

DOCKETED

Docket Number:	12-AFC-02C
Project Title:	Huntington Beach Energy Project - Compliance
TN #:	272356
Document Title:	PTA for Emergency ICE Generators
Description:	PTA for Emergency ICE Generators
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Organization:	AES Alamos
Submitter Role:	Applicant
Submission Date:	9/4/2026 8:50:23 PM
Docketed Date:	9/8/2026



Petition for Post-Certification Amendment

Installation of Four Emergency Diesel-Fired Internal Combustion Engine
Generators

For the

Huntington Beach Energy Project
Huntington Beach, California
(12-AFC-02C)

Submitted to the:

California Energy Commission

Submitted by:

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Document No: 260527083324_aa4f7aae

September 4, 2026

Executive Summary

AES Huntington Beach Energy, LLC (AES or the Project Owner) is submitting this petition to the California Energy Commission (CEC) for post-certification license modification for the Huntington Beach Energy Project (HBEP) (12-AFC-02C). HBEP consists of a combined cycle gas turbine (CCGT) power block and a simple cycle gas turbine (SCGT) power block. The CCGT power block includes unfired heat recovery steam generators (HRSGs), a condensing steam turbine generator (STG), an air-cooled condenser (ACC), and ancillary facilities. To facilitate startup of the CCGT power block, HBEP also includes an auxiliary boiler. HBEP's CCGT power block is located entirely within the existing Huntington Beach Generating Station (HBGS), an operational non-CEC jurisdictional power plant owned by AES Corporation.

This petition for post-certification license amendment (Petition to Amend or PTA) proposes to install four identical 744 brake-horsepower (bhp) emergency diesel-fired internal combustion engine (ICE) generators to provide emergency power supply to critical plant equipment in the CCGT power block during the gas turbine shutdown periods in the event of an electrical emergency. The engines of these ICE generators are U.S. Environmental Protection Agency (EPA) Tier-4 Final certified. No significant changes to the existing HBEP equipment or operations are proposed.

To ensure compliance with all applicable laws, ordinances, regulations, and standards (LORS), the Project Owner has submitted a permit application under Application Numbers 665233, 665234, 665235, 665236, and 665237 to the South Coast Air Quality Management District (SCAQMD), presented in Attachment 3.1 of this PTA. A Permit to Construct (PTC)/Permit to Operate (PTO) for these four emergency ICE generators is expected to be issued following review and approval of the permit application by SCAQMD. A courtesy copy of the forthcoming PTC/PTO will be submitted to the CEC as required.

To analyze potential environmental effects, an environmental impacts assessment is presented in Section 3. The assessment concludes that there will be no significant environmental impacts associated with the implementation of the actions specified in this PTA and that the project, as modified, will continue to comply with all applicable LORS.

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Acronyms and Abbreviations

ACC	air-cooled condenser
AES	AES Huntington Beach Energy, LLC
AFC	Application for Certification
ATCM	Airborne Toxic Control Measures
BACT	best available control technology
bhp	brake-horsepower
CAAQS	California Ambient Air Quality Standards
CARB	California Air Resources Board
CCGT	combined cycle gas turbine
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH ₄	methane
CI	compression-ignition
CO	carbon monoxide
CO ₂	carbon dioxide
CO _{2e}	carbon dioxide equivalent
COC	Condition of Certification
DPF	diesel particulate filter
DPM	diesel particulate matter
EPA	U.S. Environmental Protection Agency
FR	Federal Register
g/hp-hr	gram(s) per horsepower-hour
g/kWh	gram(s) per kilowatt-hour
GE	General Electric
GHG	greenhouse gas
H ₂ S	hydrogen sulfide
HAP	hazardous air pollutant

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HBEP	Huntington Beach Energy Project
HBGS	Huntington Beach Generating Station
HI	hazard index
HRSG	heat recovery steam generator
ICE	internal combustion engine
kW	kilowatt(s)
lb/day	pound(s) per day
lb/hr	pound(s) per hour
lb/MMBtu	pound(s) per million British thermal unit
lb/year	pound(s) per year
LORS	laws, ordinances, regulations, and standards
MICR	Maximum Individual Cancer Risk
MT/year	metric ton(s) per year
MW	megawatt(s)
N ₂ O	nitrous oxide
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMHC	non-methane hydrocarbons
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
PM _{2.5}	particulate matter with an aerodynamic diameter of 2.5 microns or less
PM ₁₀	particulate matter with an aerodynamic diameter of 10 microns or less
ppm	part(s) per million
ppmvd	part(s) per million by volume dry
PSD	Prevention of Significant Deterioration
PTA	Petition to Amend
PTC	Permit to Construct
PTE	potential to emit
PTO	Permit to Operate

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RECLAIM	Regional Clean Air Incentives Market
RTC	RECLAIM Trading Credit
SCAQMD	South Coast Air Quality Management District
SCGT	simple cycle gas turbine
SPCC	Spill Prevention, Control, and Countermeasures
STG	steam turbine generator
SO ₂	sulfur dioxide
SO _x	sulfur oxides
TAC	toxic air contaminants
tpy	ton(s) per year
VOC	volatile organic compounds

1. Introduction

1.1 Background

The CEC approved the HBEP Application for Certification (AFC) on October 29, 2014 (Final Decision) and the amendment request to the original license on April 12, 2017 (Final Amendment Decision).

The HBEP site is on the existing HBGS property owned by AES Corporation, located at 21730 Newland Street in the City of Huntington Beach, California, and occupies approximately 11 acres of the 37-acre HBGS site. With the Final Amendment Decision, the CEC analyzed HBEP's impacts for two General Electric (GE) Model 7FA.05 combustion turbines in a combined cycle configuration, two GE Model LMS100-PB combustion turbines in a simple cycle configuration, and an auxiliary boiler. HBEP's CCGTs began commercial operation in February 2020, along with the auxiliary boiler. Construction of the SCGTs has yet to commence and is contingent on securing a power purchase agreement.

Since the issuance of the Final Amendment Decision, the following post-certification changes have also been approved by the CEC:

- Modification of several commissioning parameters for the auxiliary boiler, approved in July 2019.
- Replacement of an approved architectural screening structure (spherical ball wall) with a mural-based design treatment for screening and enhancing views of the HBEP site, approved in April 2021.
- Increase of CCGT nitrogen oxides (NO_x) non-cold startup emissions limit from 17 pounds per event to 32 pounds per event for consistency with the SCAQMD's revised Title V Facility Permit, approved in August 2021.
- Remodel of the site entrance along Newland Street and installation of a new security guard shack, approved in October 2022.
- Increase of annual CCGT operating hours from 6,640 hours per unit per year (including startups and shutdowns) to 7,640 hours per unit per year (including startups and shutdowns) and modification of air emission limits commensurate with the modification of annual CCGT operating hours, approved in July 2023.

1.2 Overview of Proposed Amendments

This PTA addresses the potential environmental impacts associated with installing four identical EPA Tier-4 Final certified 744-bhp emergency diesel-fired ICE generators to provide emergency power supply to the CCGT power block.

These ICE generators are each equipped with an EPA Tier-4 Final certified engine and will emit NO_x, sulfur oxides (SO_x), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀), particulate matter with an aerodynamic diameter of 2.5 microns or less (PM_{2.5}), diesel particulate matter (DPM), and greenhouse gases (GHGs). The ICE generators will be located more than 1,000 feet from a school or other sensitive receptor.

A detailed description of the proposed modification is included in Section 2 and analyzed in Section 3.

This PTA contains all of the information that is required pursuant to the CEC's Siting Regulations (Title 20, California Code of Regulations [CCR], Section 1769, Post Certification Petition for Changes in Project Design, Operation or Performance and Amendments to the Commission Decision). The information necessary to fulfill the requirements of Section 1769 is contained in Sections 1 through 7, as summarized in Table 1.2-1.

Table 1.2-1. Informational Requirements for Post-Certification Modifications

Section 1769(a)(1) Requirements	Sections of PTA Fulfilling Requirements
(A) A complete description of the proposed change, including new language for any conditions of certification that will be affected;	Sections 1, 2, and 3
(B) A discussion of the necessity for the proposed change and an explanation of why the change should be permitted;	Sections 1.2, 1.3, and 3
(C) A description of any new information or change in circumstances that necessitated the change;	Sections 1.2, 1.3, and 3
(D) An analysis of the effects that the proposed change to the project may have on the environment and proposed measures to mitigate any significant environmental effects;	Sections 1.4 and 3
(E) An analysis of how the proposed change would affect the project's compliance with applicable laws, ordinances, regulations, and standards;	Sections 1.5 and 3
(F) A discussion of how the proposed change would affect the public;	Sections 1, 3, and 4
(G) A list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of any affected project linears and 1,000 feet of the project site;	Section 5
(H) A discussion of the potential effect of the proposed change on nearby property owners, residents, and the public; and	Sections 3, 4, and 6
(I) A discussion of any exemptions from the California Environmental Quality Act, commencing with Section 21000 of the Public Resources Code, that the project owner believes may apply to approval of the proposed change.	Section 7

1.3 Necessity of Proposed Changes, an Explanation of Why it Should Be Permitted, and a Description of New Information or Change in Circumstances

The CEC Siting Regulations require a discussion of the necessity for the proposed revisions to the HBEP Certification, an explanation of why the change should be permitted, and a description of any new information or change in circumstances that necessitated the change (Title 20, CCR, Sections 1769(a)(1)(B) and (C)). The four proposed emergency diesel-fired ICE generators will be used to provide power supply to critical plant equipment in the CCGT power block during the gas turbine shutdown periods in the event of an electrical emergency. Therefore, the change to install these four generators is necessary to maintain CCGT power block operations in the event of loss of grid power. This PTA further discusses why the change should be allowed.

1.4 Summary of Potential Environmental Effects and Proposed Mitigation Measures

The CEC Siting Regulations require an analysis of the effects that the proposed change to the project may have on the environment and proposed measures to mitigate any significant environmental effect (Title 20, CCR, Section 1769(a)(1)(D)). Section 3 of this PTA includes a discussion of the potential environmental impacts associated with the modification as well as a discussion of the consistency of the modification with applicable LORS. Section 3 concludes that there will be no significant, unmitigated environmental impacts associated with implementing the actions specified in this PTA and that the project, as modified, will comply with all applicable LORS. As such, no new or additional mitigation measures are proposed as part of this PTA.

1.5 Consistency of Changes with Applicable LORS

The CEC Siting Regulations require an analysis of how the proposed change would affect the project's compliance with applicable LORS (Title 20, CCR, Section 1769(a)(1)(E)). The proposed project modification is consistent with applicable LORS, as discussed in Section 3. The proposed project change will allow HBEP to maintain CCGT power block operations in the event of loss of grid power.

2. Description of Proposed Amendments

This section includes a description of the proposed project modification, consistent with CEC Siting Regulations (Title 20, CCR, Section 1769(a)(1)(A)).

The proposed change to HBEP includes the installation of four identical 744-bhp emergency diesel-fired ICE generators in the CCGT power block. The emergency ICE generator engines are Model Year 2025 Perkins 2806F-E18TAG1, which is certified by the EPA as Tier-4 Final engine (Family Name SCPXL18.1HTH-008).

The ICE generators will only be operated for backup and emergency uses, with periodic maintenance and testing runs to maintain operational readiness. Operation of the ICE generators will be limited to 50 hours per year for maintenance and testing, with a maximum of 200 total hours per year. The proposed operating schedule for each ICE generator is presented in Table 2-1.

Table 2-1. Proposed ICE Generator Operating Schedule

Period	Maintenance and Testing ^a	Total Operation
Hours per Day	4.2	N/A
Hours per Month	4.2	N/A
Hours per Year	50	200

Source: Yorke Engineering, LLC. 2025. *Application for Permits to Construct: Four (4) Diesel-Fueled Emergency Internal Combustion Engines*. Table 2-1. December.

Note:

N/A = Not applicable (i.e., not needed for emissions calculations presented in Section 3.1)

^a 50 hours per year / 12 months = 4.167 hours per month.

Although the proposed change will require physical installation and electrical connection of four new pieces of equipment, their installation will not require any significant earth-moving activities or operational changes beyond revising the existing SCAQMD operational permits. The modification will also not impact the operations of the existing HBEP equipment. As such, there will be no significant change to HBEP's existing equipment and operations.

3. Environmental Analysis of Proposed Amendments

The following subsections present a discussion of the potential impacts that the proposed change may have on the environmental analysis as presented in applicable sections of the Final Decision and subsequent amendments. Each discussion includes an environmental analysis, an assessment of compliance with applicable LORS, proposed mitigation measures, and, if applicable, proposed changes to the Conditions of Certification (COCs) that are necessary as a result of the project modification.

3.1 Air Quality and Greenhouse Gases

The proposed installation of four emergency diesel-fired ICE generators at HBEP has the potential to affect air quality and GHG impacts. An air permit application reflecting the potential emissions associated with the four new emergency ICE generators has been submitted to the SCAQMD and is presented as Attachment 3.1. As noted above, a PTC/PTO for these four emergency ICE generators is expected to be issued following review and approval of the permit application by SCAQMD. The potential effects of the proposed installation are considered below.

3.1.1 Environmental Setting

The project is located in Orange County, which is within the SCAQMD's jurisdiction. The SCAQMD is the EPA's delegated authority to implement state and federal air quality regulations. The SCAQMD also monitors and reports the status of the area's air quality attainment of the California and National Ambient Air Quality Standards (CAAQS and NAAQS, respectively). Table 3.1-1 presents the attainment status for Orange County.

Table 3.1-1. State and Federal Air Quality Designations for Orange County, California

Pollutant	State Designation	Federal Designation
Ozone	1-hour: Nonattainment 8-hour: Nonattainment	1-hour: N/A 8-hour: Nonattainment (Extreme)
CO	1-hour: Attainment 8-hour: Attainment	1-hour: Attainment (Serious Maintenance) 8-hour: Attainment (Serious Maintenance)
NO ₂	1-hour: Attainment Annual: Attainment	1-hour: Attainment (Maintenance) Annual: Attainment (Maintenance)
SO ₂	1-hour: Attainment 24-hour: Attainment	1-hour: Attainment 24-hour: N/A
PM ₁₀	24-hour: Nonattainment Annual: Nonattainment	24-hour: Attainment (Serious Maintenance) Annual: N/A
PM _{2.5}	24-hour: N/A Annual: Nonattainment	24-hour: Nonattainment (Serious) Annual: Nonattainment (Serious)
Lead	Attainment	Attainment
H ₂ S, Sulfates, Visibility, Vinyl Chloride	Attainment/Unclassified	N/A

Sources:

California Air Resources Board (CARB). 2026. "Maps of State and Federal Area Designations." Available online at: <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>. Accessed March 25, 2026.

U.S. Environmental Protection Agency (EPA). 2026. "Nonattainment Areas for Criteria Pollutants (Green Book)." Available online at: <https://www.epa.gov/green-book>. Accessed March 25, 2026.

Notes:

H₂S = hydrogen sulfide

N/A = Not applicable (i.e., no standard)

NO₂ = nitrogen dioxide

SO₂ = sulfur dioxide

3.1.2 Environmental Consequences

The proposed installation of four 744-bhp emergency diesel-fired ICE generators could result in a small increase in criteria pollutants and GHG emissions at HBEP. By combusting diesel fuel, all four ICE generators will emit VOC, NO_x, CO, PM₁₀/PM_{2.5}, SO_x, and GHGs during operations. As stated previously, the engines are EPA Tier-4 Final certified. SO_x emissions will be limited through the use of low-sulfur diesel fuel. Tables 3.1-2 and 3.1-3 present the controlled criteria pollutant emissions for each emergency ICE generator and all (4) emergency ICE generators, respectively, based on the routine operating schedule presented in Table 2-1. Detailed emission calculations are provided in Appendix C of Attachment 3.1.

Table 3.1-2. Criteria Pollutant Emissions per Emergency ICE Generator

Pollutant	Controlled Emission Factors (g/hp-hr)	Controlled Emissions per Generator ^a			
		(lb/hr)	(lb/day) ^b	(lb/year) ^c	(tpy) ^c
NO _x	0.076	0.125	0.525	6.25	0.003
CO	0.07	0.115	0.483	5.75	0.003
VOC	0.004	0.007	0.029	0.35	0.0002
PM ₁₀ /PM _{2.5}	0.01	0.016	0.067	0.80	0.0004
SO _x	6.24 ^d	0.228	0.958	11.40	0.006

Source: Yorke Engineering, LLC. 2025. *Application for Permits to Construct: Four (4) Diesel-Fueled Emergency Internal Combustion Engines*. Tables 3-1, 3-2, and C.2. December.

Notes:

g/hp-hr = gram(s) per horsepower hour

lb/day = pound(s) per day

lb/hr = pound(s) per hour

lb/year = pound(s) per year

tpy = ton(s) per year

^a Controlled emissions account for the engine's EPA Tier-4 Final certification, which is built into the unit itself and is not an add-on control.

^b Daily emissions assume routine operation of only 4.2 hours per day for maintenance and testing.

^c Annual emissions assume routine operation of only 50 hours per year for maintenance and testing.

^d SO_x emission rate in pound(s) per thousand gallon.

Table 3.1-3. Criteria Pollutant Emissions for All (4) Emergency ICE Generators

Pollutant	Controlled Emission Factors (g/hp-hr)	Controlled Emissions for All (4) Generators ^a			
		(lb/hr)	(lb/day) ^b	(lb/year) ^c	(tpy) ^c
NO _x	0.076	0.500	2.100	25.00	0.0125
CO	0.07	0.460	1.932	23.00	0.0115
VOC	0.004	0.028	0.116	1.40	0.0007
PM ₁₀ /PM _{2.5}	0.01	0.064	0.268	3.20	0.0016
SO _x	6.24 ^d	0.912	3.832	45.60	0.0228

Source: Yorke Engineering, LLC. 2025. *Application for Permits to Construct: Four (4) Diesel-Fueled Emergency Internal Combustion Engines*. Table 3-5 and C.2. December.

Notes:

^a Controlled emissions account for the engine's EPA Tier-4 Final certification, which is built into the unit itself and is not an add-on control.

^b Daily emissions assume routine operation of only 4.2 hours per day for maintenance and testing.

^c Annual emissions assume routine operation of only 50 hours per year for maintenance and testing.

^d SO_x emission rate in pound(s) per thousand gallon.

Table 3.1-4 presents the GHG emissions for the emergency ICE generators, based on the routine operation of only 50 hours per year for maintenance and testing at 100 percent load (36.5 gallons per hour). Detailed emission calculations are provided in Appendix C of Attachment 3.1.

Table 3.1-4. GHG Emissions for Emergency ICE Generators

Pollutant	Emission Factors (lb/MMBtu)	Emissions per Generator ^a (lb/year)	CO ₂ e Emissions per Generator ^b (MT/year)
CO ₂	163.01	40,765.58	18.48
CH ₄	6.61E-03	1.65	0.02
N ₂ O	1.32E-03	0.33	0.04
Total (Per Engine)			18.55
Total (All [4] Engines)			74.19

Source: Yorke Engineering, LLC. 2025. *Application for Permits to Construct: Four (4) Diesel-Fueled Emergency Internal Combustion Engines*. Table 3-4 and C.4. December.

Notes:

CH₄ = methane

CO₂ = carbon dioxide

CO₂e = carbon dioxide equivalent

lb/MMBtu = pound(s) per million British thermal units

MT/year = metric ton(s) per year

N₂O = nitrous oxide

^a Emissions assume routine operation of only 50 hours per year for maintenance and testing.

^b Emissions of each GHG are converted into CO₂e using the following global warming potentials: 1 for CO₂, 25 for CH₄, and 298 for N₂O.

3.1.3 Regulatory Requirements

3.1.3.1 Federal Regulations

The federal pre-construction Prevention of Significant Deterioration (PSD) program for sources subject to PSD pre-construction review permitting applies to sources located in attainment areas, which are classified as major sources. HBEP is subject to the PSD program. Therefore, PSD review applies to the proposed installation of four emergency diesel-fired ICE generators and is addressed in Section 3.1.3.2 below.

The federal operating permit program (Title V) and prohibitory rules applicable to HBEP are also addressed in Section 3.1.3.2 below.

3.1.3.2 Local Regulations

The SCAQMD has promulgated rules governing the need for sources to apply for pre-construction/operating permits and prohibitory rules. Below is an analysis of the SCAQMD rules applicable to the proposed installation of four emergency diesel-fired ICE generators at HBEP.

Rule 212 – Standards for Approving Permits and Issuing Public Notice

In accordance with Rule 212(c), public notice is required for:

- A project requesting installation of a new source or modification of an existing source, if the source is located within 1,000 feet of the outer boundary of a school, or
- A project resulting in a new or modified facility with onsite emission increases exceeding any of the daily maximums from Rule 212(g), or
- A project requesting installation of a new source or modification of an existing source, if the emission increases result in exposure to Maximum Individual Cancer Risk (MICR) greater than or equal to the applicable thresholds in Rule 212(c)(3)(A), or substances that pose a potential risk of nuisance.

The nearest K-12 school, Edison High School, is located approximately 2,972 feet northeast of the two emergency ICE generators to be installed near the combustion turbines of the site's CCGTs and 2,789 feet northeast of the two emergency ICE generators to be installed near the ACC.¹ Both of these distances are more than 1,000 feet.

As shown in Table 3.1-5, the daily emissions increases resulting from installation of the new emergency ICE generators are below the daily maximums provided in Rule 212(g).²

Table 3.1-5. Comparison to Rule 212(g) Thresholds

Pollutant	Daily Maximum Threshold (lb/day)	Project Increases (lb/day)	Thresholds Exceeded?
NO _x	40	2.100	N
CO	220	1.932	N
VOC	30	0.116	N
PM ₁₀ /PM _{2.5}	30	0.268	N
SO _x	60	3.832	N

As discussed in Section 3.9.2, the proposed project passes the Rule 1401 Tier 2 Screening Risk Assessment, indicating that the proposed installation of four emergency diesel-fired ICE generators is not expected to result in MICR greater than or equal to the applicable thresholds.

As described above, none of the Rule 212 criteria are exceeded; therefore, Rule 212 public notice is not required for this project.

Rule 301 – Permitting and Associated Fees

The processing fees were determined using Rule 301. Attachment 3.1 documents that the Project Owner has paid the applicable processing fees to SCAQMD and has requested expedited permit processing.

Rule 401 – Visible Emissions

The subject equipment combusts low-sulfur diesel fuel and is EPA Tier-4 Final certified. Therefore, the subject equipment is not expected to result in visible emissions. Compliance with this rule is expected.

¹ Yorke Engineering, LLC. 2025. *Application for Permits to Construct: Four (4) Diesel-Fueled Emergency Internal Combustion Engines*. Figure 1-1. December.

² Note that, although SCAQMD guidance does allow for this comparison to be based on the 30-day average emissions, the maximum daily emissions were used here to provide a more conservative analysis.

Rule 402 – Nuisance

This project is not expected to cause injury, detriment, nuisance, or annoyance to the public, given that the subject equipment is equipped with EPA Tier-4 Final certified engines and uses low-sulfur diesel fuel. Compliance with this rule is expected.

Rule 403 – Fugitive Dust

The HBEP site is already built out with no unpaved roadways. As such, no significant fugitive dust emissions are expected from the facility during normal operations. Regardless, the fugitive dust emissions requirements set forth in Rule 403 will be adhered to by the Project Owner during operation, as applicable. Because the proposed installation of four emergency diesel-fired ICE generators will not require any significant earth-moving activities, no significant fugitive dust emissions are expected during construction. Therefore, compliance with this rule is expected.

Rule 404 – Particulate Matter – Concentration

The subject equipment is equipped with Tier-4 Final certified engines and combusts low-sulfur diesel fuel. Therefore, the subject equipment is not expected to result in $PM_{10}/PM_{2.5}$ emissions greater than the concentration limits established in Rule 404, Table 404(a). Compliance with this rule is expected.

Rule 407 – Liquid and Gaseous Air Contaminants

This rule prohibits an operator from discharging sulfur dioxide (SO_2) and CO into the atmosphere from any equipment in excess of 500 parts per million by volume dry (ppmvd) and 2,000 ppmvd, respectively. However, per Rule 407(b)(1), the provisions of this rule do not apply to stationary ICEs. Therefore, compliance with this rule is not required for the project's new emergency ICE generators.

Rule 409 – Combustion Contaminants

This rule prohibits an owner/operator from discharging into the atmosphere from any equipment combustion contaminants exceeding 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO_2) at standard conditions averaged over a minimum of 15 consecutive minutes. However, the provisions of this rule do not apply to ICEs. Therefore, compliance with this rule is not required for the project's new emergency ICE generators.

Rule 431.2 – Sulfur Content of Liquid Fuels

This rule aims at reducing SO_x emissions from diesel fuel combustion by limiting sulfur content of diesel fuel to 15 parts per million (ppm) by weight. The subject equipment combusts low-sulfur diesel fuel; therefore, compliance with this rule is expected.

Rule 474 – Fuel Burning Equipment – Oxides of Nitrogen

This rule is superseded by the requirements of the NO_x Regional Clean Air Incentives Market (RECLAIM) Program, per Rule 2001(j).

Rule 475 – Electric Power Generating Equipment

This rule limits an owner/operator from discharging combustion contaminants into the atmosphere from any electric power generating equipment with a maximum rating of more than 10 megawatts (MW). Since the electric generating potential of each emergency ICE generator is less than 10 MW, the provisions of this rule do not apply, and compliance is not required.

Regulation IX – New Source Performance Standards

The New Source Performance Standards (NSPS) establish emission standards for specific emission sources, as published in the Code of Federal Regulations (CFR) and in the Federal Register (FR) by the EPA. The following NSPS is applicable to HBEP's proposed new emergency ICE generators.

40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines

This rule establishes emission standards, fuel requirements, and monitoring and reporting requirements for manufacturers, owners, and operators of stationary compression-ignition (CI) ICEs. Per 40 CFR 60.4205(b), emergency stationary CI ICEs of model year 2007 and later with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new non-road CI engines for the same model year and maximum engine power, as established in 40 CFR 1039, Appendix I.

The Tier 3 emission standards for engines with a maximum engine power rating greater than 130 kilowatts (kW; 175 bhp) but less than 560 kW (750 bhp) and constructed after 2006 are shown in Table 3.1–6 below.

Table 3.1-6. Tier 3 Emission Standards

Pollutant	Emission Standard (g/kWh)	Emission Standard (g/hp-hr)
NO _x	4.0	3.0
CO	3.5	2.6
PM ₁₀ /PM _{2.5}	0.2	0.15

Note:

g/kWh = gram(s) per kilowatt-hour

The proposed emergency ICE generators are equipped with Tier-4 Final certified engines; therefore, compliance with the above emission standards is expected.

Compliance with the diesel fuel requirements of 40 CFR 60.4207(b) is expected to be achieved by meeting the sulfur content requirements of SCAQMD Rule 431.2.

40 CFR 60.4211(f) also limits annual operation of emergency stationary CI ICEs as follows:

- No limit on use for emergency purposes.
- A maximum of 100 hours per year for maintenance and testing.
- A maximum of 50 hours per year for non-emergency situations, as specified in the regulation, that count towards the 100-hour limit noted above.

The Project Owner intends to operate the four emergency ICE generators for no more than 50 hours per year for maintenance and testing purposes, to also comply with the SCAQMD requirements. Therefore, compliance with the above hour restrictions is expected.

The NSPS includes other monitoring, recordkeeping, and reporting requirements. The Project Owner will demonstrate compliance by operating and maintaining the ICE generators and their control devices in accordance with the manufacturer's recommendations.

Regulation X – National Emission Standards for Hazardous Air Pollutants

The National Emission Standards for Hazardous Air Pollutants (NESHAP) regulate the emissions of Hazardous Air Pollutants (HAPs) from specific emission sources. These regulations are periodically updated to reflect actions by the EPA. The following NESHAP is applicable to HBEP's proposed new emergency ICE generators.

40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This rule applies to stationary reciprocating ICEs located at major or area sources of HAP emissions. A major source is defined as a facility with emissions of 10 tons per year (tpy) or more of a single HAP or 25 tpy or more of any combination of HAPs; an area source is defined as a facility that is not a major source. Because HBEP is considered an area source of HAP emissions, in accordance with 40 CFR 63.6590(c)(1), the requirements of 40 CFR 63, Subpart ZZZZ will be met through expected compliance with the requirements of 40 CFR 60, Subpart IIII, as described above.

Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines

This rule seeks to reduce NO_x, VOC, and CO emissions from stationary and portable engines with a maximum power rating greater than 50 bhp. This rule does not, however, apply to emergency standby engines operating no more than 200 hours per year, as evidenced by a non-resettable engine hour meter or equivalent method, per Rule 1110.2(i)(B). Because operations of each proposed emergency ICE generator will be limited to no more than 200 hours per year, the provisions of this rule are not applicable to the proposed project.

Regulation XIII – New Source Review

The proposed installation of four emergency ICE generators is expected to result in a small increase in emissions of nonattainment pollutants and their precursors; therefore, new source review is required. As HBEP is subject to RECLAIM for NO_x and SO_x, the new source review for NO_x and SO_x is separately addressed under SCAQMD Rule 2005.

Rule 1303 – Requirements

Rule 1303 requires the use of best available control technology (BACT), emissions modeling, and emission offsets. However, per Rule 1304(a)(4), emergency equipment operating no more than 200 hours per year, as evidenced by a non-resettable engine hour meter or equivalent method, is exempt from the modeling and offset requirements of Rule 1303(b)(1) and (b)(2). Therefore, only the BACT requirements are addressed below.

Additional review under Rule 1303(b)(5), including an alternatives analysis, demonstration of statewide compliance, and protection of visibility, is not required for the proposed project as the annual and daily emission increases are less than the major modification thresholds specified in Rule 1302(r), as presented in Table 3.1-7 below.

Table 3.1-7. Comparison to Rule 1302(r) Major Modification Thresholds

Pollutant	Major Modification Threshold	Project Increases	Thresholds Exceeded?
CO	50 tpy	0.0115 tpy	N
VOC	1 lb/day	0.116 lb/day ^a	N
PM ₁₀ /PM _{2.5} ^b	15 tpy	0.0016 tpy	N

Note:

^a Conservatively presented as the maximum daily emissions increase.

^b This comparison is provided for informational purposes only, since HBEP is not an existing major facility for PM₁₀/PM_{2.5} emissions.

Best Available Control Technology. In accordance with Rule 1303(a), BACT is required for new and modified equipment. Based on a review of Part B, Section I of SCAQMD's *BACT Guidelines*,³ BACT for a similarly-sized CI diesel-fired emergency engine is a certified Tier 2 engine with a California Air Resources Board (CARB)-verified diesel particulate filter (DPF) to reduce the maximum daily potential to emit (PTE)

³ Available online at <http://www.aqmd.gov/home/permits/bact/guidelines/i---scaqmd-laer-bact#sectionl>.

of PM₁₀ and PM_{2.5} to less than 1 pound per day. The engines of the proposed emergency generators are certified to comply with Tier-4 Final emission standards; therefore, BACT is satisfied.

Rule 1325 – Federal PM_{2.5} New Source Review Program

Rule 1325 applies to any new major polluting facility, major modifications to a major polluting facility, and any modification to an existing facility that would constitute a major polluting facility in and of itself that will emit PM_{2.5} or its precursors (NO_x, SO₂, VOC, and ammonia). Rule 1325(b)(4) defines a major polluting facility as a facility located in a federal nonattainment area with a PTE greater than 70 tpy of PM_{2.5} or any of its precursors. A major modification is any change resulting in a significant emissions increase (40 tpy of NO_x, SO₂, VOC, or ammonia or 10 tpy of PM_{2.5}). HBEP is considered an existing major polluting facility for NO_x and VOC, but not for SO₂ or PM_{2.5}, under this rule's definition.

