0.00267515
Total (metric tons/day)	0.00011469	0.00011516	0.00010671	0.00010671	0.00010728	0.00010728	0.00010815	0.00010815	0.00010844	0.00010872	0.00010872	0.00010872	0.00012115	0.00012115	0.00012115	0.00011985	0.00011967	0.00011762	0.00011710	0.00011631
Bldgs. 33 & 34 Construction																				
Total (metric tons/month)							0.00025636	0.00087739	0.00088009	0.00108157	0.00098081	0.00097293	0.00039665	0.00039756	0.00040829	0.00042081	0.00039935	0.00042796	0.00042260	0.00028667
Total (metric tons/day)							0.00001115	0.00003815	0.00003826	0.00004702	0.00004264	0.00004230	0.00001725	0.00001729	0.00001775	0.00001830	0.00001736	0.00001861	0.00001837	0.00001246
Total Onsite and Offsite N_2O Emissions (Construction Equipment and Vehicles)																				
Metric Tons per Month	0.00263794	0.00264867	0.00245426	0.00245426	0.00246751	0.00246751	0.00274375	0.00336478	0.00337409	0.00358220	0.00348144	0.00347356	0.00318322	0.00318412	0.00319485	0.00317730	0.00315184	0.00313323	0.00311587	0.00296182
Metric Tons per Day	0.00011469	0.00011516	0.00010671	0.00010671	0.00010728	0.00010728	0.00011929	0.00014629	0.00014670	0.00015575	0.00015137	0.00015102	0.00013840	0.00013844	0.00013891	0.00013814	0.00013704	0.00013623	0.00013547	0.00012877
Yearly Maximums	0.03515	0.03570	0.03623	0.03697	0.03769	0.03838	0.03904	0.03942	0.03901											
Maximum Metric Tons per Day																				
Maximum Metric Tons per Hour [a]																				
Maximum Metric Tons per Month																				
Month with Maximum																				
Maximum Metric Tons per Year																				
Maximum Average Metric Tons per Hour [b]																				
Year with Maximum																				

Onsite and Offsite CH_4 Emissions

Construction Step	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
Peaker and Tank Area and Stack 3&4 Demolition																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 3 & 4 Demolition																				
Total (lbs/month)																				
Total (lbs/day)																				
Block 1 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Block 2 Construction																				
Total (metric tons/month)																				
Total (metric tons/day)																				
Units 1 & 2 Demolition																				
Total (metric tons/month)	0.0060438	0.0060954	0.0056447	0.0056447	0.0056588	0.0056588	0.0056799	0.0056799	0.0056870	0.0056940	0.0056940	0.0056940	0.0063318	0.0063318	0.0063318	0.0062865	0.0062756	0.0060982	0.0060654	0.0059925
Total (metric tons/day)	0.0002628	0.0002650	0.0002454	0.0002454	0.0002460	0.0002460	0.0002470	0.0002470	0.0002473	0.0002476	0.0002476	0.0002476	0.0002753	0.0002753	0.0002753	0.0002733	0.0002729	0.0002651	0.0002637	0.0002605
Bldgs. 33 & 34 Construction																				
Total (metric tons/month)							0.0007368	0.0021705	0.0021868	0.0026311	0.0023910	0.0024028	0.0011638	0.0011715	0.0012230	0.0012832	0.0011801	0.0013176	0.0012918	0.0006386
Total (metric tons/day)							0.0000320	0.0000944	0.0000951	0.0001144	0.0001040	0.0001045	0.0000506	0.0000509	0.0000532	0.0000558	0.0000513	0.0000573	0.0000562	0.0000278
Total Onsite and Offsite CH_4 Emissions (Construction Equipment and Vehicles)																				
Metric Tons per Month	0.00604	0.00610	0.00564	0.00564	0.00566	0.00566	0.00642	0.00785	0.00787	0.00833	0.00809	0.00810	0.00750	0.00750	0.00755	0.00757	0.00746	0.00742	0.00736	0.00663
Metric Tons per Day	0.00026	0.00027	0.00025	0.00025	0.00025	0.00025	0.00028	0.00034	0.00034	0.00036	0.00035	0.00035	0.00033	0.00033	0.00033	0.00033	0.00032	0.00032	0.00032	0.00029
Yearly Maximums	0.08139	0.08285	0.08425	0.08616	0.08809	0.08989	0.09164	0.09258	0.09136											
Maximum Metric Tons per Day																				
Maximum Metric Tons per Hour [a]																				
Maximum Metric Tons per Month																				
Month with Maximum																				
Maximum Metric Tons per Year																				
Maximum Average Metric Tons per Hour [b]																				
Year with Maximum																				

Notes:
[a] The hours per day are per 'Manpower Schedule Huntington Be
[b] The hours per year are assumed to allow operation 24 hours per