As shown in Table 3.1-3, the highest increase in criteria pollutant emissions is expected to be less than 0.1 tpy. As such, the proposed emergency ICE generator installation neither results in a significant emissions increase of NO_x and VOC (as PM_{2.5} precursors) nor increases existing facility-wide SO₂ and PM_{2.5} emissions beyond the major polluting facility threshold of 70 tpy. Therefore, the proposed installation is not subject to PM_{2.5} new source review under Rule 1325.

Rule 1401 – New Source Review for Air Toxics

Per Rule 1401(g)(1)(F), emergency ICEs that are exempted under Rule 1304 are not required to comply with the requirements of Rule 1401. As previously described, these emergency ICE generators will meet the exemption criteria of Rule 1304(a)(4); therefore, compliance with Rule 1401 is not required.

Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

This rule applies to any stationary CI engine with a maximum power rating of greater than 50 bhp. The rule requires the following for new emergency engines with a maximum power rating of greater than 175 bhp but less than 750 bhp and located more than 500 feet from a school or sensitive receptor:

- Use CARB low-sulfur diesel fuel
- Operate no more than 50 hours per year for maintenance and testing
- Use a certified CI engine that emits:
 - DPM at a rate less than or equal to 0.20 grams per kilowatt-hour (g/kWh; 0.15 grams per horsepower-hour [g/hp-hr])
 - Non-methane hydrocarbons (NMHC) + NO_x at a rate less than or equal to 4.0 g/kWh (3.0 g/hp-hr)
 - CO at a rate less than or equal to 3.5 g/kWh (2.6 g/hp-hr)

The proposed emergency ICE generators will be fueled with low-sulfur diesel fuel, and their operation will be limited to 50 hours per year for maintenance and testing purposes. The proposed emergency ICE generators will also comply with applicable emission standards by using Tier-4 Final certified engines. Therefore, compliance with this rule is expected.

Rule 1472 – Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines

This rule strives to reduce DPM emissions from facilities with three or more stationary emergency standby diesel-fired ICEs, each with a maximum power rating greater than 50 bhp. Further review under this rule is required because AES currently operates two diesel-fueled fire pumps at HBGS and proposes to install four applicable diesel-fueled emergency ICE generators as part of this project, bringing the facility's total diesel-fueled emergency standby ICE count to six.

Rule 1472 requires submittal of either a compliance plan or notification of exemption from the compliance plan requirement. Because each of the applicable emergency diesel engines emits DPM at a rate of less than 0.15 g/hp-hr, HBEP is eligible for exemption from the requirement to file a compliance plan under Rule 1472(d)(1)(B). Submittal of the permit modification application to SCAQMD has satisfied the Rule 1472(d)(2)(A) requirement to submit a notification of exemption from filing a compliance plan. Therefore, compliance is considered complete.

Regulation XVII – Prevention of Significant Deterioration

HBGS, including HBEP, is an existing major source of emissions of NO_x and CO. The proposed emergency ICE generators do not result in a significant emissions increase of NO_x or CO; therefore, the proposed project is not considered to be a major modification for NO_x or CO and further review of NO_x and CO emissions under Regulation XVII is not required. HBGS, including HBEP, is not an existing major source for SO_x or PM₁₀. The proposed project's emissions increase for SO_x and PM₁₀ does not exceed the major source threshold and is not considered to be a major source for SO_x or PM₁₀ in and of itself. Therefore, further review of SO_x and PM₁₀ emissions under Regulation XVII is not required.

Regulation XX

Regulation XX establishes the requirements for the RECLAIM Program. HBGS, including HBEP, is a NO_x and SO_x RECLAIM facility. As such, new source review for NO_x and SO_x is applicable under Rule 2005 for this proposed project. Rule 2005 – New Source Review for RECLAIM

Rules 2005(c)(1)(A) and 2005(c)(4)(A)(i) require BACT for emission increases of NO_x and SO_x, respectively. Rule 2005(d) defines an emission increase to occur if a source's post-project maximum hourly PTE is greater than the source's pre-project maximum hourly PTE. Because the proposed installation of four emergency ICE generators will increase the facility's maximum hourly NO_x and SO_x emissions, BACT is required. As described previously, BACT for a similarly-sized CI diesel-fired emergency engine is a certified Tier 2 engine with a CARB-verified DPF and exclusive use of low-sulfur diesel fuel. The proposed emergency ICE generators are Tier-4 Final certified engines that meet the required emission standards and will be fueled exclusively using low-sulfur diesel fuel; therefore, BACT is satisfied.

Rule 2005(c)(1)(B) requires that new or modified source(s) at existing RECLAIM facilities conduct a modeling analysis to demonstrate that nitrogen dioxide (NO₂) ambient air quality standards will not be exceeded. However, equipment used exclusively on a standby basis in case of emergency with annual operation limited to 200 hours per year, as evidenced by a non-resettable engine hour meter or equivalent method, is exempt from this requirement per Rule 2005(k)(5). Therefore, modeling is not required for the proposed project.

Rules 2005(c)(2) and 2005(c)(4)(B) require facilities to hold sufficient RECLAIM Trading Credits (RTCs) to offset the initial year of an emissions increase of NO_x and SO_x, respectively. The proposed installation of four emergency ICE generators will increase the facility's annual emissions, requiring RTCs to be provided at a 1-to-1 ratio. Based on the projected maximum 50 hours of operation per year for maintenance and testing at maximum load (36.5 gallons per hour), the Project Owner must provide at least 6 pounds of NO_x RTCs per generator (24 pounds of NO_x RTCs total) and 11 pounds of SO_x RTCs per generator (44 pounds of SO_x RTCs total) for the first year of operation of the proposed project.⁴

Rule 2005(g) requires additional review of new major polluting facilities and major modifications at major polluting facilities. HBEP is considered a major polluting facility for NO_x, such that a major modification would be triggered if daily emissions of NO_x or VOC increased by more than 1 pound. As shown in Table 3.1-3, the proposed installation of four emergency ICE generators will increase daily NO_x PTE by

⁴ Calculated assuming an emission factor of 0.125 pounds NO_x per hour and 0.228 pounds SO_x per hour, as detailed in Section 4.10 and Table 3-2 of Attachment 3.1.

more than 1 pound; therefore, the proposed installation does constitute a major modification and additional review under Rule 2005(g) is required, as follows:

- AES will provide SCAQMD with a certification of statewide compliance upon request. It is expected that SCAQMD will determine that the Project Owner's major stationary sources are in compliance with applicable federal emission limits and standards through issuance of the PTC/PTO.
- The requirement for an alternatives analysis under Rule 2005(g)(2) is met by compliance through the California Environmental Quality Act (CEQA), as allowed under Rule 2005(g)(3). Specifically, the approval of this PTA by the CEC will satisfy the requirement for an environmental review under Rule 2005(g)(3)(C).
- A protection of visibility analysis under Rule 2005(g)(4) is not required because the net emissions increase associated with the proposed installation does not exceed 40 tpy of NO_x.

Regulation XXX – Title V

As described in Rule 3000(a), the Title V Facility Permit system is the air pollution control permit system implementing the federal Operating Permit Program as required by Title V of the federal Clean Air Act, as amended in 1990, and to implement requirements for GHGs pursuant to 40 CFR 70. Regulation XXX defines the Title V Facility Permit application and issuance procedures under the SCAQMD's jurisdiction, as well as compliance requirements associated with the program.

The proposed installation of four identical emergency ICE generators is considered a Significant Permit Revision under Rule 3000(b)(31)(I). As such, Rule 3005(f) requires the submittal of a permit revision application with contents as specified in Rule 3003. The permit revision application is currently under review by SCAQMD. Prior to the final approval and issuance of the PTC/PTO for this proposed project, the draft permit will undergo a 45-day review period with the EPA and a 30-day public comment period in accordance with Rules 3003(j) and 3006, respectively.

3.1.3.3 State Regulations

CARB is responsible for actions to protect public health from harmful effects of air pollution in communities in California. In support of this responsibility, CARB has promulgated Airborne Toxic Control Measures (ATCM) for several source categories that are codified in the CCR. Below is an analysis of the CARB ATCM applicable to the proposed installation of four emergency diesel-fired ICE generators at HBEP.

Airborne Toxic Control Measure for Stationary Compression-Ignition Engines

The purpose of this ATCM (Title 17, CCR, Section 93115) is to reduce DPM and criteria pollutant emissions from stationary diesel-fired CI engines with a maximum power rating greater than 50 bhp. The ATCM requires the use of CARB low-sulfur diesel fuel or other low-sulfur fuels (Title 17, CCR, Section 93115.5), as well as the following operational restrictions (Title 17, CCR, Section 93115.6(a)(2)):

"No owner or operator shall operate any new stationary emergency standby diesel-fueled CI engine (>50 bhp) in response to the notification of an impending rotating outage, unless all the following criteria are met:

- a. The engine's permit to operate allows operation of the engine in anticipation of a rotating outage, or the [SCAQMD] has established a policy or program that authorizes operation of the engine in anticipation of a rotating outage; and
- b. The Utility Distribution Company has ordered rotating outages in the control area where the engine is located, or has indicated it expects to issue such an order at a specified time; and
- c. The engine is located in a specific location that is subject to the rotating outage; and

- d. The engine is operated no more than 30 minutes prior to the time when the Utility Distribution Company officially forecasts a rotating outage in the control area; and
- e. The engine operation is terminated immediately after the Utility Distribution Company advises that a rotating outage is no longer imminent or in effect."

Table 1 of the ATCM establishes the emission standards for new emergency standby CI engines with a maximum power rating of greater than 600 bhp but less than 750 bhp. These emission standards are consistent with those required under 40 CFR 60, Subpart IIII, as previously shown in Table 3.1-6.

Per Title 17, CCR, Section 93115.6(a)(3)(A)(1)(c), new emergency standby CI engines with a maximum power rating greater than 50 bhp may not operate more than 50 hours per year for maintenance and testing purposes. It should be noted that engine operation for emergency use is not restricted by the ATCM. To monitor hours of use, the engine must also be equipped with a non-resettable hour engine meter with a minimum display capability of 9,999 hours (Title 17, CCR, Section 93115.10(d)). Additional monthly recordkeeping provisions are specified in Title 17, CCR, Section 93115.10(f).

The proposed emergency ICE generators will be operated using CARB low-sulfur diesel fuel and are equipped with EPA Tier-4 Final certified engines, which comply with the ATCM's emission limits. The emergency ICE generators will not be operated for more than 50 hours per year for maintenance and testing purposes and will be equipped with a non-resettable hour meter. The required monthly records will be maintained at the facility and available for review upon request. Therefore, compliance with this ATCM is expected.

3.1.4 Mitigation Measures

The proposed installation of four emergency ICE generators will not create a significant air quality or GHG impact and will not require additional mitigation measures beyond securing sufficient RECLAIM NO_x and SO_x RTCs during the first year of operations of the proposed project.

3.1.5 Consistency with LORS

The above analysis demonstrates that the proposed project will not cause or contribute to the violation of an ambient air quality standard. Therefore, HBEP, as modified, will comply with applicable federal, state, and local air quality LORS.

Additionally, for purposes of demonstrating compliance with CEQA, comparison to the SCAQMD's criteria pollutant and GHG significance thresholds is presented in Table 3.1-8 below. As shown, the emission increases associated with the proposed project do not exceed SCAQMD's significance thresholds, thereby implying less-than-significant air quality and GHG impacts.

Table 3.1-8. Comparison to SCAQMD Significance Thresholds

Pollutant	Project Increases	Significance Threshold	Threshold Exceeded?
NO _x	2 lb/day	55 lb/day	N
VOC	<1 lb/day	55 lb/day	N
PM ₁₀	<1 lb/day	150 lb/day	N
PM _{2.5}	<1 lb/day	55 lb/day	N
SO _x	4 lb/day	150 lb/day	N
CO	2 lb/day	550 lb/day	N
CO ₂ e	75 MT/year	10,000 MT/year	N

Source: South Coast Air Quality Management District (SCAQMD). 2023. *South Coast AQMD Air Quality Significance Thresholds*. March.

Lastly, although the proposed project does constitute a major modification under SCAQMD Rule 2005(g), the requirements for an alternatives analysis, demonstration of statewide compliance, and protection of visibility are not applicable, not required, or met through the CEC's CEQA-equivalent licensing process, as described in Section 3.1.3.2.

3.1.6 Conditions of Certification

The proposed installation will require new and modified COCs related to air quality. The Project Owner expects that the permit conditions in the PTC/PTO to be issued by SCAQMD will be incorporated as part of the new and modified Air Quality COCs.

3.2 Biological Resources

3.2.1 Environmental Setting

This PTA does not require changes to the biological resources setting described in the Final Decision and subsequent amendments.

3.2.2 Environmental Consequence

The proposed installation of four emergency diesel-fired ICE generators will not result in any changes to habitat or physical disturbance of special-status species, natural or cropland vegetation, soils, wetlands, vernal pools or vernal swales; interfere with wildlife or aquatic species movement; or conflict with any local policies/ordinances or any approved/adopted conservation plans.

The proposed installation will, however, increase HBEP's NO_x PTE above the licensed annual emissions of 143.3 tpy by less than 0.01 percent.⁵ This minimal increase in NO_x emissions has the potential to minimally increase the already less-than-significant nitrogen deposition impacts analyzed during licensing. During licensing, CEC staff noted that the air dispersion modeling performed to predict HBEP's nitrogen deposition was likely an overprediction of the actual nitrogen deposition by as much as 10-fold and, therefore, was not expected to approach the critical nitrogen deposition levels for nearby sensitive habitats. Staff also concluded that the project area's nitrogen emissions inventory and baseline nitrogen deposition levels have decreased by more than 50 percent since the reporting of nitrogen deposition levels in 2002.⁶ Based on the conservative nature of the previous nitrogen deposition analysis, the proposed increase in HBEP's NO_x emissions is not expected to alter or undermine the conclusions reached by the CEC staff in the Final Decision and subsequent amendments. Therefore, the modified project is expected to result in less-than-significant impacts to biological resources.

3.2.3 Mitigation Measures

The proposed installation will not create a significant biological resources impact and will not require additional mitigation measures.

3.2.4 Consistency with LORS

The modified project conforms to applicable LORS related to biological resources.

⁵ California Energy Commission (CEC). 2023. *CEC Staff Analysis of Petition to Amend the Final Commission Decision*. May. Page 30, Air Quality Table 9.

⁶ California Energy Commission (CEC). 2014. *Final Staff Assessment for Huntington Beach Energy Project*. May. CEC-700-2013-002-FSA, Page 4.2-45.

3.2.5 Conditions of Certification

The proposed installation does not require changes to the COCs for biological resources.

3.3 Cultural/Tribal Resources

3.3.1 Environmental Setting

This PTA does not require changes to the cultural/tribal resources setting described in the Final Decision and subsequent amendments.

3.3.2 Environmental Consequences

The proposed installation will require only minor earth-moving/excavations for the foundation installation within previously disturbed soils and is not, therefore, expected to impact native soils. Additionally, the proposed installation of equipment within the CCGT power block does not materially alter the physical appearance of the project, which could potentially impact nearby historic properties. Therefore, no impacts to cultural/tribal resources are expected.

3.3.3 Mitigation Measures

No cultural/tribal resources impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.3.4 Consistency with LORS

The modified project conforms to applicable LORS related to cultural/tribal resources.

3.3.5 Conditions of Certification

The proposed installation does not require changes to the COCs for cultural/tribal resources.

3.4 Energy and Energy Resources

3.4.1 Environmental Setting

This PTA proposes to secure the available energy resources in the project area by maintaining power for the critical plant systems in the event of loss of grid power.

3.4.2 Environmental Consequences

The proposed project is not expected to result in significant impacts to energy resources. HBEP only operates when called on by the balancing authority, and installation of four emergency diesel-fired ICE generators will help maintain HBEP's readiness to operate in the event of loss of grid power. Furthermore, the potential increase in HBEP's operational emissions would not conflict with or obstruct state or local planning efforts for the implementation of renewable energy or energy efficiency projects. Therefore, no impacts to energy or energy resources are expected.

3.4.3 Mitigation Measures

No energy or energy resources impacts are expected from the proposed modification. Therefore, no additional mitigation measures are required.

3.4.4 Consistency with LORS

The modified project conforms to applicable LORS related to energy and energy resources.

3.4.5 Conditions of Certification

The Final Decision and subsequent amendments did not include COCs for energy or energy resources and, as impacts are considered less than significant, none are required.

3.5 Geological and Paleontological Resources

3.5.1 Environmental Setting

This PTA does not require changes to the geological and paleontological resources setting described in the Final Decision and subsequent amendments.

3.5.2 Environmental Consequences

The proposed installation will require only minor ground disturbance/excavations for the foundation installation within previously disturbed soil, and no additional geologic resources or geologic hazards have been identified in the project area. Therefore, no impacts to geological and paleontological resources are expected.

3.5.3 Mitigation Measures

No geological and paleontological resources impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.5.4 Consistency with LORS

The modified project conforms to applicable LORS related to geological and paleontological resources.

3.5.5 Conditions of Certification

The proposed modification does not require changes to the COCs for geological and paleontological resources.

3.6 Hazardous Materials Management

3.6.1 Environmental Setting

This PTA does not require changes to the hazardous materials management setting described in the Final Decision and subsequent amendments.

3.6.2 Environmental Consequences

The proposed installation of four emergency diesel-fired ICE generators will require more diesel fuel and urea onsite than was assumed during licensing of the HBEP. As diesel fuel and other similar hazardous materials are routinely handled, used, and stored onsite, the addition of four emergency diesel-fired ICE generators does not introduce a new or unique hazardous-material handling practice to the HBEP site. Therefore, the proposed project is not expected to result in any greater risk to the public or environment than already established in the Final Decision and subsequent amendments. Furthermore, continued implementation of existing COCs HAZ-1, HAZ-2, HAZ-3, and HAZ-6 will ensure that an impact, if any, is

reduced to less-than-significant levels. Therefore, no impacts from hazardous materials management are expected.

3.6.3 Mitigation Measures

No hazardous materials management impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.6.4 Consistency with LORS

The modified project conforms to applicable LORS related to hazardous materials management.

3.6.5 Conditions of Certification

The proposed installation does not require changes to the COCs for hazardous materials management.

3.7 Land Use

3.7.1 Environmental Setting

This PTA does not require changes to the land use setting described in the Final Decision and subsequent amendments.

3.7.2 Environmental Consequences

The proposed installation does not physically divide an established community. The project change is consistent with existing land uses in the project vicinity, the policy for consistent land use designation/zoning district, and other applicable policies. Therefore, no impacts to land use are expected.

3.7.3 Mitigation Measures

No land use impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.7.4 Consistency with LORS

The modified project conforms to applicable LORS related to land use.

3.7.5 Conditions of Certification

The proposed installation does not require changes to the COCs for land use.

3.8 Noise and Vibration

3.8.1 Environmental Setting

This PTA does not require changes to the noise and vibration setting described in the Final Decision and subsequent amendments.

3.8.2 Environmental Consequences

The proposed installation is not expected to increase noise or vibration-producing activities at the site beyond those analyzed during licensing of the HBEP. Therefore, the proposed installation is not expected to alter the noise or vibration impacts of the project.

3.8.3 Mitigation Measures

The proposed installation will not create a significant noise and vibration impact and will not require additional mitigation measures.

3.8.4 Consistency with LORS

The modified project conforms to applicable LORS related to noise and vibration.

3.8.5 Conditions of Certification

The proposed installation does not require changes to the COCs for noise and vibration.

3.9 Public Health

3.9.1 Environmental Setting

This PTA does not require changes to the public health setting described in the Final Decision and subsequent amendments.

3.9.2 Environmental Consequences

The proposed installation of four emergency diesel-fired ICE generators is expected to increase onsite diesel fuel consumption, which in turn is expected to increase DPM emissions. Table 3.9-1 presents hourly and annual emissions for the emergency ICE generators, assuming Tier-4 Final engine standards.

Table 3.9-1. DPM Emissions for Emergency ICE Generators

Source	Emission Factor	DPM Emissions	
	(g/hp-hr)	(lb/hr)	(lb/year)
Per ICE Generator	0.01	0.016	0.80
Total (4) Generators	0.04	0.064	3.20

Source: Yorke Engineering, LLC. 2025. *Application for Permits to Construct: Four (4) Diesel-Fueled Emergency Internal Combustion Engines*. Table 3-3. December.

SCAQMD Rule 1401 establishes allowable limits for MICR, cancer burden, chronic hazard index (HI), and acute HI for new permit units emitting any of the toxic air contaminants (TACs) specified in Rule 1401, Table 1, including DPM. However, per Rule 1401(g)(1)(F), emergency ICEs that are exempted under Rule 1304 are not required to determine associated health risks. Because AES is permitting these ICE generators as emergency units only, a determination of health risk is not required, and public health impacts associated with their operation are expected to be less than significant.

To support this conclusion, a Rule 1401 Tier 2 Screening Risk Assessment was conducted based on the projected generator operation schedule of 50 hours per year for maintenance and testing purposes. As shown in Appendix C of Attachment 3.1, the proposed project passes the assessment, indicating that installation of the four emergency ICE generators will not result in an increase in MICR greater than or equal to 1 in 1 million at any residential or worker receptor.

3.9.3 Mitigation Measures

The proposed installation will result in less-than-significant impacts on public health. Therefore, no additional mitigation measures are required.

3.9.4 Consistency with LORS

The modified project conforms to applicable LORS related to public health.

Additionally, as demonstrated through the Rule 1401 Tier 2 Screening Risk Assessment results presented in Appendix C of Attachment 3.1, the increase in emissions resulting from installation of the four emergency ICE generators will not cause a MICR greater than the significance threshold for purposes of complying with CEQA.

3.9.5 Conditions of Certification

The Final Decision and subsequent amendments did not include COCs for public health and, as impacts are considered less than significant, none are required.

3.10 Socioeconomics

3.10.1 Environmental Setting

This PTA does not require changes to the socioeconomic setting described in the Final Decision and subsequent amendments.

3.10.2 Environmental Consequences

The proposed installation of four emergency diesel-fired ICE generators will not alter the basis of the CEC's determination that HBEP will not have a significant impact on socioeconomics. Therefore, no significant socioeconomics impacts are expected.

3.10.3 Mitigation Measures

No socioeconomics impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.10.4 Consistency with LORS

The modified project conforms to applicable LORS related to socioeconomics.

3.10.5 Conditions of Certification

The proposed installation does not require changes to the COCs for socioeconomics.

3.11 Soil and Water Resources

3.11.1 Environmental Setting

This PTA does not require changes to the soil and water resources setting described in the Final Decision and subsequent amendments.

3.11.2 Environmental Consequences

The proposed installation will require only minor ground disturbance/excavations for the foundation installation within previously disturbed soil, occurs entirely within the developed project site, and will not result in an increase in water consumption or discharge. Additionally, the site's existing Spill Prevention, Control, and Countermeasures (SPCC) Plan will be modified and implemented accordingly to account for the additional diesel fuel storage associated with the proposed project. Therefore, no impacts to soil or water resources are expected.

3.11.3 Mitigation Measures

No soil and water resources impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.11.4 Consistency with LORS

The modified project conforms to applicable LORS related to soil and water resources.

3.11.5 Conditions of Certification

The proposed installation does not require changes to the COCs for soil and water resources.

3.12 Traffic and Transportation

3.12.1 Environmental Setting

This PTA does not require changes to the traffic and transportation setting described in the Final Decision and subsequent amendments.

3.12.2 Environmental Consequences

The proposed installation of four emergency diesel-fired ICE generators may require 1 to 2 additional fuel or chemical deliveries per year. This increase in truck deliveries to the site does not result in a material increase in traffic in the project area. Therefore, no significant impacts to traffic or transportation are expected.

3.12.3 Mitigation Measures

The proposed installation will not create a significant traffic and transportation impact and will not require additional mitigation measures.

3.12.4 Consistency with LORS

The modified project conforms to applicable LORS related to traffic and transportation.

3.12.5 Conditions of Certification

The proposed installation does not require changes to the COCs for traffic and transportation.

3.13 Visual Resources

3.13.1 Environmental Setting

This PTA does not require changes to the visual resources setting described in the Final Decision and subsequent amendments.

3.13.2 Environmental Consequences

The proposed installation of four emergency diesel-fired ICE generators within the existing CCGT power block will not materially alter the physical appearance of the project. The operation of the ICE generators is not expected to create a visible plume. Therefore, no impacts to visual resources are expected.

3.13.3 Mitigation Measures

No visual resources impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.13.4 Consistency with LORS

The modified project conforms to applicable LORS related to visual resources.

3.13.5 Conditions of Certification

The proposed installation does not require changes to the COCs for visual resources.

3.14 Waste Management

3.14.1 Environmental Setting

This PTA does not require changes to the waste management setting described in the Final Decision and subsequent amendments.

3.14.2 Environmental Consequences

The proposed installation is not expected to result in an increase in waste generation at the site. Therefore, no impacts to waste management are expected.

3.14.3 Mitigation Measures

No waste management impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.14.4 Consistency with LORS

The modified project conforms to applicable LORS related to waste management.

3.14.5 Conditions of Certification

The proposed installation does not require changes to the COCs for waste management.

3.15 Wildfire

3.15.1 Environmental Setting

The HBEP site is not located in or near a State Responsibility Area or a very high Fire Hazard Severity Zone.

3.15.2 Environmental Consequences

The proposed installation of four emergency diesel-fired ICE generators will not substantially impair an adopted emergency response/evacuation plan, expose project occupants to wildfire-related air pollution, require installation or maintenance of associated infrastructure that could exacerbate fire risk, or expose people or structures to significant risks from flooding or landslides.

3.15.3 Mitigation Measures

No wildfire impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.15.4 Consistency with LORS

The modified project conforms to applicable LORS related to wildfire.

3.15.5 Conditions of Certification

The Final Decision and subsequent amendments did not include COCs for wildfire and, as no impacts are expected, none are required.

3.16 Worker Safety and Fire Protection

3.16.1 Environmental Setting

This PTA does not require changes to the worker safety and fire protection setting described in the Final Decision and subsequent amendments.

3.16.2 Environmental Consequences

The proposed installation is not expected to significantly increase workers' exposure to health and safety hazards nor negatively impact the availability and adequacy of fire protection and emergency response services. Therefore, no impacts to worker safety and fire protection are expected.

3.16.3 Mitigation Measures

No worker safety and fire protection impacts are expected from the proposed installation. Therefore, no additional mitigation measures are required.

3.16.4 Consistency with LORS

The modified project conforms to applicable LORS related to worker safety and fire protection.

3.16.5 Conditions of Certification

The proposed installation does not require changes to the COCs for worker safety and fire protection.

4. Potential Effects on the Public

This section discusses the potential effects on the public that may result from the modification proposed in this PTA, in accordance with CEC Siting Regulations (Title 20, CCR, Section 1769(a)(1)(F)).

With the implementation of the proposed change, the project is not expected to create any adverse effect on the public. As previously mentioned, the proposed emergency ICE generators will be equipped with engines that comply with the applicable most stringent emission standards, which are EPA Tier-4 Final. Although the operation of these generators is expected to slightly increase the HBEP's overall PTE, the potential impacts associated with this increase in emissions are determined to be less-than-significant. Additionally, additional NO_x and SO_x RTCs will be secured in accordance with the applicable air compliance requirements. Amending the air quality COCs does not adversely affect the public because the facility will still adhere to the conditions in the project's Title V Facility Permit, as well as all other COCs contained in the amended CEC license. The modifications will occur entirely onsite, and air quality and public health impacts are not expected to result in unmitigated significant impacts on the public. Therefore, no significant adverse effects on the public are expected to result from the project change proposed in this PTA.

5. List of Property Owners

In accordance with the CEC Siting Regulations (Title 20, CCR, Section 1769(a)(1)(G)), a list of current assessor's parcel numbers and owners' names and addresses for all parcels within 500 feet of any affected project linears and 1,000 feet of the project site will be provided under separate cover. Since the proposed change does not affect any project linears, only the list of parcel/property owners within 1,000 feet of the project site will be provided.

6. Potential Effects on Property Owners, the Public, and Parties in the Proceeding

This section addresses potential effects of the project change proposed in this PTA on nearby property owners, the public, and parties in the application proceeding, in accordance with CEC Siting Regulations (Title 20, CCR, Section 1769(a)(1)(H)).

As set forth in Section 3, the proposed installation of four emergency diesel-fired ICE generators is not expected to result in any significant impacts, and the project is expected to remain in compliance with all applicable LORS. The project, as modified, will not differ significantly in potential effects on adjacent land owners, compared with the project as certified. The project, therefore, would have no adverse effects on nearby property owners, the public, or other parties in the application proceeding.

7. Potentially Applicable CEQA Exemptions

This section includes a discussion of any exemptions from CEQA, commencing with Section 21000 of the Public Resources Code, that the Project Owner believes may apply to approval of the proposed change. Given the operational changes proposed, the CEQA exemption for Air Quality Permits (Title 14, CCR, Section 15281) would not apply in this case, and no other exemptions appear to be applicable.

Attachment 3.1

HBEP Air Permit Application



**AES Huntington Beach,
LLC**

**21730 Newland Street
Huntington Beach, CA
92646**

**South Coast AQMD
Facility ID: 115389**

December 2025

Prepared by:



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**Application for Permits to Construct:
Four (4) Diesel-Fueled Emergency
Internal Combustion Engines**

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Construct:
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AES Huntington Beach, LLC
21730 Newland Street
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South Coast AQMD Facility ID: 115389

December 2025

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Application for Permits to Construct: Four (4) Diesel-Fueled Emergency ICEs

1.0 INTRODUCTION

1.1 Application Overview

AES Huntington Beach, LLC (AES) operates the Huntington Beach Energy Project (HBEP) under South Coast AQMD Facility ID 115389 on the existing Huntington Beach Generating Station (HBGS) property at 21730 Newland Street in the City of Huntington Beach. The HBEP consists of a Combined Cycle Gas Turbine (CCGT) power block (two CCGT's), each with unfired Heat Recovery Steam Generators (HRSG), a common Steam Turbine Generator (STG) and Air-Cooled Condenser (ACC), and ancillary equipment. An Auxiliary Boiler assists CCGT start-up. Boiler No. 2, which is part of the HBGS, currently operates under the California Department of Water Resources Electricity Supply Strategic Reliability Reserve Program. The facility collectively is referred to herein as AES HB.

AES is proposing the installation of four (4) identical diesel-fueled emergency Internal Combustion Engines (ICEs) to power critical plant systems in the event of a major power loss. The ICEs are referred to herein as the "Engines." Each Engine is rated at 744 brake horsepower (bhp) for standby operations and is certified to meet the US EPA Tier 4 Final emission standards.

AES HB's RECLAIM / Title V Facility Permit to Operate (FP) includes a facility-wide condition, Condition No. F2.1, that limits facility-wide actual emissions of Particulate Matter with Aerodynamic Diameter Less than or Equal to 2.5 Microns (PM_{2.5}) to no more than 70 tons per year. Condition No. C1.15 was added to the FP in August 2023 to limit Boiler No. 2 annual fuel consumption such that facility-wide Potential to Emit (PTE) for PM_{2.5} does not exceed 70 tons per year. This application demonstrates that installation of the four Engines does not increase the PTE above the level calculated in A/N's 622199/622200, and therefore a reduction in the annual fuel consumption limit from Condition No. C1.15 is not required. AES proposes updating Condition No. F2.1 to include the emission rates for the Engines.

On behalf of AES HB, Yorke Engineering, LLC (Yorke) is submitting this application package requesting:

- Permits to Construct (PTC) for the four (4) Engines; and
- Update to Condition No. F2.1 to include the emission rates for the Engines.

The Engines emit Nitrogen Oxides (NO_x), Sulfur Oxides (SO_x), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Particulate Matter with Aerodynamic Diameter Less than or Equal to 10 Microns (PM₁₀), PM_{2.5}, and Toxic Air Contaminants (TAC) in the form of Diesel Particulate Matter (DPM).

This application package contains the information necessary for the South Coast AQMD to process and approve the application, including facility information (Section 1.0), detailed equipment and process descriptions (Section 2.0), emission estimates (Section 3.0), and rule applicability and compliance determinations (Section 4.0). Recommended permit wording is provided in Section 5.0. Application forms and supporting documentation are provided in the appendices.

1.2 Facility Information

1.2.1 Facility Background

Current PTOs are summarized in Table 1-1. As of December 2025, there are no PTCs or open applications.

Table 1-1: Current Permits for AES Huntington Beach

A/N	Permit Type	Equipment Description
641791	PTO (Issued August 1, 2023)	Boiler No. 2, Natural Gas, with Flue Gas Recirculation and Oxygen Content Control, 2,021 mmBtu/hr, 215 MW Generating Capacity. Vented to Emission Controls.
372925	PTO (Issued September 10, 2010)	Emission Controls for Boiler No. 2. Selective Catalytic Reduction.
576783	PTO (Issued August 19, 2016)	Fire Pump No. 1, Diesel, 275 bhp.
576784	PTO (Issued August 19, 2016)	Fire Pump No. 2, Diesel, 275 bhp.
633199	PTO (Issued August 1, 2023)	Combined Cycle Gas Turbine No. 1, Natural Gas, with Dry Low NOx Combustor, 2,273 mmBtu/hr at 32 Deg F, 236.1 Gross MW at 32 Deg F, with Unfired Heat Recovery Steam Generator, and Steam Turbine, Common to Combined Cycle Gas Turbine No. 2, 221.4 Gross MW at 32 Deg F Vented to Emission Controls.
613958	PTO (Issued March 23, 2022)	Emission Controls for Combined Cycle Gas Turbine No. 1. Oxidation Catalyst and Selective Catalytic Reduction.
633200	PTO (Issued August 1, 2023)	Combined Cycle Gas Turbine No. 2, Natural Gas, with Dry Low NOx Combustor, 2,273 mmBtu/hr at 32 Deg F, 236.1 Gross MW at 32 Deg F, with Unfired Heat Recovery Steam Generator, and Steam Turbine, Common to Combined Cycle Gas Turbine No. 1, 221.4 Gross MW at 32 Deg F Vented to Emission Controls.
613960	PTO (Issued March 23, 2022)	Emission Controls for Combined Cycle Gas Turbine No. 2. Oxidation Catalyst and Selective Catalytic Reduction.
613957	PTO (Issued March 23, 2022)	Auxiliary Boiler, Natural Gas, with Low NOx Burner and Flue Gas Recirculation, 71 mmBtu/hr. Vented to Emission Controls.

Application for Permits to Construct: Four (4) Diesel-Fueled Emergency ICEs
AES Huntington Beach, LLC

A/N	Permit Type	Equipment Description
613956	PTO (Issued March 23, 2022)	Emission Controls for Auxiliary Boiler. Selective Catalytic Reduction.
604032	PTO (Issued March 23, 2022)	Storage Tank, Horizontal, 19% Aqueous Ammonia, 22,290 Gallon Capacity.
543867	PTO (Issued November 2, 2012)	Storage Tank, Fixed Roof, Urea, 30,000 Gallon Capacity.
578085	PTO (Issued March 23, 2022)	Oil / Water Separator

1.2.2 Facility Information

Facility information is listed in Table 1-2. Please include the Applicant Contact Information in Table 1-2 in all communications related to this application package.

Table 1-2: Facility Information

Applicant Name:	AES Huntington Beach, LLC			
Applicant Contact Information:	Ms. Charlene He, CPP, P.E. Southland Environmental Manager Office: (562) 493-7835 E-mail: Charlene.He@AES.com			
Applicant Responsible Official Information:	Jose Perez Director of Operations Office: (310) 318-7575 E-mail: Jose.Perez@AES.com			
Facility ID:	115389			
RECLAIM:	NOx	Yes	SOx	Yes
	Cycle		2	
	Zone		Coastal	
Title V:	Yes			
Mailing Address:	690 North Studebaker Road Long Beach, CA 90803			
Equipment Location:	21730 Newland Street Huntington Beach, CA 92646			

1.2.3 Facility / Equipment Location

AES HB is located at 21730 Newland Street in the City of Huntington Beach, approximately 900 feet from the Pacific Ocean. The surrounding area is a mix of residential, wetland preserve, public beach, and industrial, and is bordered by a manufactured home/recreation vehicle park on the west, Huntington Beach Channel, and residential areas to the north and east, a tank farm to the north, the Huntington Beach Wetland Preserve/Magnolia March wetlands on the southeast, and the Huntington Beach State Park and Pacific Ocean to the south and southwest. The entire parcel on which the HBGS and HBEP are located is approximately 29 acres. The tank farm is excluded from this estimate.

AES proposes installing four identical diesel-fired emergency engines at two locations (Location A and Location B) at AES HB, as shown in Figure 1-1. Two of the Engines are to be installed at Location A, near the combustion turbines of the two CCGT's; the other two Engines are to be installed at Location B, near the southwestern portion of the ACC. For this application package, the Engines are numbered clockwise, starting with the southern Engine from Location A. Engine No. 1 is the southern Engine from Location A; Engine No. 2 is the northern engine from Location A; Engine No. 3 is the northern Engine from Location B; and Engine No. 4 is the southern Engine from Location B. Page 1 of Appendix B and Figure C.1 from Appendix C provide a detailed view of the engine locations within the facility

Relative to Location A: (1) the nearest off-site worker is approximately 102 meters (~335 feet) to the northwest; (2) the nearest residence is approximately 306 meters (~1,004 feet) to the northwest; and (3) the nearest K-12 school, Edison High School, is approximately 906 meters (~2,972 feet) to the northeast.

Relative to Location B: (1) the nearest off-site worker is approximately 182 meters (~597 feet) to the northwest; (2) the nearest residence is approximately 415 meters (~1,362 feet) to the northwest; and (3) the nearest K-12 school, Edison High School, is approximately 850 meters (~2,789 feet) to the northeast.

Application for Permits to Construct: Four (4) Diesel-Fueled Emergency ICEs
AES Huntington Beach, LLC

Figure 1-1: Aerial View of Locations A and B, and Surrounding Area



1.3 Summary of Proposed Permit Actions

With this application package, AES HB requests (1) PTCs for the four (4) engines; and (2) updates to Condition No. F2.1 to include the emission rates for the Engines. A RECLAIM/Title V FP amendment (Significant Permit Revision) is included. Please note that AES is requesting expedited processing. Proposed permit changes are summarized in Table 1-3.

Table 1-3: Summary of Proposed Permit Actions

A/N	Permit Type Permit	Summary of Proposed Permit Action
WWWWWW	PTC Engine No. 1	<u>Permit to Construct</u> -Installation of Engine No. 1; identical to Engine Nos. 2, 3, and 4.
XXXXXX	PTC Engine No. 2	<u>Permit to Construct</u> -Installation of Engine No. 2; identical to Engine Nos. 1, 3, and 4.
YYYYYY	PTC Engine No. 3	<u>Permit to Construct</u> -Installation of Engine No. 3; identical to Engine Nos. 1, 2, and 4.
ZZZZZZ	PTC Engine No. 4	<u>Permit to Construct</u> -Installation of Engine No. 4; identical to Engine Nos. 1, 2, and 3.
VVVVVV	RECLAIM / Title V FP	<u>Facility-Wide Conditions</u> -Update the text of Condition No. F2.1 to include the emission rates for the Engines.

This application package contains the application forms necessary for application processing. A summary of the application forms is provided in Table 1-4; the application forms are included in Appendix A.

Table 1-4: South Coast AQMD Forms Accompanying This Application

Equipment	Requested Permit Action	Form Number Title
Engine No. 1	Permit to Construct	400-A Application Form for Permit or Plan Approval 400-E-13a Supplemental Information – Emergency Internal Combustion Engine (<i>The Engines are identical: this application package includes a single Form 400-E-13a.</i>) 400-PS Plot Plan and Stack Information Form (<i>The Engines are identical: this application package includes a single Form 400-E-13a.</i>)
Engine No. 2	Permit to Construct	400-A Application Form for Permit or Plan Approval
Engine No. 3	Permit to Construct	400-A Application Form for Permit or Plan Approval
Engine No. 4	Permit to Construct	400-A Application Form for Permit or Plan Approval

Application for Permits to Construct: Four (4) Diesel-Fueled Emergency ICEs
 AES Huntington Beach, LLC

Equipment	Requested Permit Action	Form Number Title
RECLAIM / Title V FP	Amendment (Significant Permit Revision)	400-A Application Form for Permit or Plan Approval 500-A2 Title V Application Certification 500-C1 Title V Compliance Status Report 500-F1 Title IV – Acid Rain Phase II Facility Information Summary
Project	---	400-CEQA California Environmental Quality Act (CEQA) Applicability 400-XPP Express Permit Processing Request

1.4 Project Schedule

The project schedule from the application forms is reproduced in Table 1-5.

Table 1-5: Current Project Schedule

Estimated Start Date of Construction	Estimated End Date of Construction	Estimated Start Date of Operation
April 2026	July 2026	August 2026

1.5 Application Preparation

This permit application was prepared by James Adams and Paul Liao of Yorke Engineering, LLC. If there are technical questions regarding this application, please use the contact information provided in Table 1-6.

Table 1-6: Application Preparers and Peer Review

Name:	James Adams	Paul Liao
Company:	Yorke Engineering, LLC	Yorke Engineering, LLC
Phone:	(949) 248-8490	(949) 248-8490
Cellular:	(949) 573-7924	(949) 573-1859
E-mail:	JAdams@YorkeEngr.com	PLiao@YorkeEngr.com

2.0 PROCESS AND EQUIPMENT DESCRIPTION

The process is described in Section 2.1; equipment descriptions are provided in Section 2.2. Supporting documentation is provided in Appendix B.

2.1 Process Description

AES HB supplies power to the wholesale energy market through the existing utility substation adjacent to the property and is dispatched at peaking and intermediate loads on a regular basis.

The purpose of the Engines is to provide power to critical plant systems in the event of a major power loss.

2.2 Equipment Description

Engine information is provided in tabular format in Table 2-1. Engine stack information is provided in tabular format in Table 2-2.

Table 2-1: Engine Information (Form 400-E-13a)

Parameter	Value
Manufacturer	Perkins
Model No.	2806F-E18TAG1
EPA Family No.	SCPXL18.1HTH-008
Manufacturer Maximum Rating	744 bhp @ 1,800 rpm
ICE Emergency Function [<u>Electrical Generator</u> , Fire Pump, Flood Control, Pump Driver, Compressor, Water Pump, Other]	Electrical Generator
Type [<u>Fixed Site</u> , Portable] How Is The Engine Used? [<u>Within Facility</u> , Off-Site, Rental]	Fixed Site; Within Facility
Fuel [<u>Diesel Oil</u> , LPG, Natural Gas, Other]	Diesel
Engine Size	18.1 Liters (~3 Liters / Cylinder)
No. of Cylinders [Four, <u>Six</u> , Eight, Ten, Twelve, Sixteen, Other]	Six
Aspiration Type [Naturally Aspirated, Turbocharged, <u>Turbocharged/Aftercooled</u>]	Turbocharged / Aftercooled
Air Pollution Control	Integral Tier 4 Final Emission Controls
Fuel Consumption	Maximum Load: 36.5 gal/hr Average Load: 36.5 gal/hr
Operating Schedule	<u>Maintenance & Testing (M&T)</u> 4.2 hr/day 4.2 hr/mo 50 hr/yr <u>Total</u> 200 hr/yr

Table 2-2: Engine Stack Information (Form 400-PS)

Parameter	Value
Location Data	
Location	Please refer to Section 1.2.3 and Figure 1-1 for the location of each Engine.
Location of Schools Nearby [Is the facility located within 1,320 feet from the outer boundary of a school?]	Please refer to Section 1.2.3 and Figure 1-1. The facility and the Engines are not located within 1,320 feet from the outer boundary of a school.
Population Density [Urban, Rural]	Rural. For dispersion modeling purposes, more than 50% of the land use within a circle with a 3-kilometer radius centered on AES HB may be categorized as rural.
Zoning Classification [Mixed Use Residential Commercial (M-U), Service and Professional Zone (C-S), Medium Commercial (C-3), Heavy Commercial (C-4), Commercial Manufacturing (C-M)]	Mixed Use Residential Commercial (M-U)
Stack Data	
Stack Height	12.5 feet. Per the drawing on Page 15 of Appendix B, the stacks are located just under a grill at one end of the housing. The stack height is assumed to be the same as the height of the housing, ~150 inches, or 12.5 feet.
Stack Inside Diameter	6 inches. Provided by the equipment supplier.
Height of Closest Building	104 feet above ground level. This is the approximate height of the ACC.
Stack Flow	935 acfm ¹ . See Page 7 of Appendix B.
Stack Temperature	911 Deg F. See Page 7 of Appendix B.
Rain Cap [Flapper Cap , Fixed Rain Cap, No Cap]	Per the equipment supplier, the 'rain cap' identified on Page 15 of Appendix B is a flapper cap. Flapper caps are not considered rain caps: the stacks are identified as not having rain caps in the Form 400-PS.
Stack Orientation [Vertical , Horizontal]	Vertical. See Page 15 of Appendix B.

Notes:

1. Units are listed as cfm and assumed to be acfm.

3.0 EMISSION CALCULATIONS

Emission calculations are summarized in Section 3.0 and shown in detail in Appendix C.

3.1 Criteria Pollutants

3.1.1 Emission Factors

Criteria pollutant emission factors for the Engines are shown in detail in Table C.2 in Appendix C and summarized in Table 3-1.

Table 3-1: Criteria Pollutant Emission Factors

Criteria Pollutant	Emission Factor	Reference
NOx	3.412 lb/mgal	Statement of Exhaust Emissions; Appendix B. Converted from g/bhp-hr to lb/mgal.
CO	3.143 lb/mgal	Statement of Exhaust Emissions; Appendix B. Converted from g/bhp-hr to lb/mgal.
VOC	0.180 lb/mgal	Statement of Exhaust Emissions; Appendix B. Converted from g/bhp-hr to lb/mgal.
SOx	6.24 lb/mgal	Starting Emission Factor from Rule 2002, Table 2.
PM10	0.449 lb/mgal	Statement of Exhaust Emissions; Appendix B. Converted from g/bhp-hr to lb/mgal.

3.1.2 Emission Summary

Criteria pollutant emission calculations are shown in detail in Table C.2 in Appendix C and summarized in Table 3-2.

Table 3-2: Criteria Pollutant Emissions (per Engine)

Criteria Pollutant	Hourly Emissions ¹ (lb/hr)	Daily Emissions ² (lb/day)	Annual Emissions ³ (lb/yr)	30-Day Average Emissions ⁴ (lb/30-day)
NOx	0.125	0.525	6.25	0.018
CO	0.115	0.483	5.75	0.016
VOC	0.007	0.029	0.35	0.001
SOx	0.228	0.958	11.40	0.032
PM10/PM2.5	0.016	0.067	0.80	0.002

Notes:

1. Hourly Emissions (lb/hr) = Emission Factor (lb/mgal) x 36.5 gal/hr / 1,000 gal/mgal.
2. Daily Emissions (lb/day) = Hourly Emissions (lb/hr) x 4.2 M&T hr/day.
3. Annual Emissions (lb/yr) = Hourly Emissions (lb/hr) x 50 M&T hr/yr.
4. 30-Day Average Emissions (lb/30-day) = Hourly Emissions (lb/hr) x 4.2 M&T hr/mo / 30.

3.2 Toxic Air Contaminants

DPM is assumed to be equivalent to PM10/PM2.5. TAC emission calculations are shown in detail in Table C.3 in Appendix C and summarized in Table 3-3.

Table 3-3: TAC Emissions (per Engine)

TAC	CAS No.	Emission Factor Uncontrolled ¹ (lb/mgal)	Hourly Emissions ² (lb/hr)	Annual Emissions ³ (lb/yr)
Diesel Particulate Matter (DPM)	9901	0.449	0.016	0.80

Notes:

1. This emission factor accounts for the integral Tier 4 Final emission controls. Add-on controls are not required.
2. [From Table 3-2] Hourly Emissions (lb/hr) = Emission Factor (lb/mgal) x 36.5 gal/hr / 1,000 gal/mgal.
3. [From Table 3-2] Annual Emissions (lb/yr) = Hourly Emissions (lb/hr) x 50 M&T hr/yr.

3.3 Greenhouse Gas

Greenhouse gas (GHG) emissions are estimated from the South Coast AQMD Combustion Emission Estimator for Form 400-CEQA. Greenhouse gas emission calculations are shown in detail in Table C.4 in Appendix C and summarized in Table 3-4.

Table 3-4: GHG Emissions (per Engine and All Engines)

GHG	Emission Factor ¹ (lb/mgal)	Annual Emissions ² (lb/yr)	CO ₂ e ³ (MT/yr)
CO ₂	22,332	40,765.58	18.48
CH ₄	0.9056	1.65	0.02
N ₂ O	0.1808	0.33	0.04
Total (per Engine)			18.55
Total ⁴ (All Engines)			74.19

Notes:

1. Emission factors are from the South Coast AQMD Combustion Emission Estimator for Form 400-CEQA.
2. Annual Emissions (lb/yr) = Emission Factor (lb/mgal) x 36.5 gal/hr x / 1,000 gal/mgal x 50 M&T hr/yr.
3. CO₂e (MT/yr) = Annual Emissions (lb/yr) / 2,205 lb/MT x CO₂eq, where CO₂eq = 1 for CO₂; CO₂eq = 25 for CH₄; CO₂eq = 298 for N₂O.
4. Total (All Engines) = Total (per Engine) x 4.

3.4 Project Emissions

Project (All Engines) emissions are shown in detail in Table C.5 in Appendix C and summarized in Table 3-5.

Table 3-5: Project Emissions (All Engines)

Pollutant	Hourly Emissions (lb/hr)	Daily Emissions (lb/day)	Annual Emissions (tpy)	30-Day Average Emissions (lb/30-day)
NOx	0.500	2.100	0.0125	0.072
CO	0.460	1.932	0.0115	0.064
VOC	0.028	0.116	0.0007	0.004
SOx	0.912	3.832	0.0228	0.128
PM10/PM2.5	0.064	0.268	0.0016	0.008
Ammonia ¹			Negligible	--
CO2e			74.19 MT/yr	--
HAPs ¹			Negligible	--

Notes:

1. **Ammonia:** As shown in Table 3-6, AES HB is an existing Major Source of ammonia emissions under Rule 1325 (Pre-Project PTE > 70 tpy). Engine ammonia emissions are not calculated as the emissions are negligible relative to the 40 tpy Significant increase threshold from Rule 1325(b)(13). **HAPs:** As shown in Table 3-6, AES HB is not an existing Major Source of HAPs. Engine HAP emissions are not calculated as the emissions are negligible relative to the increase needed (25 tpy – 13.68 tpy) to cause PTE to exceed 25 tpy.

Pre-Project and Post-Project facility-wide PTE (annual basis) calculations are shown in detail in Table C.6 in Appendix C and summarized in Table 3-6.

Table 3-6: Pre-Project and Post-Project Facility-Wide PTE

Pollutant	Pre-Project (tpy)	4 Engines (tpy)	Post-Project (tpy)
NOx	161.7	0.0125	161.7
CO	1,005.7	0.0115	1,005.7
VOC	82.3	0.0007	82.3
SOx	13.4	0.0228	13.4
PM10/PM2.5	69.9	0.0016	69.9 ¹
Ammonia	120.2	Negligible	120.2
CO2e	2,270,945	82 ²	2,271,026
HAPs	13.68	Negligible	13.68

Notes:

1. Pre-Project and Post-Project PTE for PM2.5 remain at 69.9 tpy, which is less than the 70 tpy Major Source threshold under Rule 1325.
2. CO2e emissions in Table 3-6 are in units of tpy rather than MT/yr.

4.0 RULE COMPLIANCE EVALUATION

4.1 Regulation II - Permits

4.1.1 Rule 212 - Standards for Approving Permits and Issuing Public Notice

Rule 212(c) requires public notice for:

- (c)(1). A project requesting installation of a new source or modification of an existing source, if the source is location within 1,000 feet of the outer boundary of a school¹; or

Discussion: As shown in Figures 1-1 and 1-2, the nearest school, Edison High School, is approximately 3,000 feet northeast of the proposed Engine locations. The project sources are not located within 1,000 feet of the outer boundary of a school. The project does not meet the criteria for public notice from Rule 212(c)(1).

- (c)(2). A project resulting in a new or modified facility with on-site emission increases exceeding any of the daily maximums from Rule 212(g); or

Discussion: Rule 212(g) lists daily maximum emission increases for criteria pollutants. According to South Coast AQMD's January 2019 policy document *Rule Implementation Guidance, Rule 212 Public Notices*², the analysis may be based on 30-day average emission limits for new equipment that will have a monthly emission limit and not a daily emission limit. This application proposes a limitation on monthly M&T hours, as required by Rule 1313(g). Therefore, the Rule 212(g) comparison shown in Table 4-1 is based on the 30-day average emissions from Table 3-5. As shown in Table 4-1, the net change in 30-day average emissions does not exceed the Rule 212(g) thresholds. The project does not meet the criteria for public notice from Rule 212(c)(2).

Table 4-1: Rule 212(g) Threshold Comparison

Pollutant	Rule 212(g) Threshold (lb/day)	Project Net Changes (lb/30-day)	Exceeds Threshold? (Yes/No)
NOx	40	0.072	No
CO	220	0.064	No
VOC	30	0.004	No
SOx	60	0.128	No
PM10	30	0.008	No

¹ Health & Safety Code Section 42301.9 defines school as “any public or private school used for the purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes.”

² Excerpt provided in Pages 24-26 from Appendix B.

- (c)(3). A project requesting installation of a new source or modification of an existing source, if the emission increases result in exposure to Maximum Individual Cancer Risk (MICR) greater than or equal to the applicable thresholds in (c)(3)(A), or substances that pose a potential risk of nuisance.

Discussion: Health Risk Assessment (HRA) methodology is provided in tabular format in Tables C.9-C.11 in Appendix C; HRA output is provided in Table C.12 and Figure C.2 in Appendix C. Results are summarized in Table 4-2 below. As shown in Table 4-2, the MICR due to the operation of each Engine at the maximally impacted residence and off-site worker is below the Rule 212(c)(3) threshold of 1 in a million. This project does not require public notice pursuant to Rule 212(c)(3).

Table 4-2: Rule 212(c)(3) Threshold Comparison

Receptor Type	Rule 212(c)(3) Threshold	MICR	Exceeds Threshold? (Yes/No)
Engine No. 1			
Residence	1 in a million	0.0436 in a million	No
Off-Site Worker	1 in a million	0.0153 in a million	No
Engine No. 2			
Residence	1 in a million	0.0438 in a million	No
Off-Site Worker	1 in a million	0.0152 in a million	No
Engine No. 3			
Residence	1 in a million	0.0438 in a million	No
Off-Site Worker	1 in a million	0.0055 in a million	No
Engine No. 4			
Residence	1 in a million	0.0439 in a million	No
Off-Site Worker	1 in a million	0.0054 in a million	No

This project does not require Rule 212 public notice.

4.2 Regulation III - Fees; Rule 301

The application processing fees were determined using Rule 301 (fees effective July 1, 2025). Application processing fees are summarized in Table 4-3. AES HB is requesting expedited processing.

Table 4-3: Application Processing Fees

Equipment	Rule 301 Table IA/IB Description	Schedule	Requested Permit Action	Fee
Engine No. 1 (A/N WWWWWW)	IC Engine, Emergency	B	Permit Processing; RECLAIM / Title V; FY2025-26 and thereafter	\$4,959.22
Engine No. 2 (A/N XXXXXX) [Identical, Engine No. 1]	IC Engine, Emergency	B	Permit Processing; RECLAIM / Title V; FY2025-26 and thereafter	\$2,479.61 (0.5 x \$4,959.22)
Engine No. 3 (A/N YYYYYY) [Identical, Engine No. 1]	IC Engine, Emergency	B	Permit Processing; RECLAIM / Title V; FY2025-26 and thereafter	\$2,479.61 (0.5 x \$4,959.22)
Engine No. 4 (A/N ZZZZZZ) [Identical, Engine No. 1]	IC Engine, Emergency	B	Permit Processing; RECLAIM / Title V; FY2025-26 and thereafter	\$2,497.61 (0.5 x \$4,959.22)
Subtotal				\$12,398.05
Additional Charge [Expedited Processing – Rule 301(v)]				\$6,199.04
RECLAIM / Title V Facility Permit Amendment Fee – 301, Table VII				\$3,667.54
Total (w/ Expedited Processing)				\$22,264.63

4.3 Regulation IV - Prohibitions

4.3.1 Rule 401 - Visible Emissions

This rule prohibits the discharge into the atmosphere from any single source of emissions of any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (b)(1)(A) of the rule.

Proper operation of Tier 4 Final diesel-fueled emergency ICEs is not expected to result in visible emissions. Compliance is expected.

4.3.2 Rule 402 - Nuisance

Rule 402 prohibits the discharge from any source such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

Proper operation of Tier 4 Final diesel-fueled emergency ICEs is not expected to result in visible emissions. Compliance is expected.

4.3.3 Rule 404 - Particulate Matter Concentration

Rule 404 prohibits the discharge into the atmosphere from any source particulate matter in excess of the concentration at standard conditions, shown in Table 404(a) of the rule.

The Engines are subject to Rule 404. Rule 404 calculations (assuming PM₁₀ = PM) are provided in Table C.8 in Appendix C and summarized in Table 4-4. As shown in Table 4-4, PM concentration in the Engine exhaust is estimated to be less than the maximum allowed under Table 404(a). Compliance is expected.

Table 4-4: Rule 404 Summary

Equipment	Maximum Allowed Concentration from Table Rule 404(a) (gr/dscf)	Estimated Concentration (gr/dscf)	Estimated Exceeds Maximum Allowed? (Yes/No)
Engines	0.1960	0.0058	No

4.3.4 Rule 407 - Liquid and Gaseous Air Contaminants

Rule 407(a)(1) prohibits discharging CO into the atmosphere from any equipment in excess of 2,000 ppmv, averaged over 15 consecutive minutes. Rule 407(a)(2) prohibits discharging SO₂ into the atmosphere in concentrations in excess of the levels from Rule 407(a)(2)(A)-(B), averaged over 15 consecutive minutes.

Per Rule 407(b)(1), “stationary internal combustion engines” are not subject to Rule 407. The Engines are not subject to the emission standards of Rule 407.

4.3.5 Rule 409 - Combustion Contaminants

Rule 409 prohibits the discharge of combustion contaminants into the atmosphere from fuel-burning equipment that is in excess of 0.1 grains per cubic foot, calculated at 12 percent CO₂, at standard conditions and averaged over 15 consecutive minutes.

The Engines are not subject to Rule 409, as Rule 409 states that “... the provisions of this rule shall not apply to ... emissions from internal combustion engines”.

4.3.6 Rule 431.2 - Sulfur Content of Liquid Fuels

The purpose of Rule 431.2 is to limit the sulfur content in diesel and other liquid fuels for the purpose of both reducing the formation of sulfur oxides and particulates during combustion and to enable the use of add-on control devices for diesel fueled internal combustion engines. Rule 431.2 applies to all refiners, importers, and other fuel suppliers such as distributors, marketers and retailers, as well as to users of diesel, low sulfur diesel, and other liquid fuels for stationary source applications in the District. Rule 431.2 also affects diesel fuel supplied for mobile source applications.

Rule 431.2(e)(2) limits the sulfur content of diesel consumed in stationary equipment to no more than 15 ppmw. Rule 431.2(f)(3) requires facilities to maintain records demonstrating that diesel consumed in stationary equipment complies with the limitation on sulfur content from paragraph (e)(2).

Facility Condition No. F14.1 implements the limitation on sulfur content from paragraph (e)(2). Facility Condition No. F16.1 implements the recordkeeping requirement from paragraph (f)(3). Continued compliance with these two facility conditions ensures continued compliance with Rule 431.2.

4.4 Regulation IX - New Source Performance Standards

Regulation IX, New Source Performance Standards (NSPS), was adopted by reference to the appropriate section of the Code of Federal Regulations (CFR). These regulations are periodically updated to reflect actions published in the Federal Register (FR) by the Environmental Protection Agency (EPA).

4.4.1 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines

40 CFR 60 Subpart IIII (4I) applies to manufacturers, owners, and operators of stationary compression ignition (CI) IC engines as specified in paragraphs (a)(1) through (a)(4) of §60.4200(a).

§60.4200(a)(2)(i) specifies that 4I is applicable to owners and operators of stationary CI IC engines that commence construction after July 11, 2005 where the stationary CI IC engine is manufactured after April 1, 2006. The Engines are subject to 4I pursuant to §60.4200(a)(2)(i).

§60.4205(b) - Emission Standards

§60.4205(b) states that owner/operators of 2007 model year and later emergency stationary CI IC engines with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards from §60.4202.

Per §60.4202(a), “Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kW (3,000 hp) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (1)(1) through (2) of this section.” Per Table 2-1, the Engines are rated at 744 hp, have displacement of approximately 3 liters per cylinder, and are not fire pumps. The Engines are subject to the applicable emission standards from 60.4202(a).

Per §60.4202(a)(2), “For engines with a rated power greater than or equal to 37 kW (50 hp), the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR part 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 beginning in model year 2007.”

The 744 hp from Table 2-1 is equivalent to approximately 550 kW. The applicable standards from 40 CFR 1039 Appendix I are the Tier 3 standards from Table 3 to Appendix I. The applicable standards are 4.0 g/kW-hr NO_x + NMHC [3.0 g/hp-hr], 3.5 b/kW-hr CO [2.6 g/hp-hr], and 0.20 g/kW-hr PM [0.15 g/hp-hr]. Engine emission rates are shown in Table C.2 in Appendix C: 0.080 g/bhp-hr NO_x + NMHC (< 3.0), 0.07 g/bhp-hr CO (< 2.6), and 0.01 g/bhp-hr PM (< 0.15). The Engines comply with these emission standards.

The smoke standards from 40 CFR 1039.105 do not apply to engines certified to a PM emission standard of 0.07 g/kW-hr [0.05 g/hp-hr] or less, per 40 CFR 1039.105(a)(3). The Engine PM emission rate from Table C.2 in Appendix C, 0.01 g/bhp-hr, is less than 0.05 g/bhp-hr. The smoke standards from 40 CFR 39.105 do not apply to the Engines.

§60.4207(b) - Fuel Requirements

“Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.”

Sulfur Standard

Per 40 CFR 1090.305(b), the maximum sulfur content is 15 ppmw. Continued compliance with Facility Condition F14.1 ensures compliance with the sulfur standard.

Cetane Index or Aromatic Content

Per 40 CFR 1090.305(c), the fuel must have either minimum cetane index of 40 or no more than 35% by volume aromatic content. 13 CCR 2282(a)(1)(A) limits aromatic hydrocarbon content to no more than 10% by volume.

§60.4209 - Monitoring Requirements

§60.4209(a) states that “If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.” Each Engine is equipped with non-resettable hour meter.

§60.4209(b) states that “If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in §60.4202, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.” Engines with integral Tier 4 Final controls are capable of automatic adjustments. 60.4209(b) does not apply to engines with integral Tier 4 Final controls.

§60.4211 - Compliance Requirements

§60.4211(a) states that:

“If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer’s emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR part 1068, as they apply to you.”

AES HB will ensure that the Engines are operated and maintained in accordance with manufacturer’s emission-related written instructions and change only those emission-related settings that are permitted by the manufacturer.

§60.4211(c) states that:

“If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in ... §60.4205(b) ... you must comply by purchasing an engine certified to the emission standards in ... §60.4205(b) ... for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer’s emission-related specifications, except as permitted in paragraph (g) of this section.”

The Engines are certified to meet Tier 4 Final emission standards, which are lower than the applicable emission standards from 40 CFR 1039, Appendix I. AES HB will ensure that the Engines are installed and configured according to the manufacturer’s emission-related specifications. AES HB does not intend to operate the Engines in a manner that would require compliance with 60.4211(g).

§60.4211(f) provides operating time limitations for emergency engines. Engines that operate contrary to these limitations are subject to the standards for non-emergency engines.

- (f)(1) “There is no time limit on the use of emergency stationary ICE in emergency situation.” Per South Coast AQMD requirements, the Engines will each be limited to no more than 200 hours of total operation per year, as shown in Table 2-1.
- (f)(2) §60.4211(f)(2) allows for up to 100 hours of operation per calendar year for M&T purposes. Per South Coast AQMD requirements, the Engines will each be limited to no more than 50 hours per calendar year for M&T, as shown in Table 2-1.
- (f)(3) §60.4211(f)(3) allows for up to 50 hours of operation per calendar year in non-emergency situations. Per South Coast AQMD requirements, operation is not allowed in non-emergency, non-M&T situations.

§60.4214 - Notification, Reporting, and Recordkeeping Requirements

§60.4214(b) states that “If the stationary engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification ...” Per §60.4214(b), since the Engines are emergency ICEs, AES HB is not required to submit an initial notification.

§60.4214(c) states that “If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.” As described under §60.4209(b), engines with integral Tier 4 Final controls are capable of automatic adjustments and operator backpressure monitoring is not required.

4.5 Regulation X - National Emission Standards for Hazardous Air Pollutants

Regulation X, National Emission Standards for Hazardous Air Pollutants (NESHAP), was adopted by reference to the appropriate section of the CFR. These regulations are periodically updated to reflect actions published in the FR by the EPA. There are no Part 61 requirements applicable to this project.

4.5.1 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR 63 Subpart ZZZZ (4Z) establishes national emission limitations and operation limitations for Hazardous Air Pollutants (HAP) emitted from stationary Reciprocating Internal Combustion Engines (RICE) located at major and area sources of HAP emissions. 4Z also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

According to the South Coast AQMD evaluation for A/N’s 622199/622200 and as shown in Table C.6 in Appendix C, AES HB is an Area Source of HAP emissions (Total HAP PTE = 13.68 tpy, less than the 25 tpy Major Source threshold).

The Engines are considered to be ‘new’ stationary RICE per §63.6590(a)(2)(iii) since construction will have commenced after June 12, 2006.

§63.6590(c)(1) states that a “... new or reconstructed stationary RICE located at an area source” complies with 4Z by complying with the applicable requirements of 40 CFR 60 Subpart IIII and is subject to no further requirements under 4Z.

The Engines comply with 4Z by complying with the applicable requirements from 40 CFR 60 Subpart IIII.

4.6 Regulation XI - Source Specific Standards

4.6.1 Rule 1110.2 - Emissions from Gaseous- and Liquid-Fueled Engines

The purpose of Rule 1110.2 is to reduce emissions of NO_x, VOC, and CO from engines. Rule 1110.2 applies to all stationary and portable engines with rating greater than 50 bhp.

Rule 1110.2(i)(1)(B) exempts “Emergency standby engines, engines used for fire-fighting and flood control, and any other emergency engines approved by the Executive Officer, which have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter, and agricultural emergency standby engines that are exempt from a South Coast AQMD permit and operate 200 hours or less per year as determined by an elapsed operating time meter.”

The Engines are emergency standby engines that are each limited to no more than 200 hours of total operation per year as shown in Table 2-1 and are therefore exempt from Rule 1110.2.

4.7 Regulation XIII - New Source Review

Per Rule 1301(a), Regulation XIII sets forth pre-construction requirements for new, modified, or relocated facilities, to ensure that the operation of such facilities does not interfere with progress in attainment of the national ambient air quality standards, and that future economic growth within the South Coast AQMD is not unnecessarily restricted. The specific air quality goal of Regulation XIII is to achieve no net increases from new or modified permitted sources of nonattainment air contaminants or their precursors.

In addition to nonattainment air contaminants, Regulation XIII also limits emission increases of ammonia, and Ozone Depleting Compounds (ODCs) from new, modified or relocated facilities by requiring the use of Best Available Control Technology (BACT).

South Coast Air Basin National Ambient Air Quality Standard (NAAQS) and California Ambient Air Quality Standard (CAAQS) attainment status, as shown in Tables 2-1 and 2-2, respectively, of from Appendix II from the South Coast AQMD’s 2022 Air Quality Management Plan, is reproduced in Table 4-5.

The South Coast Air Basin is in serious nonattainment with PM_{2.5} standards and extreme nonattainment with ozone standards. NO_x, VOC, and SO_x are PM_{2.5} precursors; NO_x and VOC are ozone precursors. Emissions of VOC, SO_x (under Rule 1325), and PM_{2.5} (under Rule 1325) are therefore subject to Regulation XIII. AES HB is a NO_x RECLAIM facility. New Source Review requirements for NO_x are discussed in Section 4.10.1.

The South Coast Air Basin is in attainment with the NAAQS for PM₁₀ and nonattainment with the CAAQS. SO_x is a PM₁₀ precursor. Emissions of PM₁₀ are subject to Regulation XIII. AES HB is a SO_x RECLAIM facility. New Source Review requirements for SO_x are discussed in Section 4.10.1.

Although the South Coast Air Basin is in attainment with the NAAQS and CAAQS for CO, it is typical for CO to be reviewed under Regulation XIII, with the exception of offset requirements.

Table 4-5: South Coast Air Basin NAAQS and CAAQS Attainment Status

Criteria Pollutant	Standard	Attainment Status
Ozone	(1979) NAAQS; 1-Hour; 0.12 ppm	Extreme Nonattainment
	(2015) NAAQS; 8-Hour; 0.070 ppm	Extreme Nonattainment
	(2008) NAAQS; 8-Hour; 0.075 ppm	Extreme Nonattainment
	(1997) NAAQS; 8-Hour; 0.08 ppm	Extreme Nonattainment
	CAAQS; 1-Hour; 0.09 ppm	Nonattainment
	CAAQS; 8-Hour; 0.070 ppm	Nonattainment
PM2.5	(2006) NAAQS; 24-Hour; 35 ug/m ³	Serious Nonattainment
	(2012) NAAQS; Annual; 12.0 ug/m ³	Serious Nonattainment
	(1997) NAAQS; Annual; 15 ug/m ³	Attainment (Final Determination Pending)
	CAAQS; Annual; 12 ug/m ³	Nonattainment
PM10	(1987) NAAQS; 24-Hour; 150 ug/m ³	Attainment
	CAAQS; 24-Hour; 50 ug/m ³	Nonattainment
	CAAQS; Annual; 20 ug/m ³	Nonattainment
CO	(1971) NAAQS; 1-Hour; 35 ppm	Attainment
	(1971) NAAQS; 8-Hour; 9 ppm	Attainment
	CAAQS; 1-Hour; 20 ppm	Attainment
	CAAQS; 8-Hour; 9.0 ppm	Attainment
NO ₂	(2010) NAAQS; 1-Hour; 100 ppb	Unclassifiable / Attainment
	(1971) NAAQS; Annual; 0.053 ppm	Attainment
	CAAQS; 1-Hour; 0.18 ppm	Attainment
	CAAQS; Annual; 0.030 ppm	Attainment
SO ₂	(2010) NAAQS; 1-Hour; 75 ppb	Unclassifiable / Attainment
	(1971) NAAQS; 24-Hour; 0.14 ppm	Unclassifiable / Attainment
	CAAQS; 1-Hour; 0.25 ppm	Attainment
	CAAQS; 24-Hour; 0.04 ppm	Attainment

4.7.1 Rule 1303 - Requirements

4.7.1.1 Rule 1303(a) - Best Available Control Technology (BACT)

Rule 1303(a) requires Best Available Control Technology (BACT) for a new emission source that results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia. Major Sources are subject to BACT/Lowest Achievable Emission Rate (LAER) requirements, which is determined at the time a permit is issued.

As a Major Source, AES HB is subject to BACT/LAER requirements. AES HB proposes that BACT/LAER for the Engines is compliance with Tier 3 emission standards, the sulfur content requirements from Rule 431.2, and the applicable requirements from Rule 1470, consistent with South Coast AQMD's *BACT Guidelines for Non-Major Polluting Facilities*. These requirements are summarized in Table 4-6.

The Engines are certified to comply with Tier 4 Final emission standards, are to be fueled with diesel with sulfur content no greater than 15 ppmw and, as discussed in Section 4.8.3, comply with the applicable requirements of Rule 1470. The Engines comply with proposed BACT/LAER.

Table 4-6: Proposed BACT/LAER for the Engines

Criteria Pollutant	Requirement
NO _x + NMHC	<u>Emission Limitation</u> 3.0 g/bhp-hr (<i>Engines: 0.080 g/bhp-hr</i>) <u>Rule Requirements</u> Compliance with Rule 1470
CO	<u>Emission Limitation</u> 2.6 g/bhp-hr (<i>Engines: 0.07 g/bhp-hr</i>) <u>Rule Requirements</u> Compliance with Rule 1470
SO _x	<u>Fuel Requirement</u> Diesel with sulfur content no greater than 15 ppmw (<i>Facility Condition No. F14.1</i>)
PM ₁₀	<u>Emission Limitation</u> 0.15 g/bhp-hr (<i>Engines: 0.01 g/bhp-hr</i>) <u>Rule Requirements</u> Compliance with Rule 1470

4.7.1.2 Rule 1303(b)(1) - Modeling

Rule 1303(b)(1) requires a demonstration that a modified facility will not cause or make worse, a violation of an ambient air quality standard.

Appendix A to Rule 1303 states that “... modeling for VOC and SO_x is not required ...” and provides procedures for a screening analysis for NO_x, CO, and PM₁₀. The screening analysis requires comparing “... emissions from the source³ you are applying for to those in Table A-1 ...”

Per Rule 1304(a)(4), the Rule 1303(b)(1) modeling demonstration is not required for “... emergency standby equipment ...” that “... does not operate more than 200 hours per year ...” The Engines are emergency standby equipment that does not operate more than 200 hours per year and are therefore not subject to the modeling requirements of Rule 1303(b)(1) for CO or PM₁₀.

4.7.1.3 Rule 1303(b)(2) - Offsets

Rule 1303(b)(2) states that “unless exempt from offset requirements pursuant to Rule 1304, emission increases shall be offset by either Emission Reduction Credits approved pursuant to Rule 1309, or by allocations from the Priority Reserve in accordance with the provisions of Rule 1309.1, or allocations from the Offset Budget in accordance with the provisions of Rule 1309.2 ...”

Per Rule 1304(a)(4), Rule 1303(b)(2) offset requirements do not apply to “... emergency standby equipment ...” that “... does not operate more than 200 hours per year ...” The Engines are emergency standby equipment that does not operate more than 200 hours per year and are therefore not subject to the offset requirements of Rule 1303(b)(1) for VOC or PM₁₀.

4.7.1.4 Major Polluting Facilities

Rule 1303(b)(5) requires additional review of new Major Polluting Facilities and Major Modifications at Major Polluting Facilities. The definitions of Major Polluting Facility and Major Modification are provided in Rule 1302. As described in both definitions, these determinations are based on Potential to Emit.

The Pre-Project PTE from Table 3-6 and the Engine emissions from Table 3-5 are compared to the Major Polluting Facility and Major Modification thresholds in Table 4-7. As shown in Table 4-7, this project is not a Major Modification under Regulation XIII.

³ Rule 1302(ao). “SOURCE means any permitted individual unit, piece of equipment, article, machine, process, contrivance or combination thereof, which may emit or control an air contaminant. This includes any permit unit at any non-RECLAIM facility and any device at a RECLAIM facility.”

Table 4-7: Rule 1303 Major Polluting Facility Review

Criteria Pollutant	Major Source Threshold ¹ (ton/yr)	Pre-Project PTE ² (ton/yr)	Existing Major Source?	Major Mod. Threshold ³	Project Increase ⁴	Major Mod. ⁵
CO	100	1,005.7	Yes	50 ton/yr	0.01 ton/yr	No
VOC	10	82.3	Yes	1 lb/day	0.12 lb/day	No
PM10	100	69.9	No	15 ton/yr	0.002 ton/yr	--

Notes:

1. The Major Source thresholds shown here for CO and PM10 are different from Rule 1302(s). VOC is set to 10 ton/yr due to the South Coast Air Basin being in extreme nonattainment with the NAAQS for ozone [no change from Rule 1302(s)]. CO and PM10 are set to 100 ton/yr due to the South Coast Air Basin being in attainment with the NAAQS for CO and PM10 [CO = 50 ton/yr in Rule 1302(s) and PM10 = 70 ton/yr in Rule 1302(s)]. Usage of the thresholds shown here in place of the thresholds from Rule 1302(s) does not affect the conclusion.
2. Pre-Project PTE from Table 3-6.
3. Major Modification thresholds are from Rule 1302(r).
4. Project increases from Tables 3-5.
5. Project increases are compared to the Major Modification thresholds for pollutants for which AES HB is an existing Major Source.

4.7.2 Rule 1313 - Permits to Operate

Rule 1313(g) requires every permit to have conditions identifying BACT and monthly maximum emissions.

AES HB understands that the PTCs for the Engines will be issued with conditions that identify BACT requirements and monthly maximum hours of operation for M&T purposes.

4.7.3 Rule 1325 - Federal PM2.5 New Source Review Program

Rule 1325 applies to any new Major Polluting Facility, Major Modifications to a Major Polluting Facility, and any modification to an existing facility that would constitute a Major Polluting Facility in and of itself that will emit PM2.5 or its precursors. Rule 1325(b)(9) defines precursors as NOx, SOx, VOC, and ammonia.

Per Rule 1325(b)(4), the Major Polluting Facility threshold is 70 ton/y for each pollutant subject to Rule 1325. A facility is considered to be a Major Polluting Facility only for the specific pollutant(s) with a Potential to Emit at or above the level specified.

Per Rule 1325(b)(13), the Significance threshold is 40 ton/yr for NOx, SOx, VOC, and ammonia, and 10 ton/yr for PM2.5. A Major Modification is defined in Rule 1325(b)(3)(A) as “any physical change in or change in the method of operation of a Major Polluting Facility that would result in: a Significant emission increase of a regulated NSR pollutant; and a Significant net emissions increase of that pollutant from the Major Polluting Facility ...”

The Pre-Project PTE from Table 3-6 and the Engine emissions from Table 3-5 are compared to the Major Polluting Facility and Significance thresholds in Table 4-8.

AES HB is an existing Major Polluting Facility for NOx, VOC, and ammonia. The Engines do not result in a Significant emission increase. The project is not considered to be a Major Modification to a Major Polluting Facility. Further review of NOx, VOC, and ammonia emissions under Rule 1325 is not required.

The Pre-Project Potential to Emit for SOx and PM2.5 does not exceed the Major Polluting Facility threshold. AES HB is not an existing Major Polluting Facility for SOx or PM2.5. The project emission increase for SOx and PM2.5 does not exceed the Major Polluting Facility threshold and is not considered to be a Major Polluting Facility for SOx or PM2.5, in and of itself. Further review of VOC and PM2.5 emissions under Rule 1325 is not required.

Additionally, as shown in Table 3-6, Post-Project facility-wide PTE for PM2.5 remains at 69.9 tpy and this project does not cause AES HB to be an existing Major Polluting Facility for PM2.5 for future projects.

Table 4-8: Rule 1325 Review

Criteria Pollutant	Major Source Threshold ¹ (ton/yr)	Pre-Project PTE ² (ton/yr)	Existing Major Source?	Significance Threshold ³ (ton/yr)	Project Increase ⁴ (ton/yr)	Major Mod. ⁵
NOx	70	161.7	Yes	40	0.01	No
VOC	70	82.3	Yes	40	0.001	No
SOx	70	13.4	No	40	0.02	--
PM2.5 (PM10)	70	69.9	No	10	0.002	--
Ammonia ⁶	70	120.2	Yes	40	Negligible	No

Notes:

1. Major Source thresholds are from Rule 1325(b)(4).
2. Pre-Project PTE from Table 3-6.
3. Significance thresholds are from Rule 1325(b)(13).
4. Project increases from Table 3-5.
5. Project increases are compared to the Significance threshold for pollutants for which AES HB is an existing Major Source.
6. AES HB is an existing Major Source of ammonia emissions under Rule 1325. Engine ammonia emissions are not calculated as the emissions are negligible relative to the 40 tpy Significant increase threshold.

4.8 Regulation XIV - Toxics and Other Non-Criteria Pollutants

4.8.1 Rule 1401 - New Source Review for Air Toxics

Rule 1401 specifies limits for maximum individual cancer risk (MICR), cancer burden, and non-cancer acute and chronic hazard index (HI) from new permit units, relocations, or modifications to existing permit units that emit TAC listed in Table I of the rule. The rule establishes allowable risks for permit units requiring new permits pursuant to Rules 201 or 203.

Rule 1401(d) states that South Coast AQMD shall deny a PTC for a new, relocated, or modified permit unit if emissions of any TAC listed in Rule 1401, Table 1 may occur, unless the applicant demonstrates to the satisfaction of South Coast AQMD that:

- (1) "The cumulative increase in Maximum Individual Cancer Risk (MICR), which is the sum of the calculated MICR values for all toxic air contaminants emitted from the new, relocated or modified permit unit will not result in any of the following:

- (A) An increased MICR greater than one in one million (1.0×10^{-6}) at any receptor location, if the permit unit is constructed without Best Available Control Technology for Toxics (T-BACT);
 - (B) An increased MICR greater than ten in one million (10×10^{-6}) at any receptor location, if the permit unit is constructed without T-BACT;
 - (C) A cancer burden greater than 0.5.”
- (2) “The cumulative increase in total chronic Hazard Index (HIC) for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by the state Office of Environmental Health Hazard Assessment (OEHHA) will not exceed 1.0 at any receptor location.”
- (3) “The cumulative increase in total acute HI (HIA) for any target organ system due to total emissions from the new, relocated or modified permit unit owned or operated by the applicant for which applications were deemed complete on or after the date when the risk value for the compound is finalized by the state Office of Environmental Health Hazard Assessment (OEHHA) will not exceed 1.0 at any receptor location.”

Rule 1401(g)(1)(F) states that the provisions of Rule 1401(d) do not apply to “emergency internal combustion engines that are exempted under Rule 1304”. The Engines are exempt under Rule 1304 and are therefore not subject to the provisions of Rule 1401(d).

4.8.2 Rule 1401.1 - Requirements for New and Relocated Facilities Near Schools

The purpose of Rule 1401.1 is to provide additional health protections to children at Schools or Schools Under Construction from New Facilities or Relocated Facilities emitting Toxic Air Contaminants. The rule applies to New Facilities and Relocated Facilities, but not to Existing Facilities.

An Existing Facility is defined in Rule 1401.1(c)(3) as any facility that:

- (A) “demonstrates to the satisfaction of the Executive Officer that it had equipment requiring a Permit to Construct/Operate that was in operation prior to November 4, 2005; or
- (B) has an application for Permit to Construct/Operate that is deemed complete prior to February 2, 2006.”

According to the South Coast AQMD’s Facility Information Detail for AES HB, the earliest PTO is from 1998. AES HB is an Existing Facility under Rule 1401.1 and therefore not subject to Rule 1401.1.

4.8.3 Rule 1470 - Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

Rule 1470 applies to any person that owns or operates a stationary CI engine in the South Coast AQMD with a rated brake horsepower greater than 50, except as provided in subdivision (h) of Rule 1470. The Engines are subject to Rule 1470.

The Engines are installed after January 1, 2005 and are considered ‘new’ per Rule 1470(b)(47)(A).

Rule 1470(c)(1) - Fuel Requirements

“As of January 1, 2006, except as provided in subdivision(h), no owner or operator of a new stationary CI engine ... shall fuel the engine with any fuel unless the fuel is one of the following: (i) CARB Diesel Fuel ...” CARB Diesel Fuel is defined as diesel fuel meeting the specifications from 13 CCR 2281 and 2282.

13 CCR 2281 limits sulfur content to no more than 15 ppmw; 13 CCR 2282(a)(1)(A) limits aromatic hydrocarbon content to no more than 10% by volume. The Engines are to be fueled with diesel meeting these specifications.

Rule 1470(c)(2) - Operating Requirements

Rule 1470(c)(2)(C)(i) allows new engines to be operated for up to 50 hours per year for M&T purposes. The Engines will be conditioned to operate for up to 50 hours per year for M&T purposes, as shown in Table 2-1.

The Engines are subject to the 0.15 g/bhp-hr DPM emission standard from Rule 1470(c)(2)(C)(vi). As shown in Table C.2 in Appendix C, the Engines emit DPM at a rate less than 0.15 g/bhp-hr and comply with the applicable Rule 1470 DPM emission standard.

Rule 1470(c)(2)(C)(vii) requires new engines rated greater than or equal to 175 bhp and less than or equal to 750 bhp to comply with 3.0 g/bhp-hr NO_x + NMHC and 2.6 g/bhp-hr CO. Engine emission rates are shown in Table C.2 in Appendix C: 0.080 g/bhp-hr NO_x + NMHC (< 3.0), and 0.07 g/bhp-hr CO (< 2.6). The Engines comply with these emission standards.

Rule 1470(c)(2)(F) allows for removal of a diesel particulate filter for cleaning if the provisions of (c)(2)(F)(i)-(iii) are followed. Should the diesel particulate filter be removed for cleaning, AES HB will follow the provisions of (c)(2)(F)(i)-(iii).

Rule 1470(d) - Recordkeeping, Reporting, and Monitoring Requirements

Rule 1470(d)(5)(A) requires engines subject to any of the provisions of paragraph (c)(2) to be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours. Each Engine is equipped with non-resettable hour meter.

Rule 1470(d)(5)(B) requires all diesel particulate filters to be installed with a backpressure monitor to notify the owner or operator when the high backpressure limit of the engine is approached. As described under Section 4.4.1, engines with integral Tier 4 Final controls are capable of automatic adjustments and operator backpressure monitoring is not required.

Rule 1470(d)(7)(A) requires an owner/operator of an engine subject to Rule 1470 to maintain records of hours of operation for, among other reasons, emergency use and maintenance and testing. AES HB understands and will comply with this requirement.

4.8.4 Rule 1472 - Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines

The purpose of Rule 1472 is to reduce DPM emissions from facilities with three or more stationary emergency standby diesel-fueled internal combustion engines.

Rule 1472 applies to facilities with three or more stationary emergency standby diesel-fueled internal combustion engines, where each is rated at greater than 50 bhp, except as provided in subdivision (j) of Rule 1472.

AES HB currently operates the two diesel-fueled fire pumps identified in Table 1-1. AES HB is not currently subject to Rule 1472 as there are not three or more diesel-fueled emergency standby internal combustion engines at the facility.

This project proposes installation of four diesel-fueled emergency standby internal combustion engines. Post-project, AES HB is subject to Rule 1472 as there will be six diesel-fueled emergency standby internal combustion engines at the facility. This permit application requires further review under Rule 1472.

Rule 1472 compliance generally requires submittal of an Initial Notification of Exemption from Filing a Compliance Plan or submittal of a Compliance Plan. The criteria for qualifying for the exemption are under Rule 1472(d)(1). Rule 1472(d)(1)(B) provides for exemption if "... each emergency diesel engine in each group at the facility emits diesel PM at less than or equal to 0.15 g/bhp-hr ..."

Rule 1472(c)(8) defines an Engine Group as "... three or more stationary emergency diesel engines (excluding direct-drive fire pump engines) at a facility where the exhaust stacks are within 150 meters of one another ...". The two fire pumps are excluded from consideration as part of an Engine Group. The exhaust stack of each of the four Engines is within 150 meters of the exhaust stack of each other Engine; the Engines form an Engine Group and this is the only Engine Group at the facility. Each Engine emits DPM at a rate less than 0.15 g/bhp-hr, as shown in Table C.2 in Appendix C. AES HB therefore qualifies for the Rule 1472(d)(1)(B) exemption since "... each emergency diesel engine in each group at the facility emits diesel PM at less than or equal to 0.15 g/bhp-hr ..."

AES HB proposes that this application package, which demonstrates exemption under Rule 1472(d)(1)(B), satisfies the Rule 1472(d)(2)(A) requirement to submit a notification of exemption from filing a compliance plan.

4.9 Regulation XVII - Prevention of Significant Deterioration

The purpose of Regulation XVII, Prevention of Significant Deterioration (PSD), is to establish preconstruction review requirements for stationary sources to ensure that air quality in clean (attainment) air areas does not significantly deteriorate while maintaining a margin for future industrial growth.

Per Table 4-4, the South Coast Air Basin is in attainment with the NAAQS for PM₁₀; the NAAQS and CAAQS for CO; the NAAQS and CAAQS for NO₂; and the NAAQS and CAAQS for SO₂. Emissions of these pollutants are subject to review under PSD.

PSD applies on a pollutant-specific basis to any new Major Source, a Major Modification to an existing Major Source, and any modification to an existing facility that would constitute a Major Source in and of itself. The Major Source threshold is 100 ton/yr for ‘listed’ source categories⁴, and 250 ton/yr for unlisted source categories. AES HB is a fossil fuel-fired steam electric plant with heat input greater than 250 mmBtu/hr: the Major Source threshold for AES HB is 100 ton/yr.

The Pre-Project PTE from Table 3-6 and the Engine emissions from Table 3-5 are compared to the Major Source and Major Modification thresholds in Table 4-9.

AES HB is an existing Major Source of emissions of NOx and CO. The Engines do not result in a Significant emission increase. The project is not considered to be a Major Modification for NOx or CO. Further review of NOx and CO emissions under Regulation XVII is not required.

The Pre-Project PTE for SOx and PM10 does not exceed the Major Source threshold. AES HB is not an existing Major Source for SOx or PM10. The project emission increase for SOx and PM10 does not exceed the Major Source threshold and is not considered to be a Major Source for SOx or PM10, in and of itself. Further review of SOx and PM10 emissions under Regulation XVII is not required.

Table 4-9: PSD Review

Criteria Pollutant	Major Source Threshold (ton/yr)	Pre-Project PTE ² (ton/yr)	Existing Major Source?	Significance Threshold ³ (ton/yr)	Project Increase ⁴ (ton/yr)	Project is Major Source? ⁵
NOx	100	161.7	Yes	40	0.01	No
CO	100	1,005.7	Yes	100	0.01	No
SOx	100	13.4	No	40	0.001	--
PM10	100	69.9	No	15	0.002	--

Notes:

1. AES HB is a fossil fuel-fired steam electric plant with heat input greater than 250 mmBtu/hr: the Major Source threshold for AES HB is 100 ton/yr.
2. Pre-Project PTE from Table 3-6.
3. Thresholds for a Significant emission increase are from Rule 1702(s).
4. Project increases from Table 3-5.
5. Project increases are compared to the Major Modification thresholds for pollutants for which AES is an existing Major Source.

⁴ Per Rule 1702(m)(1): “... Fossil fuel-fired steam electric plants of more than 250 million BTU/hr input, Coal cleaning plants (with thermal dryers), Kraft pulp mills, Portland cement plants, Primary zinc smelters, Iron and steel mill plants, Primary aluminum ore reduction plants, Primary copper smelters, Municipal incinerators capable of charging more than 250 tons of refuse per day, Hydrofluoric acid plants, Sulfuric acid plants, Nitric acid plants, Petroleum refineries, Lime plants, Phosphate rock processing plants, Coke oven batteries, Sulfur recovery plants, Carbon black plants (furnace process), Primary lead smelters, Fuel conversion plants, Sintering plants, Secondary metal production plants, Chemical process plants, Fossil fuel boilers (or combination thereof) totaling more than 250 million BTU/hr heat input, Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, Taconite ore processing plants, Glass fiber processing plants, and Charcoal production plants ...”

On June 23, 2014, the United States Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA*, 134 S. Ct. 2427 (2014), which concluded that increases in GHG emissions alone cannot trigger review of a permit application under PSD. An analysis under PSD for GHG emissions is only required when a source triggers PSD review for other criteria pollutants. Since the project does not require PSD review for other criteria pollutants, a review of GHG emissions under PSD is not required.

4.10 Regulation XX - RECLAIM

AES HB is a NO_x and SO_x RECLAIM facility.

4.10.1 Rule 2005 - New Source Review for RECLAIM

RECLAIM New Source Review requirements vary depending on whether a project results in facility-wide PTE for NO_x and/or SO_x that is at a level greater than the respective starting allocation plus non-tradable credits.

AES HB's starting allocation plus non-tradable credits for NO_x, as shown in the July 1, 2025 version of Section B of the RECLAIM/Title V FP, is 1,276,552 lb/yr⁵. Pre-Project and Post-Project PTE for NO_x from Table 3-6 is on the order of 320,000 lb/yr⁶, which is less than the starting allocation plus non-tradable credits for NO_x.

AES HB's RECLAIM/Title V FP currently contains I298.x conditions for SO_x. This is an indication that the PTE for SO_x exceeds AES HB's starting allocation plus non-tradable credits for SO_x.

Rule 2005 also has additional requirements for major sources, similar to Rule 1303(b)(5).

4.10.1.1 BACT/LAER, Modeling, and Offsets for NO_x

BACT/LAER and modeling requirements for projects that do not result in facility-wide PTE for NO_x that is at a level greater than the starting allocation plus non-tradable credits are from Rule 2005(c)(1)(A) and (c)(1)(B), respectively. RECLAIM Trading Credit (RTC) holding requirements are from Rule 2005(c)(2).

Rule 2005(c)(1)(A) requires BACT/LAER for NO_x for each Engine. As discussed in Section 4.7.1.1, the Engines comply with proposed BACT/LAER for this project.

The Engines are exempt from the modeling requirement of Rule 2005(c)(1)(B) pursuant to Rule 2005(k)(5). This exemption is identical to the exemption from Rule 1304(a)(4).

To satisfy Rule 2005(c)(2), AES HB understands that conditions (I297.x) will be added to its RECLAIM/Title V FP requiring that AES HB hold NO_x RTCs in an amount equal to 6 lb/yr prior to the start of operation of each engine. This is based on the annual projected emissions from Table 3-2, rounded to the nearest whole number. AES HB is a Cycle 2 facility, and has ongoing Cycle 2 NO_x RTC holdings of 104,788 lb/yr and ongoing Cycle 1 NO_x RTC holdings of 141,000 lb/yr. AES HB will ensure that at least 6 lb NO_x RTC per engine is available prior to the start of operation of each engine.

⁵ Starting Allocation: 1,024,673 lb/yr. Non-Tradable Credits: 251,879 lb/yr.

⁶ 161.7 tpy x 2,000 lb/ton ~ 320,000 lb/yr.

4.10.1.2 BACT/LAER, Modeling, and Offsets for SO_x

BACT/LAER requirements for projects that result in facility-wide PTE for SO_x that is at a level greater than the starting allocation plus non-tradable credits are from Rule 2005(c)(4)(A)(i). RECLAIM Trading Credit (RTC) holding requirements are from Rule 2005(c)(4)(B). Rule 2005(c)(4) does not include modeling requirements for SO_x, similar to Appendix A from Rule 1303.

Rule 2005(c)(4)(A)(i) requires BACT/LAER for SO_x for each Engine. As discussed in Section 4.7.1.1, the Engines comply with proposed BACT/LAER for this project.

To satisfy Rule 2005(c)(4)(B), AES HB understands that conditions (I298.x) will be added to its RECLAIM/Title V FP requiring that AES hold SO_x RTCs in an amount equal to 11 lb/yr prior to the start of operation of each engine and prior to the start of each RECLAIM compliance year thereafter. This is the annual emissions from Table 3-2, rounded to the nearest whole number. AES HB has ongoing Cycle 2 SO_x RTC holdings of 15,752 lb/yr and ongoing Cycle 1 SO_x RTC holdings of 8,068 lb/yr. Existing I298.x conditions require holding 23,302⁷ lb SO_x RTCs prior to the start of each year. Accounting for Cycle 1 and Cycle 2 holdings and existing I298.x conditions, AES HB will ensure that at least 11 lb per engine is available prior to the start of operation of each engine and prior to the start of each RECLAIM compliance year thereafter.

4.10.1.3 Additional Requirements for Major Stationary Sources

Rule 2005(g) requires additional review of new Major Stationary Sources and Major Modifications at existing Major Stationary Sources. The definitions of Major Stationary Source and Major Modification are from Rule 2000(c)(45) and Rule 2000(c)(44), respectively. As described in both definitions, these determinations are based on Potential to Emit.

The Pre-Project PTE from Table 3-6 and the Engine emissions from Table 3-5 are compared to the Major Stationary Source and Major Modification thresholds in Table 4-10. As shown in Table 4-10, this project is a Major Modification for NO_x under Rule 2005.

Table 4-10: Rule 2005 Major Stationary Source Review

Criteria Pollutant	Major Source Threshold ¹ (ton/yr)	Pre-Project PTE ² (ton/yr)	Existing Major Source?	Major Mod. Threshold ³	Project Increase ⁴	Major Mod.? ⁵
NO _x	10	161.7	Yes	1 lb/day	2.10 lb/day	Yes
SO _x	100	13.4	No	40 ton/yr	0.02 ton/yr	--

Notes:

1. The Major Source thresholds shown here for NO_x and SO_x are from Rule 2000(c)(45).
2. Pre-Project PTE from Table 3-6.
3. Major Modification thresholds are from Rule 2005(c)(44).
4. Project increases from Tables 3-5.
5. Project increases are compared to the Major Modification thresholds for pollutants for which AES HB is an existing Major Source.

⁷ I298.1 = 11,460 lb SO_x RTCs; I298.3 = 382 lb SO_x RTCs; I298.4 = 11,460 lb SO_x RTCs. Total = 23,302 lb SO_x RTCs.

Rule 2005(g)(1) - Certification of Statewide Compliance

AES HB will provide South Coast AQMD with a certification of statewide compliance upon request.

Rule 2005(g)(2) - Alternatives Analysis

Rule 2005(g)(2) requires a facility owner or operator to submit "... an analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source which demonstrates that the benefits of the proposed source significantly outweigh the environmental and social cost imposed as a result of its location, construction, or modification ..."

See Rule 2005(g)(3).

Rule 2005(g)(3) - Compliance through California Environmental Quality Act

Rule 2005(g)(3) allows for the requirements of Rule 2005(g)(2) to be met through compliance with the California Environmental Quality Act (CEQA). AES HB is submitting a Petition for Post-Certification Amendment (the "Petition") to the California Energy Commission (CEC) for the project. AES HB suggests that the CEC's review of the Petition satisfies the requirement to conduct an Alternatives Analysis.

Rule 2005(g)(4) - Protection of Visibility

Rule 2005(g)(4) requires a facility owner or operator to prepare a modeling analysis for plume visibility if the "... net emission increase from the new or modified source exceeds 40 tons/year of NOx ..."

As shown in Table 3-2, each Engine is estimated to emit approximately 6.25 lb/yr NOx (< 40 ton/yr). Visibility modeling is not required.

4.10.2 Rule 2011 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions

SOx RECLAIM source categorization and reporting methodology are from Rule 2011 and its appendices.

4.10.2.1 Source Categorization

Rule 2011(d)(1) defines a SOx Process Unit as "... any piece of SOx emitting equipment which is not a major SOx source or a piece of equipment designated in Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II." The Engines do not meet any of the criteria for Major SOx Sources under Rule 2011(c)(1) and are not exempt from written permit. The Engines are SOx Process Units.

4.10.2.2 RECLAIM Reporting Methodology - Emission Factor

AES HB requests a SOx emission factor of 6.24 lb/1,000-gallons diesel combusted. This is the Starting Emission Factor from Rule 2002, Table 2 and is consistent with the emission calculations contained herein.

4.10.3 Rule 2012 - Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

NOx RECLAIM source categorization and reporting methodology are from Rule 2012 and its appendices.

4.10.3.1 Source Categorization

Rule 2012(e)(1)(D) defines a NOx Process Unit as “... any emergency standby equipment ...” Emergency Standby Equipment is defined in Rule 2000(c)(28) as “... equipment solely used on a standby basis in cases of emergency and is listed as emergency equipment on the Facility Permit; or is equipment that does not operate more than 200 hours per compliance year and is listed as emergency equipment in the Facility Permit.”

The Engines meet the definition of Emergency Standby Equipment from Rule 2000(c)(28) since the RECLAIM/Title V FP will identify the Engines as emergency equipment and limit operation to no more than 200 hours per year. The Engines are NOx Process Units.

4.10.3.2 RECLAIM Reporting Methodology - Emission Factor

AES HB requests a NOx emission factor of 3.412 lb/1,000-gallons diesel combusted, consistent with the emission calculations contained herein. The basis for this emission factor is shown in footnotes 1 and 2 to Table C.2 in Appendix C.

4.11 Regulation XXX - Title V

The Title V Permit system is the air pollution control permit system implementing the federal Operating Permit Program as required by Title V of the federal CAA as amended in 1990 and to implement requirements for greenhouse gases pursuant to 40 CFR Parts 70. This regulation defines permit application and permit issuance procedures as well as compliance requirements associated with the program.

AES HB is an existing Title V facility. Rule 3000(b)(31) defines a Significant Permit Revision as:

- [(b)(31)(D)] “... any modification at a RECLAIM facility that results in an emission increase of RECLAIM pollutants over the facility’s starting Allocation plus the nontradable Allocations”; and
- [(b)(31)(I)] “... installation of new equipment subject to a New Source Performance Standard (NSPS) pursuant to 40 CFR Part 60, or a National Emission Standard for Hazardous Air Pollutants (NESHAP) pursuant to 40 CFR Part 61 or 40 CFR Part 63.”

AES HB is a SOx RECLAIM facility. The Engines result in an emission increase of SOx to a level that is greater than its starting allocation plus non-tradable credits. The Engines are subject to 40 CFR 60 Subpart IIII. This project is considered a Significant Permit Revision to AES HB’s RECLAIM/Title V FP.

4.12 40 CFR 64 - Compliance Assurance Monitoring

In general, Compliance Assurance Monitoring (CAM) requirements may apply to emission units that meet all of the following conditions:

- The unit is located at a Major Source for which a Title V permit is required; and
- The unit is subject to an emission limitation or standard; and
- The unit uses a control device to achieve compliance with a federally enforceable limit or standard; and
- The unit has potential pre-control or post-control emissions of at least 100 percent of the Major Source amount; and
- The unit is not otherwise exempt from CAM.

The Engines and their integral Tier 4 Final emission controls are each single emission units with no add-on controls. Further review of CAM is not required.

4.13 California Environmental Quality Act

A completed Form 400-CEQA is provided in Appendix A.

5.0 PROPOSED PERMIT WORDING

Proposed permit wording and conditions are suggested in Section 5.0 (~~deletions~~additions). For ease of review, underlines are not shown in the first five columns of the permit wording table since each item from the table is new and would be underlined.

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* and Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
<u>System 4: EMERGENCY POWER GENERATION</u>					
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, NO. 1, DIESEL FUEL, PERKINS, MODEL 2806F-E18TAG1, SIX CYLINDERS, WITH AFTERCOOLER, TURBOCHARGER, AND INTEGRAL TIER 4 FINAL EMISSION CONTROLS, 744 BHP A/N: WWWWWW	Dww		NOX: PROCESS UNIT; SOX: PROCESS UNIT	CO: 2.6 GRAM/BHP-HR (4) NOX: 3.412 LBS/1000 GAL DIESEL (1) NOX+NMHC: 3.0 GRAM/BHP-HR (4) PM10: 0.15 GRAM/BHP-HR (4) SOX: 6.24 LBS/1000 GAL DIESEL (1)	<u>C1.x</u> , <u>C1.y</u> , <u>H23.5</u> , <u>I297.x</u> , <u>I298.x</u> , <u>K67.x</u>
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, NO. 2, DIESEL FUEL, PERKINS, MODEL 2806F-E18TAG1, SIX CYLINDERS, WITH AFTERCOOLER, TURBOCHARGER, AND INTEGRAL TIER 4 FINAL EMISSION CONTROLS, 744 BHP A/N: XXXXXX	Dxx		NOX: PROCESS UNIT; SOX: PROCESS UNIT	CO: 2.6 GRAM/BHP-HR (4) NOX: 3.412 LBS/1000 GAL DIESEL (1) NOX+NMHC: 3.0 GRAM/BHP-HR (4) PM10: 0.15 GRAM/BHP-HR (4) SOX: 6.24 LBS/1000 GAL DIESEL (1)	<u>C1.x</u> , <u>C1.y</u> , <u>H23.5</u> , <u>I297.x</u> , <u>I298.x</u> , <u>K67.x</u>

Application for Permits to Construct: Four (4) Diesel-Fueled Emergency ICEs
 AES Huntington Beach, LLC

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* and Requirements	Conditions
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, NO. 3, DIESEL FUEL, PERKINS, MODEL 2806F-E18TAG1, SIX CYLINDERS, WITH AFTERCOOLER, TURBOCHARGER, AND INTEGRAL TIER 4 FINAL EMISSION CONTROLS, 744 BHP A/N: YYYYYY	Dyy		NOX: PROCESS UNIT; SOX: PROCESS UNIT	CO: 2.6 GRAM/BHP-HR (4) NOX: 3.412 LBS/1000 GAL DIESEL (1) NOX+NMHC: 3.0 GRAM/BHP-HR (4) PM10: 0.15 GRAM/BHP-HR (4) SOX: 6.24 LBS/1000 GAL DIESEL (1)	<u>C1.x</u> , <u>C1.y</u> , <u>H23.5</u> , <u>I297.x</u> , <u>I298.x</u> , <u>K67.x</u>
INTERNAL COMBUSTION ENGINE, EMERGENCY POWER, NO. 4, DIESEL FUEL, PERKINS, MODEL 2806F-E18TAG1, SIX CYLINDERS, WITH AFTERCOOLER, TURBOCHARGER, AND INTEGRAL TIER 4 FINAL EMISSION CONTROLS, 744 BHP A/N: ZZZZZZ	Dzz		NOX: PROCESS UNIT; SOX: PROCESS UNIT	CO: 2.6 GRAM/BHP-HR (4) NOX: 3.412 LBS/1000 GAL DIESEL (1) NOX+NMHC: 3.0 GRAM/BHP-HR (4) PM10: 0.15 GRAM/BHP-HR (4) SOX: 6.24 LBS/1000 GAL DIESEL (1)	<u>C1.x</u> , <u>C1.y</u> , <u>H23.5</u> , <u>I297.x</u> , <u>I298.x</u> , <u>K67.x</u>

* (1) Denotes RECLAIM emission factor
 (4) Denotes BACT emission limit

F2.1 The operator shall limit emissions from this facility as follows:

Contaminant	Emissions Limit
PM2.5	Less than 70 tons in any one year

For purposes of demonstrating compliance with the 70 tons per year limit the operator shall sum the PM2.5 emissions for each of the sources at this facility by calculating a 12 month rolling average as follows:

Using the calendar monthly fuel use data and following emission factors for each combined cycle turbine PM2.5 = 3.94 lbs/mmcf, for the auxiliary boiler PM2.5 = 7.54 lbs/mmcf, for Boiler 2 PM2.5 = 2.1 lbs/mmcf. For each emergency fire pump engine using the rated hp and the calendar monthly hourly usage and the following emission factor PM2.5 = 0.38 gr/bhp-hr. For each emergency engine using the rated hp and the calendar monthly hourly usage and the following emission factor PM2.5 = 0.01 gr/bhp-hr.

The operator may apply to change the factors, via permit application, once a different value is demonstrated, subject to SCAQMD review of testing procedures and protocols.

The operator shall submit written reports of the monthly PM2.5 compliance demonstrations required by this condition. The report submittal shall be included with the semi annual Title V report as required under Rule 3004(a)(4)(f). Records of the monthly PM2.5 compliance demonstrations shall be maintained on site for at least five years and made available upon SCAQMD request.

C1.x The operator shall limit the operating time to no more than 200 hour(s) in any one year.

The 200 hours per year shall include no more than 50 hours in any one year for maintenance and testing purposes.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[Devices subject to this condition: Dww, Dxx, Dyy, Dzz]

C1.y The operator shall limit the operating time to no more than 4.2 hour(s) in any one month for maintenance and testing purposes.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[Devices subject to this condition: Dww, Dxx, Dyy, Dzz]

H23.5 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
Sulfur compounds	District Rule	431.2
PM10	District Rule	1470

[Devices subject to this condition: D113, D114, Dww, Dxx, Dyy, Dzz]

I297.x This equipment shall not be operated unless the facility holds 6 pounds of NOx RTCs in its allocation to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Devices subject to this condition: Dww, Dxx, Dyy, Dzz]

I298.x This equipment shall not be operated unless the facility holds 11 pounds of SOx RTCs in its allocation to offset the annual emissions increase for the first year of operation. RTCs held to satisfy the first year of operation portion of this condition may be transferred only after one year from the initial start of operation. In addition, this equipment shall not be operated unless the operator demonstrates to the Executive Officer that, at the commencement of each compliance year after the start of operation, the facility holds 11 pounds of SOx RTCs valid during that compliance year. RTCs held to satisfy the compliance year portion of this condition may be transferred only after the compliance year for which the RTCs are held. If the initial or annual hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[Devices subject to this condition: Dww, Dxx, Dyy, Dzz]

K67.x The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

An engine operating log listing on a monthly basis the emergency use hours of operation, maintenance and testing hours of operation, and any other hours of use with a description of the reason for operation. Additionally, each time the engine is started manually, the log shall include the date of operation and the timer reading in hours at the beginning and end of operation.

The log shall be kept for a minimum of five calendar years prior to the current year and be made available to District personnel upon request. The total hours of operation for the previous calendar year shall be recorded sometime during the first 15 days of January of each year.

[Devices subject to this condition: Dww, Dxx, Dyy, Dzz]

APPENDIX A - APPLICATION FORMS

Equipment	Requested Permit Action	Form Number Title
Engine No. 1	Permit to Construct	400-A Application Form for Permit or Plan Approval 400-E-13a Supplemental Information – Emergency Internal Combustion Engine (<i>The Engines are identical: this application package includes a single Form 400-E-13a.</i>) 400-PS Plot Plan and Stack Information Form (<i>The Engines are identical: this application package includes a single Form 400-E-13a.</i>)
Engine No. 2	Permit to Construct	400-A Application Form for Permit or Plan Approval
Engine No. 3	Permit to Construct	400-A Application Form for Permit or Plan Approval
Engine No. 4	Permit to Construct	400-A Application Form for Permit or Plan Approval
RECLAIM / Title V FP	Amendment (Significant Permit Revision)	400-A Application Form for Permit or Plan Approval 500-A2 Title V Application Certification 500-C1 Title V Compliance Status Report 500-F1 Title IV – Acid Rain Phase II Facility Information Summary
Project	---	400-CEQA California Environmental Quality Act (CEQA) Applicability 400-XPP Express Permit Processing Request

Appendix A also contains printouts from the South Coast AQMD Permit Processing Fees Portal to corroborate the application processing fees from Table 4-3.



South Coast Air Quality Management District

Form 400-A**Application Form for Permit or Plan Approval**

List only one piece of equipment or process per form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944
Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator to Appear on the Permit): AES Huntington Beach, LLC	2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115389
3. Owner's Business Name (If different from Business Name of Operator):	

Section B - Equipment Location Address

4. Equipment Location Is: ☒ Fixed Location ☐ Various Location
(For equipment operated at various locations, provide address of initial site.)

21730 Newland Street
Street Address
Huntington Beach, CA 92646
City Zip
Charlene He Southland Env. Manager
Contact Name Title
(562) 493-7835
Phone # Ext. Fax #
E-Mail: Charlene.He@AES.com

Section C - Permit Mailing Address

5. Permit and Correspondence Information:
☐ Check here if same as equipment location address

690 North Studebaker Road
Address
Long Beach, CA 90803
City State Zip
Charlene He Southland Env. Manager
Contact Name Title
(562) 493-7835
Phone # Ext. Fax #
E-Mail: Charlene.He@AES.com

Section D - Application Type

6. The Facility Is: ☐ Not In RECLAIM or Title V ☐ In RECLAIM ☐ In Title V ☒ In RECLAIM & Title V Programs

7. Reason for Submitting Application (Select only ONE):

7a. New Equipment or Process Application:

- ☒ New Construction (Permit to Construct)
- ☐ Equipment On-Site But Not Constructed or Operational
- ☐ Equipment Operating Without A Permit *
- ☐ Compliance Plan
- ☐ Registration/Certification
- ☐ Streamlined Standard Permit

7b. Facility Permits:

- ☐ Title V Application or Amendment (Refer to Title V Matrix)
- ☐ RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:

- ☐ Administrative Change
- ☐ Alteration/Modification
- ☐ Alteration/Modification without Prior Approval *
- ☐ Change of Condition
- ☐ Change of Condition without Prior Approval *
- ☐ Change of Location
- ☐ Change of Location without Prior Approval *
- ☐ Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number: _____

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. Estimated Start Date of Construction (mm/dd/yyyy): 04/01/2026	8b. Estimated End Date of Construction (mm/dd/yyyy): 07/01/2026	8c. Estimated Start Date of Operation (mm/dd/yyyy): 08/01/2026
9. Description of Equipment or Reason for Compliance Plan (list applicable rule): Installation of Diesel-Fueled Emergency ICE No. 1	10. For identical equipment, how many additional applications are being submitted with this application? (Form 400-A required for each equipment / process) 3	
11. Are you a Small Business as per AQMD's Rule 102 definition? (10 employees or less and total gross receipts are \$500,000 or less OR a not-for-profit training center) ☒ No ☐ Yes	12. Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment? If Yes, provide NOV/NC#: ☒ No ☐ Yes	

Section E - Facility Business Information

13. What type of business is being conducted at this equipment location? Fossil Fuel Electric Power Generation	14. What is your business primary NAICS Code? (North American Industrial Classification System) 221112
15. Are there other facilities in the SCAQMD jurisdiction operated by the same operator? ☐ No ☒ Yes	16. Are there any schools (K-12) within 1000 feet of the facility property line? ☒ No ☐ Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. Signature of Responsible Official: 	18. Title of Responsible Official: Director of Operations	19. I wish to review the permit prior to issuance. (This may cause a delay in the application process.) ☐ No ☒ Yes
20. Print Name: Jose Perez	21. Date: 12/19/2025	22. Do you claim confidentiality of data? (If Yes, see instructions.) ☒ No ☐ Yes

23. Check List: ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed					
AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED \$	PAYMENT TRACKING #	VALIDATION
DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL
EQUIPMENT CATEGORY CODE		TEAM	ENGINEER	REASON/ACTION TAKEN	



South Coast Air Quality Management District

FORM 400-E-13a

Emergency Internal Combustion Engine

This form must be accompanied by a completed Application for a Permit to Construct/Operate -Form 400A

Mail Application To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765

Tel: (909) 396-3385

www.aqmd.gov

Permit to be issued to (Business name of operator to appear on permit):

AES Huntington Beach, LLC

Street location where the equipment will be operated (for equipment which will be moved to various location in SCAQMD's jurisdiction, please list the initial location site):

21730 Newland Street ; Huntington Beach, CA 92646

Section A: Equipment Information

Internal Combustion Engine	Manufacturer:	Perkins	Model No.:	2806F-E18TAG1	Serial No.:	
	EPA Family No.:	SCPXL18.1HTH-008		Date of Manufacture:	(mm/dd/yyyy) For an ICE manufactured after 7/18/94, please provide manufacturer's specification.	
	Manufacturer Maximum Rating:	744 BHP @ 1800 RPM		Date of Installation:	(mm/dd/yyyy)	
ICE Emergency Function	☒ Electrical Generator ☐ Fire Pump ☐ Flood Control ☐ Pump Driver ☐ Compressor ☐ Water Pump ☐ Other _____					
Type	☒ Fixed site ☐ Portable How Is This Type of Equipment Used? (Check All That Apply) ☒ Within Facility ☐ Off- Site ☐ Rental					
Fuel	☒ Diesel Oil ☐ LPG ☐ Natural Gas ☐ Other: _____					
Cycle Type	☐ Two Cycle ☒ Four Cycle					
Combustion Type	☐ Lean Burn ☐ Rich Burn					
Engine Size	18.1 liters					
No. of Cylinders	☐ Four ☒ Six ☐ Eight ☐ Ten ☐ Twelve ☐ Sixteen ☐ Other _____					
Aspiration Type	☐ Naturally Aspirated ☐ Turbocharged ☒ Turbocharged/Aftercooled					
Air Pollution Control	Check all that apply: ☐ Selective Catalytic Reduction (SCR)* ☐ Catalytic Converter ☐ Selective Non-catalytic Reduction (SNCR)* ☐ Air/Fuel Ratio Controller ☐ Non-selective Catalytic Reduction (NSCR) ☐ No Controls ☐ Diesel Particulate Filter (DPF) ☒ Other (specify) <u>Integral Tier 4 Final Controls</u>					
	Manufacturer: _____ Model No. _____					
	If already permitted, indicate Permit No. _____ Device No. _____ (RECLAIM and/or Title V Permits)					
	* Separate application is required.					
Additional Information for Diesel Particulate Filter (DPF) Filter Efficiency: _____ % CARB Certified? ☐ Yes ☐ No If Yes, provide a copy of the CARB Verification Certificate, or provide the Verification No. _____ Installing a backpressure relief system? ☐ Yes ☐ No						

Section B: Operation Information

Fuel Consumption	Maximum Load: <u>36.5</u> gal/hr OR _____ cu ft/hr	Average Load: <u>36.5</u> gal/hr OR _____ cu ft/hr
------------------	--	--

Operating Schedule	Normal: _____ hours/day _____ days/week _____ weeks/year
	Maximum: <u>4.2</u> hours/day _____ days/week _____ weeks/year
	Testing & Maintenance: <u>50</u> hours/year

Section C: Engine Data

Is the engine EPA certified?

☒ Yes Provide a copy of EPA's Engine Certification.Choose one: ☐ Tier I ☐ Tier II ☐ Tier III ☐ Tier IV (Interim) ☒ Tier IV☐ No Provide a copy of the Manufacturer's Emissions Data.

If manufacturer's emissions data is not available, provide available emissions data below. Provide supporting documents.

Carbon Monoxide (grams/bhp-hr)	Hydrocarbons (grams/bhp-hr)	Oxides of Nitrogen (grams/bhp-hr)	Hydrocarbons + Oxides of Nitrogen (grams/bhp-hr)	Particulate Matter (grams/bhp-hr)

Section D: Sensitive ReceptorsA. Distance from engine stack to the fenceline of the nearest sensitive receptor (ie., long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools (K-12), playgrounds, child care centers, and athletic facilities):

Type of Facility	Name of Facility	Distance (feet)
	See Application Report	

Section E: Applicant Certification Statement

I hereby certify that all information contained herein and submitted with this application is true and correct.

SIGNATURE OF PREPARER: 	TITLE OF PREPARER: Senior Engineer, Yorke Engineering, LLC	
CONTACT PERSON FOR INFORMATION ON THIS EQUIPMENT: Charlene He	CONTACT PERSON'S TELEPHONE NUMBER (562) 493-7835	DATE SIGNED: 12/11/2025

THIS IS A PUBLIC DOCUMENT

Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim at the time of submittal to the District.

Check here if you claim that this form or its attachments contain confidential trade secret information.

RULE EVALUATION

The internal combustion engine may be subject to the following rules:

SCAQMD Rules and Regulations	
Rule 212	Standards for Approving Permits and Issuing Public Notice
Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 404	Particulate Matter – Concentration
Rule 431.1	Sulfur Content of Gaseous Fuels
Rule 431.2	Sulfur Content of Liquid Fuels Liquid fuels – sulfur content of 500 ppm by weight or less. Diesel fuel – sulfur content of 0.015% by weight or less.
Reg XIII	New Source Review
Rule 1401	New Source Review of Toxic Air Contaminants
Rule 1401.1	Requirements for New and Relocated Facilities Near Schools
Rule 1470	Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines
Rule 1472	Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines
Rule 1714	Prevention of Significant Deterioration for Greenhouse Gases
Code of Federal Regulations	
40 CFR 60 Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 CFR 60 Subpart JJJJ	Standards of Performance for New Stationary Sources
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

SAMPLE CONDITIONS FOR EMERGENCY INTERNAL COMBUSTION ENGINES (GENERATORS)

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.
3. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF SCAQMD RULE 431.2, SCAQMD RULE 1470, 40CFR PART 60 SUBPART IIII AND 40 CFR PART 63 SUBPART ZZZZ, OR THE OPERATOR SHALL NOT USE ANY DIESEL FUEL UNLESS THE FUEL IS LOW SULFUR DIESEL FOR WHICH THE SULFUR CONTENT SHALL NOT EXCEED 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER.
4. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
5. THE OPERATION OF ENGINE BEYOND 50 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
6. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
7. ON OR BEFORE JANUARY 15TH OF EACH YEAR THE OPERATOR SHALL RECORD IN THE ENGINE OPERATING LOG:
 - A. THE TOTAL HOURS OF ENGINE OPERATION FOR THE PREVIOUS CALENDAR YEAR, AND
 - B. THE TOTAL HOURS OF ENGINE OPERATION FOR MAINTENANCE AND TESTING FOR THE PREVIOUS CALENDAR YEAR.

ENGINE OPERATION LOG(S) SHALL BE RETAINED ON SITE FOR A MINIMUM OF FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR REPRESENTATIVE UPON REQUEST.

8. THE OPERATOR SHALL KEEP A LOG OF ENGINE OPERATIONS DOCUMENTING THE TOTAL TIME THE ENGINE IS OPERATED EACH MONTH AND THE SPECIFIC REASON FOR OPERATION AS:
 - A. EMERGENCY USE
 - A. MAINTENANCE AND TESTING
 - C. OTHER (BE SPECIFIC)

IN ADDITION, FOR EACH TIME THE ENGINE IS MANUALLY STARTED, THE LOG SHALL INCLUDE: THE DATE OF ENGINE OPERATION, THE START AND STOP TIME OF THE ENGINE, THE SPECIFIC REASON FOR OPERATION, AND THE TOTALIZING HOUR METER READING (IN HOURS AND TENTHS OF HOURS) AT THE BEGINNING AND THE END OF THE OPERATION.

9. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.

10. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING TO COMPLY WITH REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). ANYTHING IN EXCESS OF 50 HOURS SHALL BE ALLOWED ONLY IN THE EVENT OF AN EMERGENCY FIRE FIGHTING OPERATION.

For Fire pumps:

11. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING TO COMPLY WITH REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). ANYTHING IN EXCESS OF 50 HOURS SHALL BE ALLOWED ONLY IN THE EVENT OF AN EMERGENCY FIRE FIGHTING OPERATION.

For Various Locations Equipment:

12. UPON THE FIFTH DAY AFTER PLACEMENT OF THIS EQUIPMENT INTO OPERATION AT A NEW SITE, THE DISTRICT SHALL BE NOTIFIED VIA TELEPHONE AT 877-810-6995 OF THE EXACT NATURE OF THE PROJECT AS FOLLOWS:
 - A. THE PERMIT NUMBER OF THE PORTABLE EQUIPMENT.
 - B. THE NAME AND TELEPHONE NUMBER OF A CONTACT PERSON.
 - C. THE LOCATION WHERE THE PORTABLE EQUIPMENT WILL BE OPERATED.
 - D. THE ESTIMATED TIME THE PORTABLE EQUIPMENT WILL BE LOCATED AT THE SITE.
 - E. DESCRIPTION OF THE PROJECT.
 - F. IF LESS THAN 1/4 MILE, THE DISTANCE TO THE NEAREST SENSITIVE RECEPTOR. SENSITIVE RECEPTORS ARE DEFINED AS LONG-TERM HEALTH CARE FACILITIES, REHABILITATION CENTERS, CONVALESCENT CENTERS, RETIREMENT HOMES, RESIDENCES, SCHOOLS, PLAYGROUNDS, CHILD CARE CENTERS, AND ATHLETIC FACILITIES.
13. THIS ENGINE AND ITS REPLACEMENT UNIT INTENDED TO PERFORM THE SAME OR SIMILAR FUNCTION, SHALL NOT RESIDE AT ANY ONE LOCATION FOR MORE THAN 12 CONSECUTIVE MONTHS. THE PERIOD DURING WHICH THE ENGINE AND ITS REPLACEMENT IS MAINTAINED AT A STORAGE FACILITY SHALL BE EXCLUDED FROM RESIDENCY TIME DETERMINATION.
14. THIS ENGINE SHALL NOT BE REMOVED FROM ONE LOCATION FOR A PERIOD OF TIME, AND THEN IT OR ITS EQUIVALENT ENGINE RETURNED TO THE SAME LOCATION, IN ORDER TO CIRCUMVENT THE PORTABLE ENGINE RESIDENCE TIME REQUIREMENTS.
15. IN ADDITION TO MAINTENANCE AND TESTING OF THIS ENGINE, THIS ENGINE SHALL ONLY BE USED FOR EITHER PROVIDING ELECTRICAL POWER TO PORTABLE OPERATIONS OR EMERGENCY POWER TO STATIONARY SOURCES. PORTABLE OPERATIONS ARE THOSE WHERE IT CAN BE DEMONSTRATED THAT BECAUSE OF THE NATURE OF THE OPERATION, IT IS NECESSARY TO PERIODICALLY MOVE THE EQUIPMENT FROM ONE LOCATION TO ANOTHER. EMERGENCIES AT STATIONARY SOURCES ARE THOSE THAT RESULT IN AN INTERRUPTION OF SERVICE OF THE PRIMARY POWER SUPPLY OR DURING STAGE II OR III ELECTRICAL EMERGENCIES DECLARED BY THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR.



South Coast Air Quality Management District

Form 400-PS**Plot Plan And Stack Information Form**

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Form 400A and Form 400-CEQA.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944Tel: (909) 396-3385
www.aqmd.gov**Section A - Operator Information**

Facility Name (Business Name of Operator To Appear On The Permit):

AES Huntington Beach, LLC

Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):

115389

Address where the equipment will be operated (for equipment which will be moved to various location in AQMD's jurisdiction, please list the initial location site):

21730 Newland Street ; Huntington Beach, CA 92646

☒ Fixed Location ☐ Various Locations**Section B - Location Data****Plot Plan**

Please attach a site map for the project with distances and scales. Identify and locate the proposed equipment on the map. A copy of the appropriate Thomas Brothers page, a web-based map, or a sketch that shows the major streets and location of the equipment is acceptable.

Location of Schools NearbyIs the facility located within a 1/4 mile radius (1,320 feet) of the outer boundary of a school? ☐ Yes ☒ No

If yes, please provide name(s) of school(s) below:

School Name: _____ School Name: _____

School Address: _____ School Address: _____

Distance from stack or equipment vent to the outer boundary of the school: _____ feet Distance from stack or equipment vent to the outer boundary of the school: _____ feet

CA Health & Safety Code 42301.9: "School" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grades 1 to 12, inclusive, but does not include any private school in which education is primarily conducted in private homes.

Population Density☐ Urban ☒ Rural (<50% of land within 3 km radius accounted for by urban land use categories, i.e., multi-family dwelling or industrial.)**Zoning Classification**☒ Mixed Use Residential Commercial Zone (M-U) ☐ Service and Professional Zone (C-S) ☐ Medium Commercial (C-3)
☐ Heavy Commercial (C-4) ☐ Commercial Manufacturing (C-M)**Section C - Emission Release Parameters - Stacks, Vents****Stack Data**

Stack Height: 12.50 feet (above ground level)

What is the height of the closest building nearest the stack? 104 feet

Stack Inside Diameter: 6.00 inches

Stack Flow: 935 acfm Stack Temperature: 911 °F

Rain Cap Present: ☐ Yes ☒ NoStack Orientation: ☒ Vertical ☐ Horizontal

If the stack height is less than 2.5 times the closest building height (H), please provide information on any building within 5xH distance from the stack (attach additional sheet if necessary):

Building #/Name: _____ Building #/Name: _____

Building Height: _____ feet (above ground level) Building Height: _____ feet (above ground level)

Building Width: _____ feet Building Width: _____ feet

Building Length: _____ feet Building Length: _____ feet

Receptor Distance From Equipment Stack or Roof Vents/Openings

Distance to nearest residence or sensitive receptor*: _____ feet

Distance to nearest business: _____ feet

Building InformationAre the emissions released from vents and/or openings from a building? ☐ Yes ☒ No

If yes, please provide:

Building #/Name: _____ Building Width: _____ feet

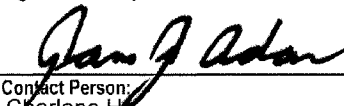
Building Height: _____ feet (above ground level) Building Length: _____ feet

*AQMD Rule 1470 defines SENSITIVE RECEPTOR as meaning any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57), preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

Form 400-PS

Plot Plan And Stack Information Form

This form must be accompanied by a completed Application for a Permit to Construct/Operate - Form 400A and Form 400-CEQA.

Section D - Authorization/Signature			
I hereby certify that all information contained herein and information submitted with this application is true and correct.			
Signature of Preparer: 		Title of Preparer: Sr. Engineer, Yorke Eng., LLC	
		Preparer's Phone #: (949) 248-8490	
		Preparer's Email: JAdams@YorkeEngr.com	
Contact Person: Charlene He		Contact's Phone#: (562) 493-7835	
Contact's Email: Charlene.He@AES.com		Contact's Fax#:	
		Date Signed: 12/11/2025	
THIS IS A PUBLIC DOCUMENT Pursuant to the California Public Records Act, your permit application and any supplemental documentation are public records and may be disclosed to a third party. If you wish to claim certain limited information as exempt from disclosure because it qualifies as a trade secret, as defined in the District's Guidelines for Implementing the California Public Records Act, you must make such claim <u>at the time of submittal</u> to the District. Check here if you claim that this form or its attachments contain confidential trade secret information. ☐			



South Coast Air Quality Management District

Form 400-A**Application Form for Permit or Plan Approval**

List only one piece of equipment or process per form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944
Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator to Appear on the Permit): AES Huntington Beach, LLC	2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115389
3. Owner's Business Name (If different from Business Name of Operator):	

Section B - Equipment Location Address

4. Equipment Location Is: ☒ Fixed Location ☐ Various Location
(For equipment operated at various locations, provide address of initial site.)

21730 Newland Street
Street Address
Huntington Beach, CA 92646
City Zip
Charlene He Southland Env. Manager
Contact Name Title
(562) 493-7835
Phone # Ext. Fax #
E-Mail: Charlene.He@AES.com

Section C - Permit Mailing Address

5. Permit and Correspondence Information:
☐ Check here if same as equipment location address

690 North Studebaker Road
Address
Long Beach, CA 90803
City State Zip
Charlene He Southland Env. Manager
Contact Name Title
(562) 493-7835
Phone # Ext. Fax #
E-Mail: Charlene.He@AES.com

Section D - Application Type

6. The Facility Is: ☐ Not In RECLAIM or Title V ☐ In RECLAIM ☐ In Title V ☒ In RECLAIM & Title V Programs

7. Reason for Submitting Application (Select only ONE):

7a. New Equipment or Process Application:

- ☒ New Construction (Permit to Construct)
- ☐ Equipment On-Site But Not Constructed or Operational
- ☐ Equipment Operating Without A Permit *
- ☐ Compliance Plan
- ☐ Registration/Certification
- ☐ Streamlined Standard Permit

7b. Facility Permits:

- ☐ Title V Application or Amendment (Refer to Title V Matrix)
- ☐ RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:

- ☐ Administrative Change
- ☐ Alteration/Modification
- ☐ Alteration/Modification without Prior Approval *
- ☐ Change of Condition
- ☐ Change of Condition without Prior Approval *
- ☐ Change of Location
- ☐ Change of Location without Prior Approval *
- ☐ Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number: _____

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. Estimated Start Date of Construction (mm/dd/yyyy): 04/01/2026	8b. Estimated End Date of Construction (mm/dd/yyyy): 07/01/2026	8c. Estimated Start Date of Operation (mm/dd/yyyy): 08/01/2026
9. Description of Equipment or Reason for Compliance Plan (list applicable rule): Installation of Diesel-Fueled Emergency ICE No. 2	10. For identical equipment, how many additional applications are being submitted with this application? (Form 400-A required for each equipment / process) 3	
11. Are you a Small Business as per AQMD's Rule 102 definition? (10 employees or less and total gross receipts are \$500,000 or less OR a not-for-profit training center) ☒ No ☐ Yes	12. Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment? If Yes, provide NOV/NC#: ☒ No ☐ Yes	

Section E - Facility Business Information

13. What type of business is being conducted at this equipment location? Fossil Fuel Electric Power Generation	14. What is your business primary NAICS Code? (North American Industrial Classification System) 221112
15. Are there other facilities in the SCAQMD jurisdiction operated by the same operator? ☐ No ☒ Yes	16. Are there any schools (K-12) within 1000 feet of the facility property line? ☒ No ☐ Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. Signature of Responsible Official: 	18. Title of Responsible Official: Director of Operations	19. I wish to review the permit prior to issuance. (This may cause a delay in the application process.) ☐ No ☒ Yes
20. Print Name: Jose Perez	21. Date: 12/19/2025	22. Do you claim confidentiality of data? (If Yes, see instructions.) ☒ No ☐ Yes

23. Check List: ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed

AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED \$	PAYMENT TRACKING #	VALIDATION
DATE APP DATE APP CLASS BASIC EQUIPMENT CATEGORY CODE TEAM ENGINEER REASON/ACTION TAKEN	REJ	REJ	I III CONTROL		



South Coast Air Quality Management District

Form 400-A**Application Form for Permit or Plan Approval**

List only one piece of equipment or process per form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944
Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator to Appear on the Permit): AES Huntington Beach, LLC	2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD): 115389
3. Owner's Business Name (If different from Business Name of Operator):	

Section B - Equipment Location Address

4. Equipment Location Is: ☒ Fixed Location ☐ Various Location
(For equipment operated at various locations, provide address of initial site.)

21730 Newland Street
Street Address

Huntington Beach, CA 92646
City Zip

Charlene He Southland Env. Manager
Contact Name Title

(562) 493-7835
Phone # Ext. Fax #

E-Mail: Charlene.He@AES.com

Section C - Permit Mailing Address

5. Permit and Correspondence Information:
☐ Check here if same as equipment location address

690 North Studebaker Road
Address

Long Beach, CA 90803
City State Zip

Charlene He Southland Env. Manager
Contact Name Title

(562) 493-7835
Phone # Ext. Fax #

E-Mail: Charlene.He@AES.com

Section D - Application Type

6. The Facility Is: ☐ Not In RECLAIM or Title V ☐ In RECLAIM ☐ In Title V ☒ In RECLAIM & Title V Programs

7. Reason for Submitting Application (Select only ONE):

7a. New Equipment or Process Application:

- ☒ New Construction (Permit to Construct)
- ☐ Equipment On-Site But Not Constructed or Operational
- ☐ Equipment Operating Without A Permit *
- ☐ Compliance Plan
- ☐ Registration/Certification
- ☐ Streamlined Standard Permit

7b. Facility Permits:

- ☐ Title V Application or Amendment (Refer to Title V Matrix)
- ☐ RECLAIM Facility Permit Amendment

7c. Equipment or Process with an Existing/Previous Application or Permit:

- ☐ Administrative Change
- ☐ Alteration/Modification
- ☐ Alteration/Modification without Prior Approval *
- ☐ Change of Condition
- ☐ Change of Condition without Prior Approval *
- ☐ Change of Location
- ☐ Change of Location without Prior Approval *
- ☐ Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application
If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number: _____

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. Estimated Start Date of Construction (mm/dd/yyyy): 04/01/2026	8b. Estimated End Date of Construction (mm/dd/yyyy): 07/01/2026	8c. Estimated Start Date of Operation (mm/dd/yyyy): 08/01/2026
--	--	---

9. Description of Equipment or Reason for Compliance Plan (list applicable rule):
Installation of Diesel-Fueled Emergency ICE No. 3

10. For identical equipment, how many additional applications are being submitted with this application?
(Form 400-A required for each equipment / process) **3**

11. Are you a Small Business as per AQMD's Rule 102 definition?
(10 employees or less and total gross receipts are \$500,000 or less OR a not-for-profit training center) ☒ No ☐ Yes

12. Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment?
If Yes, provide NOV/NC#: _____ ☒ No ☐ Yes

Section E - Facility Business Information

13. What type of business is being conducted at this equipment location? Fossil Fuel Electric Power Generation	14. What is your business primary NAICS Code? (North American Industrial Classification System) 221112
15. Are there other facilities in the SCAQMD jurisdiction operated by the same operator? ☐ No ☒ Yes	16. Are there any schools (K-12) within 1000 feet of the facility property line? ☒ No ☐ Yes

Section F - Authorization/Signature

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. Signature of Responsible Official: 	18. Title of Responsible Official: Director of Operations	19. I wish to review the permit prior to issuance. (This may cause a delay in the application process.) ☐ No ☒ Yes
20. Print Name: Jose Perez	21. Date: 12/19/2025	22. Do you claim confidentiality of data? (If Yes, see instructions.) ☒ No ☐ Yes

23. Check List: ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed					
AQMD USE ONLY	APPLICATION TRACKING #	CHECK #	AMOUNT RECEIVED \$	PAYMENT TRACKING #	VALIDATION
DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL
EQUIPMENT CATEGORY CODE			TEAM	ENGINEER	REASON/ACTION TAKEN



South Coast Air Quality Management District

Form 400-A**Application Form for Permit or Plan Approval**

List only one piece of equipment or process per form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944
Tel: (909) 396-3385
www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator to Appear on the Permit):

AES Huntington Beach, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):

115389

3. Owner's Business Name (If different from Business Name of Operator):

Section B - Equipment Location Address4. Equipment Location Is: ☒ Fixed Location ☐ Various Location
(For equipment operated at various locations, provide address of initial site.)

21730 Newland Street

Street Address

Huntington Beach, CA 92646

City Zip

Charlene He Southland Env. Manager

Contact Name Title

(562) 493-7835

Phone # Ext. Fax #

E-Mail: Charlene.He@AES.com

Section C - Permit Mailing Address

5. Permit and Correspondence Information:

☐ Check here if same as equipment location address

690 North Studebaker Road

Address

Long Beach, CA 90803

City State Zip

Charlene He Southland Env. Manager

Contact Name Title

(562) 493-7835

Phone # Ext. Fax #

E-Mail: Charlene.He@AES.com

Section D - Application Type6. The Facility Is: ☐ Not In RECLAIM or Title V ☐ In RECLAIM ☐ In Title V ☒ In RECLAIM & Title V Programs

7. Reason for Submitting Application (Select only ONE):

7a. New Equipment or Process Application:

- ☒ New Construction (Permit to Construct)
☐ Equipment On-Site But Not Constructed or Operational
☐ Equipment Operating Without A Permit *
☐ Compliance Plan
☐ Registration/Certification
☐ Streamlined Standard Permit

7c. Equipment or Process with an Existing/Previous Application or Permit:

- ☐ Administrative Change
☐ Alteration/Modification
☐ Alteration/Modification without Prior Approval *
☐ Change of Condition
☐ Change of Condition without Prior Approval *
☐ Change of Location
☐ Change of Location without Prior Approval *
☐ Equipment Operating with an Expired/Inactive Permit *

Existing or Previous Permit/Application

If you checked any of the items in 7c., you MUST provide an existing Permit or Application Number:

7b. Facility Permits:

- ☐ Title V Application or Amendment (Refer to Title V Matrix)
☐ RECLAIM Facility Permit Amendment

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. Estimated Start Date of Construction (mm/dd/yyyy):

04/01/2026

8b. Estimated End Date of Construction (mm/dd/yyyy):

07/01/2026

8c. Estimated Start Date of Operation (mm/dd/yyyy):

08/01/2026

9. Description of Equipment or Reason for Compliance Plan (list applicable rule):

Installation of Diesel-Fueled Emergency ICE No. 4

10. For identical equipment, how many additional applications are being submitted with this application?
(Form 400-A required for each equipment / process)

3

11. Are you a Small Business as per AQMD's Rule 102 definition?
(10 employees or less and total gross receipts are \$500,000 or less OR a not-for-profit training center)☒ No ☐ Yes12. Has a Notice of Violation (NOV) or a Notice to Comply (NC) been issued for this equipment?
If Yes, provide NOV/NC#:☒ No ☐ Yes**Section E - Facility Business Information**

13. What type of business is being conducted at this equipment location?

Fossil Fuel Electric Power Generation

14. What is your business primary NAICS Code?
(North American Industrial Classification System)

221112

15. Are there other facilities in the SCAQMD jurisdiction operated by the same operator?

☐ No ☒ Yes

16. Are there any schools (K-12) within 1000 feet of the facility property line?

☒ No ☐ Yes**Section F - Authorization/Signature**

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. Signature of Responsible Official:

18. Title of Responsible Official:

Director of Operations

19. I wish to review the permit prior to issuance.
(This may cause a delay in the application process.)☐ No
☒ Yes20. Print Name:
Jose Perez21. Date:
12/19/2025

22. Do you claim confidentiality of data? (If Yes, see instructions.)

☒ No ☐ Yes23. Check List: ☒ Authorized Signature/Date ☒ Form 400-CEQA ☒ Supplemental Form(s) (ie., Form 400-E-xx) ☒ Fees Enclosed

AQMD USE ONLY		APPLICATION TRACKING #		CHECK #		AMOUNT RECEIVED \$		PAYMENT TRACKING #		VALIDATION	
DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL	EQUIPMENT CATEGORY CODE		TEAM	ENGINEER	REASON/ACTION TAKEN	



South Coast Air Quality Management District

Form 400-A**Application Form for Permit or Plan Approval**

List only one piece of equipment or process per form.

Mail To:

SCAQMD

P.O. Box 4944

Diamond Bar, CA 91765-0944

Tel: (909) 396-3385

www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator to Appear on the Permit):

AES Huntington Beach, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):

115389

3. Owner's Business Name (If different from Business Name of Operator):

Section B - Equipment Location Address4. Equipment Location Is: ☒ Fixed Location ☐ Various Location
(For equipment operated at various locations, provide address of initial site.)

21730 Newland Street

Street Address

Huntington Beach, CA 92646

City Zip

Charlene He Southland Env. Manager

Contact Name

Title

(562) 493-7835

Phone #

Ext.

Fax #

E-Mail: Charlene.He@AES.com

Section C - Permit Mailing Address

5. Permit and Correspondence Information:

☐ Check here if same as equipment location address

690 North Studebaker Road

Address

Long Beach, CA 90803

City State Zip

Charlene He Southland Env. Manager

Contact Name

Title

(562) 493-7835

Phone #

Ext.

Fax #

E-Mail: Charlene.He@AES.com

Section D - Application Type6. The Facility Is: ☐ Not In RECLAIM or Title V ☐ In RECLAIM ☐ In Title V ☒ In RECLAIM & Title V Programs

7. Reason for Submitting Application (Select only ONE):

7a. New Equipment or Process Application:

- ☐ New Construction (Permit to Construct)
☐ Equipment On-Site But Not Constructed or Operational
☐ Equipment Operating Without A Permit*
☐ Compliance Plan
☐ Registration/Certification
☐ Streamlined Standard Permit

7c. Equipment or Process with an Existing/Previous Application or Permit:

- ☐ Administrative Change
☐ Alteration/Modification
☐ Alteration/Modification without Prior Approval*
☐ Change of Condition
☐ Change of Condition without Prior Approval*
☐ Change of Location
☐ Change of Location without Prior Approval*
☐ Equipment Operating with an Expired/Inactive Permit*

Existing or Previous
Permit/ApplicationIf you checked any of the items in
7c., you MUST provide an existing
Permit or Application Number:

7b. Facility Permits:

- ☒ Title V Application or Amendment (Refer to Title V Matrix)
☐ RECLAIM Facility Permit Amendment

* A Higher Permit Processing Fee and additional Annual Operating Fees (up to 3 full years) may apply (Rule 301(c)(1)(D)(i)).

8a. Estimated Start Date of Construction (mm/dd/yyyy):

04/01/2026

8b. Estimated End Date of Construction (mm/dd/yyyy):

07/01/2026

8c. Estimated Start Date of Operation (mm/dd/yyyy):

08/01/2026

9. Description of Equipment or Reason for Compliance Plan (list applicable rule):

RECLAIM/Title V FP Amendment: PTCs for 4 Diesel Emergency
ICEs10. For identical equipment, how many additional
applications are being submitted with this application?
(Form 400-A required for each equipment / process)

11. Are you a Small Business as per AQMD's Rule 102 definition?

(10 employees or less and total gross receipts are
\$500,000 or less OR a not-for-profit training center)☒ No ☐ Yes12. Has a Notice of Violation (NOV) or a Notice to
Comply (NC) been issued for this equipment?
If Yes, provide NOV/NC#:☒ No ☐ Yes**Section E - Facility Business Information**

13. What type of business is being conducted at this equipment location?

Fossil Fuel Electric Power Generation

14. What is your business primary NAICS Code?
(North American Industrial Classification System)

221112

15. Are there other facilities in the SCAQMD
jurisdiction operated by the same operator?☐ No ☒ Yes16. Are there any schools (K-12) within
1000 feet of the facility property line?☒ No ☐ Yes**Section F - Authorization/Signature**

I hereby certify that all information contained herein and information submitted with this application are true and correct.

17. Signature of Responsible Official:

18. Title of Responsible Official:

Director of Operations

19. I wish to review the permit prior to issuance.

(This may cause a delay in the
application process.)☐ No☒ Yes

20. Print Name:

Jose Perez

21. Date:

12/19/2025

22. Do you claim confidentiality of
data? (If Yes, see instructions.)☒ No☐ Yes

23. Check List:

☒ Authorized Signature/Date☒ Form 400-CEQA☒ Supplemental Form(s) (ie., Form 400-E-xx)☒ Fees Enclosed

AQMD USE ONLY		APPLICATION TRACKING #		CHECK #		AMOUNT RECEIVED \$		PAYMENT TRACKING #		VALIDATION	
DATE	APP REJ	DATE	APP REJ	CLASS I III	BASIC CONTROL	EQUIPMENT CATEGORY CODE		TEAM	ENGINEER	REASON/ACTION TAKEN	



South Coast Air Quality Management District

Form 500-A2**Title V Application Certification**

Mail To:

SCAQMD

P.O. Box 4944

Diamond Bar, CA 91765-0944

Tel: (909) 396-3385

www.aqmd.gov

Section I - Operator Information**1. Facility Name** (Business Name of Operator That Appears On Permit):

AES Huntington Beach, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):

115389

3. This Certification is

submitted with a (Check one):

- a. ☒ Title V Application (Initial, Revision or Renewal)
- b. ☐ Supplement/Correction to a Title V Application
- c. ☐ MACT Part 1

4. Is Form 500-C2 included with this Certification? ☐ Yes ☒ No**Section II - Responsible Official Certification Statement***Read each statement carefully and check each that applies – You must check 3a or 3b.***1. For Initial, Permit Renewal, and Administrative Application Certifications:**

- a. ☐ The facility, including equipment that are exempt from written permit per Rule 219, is currently operating and will continue to operate in compliance with all applicable requirement(s) identified in Section II and Section III of Form 500-C1,
- i. ☐ except for those requirements that do not specifically pertain to such devices or equipment and that have been identified as "Remove" on Section III of Form 500-C1.
- ii. ☐ except for those devices or equipment that have been identified on the completed and attached Form 500-C2 that will not be operating in compliance with the specified applicable requirement(s).
- b. ☐ The facility, including equipment that are exempt from written permit per Rule 219, will meet in a timely manner, all applicable requirements with future effective dates.

2. For Permit Revision Application Certifications:

- a. ☒ The equipment or devices to which this permit revision applies, will in a timely manner comply with all applicable requirements identified in Section II and Section III of Form 500-C1.

3. For MACT Hammer Certifications:

- a. ☐ The facility is subject to Section 112(j) of the Clean Air Act (Subpart B of 40 CFR part 63), also known as the MACT "hammer." The following information is submitted with a Title V application to comply with the Part 1 requirements of Section 112(j).
- b. ☒ The facility is not subject to Section 112(j) of the Clean Air Act (Subpart B of 40 CFR part 63).

Section III - Authorization/Signature

I certify under penalty of law that I am the responsible official for this facility as defined in AQMD Regulation XXX and that based on information and belief formed after reasonable inquiry, the statement and information in this document and in all attached application forms and other materials are true, accurate, and complete.

1. Signature of Responsible Official:**2. Title of Responsible Official:**

Director of Operations

3. Print Name:

Jose Perez

4. Date:

12/19/2025

5. Phone #:

(310) 318-7575

6. Fax #:**7. Address of Responsible Official:**

690 North Studabaker Road

Long Beach

CA

90803

Street #

City

State

Zip

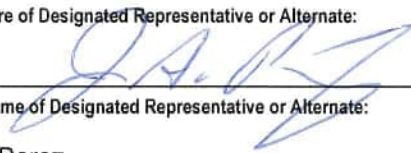
Acid Rain Facilities Only: Please Complete Section IV

Acid Rain facilities must certify their compliance status of the devices subject to applicable requirements under Title IV by an individual who meets the definition of Designated (or Alternate) Representative in 40 CFR Part 72.

Section IV - Designated Representative Certification Statement

For Acid Rain Facilities Only: I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

1. Signature of Designated Representative or Alternate:



2. Title of Designated Representative or Alternate:

Director of Operations

3. Print Name of Designated Representative or Alternate:

Jose Perez

4. Date:

12/19/2025

5. Phone #:

(310) 318-7575

6. Fax #:

7. Address of Designated Representative or Alternate:

690 North Studabaker Road

Long Beach

CO

90803

Street #

City

State

Zip



South Coast Air Quality Management District

Form 500-C1

Title V Compliance Status Report

To provide the compliance status of your facility with applicable federally enforceable requirements and identify other local-only requirements, complete this form and attach it to a completed compliance certification Form 500-A2. As appropriate, all submittals of Form 500-C2 as appropriate should also be attached to this form.

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

Section I - Operator Information

1. **Facility Name** (Business Name of Operator That Appears On Permit):

AES Huntington Beach, LLC

2. **Valid AQMD Facility ID** (Available On Permit Or Invoice

Issued By AQMD):

115389

PROCEDURES FOR DETERMINING COMPLIANCE STATUS

1. **Equipment verification:** Review the list of pending applications, and either the preliminary Title V facility permit or the list of current permits to operate that the AQMD provided you, to determine if they completely and accurately describe all equipment operating at the facility. Attach a statement to describe any discrepancies.
2. **Identify applicable requirements*:** Use the checklist in Section II to identify all applicable and federally-enforceable local, state, and federal rules and regulations, test methods, and monitoring, recordkeeping and reporting (MRR) requirements that apply to any equipment or process (including equipment exempt from a permit by Rule 219) at your facility. The potential applicable requirements, test methods and MRR requirements are identified and listed adjacent to each given equipment/process description. Check off each box adjacent to the corresponding requirement as it applies to your particular equipment/process.
Note: Even if there is only one piece of equipment that is subject to a particular requirement, the appropriate box should be checked.
3. **Identify additional applicable requirements*:** Use Section III to identify any additional requirements not found in Section II. Section II is not a complete list of all applicable requirements. It does not include recently adopted NESHAP regulations by EPA or recent amendments to AQMD rules. Do not add rules listed in Section V here.
4. **Identify any requirements that do not apply to a specific piece of equipment or process:** Also use Section III to identify any requirements that are listed in Section II but that do not apply to a specific piece of equipment or process. Fill out Section III of this form and attach a separate sheet to explain the reason(s) why the identified rules do not apply. Note: Listing any requirement that does not apply to a specific piece of equipment will not provide the facility with a permit shield unless one is specifically requested by completing Form 500-D and is approved by AQMD.
5. **Identify SIP-approved rules that are not current AQMD rules:** Use Section IV to identify older versions of current AQMD rules that are the EPA-approved versions in the State Implementation Plan (SIP), and that are still applicable requirements as defined by EPA. The facility is not required to certify compliance with the items checked in Section IV provided that the non-SIP approved rule in Section II is at least as stringent as the older SIP-approved version in Section IV. **
6. **Identify Local-Only Enforceable Regulatory Requirements:** Use Section V to identify AQMD rules that are not SIP-approved and are not federally enforceable.
7. **Determine compliance:** Determine if all equipment and processes are complying with all requirements identified in Sections II and III. If each piece of equipment complies with all applicable requirements, complete and attach Form 500-A2 to certify the compliance status of the facility. If any piece of equipment is not in compliance with any of the applicable requirements, complete and attach Form 500-C2 in addition to Form 500-A2.

* The following AQMD rules and regulations are not required to be included in Section II and do not have to be added to Section III: Regulation I, List and Criteria in Regulation II, Rule 201, Rule 201.1, Rule 202, Rule 203, Rule 205, Rule 206, Rule 207, Rule 208, Rule 209, Rule 210, Rule 212, Rule 214, Rule 215, Rule 216, Rule 217, Rule 219, Rule 220, Rule 221, Regulation III, Regulation V, Regulation VIII, Regulation XII, Regulation XV, Regulation XVI, Regulation XIX, Regulation XXI, Regulation XXII, and Regulation XXX.

** Emission units adversely affected by the gap between current and SIP-approved versions of rules may initially be placed in a non-Title V portion of the permit

Section II - Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ All Air Pollution Control Equipment Using Combustion (RECLAIM & non-RECLAIM sources)	☐ Rule 480 (10/07/77)	N/A	N/A
☐ All Coating Operations (12/15/00)	☐ Rule 442	☐ Rule 442(f)	☐ Rule 442(g)
☐ All Combustion Equipment, ≥ 555 Mmbtu/Hr (except for NOx RECLAIM sources)	☐ Rule 474 (12/04/81)	☐ AQMD TM 7.1 or 100.1	
☒ All Combustion Equipment Except Internal Combustion Engines (RECLAIM & non-RECLAIM sources)	☒ Rule 407 (04/02/82) ☒ Rule 409 (08/07/81)	☒ AQMD TM 100.1 or 10.1, 307-91 ☒ AQMD TM 5.1, 5.2, or 5.3	
☒ All Combustion Equipment Using Gaseous Fuel (except SOx RECLAIM sources)	☒ Rule 431.1 (06/12/98)	☒ Rule 431.1(f)	☒ Rule 431.1(d) & (e)
☒ All Combustion Equipment Using Liquid Fuel (except SOx RECLAIM sources)	☒ Rule 431.2 (09/15/00)	☒ Rule 431.2(g)	☒ Rule 431.2(f)
☐ All Combustion Equipment Using Fossil Fuel (except SOx RECLAIM sources)	☐ Rule 431.3 (05/07/76)		
☒ All Equipment	☒ Rule 401 (11/09/01) ☐ Rule 405 (02/07/86) ☐ Rule 408 (05/07/76) ☒ Rule 430 (07/12/96) ☒ Rule 701 (06/13/97) ☒ New Source Review, BACT ☒ Rule 1703 (10/07/88) ☒ 40 CFR68 - Accidental Release Prevention	☒ California Air Resources Board Visible Emission Evaluation ☐ AQMD TM 5.1, 5.2, or 5.3 N/A See Applicable Subpart	☐ Rule 430(b) See Applicable Subpart
☐ All Equipment Processing Solid Materials	☐ Rule 403 (06/03/05)	☐ Rule 403(d)(3)	☐ Rule 403(f)
☒ All Equipment With Exhaust Stack (except cement kilns subject to Rule 1112.1)	☒ Rule 404 (02/07/86)	☒ AQMD TM 5.1, 5.2, or 5.3	
☒ All Facilities Using Solvents to Clean Various Items or Equipment	☒ Rule 109 (05/02/03) ☒ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART T	☒ Rule 109(g) ☒ Rule 1171(e) See Applicable Subpart	☒ Rule 109(c) ☒ Rule 1171(c)(6) See Applicable Subpart
☒ All RECLAIM Equipment (NOx & SOx)	☒ Reg. XX - RECLAIM	☒ Rule 2011, App. A (05/06/05) ☒ Rule 2012, App. A (05/06/05)	☒ Rule 2011, App. A (05/06/05) ☒ Rule 2012, App. A (05/06/05)
☒ Abrasive Blasting	☒ Rule 1140 (08/02/85)	☒ Rule 1140(d) & (e), AQMD Visible Emission Method	

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Aggregate and Related Operations	☐ Rule 1157 (09/08/06)	☐ Rule 1157(f)	☐ Rule 1157(e)
☐ Appliances Containing Ozone Depleting Substances (except Motor Vehicle Air Conditioners): Manufacturing, Repair, Maintenance, Service, & Disposal	☐ 40 CFR82 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Asphalt	See Manufacturing, Asphalt Processing & Asphalt Roofing		
☐ Asphalt Concrete/Batch Plants	☐ 40 CFR60 SUBPART I	See Applicable Subpart	See Applicable Subpart
☐ Benzene Emissions, Maleic Anhydride Plants, Ethylbenzene/Styrene Plants, Benzene Storage Vessels, Benzene Equipment Leaks, & Coke By-Product Recovery Plants	☐ Rule 1173 (02/06/09) ☐ Rule 1176 (09/13/96) ☐ 40 CFR61 SUBPART L ☐ 40 CFR61 SUBPART Y ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 1173(j) ☐ Rule 1176(h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1173(i) ☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Benzene Transfer Operations	☐ Rule 1142 (07/19/91) ☐ 40 CFR61 SUBPART BB ☐ 40 CFR63 SUBPART Y	☐ Rule 1142(e) See Applicable Subpart See Applicable Subpart	☐ Rule 1142(h) See Applicable Subpart See Applicable Subpart
☐ Benzene Waste Operations	☐ Rule 1176 (09/13/96) ☐ 40 CFR61 SUBPART FF ☐ 40 CFR63 SUBPART CC	☐ Rule 1176(h) See Applicable Subpart See Applicable Subpart	☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart
☐ Beryllium Emissions	☐ 40 CFR61 SUBPART C	See Applicable Subpart	See Applicable Subpart
☐ Beryllium Emissions, Rocket Motor Firing	☐ 40 CFR61 SUBPART D	See Applicable Subpart	See Applicable Subpart
☐ Boiler, < 5 Mmbtu/Hr (non-RECLAIM sources)	☐ Rule 1146.1 (09/05/08) ☐ Rule 1146.2 (05/05/06) ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 1146.1(d) N/A See Applicable Subpart	☐ Rule 1146.1(c)(2) & (c)(3) N/A See Applicable Subpart
☐ Boiler, < 5 Mmbtu/Hr (RECLAIM sources)	☐ Rule 1146.1 (09/05/08) - excluding NOx requirements ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 1146.1(d) See Applicable Subpart	☐ Rule 1146.1(c)(2) & (c)(3) See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Boiler, ≥ 5 Mmbtu/Hr (non-RECLAIM sources)	☐ Rule 218 (05/14/99) ☐ Rule 429 (12/21/90) ☐ Rule 475 (08/07/78) ☐ Rule 476 (10/08/76) ☐ Rule 1146 (09/05/08) ☐ 40 CFR60 SUBPART D ☐ 40 CFR60 SUBPART Da ☐ 40 CFR60 SUBPART Dc ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 100.1 N/A ☐ AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 7.1, 100.1, 5.1, 5.2, or 5.3 ☐ Rule 1146(d) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 429(d) ☐ Rule 1146(c)(6) & (c)(7) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☒ Boiler, ≥ 5 Mmbtu/Hr (RECLAIM sources)	☒ Rule 475 (08/07/78) ☐ Rule 476 (10/08/76) - excluding NOx requirements ☒ Rule 1146 (09/05/08) - excluding NOx requirements ☒ Rule 2011 (05/06/05) ☒ or Rule 2012 (05/06/05) ☐ 40 CFR60 SUBPART D ☐ 40 CFR60 SUBPART Da ☐ 40 CFR60 SUBPART Dc ☐ 40 CFR63 SUBPART DDDDD	☒ AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 7.1, 100.1, 5.1, 5.2, or 5.3 ☒ Rule 1146(d) ☒ Rule 2011, App. A (05/06/05) ☒ or Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☒ Rule 1146(c)(6) & (c)(7) ☒ Rule 2011, App. A (05/06/05) ☒ or Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Boiler, Petroleum Refining (non-RECLAIM sources)	☐ Rule 218 (05/14/99) ☐ Rule 429 (12/21/90) ☐ Rule 431.1 (06/12/98) ☐ Rule 475 (08/07/78) ☐ Rule 1146 (09/05/08) ☐ 40 CFR60 SUBPART J ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 100.1 N/A ☐ Rule 431.1(f) ☐ AQMD TM 5.1, 5.2, or 5.3 ☐ Rule 1146(d) See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 429(d) ☐ Rule 431.1(d) & (e) ☐ Rule 1146(c)(6) & (c)(7) See Applicable Subpart See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Boiler, Petroleum Refining (RECLAIM sources)	☐ Rule 1146 (09/05/08) - excluding NOx requirements ☐ Rule 2011 (05/06/05) ☐ or ☐ Rule 2012 (05/06/05) ☐ 40 CFR60 SUBPART J ☐ 40 CFR63 SUBPART DDDDD	☐ Rule 1146(d) ☐ Rule 2011, App. A (05/06/05) ☐ or ☐ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart	☐ Rule 1146(c)(6) & (c)(7) ☐ Rule 2011, App. A (05/06/05) ☐ or ☐ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart
☐ Boilers, Electric Utility (non-RECLAIM sources)	☐ Rule 218 (05/14/99) ☐ Rule 429 (12/21/90) ☐ Rule 1135 (07/19/91) ☐ 40 CFR60 SUBPART Db ☐ 40 CFR63 SUBPART DDDDD	☐ AQMD TM 100.1 N/A ☐ Rule 1135(e) See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 429(d) ☐ Rule 1135(e) See Applicable Subpart See Applicable Subpart
☒ Boilers, Electric Utility (RECLAIM sources)	☒ Rule 2012 (05/06/05) ☐ 40 CFR60 SUBPART Db ☐ 40 CFR63 SUBPART DDDDD	☒ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart	☒ Rule 2012, App. A (05/06/05) See Applicable Subpart See Applicable Subpart
☐ Bulk Loading Of Organic Liquids	☐ Rule 462 (05/14/99) ☐ 40 CFR60 SUBPART XX ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART BBBB ☐ 40 CFR63 SUBPART EEEE	☐ Rule 462(f) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 462(g) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Cadmium Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Calciner, Mineral Industries	☐ 40 CFR60 SUBPART UUU	See Applicable Subpart	See Applicable Subpart
☐ Calciner, Petroleum Coke	☐ Rule 477 (04/03/81) ☐ Rule 1119 (03/02/79) ☐ 40 CFR63 SUBPART L	☐ AQMD Visible Emissions, AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 6.1 or 100.1 See Applicable Subpart	See Applicable Subpart
☐ Charbroilers	☐ Rule 1174 (10/05/90) ☐ Rule 1138 (11/14/97)	☐ AQMD Test Protocol ☐ Rule 1138(g)	☐ Rule 1138(d)
☐ Chrome Plating & Chromic Acid Anodizing Operation	☐ Rule 1426 (05/02/03) ☐ Rule 1469 (12/05/08)	☐ Rule 1469(e)	☐ Rule 1426(e) ☐ Rule 1469(g), (j) & (k)

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Coating Operation, Adhesive Application Operation	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1132 (05/05/06) ☐ Rule 1168 (01/07/05) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART RR	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1132(f) ☐ Rule 1168(f) & (e) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1132(g) ☐ Rule 1168(d) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Aerospace Assembly & Component Manufacturing	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1124 (09/21/01) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART GG	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1124(e) & (f) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1124(j) & (d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Graphic Arts (Gravure, Letter Press, Flexographic & Lithographic Printing Process, Etc.)	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1130 (10/08/99) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART QQ ☐ 40 CFR60 SUBPART RR ☐ 40 CFR60 SUBPART FFF ☐ 40 CFR60 SUBPART VVV ☐ 40 CFR63 SUBPART KK ☐ 40 CFR63 SUBPART JJJJ	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1130(h) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1130(e) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Magnet Wire Coating	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1126 (01/13/95) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09)	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1126(d) ☐ Rule 1132(f) ☐ Rule 1171(e)	☐ Rule 109(c) ☐ Rule 1126(c)(4) ☐ Rule 1132(g) ☐ Rule 1171(c)(6)

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☐ Coating Operation, Marine Coating (Except for recreational equipment)	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1106 (01/13/95) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART II	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1106(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1106(c)(5) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Metal Coating	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1107 (01/06/06) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART EE ☐ 40 CFR60 SUBPART SS ☐ 40 CFR63 SUBPART NNNN ☐ 40 CFR63 SUBPART MMMM ☐ 40 CFR63 SUBPART RRRR	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1107(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1107(j) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Metal Containers, Closure, & Coil Coating Operations	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1125 (03/07/08) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART TT ☐ 40 CFR60 SUBPART VV ☐ 40 CFR63 SUBPART KKKK ☐ 40 CFR63 SUBPART SSSS	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1125(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1125(c)(6) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Motor Vehicle & Mobile Equipment Non-Assembly Line Coating Operation	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1132 (05/05/06) ☐ Rule 1151 (12/02/05) ☐ Rule 1171 (05/01/09)	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1132(f) ☐ Rule 1151(h) ☐ Rule 1171(e)	☐ Rule 109© ☐ Rule 1132(g) ☐ Rule 1151(f) ☐ Rule 1171(c)(6)

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☐ Coating Operation, Motor Vehicle Assembly Line	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1115 (05/12/95) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART MM ☐ 40 CFR63 SUBPART IIII	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1115(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1115(g) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Paper, Fabric, & Film Coating Operations	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1128 (03/08/96) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART VVV ☐ 40 CFR63 SUBPART OOOO	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1128(f) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1128(e) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Plastic, Rubber, & Glass	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1145 (12/04/09) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR60 SUBPART TTT ☐ 40 CFR63 SUBPART NNNN ☐ 40 CFR63 SUBPART PPPP	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1145(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1145(d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Coating Operation, Pleasure Craft	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1106.1 (02/12/99) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART II	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1106.1(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1106.1(d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Coating Operation, Screen Printing	☐ Rule 109 (05/02/03) ☐ Rule 1130.1 (12/13/96) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART KK	☐ Rule 109(g) ☐ Rule 1130.1(g) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1130.1(c)(5) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☒ Coating Operation, Use Of Architectural Coating (Stationary Structures)	☒ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☒ Rule 1113 (07/13/07) ☐ Rule 1132 (05/05/06) ☒ Rule 1171 (05/01/09)	☒ Rule 109(g) ☐ Rule 481(d) ☒ Rule 1113(e) ☐ Rule 1132(f) ☒ Rule 1171(e)	☒ Rule 109(c) ☐ Rule 1132(g) ☒ Rule 1171(c)(6)
☐ Coating Operation, Wood Flat Stock	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1104 (08/13/99) ☐ Rule 1132 (05/05/06) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART II	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1104(e) ☐ Rule 1132(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1104(d) ☐ Rule 1132(g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coating Operation, Wood Products (Commercial Furniture, Cabinets, Shutters, Frames, Toys)	☐ Rule 109 (05/02/03) ☐ Rule 481 (01/11/02) ☐ Rule 1132 (05/05/06) ☐ Rule 1136 (06/14/96) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART JJ	☐ Rule 109(g) ☐ Rule 481(d) ☐ Rule 1132(f) ☐ Rule 1136(f) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1132(g) ☐ Rule 1136(d) & (g) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Coater	See Coating Operations		
☐ Columns	See Petroleum Refineries, Fugitive Emissions		
☐ Composting Operation	☐ Rule 1133 (01/10/03) ☐ Rule 1133.1 (01/10/03) ☐ Rule 1133.2 (01/10/03)	☐ Rule 1133.1(e) ☐ Rule 1133.2(g)	☐ Rule 1133.1(d) ☐ Rule 1133.2(h)
☐ Compressors	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		
☐ Concrete Batch Plants	See Nonmetallic Mineral Processing Plants		
☐ Consumer Product Manufacturing	See Manufacturing, Consumer Product		
☐ Cooling Tower, Hexavalent Chromium	☐ 40 CFR63 SUBPART Q	See Applicable Subpart	See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Copper Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Crude Oil Production	See Oil Well Operations		
☐ Crusher	See Nonmetallic Mineral Processing Plants		
☐ Dairy Farms and Related Operations	☐ Rule 1127 (08/06/04)	☐ Rule 1127(h)	☐ Rule 1127(g)
☐ Degreasers	☐ Rule 109 (05/02/03) ☐ Rule 1122 (05/01/09) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART T	☐ Rule 109(g) ☐ Rule 1122(h) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1122(i) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Dry Cleaning, Perchloroethylene	☐ Rule 1421 (12/06/02)	☐ Rule 1421(e) & (i)	☐ Rule 1421(g) & (h)
☐ Dry Cleaning, Petroleum Solvent	☐ Rule 109 (05/02/03) ☐ Rule 1102 (11/17/00) ☐ 40 CFR60 SUBPART JJJ	☐ Rule 109(g) ☐ Rule 1102(g) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1102(f) See Applicable Subpart
☐ Dryers, Mineral Industries	☐ 40 CFR60 SUBPART UUU	See Applicable Subpart	See Applicable Subpart
☐ Ethylene Oxide Sterilizer	See Sterilizer, Ethylene Oxide		
☐ Flanges	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		
☐ Fluid Catalytic Cracking Unit	☐ Rule 218 (05/14/99) ☐ Rule 1105 (09/01/84) ☐ Rule 1105.1 (11/07/03)	☐ AQMD TM 100.1 ☐ Rule 1105(c)(1) ☐ Rule 1105.1(f)	☐ Rule 218(e) & (f) ☐ Rule 1105(c)(2) ☐ Rule 1105.1(e)
☐ Foundries, Iron and Steel	☐ 40 CFR63 SUBPART EEEEE	See Applicable Subpart	See Applicable Subpart
☐ Friction Materials Manufacturing	See Manufacturing, Friction Materials		
☐ Fugitive Emissions, Benzene	☐ Rule 1173 (12/06/02) ☐ 40 CFR61 SUBPART L ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 1173(j) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1173(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Fugitive Emissions, Chemical Plant	☐ Rule 466 (10/07/83) ☐ Rule 466.1 (03/16/84) ☐ Rule 467 (03/05/82) ☐ Rule 1173 (02/06/09) ☐ 40 CFR60 SUBPART VV ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 466(f) ☐ Rule 466.1(g) ☐ Rule 467(f) ☐ Rule 1173(j) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 466(e) ☐ Rule 466.1(h) ☐ Rule 467(e) ☐ Rule 1173(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Fugitive Emissions, Natural Gas Processing Plant	☐ Rule 466 (10/07/83) ☐ Rule 466.1 (03/16/84) ☐ Rule 467 (03/05/82) ☐ Rule 1173 (02/06/09) ☐ 40 CFR60 SUBPART KKK ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 466(f) ☐ Rule 466.1(g) ☐ Rule 467(f) ☐ Rule 1173(j) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 466(e) ☐ Rule 466.1(h) ☐ Rule 467(e) ☐ Rule 1173(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Fugitive Emissions, Oil & Gas Production Facility	☐ Rule 466 (10/07/83) ☐ Rule 466.1 (03/16/84) ☐ Rule 467 (03/05/82) ☐ Rule 1173 (02/06/09) ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 466(f) ☐ Rule 466.1(g) ☐ Rule 467(f) ☐ Rule 1173(j) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 466(e) ☐ Rule 466.1(h) ☐ Rule 467(e) ☐ Rule 1173(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Fugitive Emissions, Pipeline Transfer Station	☐ Rule 466 (10/07/83) ☐ Rule 466.1 (03/16/84) ☐ Rule 467 (03/05/82) ☐ Rule 1173 (02/06/09) ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 466(f) ☐ Rule 466.1(g) ☐ Rule 467(f) ☐ Rule 1173(j) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 466(e) ☐ Rule 466.1(h) ☐ Rule 467(e) ☐ Rule 1173(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Furnace, Basic Oxygen Process	☐ 40 CFR60 SUBPART Na	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Electric Arc, For Steel Plants: Constructed After August 17, 1983	☐ 40 CFR60 SUBPART AAa	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Electric Arc, For Steel Plants: Constructed After Oct. 21, 1974, & On Or Before Aug. 17, 1983	☐ 40 CFR60 SUBPART AA	See Applicable Subpart	See Applicable Subpart
☐ Furnace, Glass Melting	☐ Rule 1117 (01/06/84) ☐ 40 CFR60 SUBPART CC	☐ Rule 1117(c), AQMD TM 7.1 or 100.1 See Applicable Subpart	See Applicable Subpart
☐ Furnace, Lead Melting, Automotive Batteries	☐ Rule 1101 (10/07/77) ☐ 40 CFR63 SUBPART X	☐ AQMD TM 6.1 See Applicable Subpart	See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Gasoline Transfer & Dispensing Operation	☐ Rule 461 (06/03/05)	☐ Rule 461(f)	☐ Rule 461(e)(6) & (e)(7)
☐ Glass Manufacturing	See Manufacturing, Glass		
☐ Grain Elevators	☐ 40 CFR60 SUBPART DD	See Applicable Subpart	See Applicable Subpart
☐ Halon-containing Equipment, Use for Technician Training, Testing, Maintenance, Service, Repair, or Disposal	☐ 40 CFR82 SUBPART H	See Applicable Subpart	See Applicable Subpart
☐ Hazardous Waste Combustors	☐ 40 CFR63 SUBPART EEE	See Applicable Subpart	See Applicable Subpart
☐ Heater, Asphalt Pavement	☐ Rule 1120 (08/04/78)	☐ AQMD Visible Emissions, AQMD TM 6.2	☐ Rule 1120(f)
☐ Heaters, Petroleum Refinery Process	☐ Rule 429 (12/21/90) ☐ Rule 431.1 (06/12/98) ☐ Rule 1146 (09/05/08) ☐ 40 CFR60 SUBPART J ☐ 40 CFR63 SUBPART DDDDD	N/A ☐ Rule 431.1(f) ☐ Rule 1146(d) See Applicable Subpart See Applicable Subpart	☐ Rule 429(d) ☐ Rule 431.1(d) & (e) ☐ Rule 1146(c)(6) & (c)(7) See Applicable Subpart See Applicable Subpart
☐ Heaters, Process	See Boilers		
☐ Incinerators	☐ 40 CFR60 SUBPART E ☐ 40 CFR60 SUBPART CCCC	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Inorganic Arsenic Emissions, Arsenic Trioxide & Metallic Arsenic Production Facilities	☐ 40 CFR61 SUBPART P	See Applicable Subpart	See Applicable Subpart
☐ Internal Combustion Engines, Reciprocating	☐ Rule 1110.2 (07/09/10) ☐ 40 CFR60 SUBPART IIII and JJJJ ☐ 40 CFR63 SUBPART ZZZZ	Rule 1110.2(g) See Applicable Subpart See Applicable Subpart	Rule 1110.2(f) See Applicable Subpart See Applicable Subpart
☐ Kiln, Cement Plant	☐ Rule 1112 (06/06/86) ☐ Rule 1112.1 (12/04/09) ☐ 40 CFR60 SUBPART F	N/A N/A See Applicable Subpart	N/A N/A See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements			
Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Landfills	☐ Rule 1150 (10/15/82) ☐ Rule 1150.1 (03/17/00) ☐ 40 CFR60 SUBPART WWW ☐ 40 CFR63 SUBPART AAAA	☐ Rule 1150.1(j) See Applicable Subpart See Applicable Subpart	☐ Rule 1150.1(e) & (f) See Applicable Subpart See Applicable Subpart
☐ Lead Acid Battery Manufacturing Plants	See Manufacturing, Lead Acid Battery		
☐ Lead Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Manufacturing, Asphalt Processing & Asphalt Roofing	☐ Rule 470 (05/07/76) ☐ Rule 1108 (02/01/85) ☐ Rule 1108.1 (11/04/83) ☐ 40 CFR60 SUBPART UU ☐ 40 CFR63 SUBPART LLLLL	N/A ☐ Rule 1108(b) ☐ Rule 1108.1 (b) See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Brick & Structural Clay Products	☐ 40 CFR63 SUBPART JJJJJ	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Cement	☐ Rule 1156 (03/06/09)	☐ Rule 1156(g)	☐ Rule 1156(f)
☐ Manufacturing, Clay Ceramics	☐ 40 CFR63 SUBPART KKKKK	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Coatings & Ink (SIC Code 2851)	☐ Rule 1141.1 (11/17/00) ☐ 40 CFR63 SUBPART HHHHH	N/A See Applicable Subpart	☐ Rule 1141.1(c) See Applicable Subpart
☐ Manufacturing, Consumer Product	☐ Title 17 CCR 94500		
☐ Manufacturing, Food Product	☐ Rule 1131 (06/06/03)	☐ Rule 1131(e)	☐ Rule 1131(d)
☐ Manufacturing, Friction Materials	☐ 40 CFR63 SUBPART QQQQQ	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Glass	☐ Rule 1117 (01/06/84) ☐ 40 CFR60 SUBPART CC ☐ 40 CFR61 SUBPART N	☐ Rule 1117(c), AQMD TM 7.1 or 100.1 See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Hydrochloric Acid	☐ 40 CFR63 SUBPART NNNNN	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Lead-Acid Battery	☐ 40 CFR60 SUBPART KK	See Applicable Subpart	See Applicable Subpart

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Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Manufacturing, Lime	☐ 40 CFR63 SUBPART AAAAA	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Magnetic Tape Industry	☐ 40 CFR60 SUBPART SSS ☐ 40 CFR63 SUBPART EE	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Miscellaneous Organic Chemical	☐ 40 CFR63 SUBPART FFFF	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Nitric Acid	☐ Rule 218 (05/14/99) ☐ Rule 1159 (12/06/85) ☐ 40 CFR60 SUBPART G	☐ AQMD TM 100.1 ☐ AQMD TM 7.1 or 100.1 See Applicable Subpart	☐ Rule 218(e) & (f) See Applicable Subpart
☐ Manufacturing, Plywood & Composite Wood Products	☐ Rule 1137 (02/01/02) ☐ 40 CFR63 SUBPART DDDD	N/A See Applicable Subpart	☐ Rule 1137(e) See Applicable Subpart
☐ Manufacturing, Polymer Industry	☐ 40 CFR60 SUBPART DDD ☐ 40 CFR63 SUBPART W ☐ 40 CFR63 SUBPART J	See Applicable Subpart See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Polymeric Cellular Foam	☐ Rule 1175 (09/07/07) ☐ 40 CFR63 SUBPART UUUU	☐ Rule 1175(f) See Applicable Subpart	☐ Rule 1175(e) See Applicable Subpart
☐ Manufacturing, Products Containing Halon Blends	☐ 40 CFR82 SUBPART H	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Products Containing Organic Solvents	☐ Rule 443.1 (12/05/86)	N/A	N/A
☐ Manufacturing, Products Containing Ozone Depleting Substances (ODS)	☐ 40 CFR82 SUBPART A ☐ 40 CFR82 SUBPART E	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Reinforced Plastic Composites	☐ 40 CFR63 SUBPART WWWW	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Refractory Products	☐ 40 CFR63 SUBPART SSSSS	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Resin	☐ Rule 1141 (11/17/00) ☐ 40 CFR63 SUBPART W	☐ Rule 1141(d) See Applicable Subpart	☐ Rule 1141(c) See Applicable Subpart
☐ Manufacturing, Rubber Tire	☐ 40 CFR63 SUBPART XXXX	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Semiconductors	☐ Rule 109 (05/02/03) ☐ Rule 1164 (01/13/95) ☐ Rule 1171 (05/01/09) ☐ 40 CFR63 SUBPART BBBB	☐ Rule 109(g) ☐ Rule 1164(e) ☐ Rule 1171(e) See Applicable Subpart	☐ Rule 109(c) ☐ Rule 1164(c)(5) ☐ Rule 1171(c)(6) See Applicable Subpart
☐ Manufacturing, Solvent	☐ Rule 443 (05/07/76)	N/A	N/A

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Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Manufacturing, Sulfuric Acid	☐ Rule 469 (02/13/81) ☐ 40 CFR60 SUBPART H ☐ 40 CFR60 SUBPART Cd	☐ AQMD TM 6.1 or 6.2 See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Surfactant	☐ Rule 1141.2 (01/11/02)	☐ Rule 1141.2(e) ☐ AQMD TM 25.1	
☐ Manufacturing, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes	☐ 40 CFR60 SUBPART III ☐ 40 CFR60 SUBPART NNN	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Manufacturing, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes	☐ 40 CFR60 SUBPART RRR	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Vinyl Chloride	☐ 40 CFR61 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Manufacturing, Water Heaters	☐ Rule 1121 (09/03/04)	N/A	N/A
☐ Manufacturing, Wool Fiberglass Insulation	☐ 40 CFR60 SUBPART PPP	See Applicable Subpart	See Applicable Subpart
☐ Manure Processing Operations	☐ Rule 1127 (08/06/04)	☐ Rule 1127(h)	☐ Rule 1127(g)
☐ Marine Tank Vessel Operations	☐ Rule 1142 (07/19/91) ☐ Rule 1173 (02/06/09) ☐ 40 CFR63 SUBPART Y	☐ Rule 1142(e) ☐ Rule 1173(j) See Applicable Subpart	☐ Rule 1142(h) ☐ Rule 1173(i) See Applicable Subpart
☐ Mercury Emissions	☐ 40 CFR61 SUBPART E ☐ 40 CFR63 SUBPART IIII	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Motor Vehicle Air Conditioners with Ozone Depleting Substances (ODS): Repair, Service, Manufacturing, Maintenance, or Disposal	☐ 40 CFR82 SUBPART B ☐ 40 CFR82 SUBPART F	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Municipal Waste Combustors	☐ 40 CFR60 SUBPART Cb ☐ 40 CFR60 SUBPART Ea ☐ 40 CFR60 SUBPART Eb	See Applicable Subpart See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Negative Air Machines/HEPA, Asbestos	☐ 40 CFR61 SUBPART M	See Applicable Subpart	See Applicable Subpart
☐ Nickel Electroplating Operation	☐ Rule 1426 (05/02/03)		☐ Rule 1426(e)
☐ Nonmetallic Mineral Processing Plants	☐ Rule 404 (02/07/86) ☐ Rule 405 (02/07/86) ☐ 40 CFR60 SUBPART OOO	☐ AQMD TM 5.1, 5.2, or 5.3 ☐ AQMD TM 5.1, 5.2, or 5.3 See Applicable Subpart	See Applicable Subpart
☐ Off-site Waste and Recovery Operation	☐ 40 CFR63 SUBPART DD	See Applicable Subpart	See Applicable Subpart

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☐ Oil and Gas Well Operation	☐ Rule 1148 (11/05/82) ☐ Rule 1148.1 (03/05/04)	☐ AQMD TM 25.1 ☐ Rule 1148.1 (g)	☐ Rule 1148.1 (f)
☐ Onshore Natural Gas Processing, SO2 Emissions	☐ 40 CFR60 SUBPART LLL	See Applicable Subpart	See Applicable Subpart
☐ Open Fires	☐ Rule 444 (11/07/08)		
☐ Open Storage, Petroleum Coke	☐ Rule 403 (06/03/05) ☐ Rule 403.1 (04/02/04) ☐ Rule 1158 (06/11/99)	☐ Rule 403(d)(4) ☐ Rule 1158(h)	☐ Rule 403(f) ☐ Rule 403.1(h) ☐ Rule 1158(j)
☐ Open Storage	☐ Rule 403 (06/03/05) ☐ Rule 403.1 (04/02/04)	☐ Rule 403(d)(4)	☐ Rule 403(f) ☐ Rule 403.1(h)
☐ Outer Continental Shelf Platform	☐ Rule 1183 (03/12/93) ☐ 40 CFR55	☐ 40 CFR55 See Applicable Subpart	☐ 40 CFR55 See Applicable Subpart
☐ Oven, Commercial Bakery	☐ Rule 1153 (01/13/95)	☐ Rule 1153(h)	☐ Rule 1153(g)
☐ Oven, Petroleum Coke	☐ Rule 477 (04/03/81) ☐ 40 CFR63 SUBPART L ☐ 40 CFR63 SUBPART CCCCC	☐ AQMD Visible Emissions, AQMD TM 5.1, 5.2, or 5.3 See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Ozone Depleting Substances (ODS) or Alternative ODS, Use	☐ 40 CFR82 Subpart G	See Applicable Subpart	See Applicable Subpart

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Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Petroleum Refineries	☐ Rule 218 (05/14/99) ☐ Rule 465 (08/13/99) ☐ Rule 468 (10/08/76) ☐ Rule 469 (02/13/81) ☐ Rule 1118 (11/04/05) ☐ Rule 1123 (12/07/90) ☐ Rule 1189 (01/21/00) ☐ 40 CFR60 SUBPART J ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART CC ☐ 40 CFR63 SUBPART EEEE ☐ 40 CFR63 SUBPART GGGG ☐ Title 13 CCR 2250	☐ AQMD TM 100.1 ☐ AQMD TM 6.1 or 6.2 ☐ AQMD TM 6.1 or 6.2 ☐ Rule 1118(j) N/A ☐ Rule 1189(f) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 218(e) & (f) ☐ Rule 1118(f), (g), (h), & (i) ☐ Rule 1123(c) ☐ Rule 1189(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Petroleum Refineries, Fugitive Emissions	☐ Rule 1173 (02/06/09) ☐ Rule 466 (10/07/83) ☐ Rule 466.1 (03/16/84) ☐ Rule 467 (03/05/82) ☐ 40 CFR60 SUBPART GGG ☐ 40 CFR61 SUBPART V ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC	☐ Rule 1173(j) ☐ Rule 466(f) ☐ Rule 466.1(g) ☐ Rule 467(f) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1173(i) ☐ Rule 466(e) ☐ Rule 466.1(h) ☐ Rule 467(e) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Petroleum Refineries, Storage Tanks	☐ Rule 463 (05/06/05) ☐ Rule 1178 (04/07/06) ☐ 40 CFR60 SUBPART K ☐ 40 CFR60 SUBPART Ka ☐ 40 CFR60 SUBPART Kb ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART R ☐ 40 CFR63 SUBPART CC ☐ 40 CFR63 SUBPART EEEE	☐ Rule 463(g) ☐ Rule 1178(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 463(e)(5) ☐ Rule 1178(f) & (h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Petroleum Refineries, Wastewater Systems	☐ Rule 1176 (09/13/96) ☐ Rule 464 (12/07/90) ☐ 40 CFR60 SUBPART QQQ ☐ 40 CFR63 SUBPART CC	☐ Rule 1176(h) N/A See Applicable Subpart See Applicable Subpart	☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart
☐ Pharmaceuticals & Cosmetics Manufacturing	☐ Rule 1103 (03/12/99) ☐ 40 CFR63 SUBPART GGG	☐ Rule 1103(f) See Applicable Subpart	☐ Rule 1103(e) See Applicable Subpart
☐ Polyester Resin Operation	☐ Rule 109 (05/02/03) ☐ Rule 1162 (07/08/05) ☐ Rule 1171 (05/01/09)	☐ Rule 109(g) ☐ Rule 1162(f) ☐ Rule 1171(e)	☐ Rule 109(c) ☐ Rule 1162(e) ☐ Rule 1171(c)(6)
☐ Primary Magnesium Refining	☐ 40 CFR63 SUBPART TTTT	See Applicable Subpart	See Applicable Subpart
☐ Printing Press	See Coating Operations		
☐ Publicly Owned Treatment Works Operations	☐ Rule 1179 (03/06/92) ☐ 40 CFR60 SUBPART O	☐ Rule 1179(e) See Applicable Subpart	☐ Rule 1179(c) & (d) See Applicable Subpart
☐ Pumps	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Recycling & Recovery Equipment for Ozone Depleting Substances (ODS),	☐ 40 CFR82 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Refrigerant Reclaimers for Ozone Depleting Substances (ODS)	☐ 40 CFR82 SUBPART F	See Applicable Subpart	See Applicable Subpart
☐ Rendering Plant	☐ Rule 472 (05/07/76)	N/A	☐ Rule 472(b)
☐ Rock Crushing	See Nonmetallic Mineral Processing Plants		
☐ Secondary Aluminum Production	☐ 40 CFR63 SUBPART LL	See Applicable Subpart	See Applicable Subpart
☐ Semiconductor Manufacturing	See Manufacturing, Semiconductors		
☐ Sewage Treatment Plants	See Publicly Owned Treatment Works Operation		
☐ Site Remediation	☐ 40 CFR63 SUBPART GGGGG	See Applicable Subpart	See Applicable Subpart
☐ Smelting, Primary Copper	☐ 40 CFR63 SUBPART QQQ	See Applicable Subpart	See Applicable Subpart
☐ Smelting, Secondary Lead	☐ 40 CFR60 SUBPART L ☐ 40 CFR63 SUBPART X	See Applicable Subpart See Applicable Subpart	See Applicable Subpart See Applicable Subpart
☐ Soil Decontamination / Excavation	☐ Rule 1166 (05/11/01) ☐ 40 CFR63 SUBPART GGGGG	☐ Rule 1166(e) See Applicable Subpart	☐ Rule 1166(c)(1)(C) See Applicable Subpart
☐ Spray Booth	See Coating Operations		
☐ Sterilizer, Ethylene Oxide	☐ 40 CFR63 SUBPART O	See Applicable Subpart	See Applicable Subpart
☐ Storage Tank, Degassing Operation	☐ Rule 1149 (07/14/95) ☐ 40 CFR63 SUBPART CC	See Applicable Subpart	See Applicable Subpart

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Storage Tank, Greater Than 19,815 Gallon Capacity	☐ Rule 463 (05/06/05) ☐ Rule 1178 (04/07/06) ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR60 SUBPART K ☐ 40 CFR60 SUBPART Ka ☐ 40 CFR60 SUBPART Kb ☐ 40 CFR63 SUBPART R ☐ 40CFR63 SUBPART BBBB ☐ 40 CFR63 SUBPART CC	☐ Rule 463(g) ☐ Rule 1178(i) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 463(e)(5) ☐ Rule 1178(h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Synthetic Fiber Production Facilities	☐ 40 CFR60 SUBPART HHH	See Applicable Subpart	See Applicable Subpart
☐ Taconite Iron Ore Processing Facilities	☐ 40 CFR63 SUBPART RRRRR	See Applicable Subpart	See Applicable Subpart
☒ Turbine, Stationary Gas-Fired	☐ Rule 1134 (08/08/97) ☒ Rule 475 (08/07/78) ☐ 40 CFR60 SUBPART GG ☒ 40 CFR60 SUBPART KKKK ☐ 40 CFR63 SUBPART YYYY	☐ Rule 1134(e) & (g) ☒ AQMD TM 5.1, 5.2, or 5.3 See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1134(d) & (f) See Applicable Subpart See Applicable Subpart See Applicable Subpart
☐ Turbine, Stationary Oil-Fired	☐ 40 CFR63 SUBPART YYYY	See Applicable Subpart	See Applicable Subpart
☐ Valves	See Fugitive Emissions or Petroleum Refineries, Fugitive Emissions		
☐ Vessel, Refinery Process	☐ Rule 1123 (12/07/90)	N/A	☐ Rule 1123(c)
☐ Vessels	See Petroleum Refineries, Fugitive Emissions		

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Section II - Applicable Requirements, Test Methods, & MRR Requirements

Equipment/Process	Applicable Requirement	Test Method	MRR Requirement
☐ Wastewater, Chemical Plant	☐ Rule 464 (12/07/90) ☐ Rule 1176 (09/13/96) ☐ 40 CFR63 SUBPART F ☐ 40 CFR63 SUBPART G ☐ 40 CFR63 SUBPART H ☐ 40 CFR63 SUBPART I ☐ 40 CFR63 SUBPART CC	N/A ☐ Rule 1176(h) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart	☐ Rule 1176(f) & (g) See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart See Applicable Subpart
☒ Wastewater Treatment, Other	☒ Rule 464 (12/07/90) ☐ Rule 1176 (09/13/96)	N/A ☐ Rule 1176(h)	☐ Rule 1176(f) & (g)
☐ Woodworking Operations	☐ Rule 1137 (02/01/02)	N/A	☐ Rule 1137(e)

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Section IV - SIP-Approved Rules That Are Not The Most Current AQMD Rules

Check off each SIP-Approved Rule as it applies to the facility. Use the blanks at the end of this form to fill-in new items.

SIP - Approved Rule	Adoption/ Amendment Date	Check (✓) If Applies	SIP - Approved Rule	Adoption/ Amendment Date	Check (✓) If Applies
401	03/02/84	☒			☐
431.2	05/04/90	☒			☐
461	6/3/05	☐			☐
466.1	05/02/80	☐			☐
469	04/07/76	☐			☐
475	10/08/76	☒			☐
1112	01/06/84	☐			☐
1112.1	2/7/86	☐			☐
1113	11/08/96	☒			☐
1117	1/6/83	☐			☐
1122	07/11/97	☐			☐
1132	03/05/04	☐			☐
1140	02/01/80	☐			☐
1146	11/17/00	☒			☐
1146.1	5/13/94	☐			☐
1151	12/11/98	☐			☐
1158	6/11/99	☐			☐
1162	11/17/00	☐			☐
1166	07/14/95	☐			☐
1171	11/07/03	☒			☐
1175	05/13/94	☐			☐
1186	09/10/99	☐			☐

Section V - AQMD Rules That Are Not SIP-Approved (Continued on Following Page)

Check off each AQMD Rule as it applies to the facility. Use the blanks at the end of this form to fill-in new items.

Non SIP - Approved Rule	Adoption/ Amendment Date	Check (✓) If Applies	Non SIP - Approved Rule	Adoption/ Amendment Date	Check (✓) If Applies
53 Los Angeles Co.	N/A	☐	1192	06/16/00	☐
53 Orange Co.	N/A	☐	1193	07/09/10	☐
53 Riverside Co.	N/A	☐	1194	10/20/00	☐
53 San Bernardino Co.	N/A	☐	1195	05/05/06	☐
53A San Bernardino Co.	N/A	☐	1196	06/06/08	☐
402	05/07/76	☒	1401	09/10/10	☒
429	12/21/90	☐	1401.1	11/04/05	☐
430	07/12/96	☒	1402	03/04/05	☐
441	05/07/76	☐	1403	10/05/07	☐
473	05/07/76	☐	1404	04/06/90	☐
477	04/03/81	☐	1405	01/04/91	☐
480	10/07/77	☐	1406	07/08/94	☐
1109	08/05/88	☐	1407	07/08/94	☐
1110.2	07/09/10	☒	1411	03/01/91	☐
1116.1	10/20/78	☐	1414	05/03/91	☐
1127	08/06/04	☐	1415	10/14/94	☐
1143	07/09/10	☐	1418	09/10/99	☐
1147	12/05/08	☐	1420	09/11/92	☐
1148.1	03/05/04	☐	1420.1	11/05/10	☐
1150	10/15/82	☐	1421	12/06/02	☐
1155	12/04/09	☐	1425	03/16/01	☐
1156	03/06/09	☐	1426	05/02/03	☐
1157	09/08/06	☐			☐
1163	06/07/85	☐			☐
1170	05/06/88	☐			☐
1183	03/12/93	☐			☐
1186.1	01/09/09	☐			☐
1191	06/16/00	☐			☐

Section V - AQMD Rules That Are Not SIP-Approved (Continued on Following Page)

Check off each AQMD Rule as it applies to the facility. Use the blanks at the end of this form to fill-in new items.

Non SIP - Approved Rule	Adoption/ Amendment Date	Check (✓) If Applies	Non SIP - Approved Rule	Adoption/ Amendment Date	Check (✓) If Applies
1469	12/05/08	☐	2009.1	05/11/01	☐
1469.1	03/04/05	☐	2501	05/09/97	☐
1470	06/01/07	☒	2506	12/10/99	☐
1472	03/07/08	☒			☐
2009	01/07/05	☐			☐
		☐			☐
		☐			☐
		☐			☐
		☐			☐
		☐			☐

**Form 500-F1 (Title V)****Title IV - Acid Rain Phase II Facility Information Summary**

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

This form shall be completed by Acid Rain facilities ONLY and shall accompany all requests for Phase II permit actions unique to Acid Rain facilities. Also attach a completed Form 500-A2. In addition, if an initial Title V permit, permit renewal, or permit revision is requested, attach Form 500-A1 and any supplemental Acid Rain forms (Forms 500-F2, 500-F3, and 500-F4), as appropriate.

Section I - General Information**1. Facility Name** (Business Name of Operator That Appears On Permit):

AES Huntington Beach, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):

115389

3. ORIS Code (5-Digit): 335**4. This is an application for a** (Check all that apply to the facility):

- a. ☐ Phase II Acid Rain Permit or Revision
(Complete Section II of this form)
- b. ☐ Repowering Extension Plan or Revision
(Complete Form 500-F2)
- c. ☐ New Unit Exemption or Revision
(Complete Form 500-F3)
- d. ☐ Retired Unit Exemption or Revision
(Complete Form 500-F4)

5. The requested permit action involves a(n) (Check one):

- a. ☐ Administrative Permit Revision
- b. ☐ Significant Permit Revision
- c. ☐ Fast Track Permit Revision
- d. ☐ Automatic Permit Revision
- e. ☒ Other (specify): See Application Report

6. For all applications requesting a permit revision, provide a general description of the proposed changes

(Attach additional sheets as necessary):

See Application Report

Section II - Phase II Acid Rain Device Summary**1. The following information is** (Check one):a. ☐ Newb. ☐ Revised

AQMD Device #	EPA Unit #	Will device need a Repowering Extension Plan?	Has device started operations on or after 11/15/90?	Device Operations Start Date (mo/day/yr)	For devices starting-up after 11/15/90, provide date when Monitoring Certification will begin (mo/day/yr)
		☐ Yes ☐ No	☐ Yes ☐ No		
		☐ Yes ☐ No	☐ Yes ☐ No		
		☐ Yes ☐ No	☐ Yes ☐ No		
		☐ Yes ☐ No	☐ Yes ☐ No		
		☐ Yes ☐ No	☐ Yes ☐ No		

To complete this application, type or print the information in the appropriate blanks.

Section I - General Information

1. **Facility Name:** Provide the name of the legal entity that operates the facility.

AQMD Facility ID: Complete only if the facility has been issued a 6-digit identification or ID number by AQMD. If not, leave these boxes blank. An ID number will be assigned when the application is submitted.

ORIS Code: Provide the 5-digit code that has been assigned to facility by Department of Energy.
2. Check all applicable boxes to indicate the type of Acid Rain application filed. If box 1a. is checked, complete Section II of this form. If box 1b. is checked, complete and attach Form 500-F2 - Title IV Phase II Acid Rain Repowering Extension Plan. If box 1c. is checked, complete and attach Form 500-F3 - Title IV Phase II Acid Rain New Unit Exemption Request. If box 1d. is checked, complete and attach Form 500-F4 - Title IV Phase II Acid Rain Retired Unit Exemption Request.
3. Check one box that best represents the type of permit action requested. If box 1e. is checked, in the space provided identify any additional elements regarding the application or the facility that need to be considered during the processing of this application (i.e., Initial Title V Permit Application).
4. If the application is a revision request, describe in general terms the changes that are proposed in the application revision request. Attach additional sheets as necessary.

Section II - Phase II Acid Rain Device Summary

1. Before completing this section, check one box to indicate whether this is a new application or a revision.

AQMD Device #:	Provide the identification number for each AQMD-assigned device subject to Phase II requirements.
EPA Unit #:	Provide the identification number for each EPA-assigned device subject to Phase II requirements.
Will device need a Repowering Extension Plan?:	Indicate with a "yes" or "no" if the device is or will be participating under a Repowering Extension Plan.
Has device started operations on or after 11/15/90?:	Indicate with a "yes" or "no" if the device was source tested or started operating on or after November 15, 1990.
Device Operations Start Date:	Complete this column <u>only</u> if the device was source tested or started operating on or after November 15, 1990. Provide the date (mo/day/yr) when the device started or will start operating. Note: If the date of beginning operations changes, an administrative permit revision application will be required.
For Devices starting-up after 11/15/90, provide date when Monitoring Certification will begin:	Complete this column <u>only</u> if the device was source tested or started operating on or after November 15, 1990. Provide the date (mo/day/yr) when compliance with the monitoring procedures for the device will begin. Refer to 40 CFR Part 75.4 to determine this date. Note: If the monitoring certification date changes, an administrative permit revision application will be required.



South Coast Air Quality Management District

Form 400-CEQA

California Environmental Quality Act (CEQA) Applicability

Mail To:
SCAQMD
P.O. Box 4944
Diamond Bar, CA 91765-0944

Tel: (909) 396-3385
www.aqmd.gov

The SCAQMD is required by state law, the California Environmental Quality Act (CEQA), to review discretionary permit project applications for potential air quality and other environmental impacts. This form is a screening tool to assist the SCAQMD in clarifying whether or not the project ¹ has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document [CEQA Guidelines § 15060(a)]. Form 400-CEQA and the instructions for guidance on completing this form are available at <http://www.aqmd.gov/home/regulations/ceqa/ceqa-permit-forms> or <http://www.aqmd.gov/home/permits/permit-application-forms>. For each Form 400-A application, also complete and submit one Form 400-CEQA. If submitting multiple Form 400-A applications for the same project at the same time, only one Form 400-CEQA is necessary for the entire project. If you need assistance completing this form, contact Permit Services at (909) 396-3385.

Section A – Facility Information		
1. Facility Name (Business Name of Operator to Appear on the Permit): <u>AES Huntington Beach, LLC</u>		2. SCAQMD Facility ID: <u>115389</u>
3. Project Description: <u>Installation of 4 Diesel-Fueled Emergency ICEs</u>		
Section B – Review For Exemption From Further CEQA Action		
Check "Yes" or "No" as applicable. If "Yes" is checked for any question in Section B, skip Section C and proceed to page 2 and complete Section D - Signatures.		
	Yes	No
1.	☐	☒
A request for a change of operator only (without equipment or process change modifications)?		
2.	☐	☒
A functionally identical permit unit replacement with no increase in equipment unit rating or emissions?		
3.	☐	☒
A change of daily VOC permit limit to a monthly VOC permit limit?		
4.	☐	☒
Equipment damaged as a result of a disaster during state of emergency?		
5.	☐	☒
A Title V (e.g., SCAQMD Regulation XXX) permit renewal without equipment or process change modifications?		
6.	☐	☒
A Title V administrative permit revision?		
7.	☐	☒
The conversion of an existing permit into an initial Title V permit?		
Section C – Review of Impacts Which May Trigger Further CEQA Review		
Check "Yes" or "No" as applicable. To avoid delays in processing your application(s), explain all "Yes" responses on a separate sheet and attach it to this form.		
	Yes	No
1.	☐	☒
Is this project specifically evaluated in a previously certified or adopted CEQA document? If "Yes" is checked, attach a copy of the signed Notice of Determination to this form.		
2.	☐	☒
Is this project specifically exempted from CEQA by another entity (e.g., city or agency)? If "Yes" is checked, attach a copy of the signed Notice of Exemption or other documentation from the entity to this form.		
3.	☐	☒
Is this project part of a larger project? If "Yes" is checked, attach a separate sheet to briefly describe the larger project.		
4.	☐	☒
Will the project increase the QUANTITY of hazardous materials stored aboveground onsite or transported by mobile vehicle to or from the site by greater than or equal to the amounts associated with each compound listed on Form 400-CEQA, Table 1 - Regulated Substances List and Threshold Quantities for Accidental Release Prevention [http://www.aqmd.gov/home/regulations/ceqa/ceqa-permit-forms]? If "Yes" is checked, attach a separate sheet to identify each hazardous material and corresponding quantity to be transported, stored, or used.		
5.	☐	☒
Will the project emit any air toxic listed on Form 400-CEQA, Table 2 - Other Air Toxics and Their Screening Levels [http://www.aqmd.gov/home/regulations/ceqa/ceqa-permit-forms]? ² If "Yes" is checked, attach a separate sheet to identify each air toxic and corresponding quantity to be emitted.		
6.	☐	☒
Will the project require any demolition, excavation, and/or grading construction activities that encompass an area exceeding 20,000 square feet?		

¹ A "project" means the whole of an action which has a potential for resulting in physical change to the environment, including construction activities, clearing or grading of land, improvements to existing structures, and activities or equipment involving the issuance of a permit. For example, a project might include installation of a new, or modification of an existing internal combustion engine, dry cleaning facility, boiler, gas turbine, spray coating booth, solvent cleaning tank, etc.

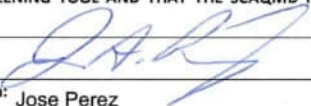
² Form 400-CEQA, Table 2 - Other Air Toxics and Their Screening Levels, contains a list of air toxics that either do not have a cancer potency (CP) or reference exposure level (REL) approved by the Office of Environmental Health Hazards Assessment (OEHHHA) or have a combination of OEHHHA-approved and non-approved CPs or RELs.

Section C – Review of Impacts Which May Trigger Further CEQA (concluded)

	Yes	No	
7.	☒	☐	Will the project utilize a boiler, engine, or other combustion equipment that uses fuel (e.g., gasoline, diesel, natural gas, liquefied petroleum gas (LPG), or landfill gas)? If "Yes" is checked, then the applicant will need to calculate the amount of GHGs from fuel use via on the Greenhouse Gas (GHG) online estimator (http://www.aqmd.gov/home/regulations/ceqa/ceqa-permit-forms), and attaching the printout or by conducting hand calculations and providing the documentation. Refer to the Instructions for Form 400-CEQA for guidance.
8.	☐	☒	Will the project utilize other types of equipment not addressed in Question 7 that require the use of, or will generate, any chemicals listed on Form 400-CEQA, Table 3 - Greenhouse Gases (http://www.aqmd.gov/home/regulations/ceqa/ceqa-permit-forms)? If "Yes" is checked, attach a separate sheet to identify each equipment unit, the chemical name(s), and the quantity of each chemical identified.
9.	☐	☒	Will the project include the open outdoor storage of dry bulk solid materials that could generate dust? If "Yes" is checked, include a plot plan with the application package.
10.	☐	☒	Will the project result in or make worse noticeable off-site odors from activities that may not be subject to SCAQMD permit requirements? For example, landfills, materials recovery/recycling facilities (MRF), and compost materials or other types of greenwaste (e.g., lawn clippings, tree trimmings, etc.) have the potential to generate odor complaints subject to SCAQMD Rule 402 – Nuisance.
11.	☐	☒	Will the project cause an increase of emissions from marine vessels, trains and/or airplanes?
12.	☐	☒	Will the project increase demand for potable water at the facility by more than 262,820 gallons per day? The following examples identify some, but not all, types of projects that may result in a "Yes" answer to this question: 1) a project that generates steam; 2) a project that uses water as part of operating air pollution control equipment; 3) a project that requires water as part of the production process; 4) a project that requires a new, or the expansion of an existing, sewage treatment facility, new water lines, sewage lines, sewage hook-ups etc.; 5) a project where the water demand exceeds the capacity of the local water purveyor to supply sufficient water for the project; 6) a project that requires new or the expansion of existing, water supply and conveyance facilities; and, 7) a project that requires water to hydrotest pipelines, storage tanks etc. for structural integrity.
13.	☐	☒	Will the project create an increase in the mass inflow of effluents to a public wastewater treatment facility that would require a new, or revision to an existing, National Pollutant Discharge Elimination System (NPDES) or other related permit at the facility?
14.	☐	☒	Will the project result in the need for more than 350 new employees?
15.	☐	☒	Will the project result in an increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round-trips per day?
16.	☐	☒	Will the project result in an increase in customer traffic by more than 700 visits per day?
17.	☐	☒	Will the project result in temporary or permanent noise or vibration in excess of what is allowed by the applicable local noise ordinance?
18.	☐	☒	Will the project create a permanent need for new or additional solid waste disposal? Check "No" if the projected potential amount of solid waste to be generated by the project is less than five tons per day.
19.	☐	☒	Will the project create a permanent need for new or additional hazardous waste disposal? Check "No" if the projected potential amount of hazardous wastes to be generated by the project is less than 42 cubic yards per day (or equivalent in pounds).
20.	☐	☒	Will the project include equipment that after installation or modification will change the visual character of the site and its surroundings or block views?
21.	☐	☒	Will the project have equipment that will create a new source of external lighting that will be visible at the property line?

Section D – SIGNATURES

I HEREBY CERTIFY THAT ALL INFORMATION CONTAINED HEREIN AND INFORMATION SUBMITTED WITH THIS APPLICATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THIS FORM IS A SCREENING TOOL AND THAT THE SCAQMD RESERVES THE RIGHT TO CONSIDER OTHER PERTINENT INFORMATION IN DETERMINING CEQA APPLICABILITY.

1. Signature of Responsible Official of Firm: 		2. Title of Responsible Official of Firm: Director of Operations	
3. Print Name of Responsible Official of Firm: Jose Perez		4. Date Signed: 12/19/2025	
5. Phone # of Responsible Official of Firm: (310) 318-7575	6. Fax # of Responsible Official of Firm:	7. Email of Responsible Official of Firm: Jose.Perez@AES.com	
8. Signature of Preparer, (If prepared by person other than responsible official of firm): 		9. Title of Preparer: Senior Engineer, Yorke Engineering, LLC	
10. Print Name of Preparer: James J. Adams		11. Date Signed: 12/19/2025	
12. Phone # of Preparer: (949) 248-8490	13. Fax # of Preparer: (949) 248-8499	14. Email of Preparer: JAdams@YorkeEngr.com	

THIS CONCLUDES FORM 400-CEQA. INCLUDE THIS FORM AND ANY ATTACHMENTS WITH FORM 400-A.



South Coast Air Quality Management District

Form 400 - XPP**Express Permit Processing Request**

Form 400-A, Form 400-CEQA and one or more 400-E-xx form(s) must accompany all submittals.

Mail To:

SCAQMD

P.O. Box 4944

Diamond Bar, CA 91765-0944

Tel: (909) 396-3385

www.aqmd.gov

Section A - Operator Information

1. Facility Name (Business Name of Operator To Appear On The Permit):

AES Huntington Beach, LLC

2. Valid AQMD Facility ID (Available On Permit Or Invoice Issued By AQMD):

115389

Section B - Equipment Location Address3. ☒ Fixed Location ☐ Various Location

(For equipment operated at various locations, provide address of initial site.)

21730 Newland Street

Street Address

Huntington Beach, CA 92646

City State Zip

Charlene He Southland Env. Mgr.

Contact Name Title

(562) 493-7835

Phone # Ext. Fax #

Charlene.He@AES.com

E-Mail

Section C - Permit Mailing Address

4. Permit and Correspondence Information:

☐ Check here if same as equipment location address

690 North Studebaker Road

Address

Long Beach, CA 90803

City State Zip

Charlene He Southland Env. Mgr.

Contact Name Title

(562) 493-7835

Phone # Ext. Fax #

Charlene.He@AES.com

E-Mail

Section D - Authorization/Signature

I understand that the Expedited Permit Processing fees must be submitted at the time of application submittal, and that the application may be subject to additional fees per Rule 301. I understand that requests for Express Permit Processing neither guarantees action by any specific date nor does it guarantee permit approval; that Express Permit Processing is subject to availability of qualified staff; and that once Express Permit Processing has commenced, the expedited fees will not be refunded. I hereby certify that all information contained herein and information submitted with the application are true and correct.

5. Signature of Responsible Official:

6. Title of Responsible Official:

Director of Operations

7. Print Name of Responsible Official:

Jose Perez

8. Date:

12/19/2025

9. Phone #:

(310) 318-7575

10. Fax #:

AQMD USE ONLY	APPLICATION TRACKING #		TYPE B C	EQUIPMENT CATEGORY CODE		FEE SCHEDULE: \$		VALIDATION		
ENG. DATE	A	R	ENG. DATE	A	R	CLASS I III	ASSIGNMENT Unit Engineer	CHECK/MONEY ORDER #	AMOUNT \$	TRACKING #

SCAQMD Permit Processing Fees Portal

[Hide Tooltip](#)

Fee Sheet

Below are the permit fees calculated based on the information entered. Click the "Print" button to print the Fee Sheet for your records.

[Print](#)[Restart](#)

Permit Unit

IC Engine, Emergency, (> 500 HP)	\$4,959.22
IC Engine, Emergency, (> 500 HP) (3 Identical)	\$7,438.83
Expedited Processing Fee	\$6,199.04

Facility Permit Revision Fee

Administrative Permit Revision Fee	\$3,667.54
------------------------------------	------------

Summary

Permit Fees	\$12,398.05
Expedited Processing Fees	\$6,199.04
Higher Fees	\$0.00
Small Business Discount	\$0.00
Administrative Permit Revision Fee	\$3,667.54

Total: **\$22,264.63**

[Back](#)[Generate Voucher](#)



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

PAYMENT VOUCHER

VOUCHER NO.
27085

PAGE: 1

FACILITY ID: 115389
COMPANY NAME: AES HUNTINGTON BEACH
CONTACT NAME: CHARLENE HE
ADDRESS: 21730 Newland Street
Huntington Beach Ca 92646

PRINT DATE : 11/19/2025

Transaction Date	Description	Transaction Balance
11/19/2025	IC Engine, Emergency, (> 500 HP)	4959.22
11/19/2025	IC Engine, Emergency, (> 500 HP) (3 Identical)	7438.83
11/19/2025	Expedited Processing Fee	6199.04
11/19/2025	Administrative Permit Revision Fee	3667.54

VOUCHER TOTAL : 22264.63

Valid through: 06/30/2026

For questions or information, call Billing Services at 909-396-2900; within California, you may call toll free 866-888-8838.

Send email inquiries to billingservice@aqmd.gov

Mail remittance to: P.O.Box 4943 Diamond Bar CA, 91765-0943

APPENDIX B - EQUIPMENT INFORMATION

Page No.	Contains
1 of 26	<u>Site Layout</u> Page 1 shows the locations proposed for installation of the Engines. As described in Section 1.2.3 and shown in the image, two Engines will be installed at each of the two Locations.
2-8 of 26	<u>Engine / Generator Specifications</u> Engine / generator specifications are provided in Pages 2-8. Information used to prepare this application package is highlighted.
9-11 of 26	<u>Statement of Exhaust Emissions</u> Engine family and exhaust emissions (NO _x + NMHC, CO, PM) are highlighted on Pages 9-11.
12 of 26	<u>Percent NO_x and NMHC in NO_x + NMHC</u> Page 12 provides a document from the Bay Area Air District identifying the fractions of NO _x and NMHC to be used when emission standards are provided for NO _x + NMHC.
13 of 26	<u>SO_x Emission Factor</u> Page 13 provides South Coast AQMD's Starting Emission Factor from Rule 2002, Table 2, for ICE's consuming diesel.
14 of 26	<u>GHG Emission Factors</u> Page 14 provides South Coast AQMD's default emission factors for GHG emissions associated with diesel combustion. The emission factors are from South Coast AQMD's Combustion Emission Estimator for Form 400-CEQA.
15 of 26	<u>Generator Enclosure Drawing</u> Page 15 provides a drawing of the generator enclosure. This drawing shows the dimensions of the enclosure and other information related to the Engine exhaust stacks.
16-19 of 26	<u>Fire Pump Information</u> Pages 16-19 provide relevant information needed to estimate annual PM _{2.5} emissions from the fire pumps.
20-23 of 26	<u>Pre-Project Facility-Wide PTE</u> Pages 20-23 provide Pre-Project facility-wide PTE for use in conjunction with the Engine emissions in rule evaluations.
24-26 of 26	<u>Excerpt from Rule Implementation Guidance, Rule 212</u> Pages 24-26 provide an excerpt from a January 2019 Rule 212 implementation document. This excerpt shows that 30-day average emissions may be used in the Rule 212(c)(2) demonstration when permits do not include daily emission limits.

NOTES:

HRSG STACK UNIT 1A1
COORDINATES STATE PLANE COORDINATES (NAD83, ZONE 6)
N 6000.000 E 2182417.74872
E 6036243.42297

LEGEND

- | | |
|--|--|
| 0001 ADMINISTRATION BUILDING | 1051 CONDENSATE PUMPS |
| 0002 CONTROL BUILDING | 1052 LP STEAM TURBINE DRAIN TANK |
| 0003 GAS COMPRESSOR BUILDING | 1053 STG EXCITATION UNIT EQUIPMENT (GEC) |
| 0004 FINE PUMP ENCLOSURE (SEE SITE PLAN) | 1054 STG EXCITATION TRANSFORMER |
| 0005 FINE PROTECTION VALVE HOUSE | 1055 STG MOTOR REMOVAL AREA |
| 0006 MEDIUM VOLTAGE ELECTRICAL ENCLOSURE | 1056 STG STEP-UP TRANSFORMER |
| 0007 ACC ELECTRICAL ENCLOSURE | 1057 STG LUBE OIL MODULE |
| 0008 CHEMICAL FEED CANOPY | 1058 CONDENSATE FILTER |
| 0009 ROADWAY | 1059 STG HYDRAULIC CONTROL UNIT |
| 0010 STORM WATER BASIN | 1060 PERFORMANCE HEATER |
| 0011 WASTE WATER STORAGE TANK | 1061 LP STEAM DRAINING TANK |
| 0012 OIL/WATER SEPARATOR | 1062 LP DRAINING TANK PUMPS |
| 0013 DEMINERALIZED WATER PUMPS (SEE SITE PLAN) | 1063 COMBUSTION TURBINE |
| 0014 DEMIN WATER TANK (SEE SITE PLAN) | 1064 COMBUSTION TURBINE GENERATOR |
| 0015 SERVICE WATER TANK (SEE SITE PLAN) | 1065 TURBINE ROTOR REMOVAL AREA |
| 0016 SERVICE WATER PUMPS (SEE SITE PLAN) | 1066 GENERATOR REMOVAL AREA |
| 0017 CLOSED COOLING WATER PUMPS | 1067 AIR INLET FILTER |
| 0018 CLOSED COOLING WATER HEAD TANK | 1068 HYDROGEN BOTTLE RACKS |
| 0019 POTABLE WATER TEMPERING SKID | 1069 ACCESSORY MODULE |
| 0020 SANITARY LIFT STATION | 1070 PACKAGED ELECTRICAL ELECTRONIC CONTROL CENTER (PEECC) |
| 0021 CLOSED COOLING WATER STRAINER | 1071 ABSOLUTE SEPARATOR |
| 0022 SAMPLE PANEL | 1072 FUEL GAS START-UP HEATER |
| 0023 EQUIPMENT FURNACE | 1073 CTC LCI AND EXCITATION COMPARTMENT |
| 0024 AIR COOLED CONDENSER | 1074 DC LINK REACTOR |
| 0025 CONDENSATE RECEIVER TANK/DEAERATOR | 1075 WATER WAST SKID |
| 0026 AIR COOLED CONDENSER DUCT | 1076 CTC ISOLATION TRANSFORMER |
| 0027 AIR COOLED CONDENSER FINTUNE CLEANING SKID | 1077 CTC EXCITATION TRANSFORMER |
| 0028 TOWER CRANE W/MT | 1078 CTC GENERATOR BREAKER |
| 0029 SECONDARY LOW VOLTAGE TRANSFORMER | 1079 ISO PHASE BUS DUCT |
| 0030 DEADEND STRUCTURE | 1080 CTC AUXILIARY TRANSFORMER |
| 0031 FUEL GAS COMPRESSORS | 1081 CTC STEP-UP TRANSFORMER |
| 0032 FUEL GAS COMPRESSOR DRAINING TANK | 1082 NON-SEG BUS DUCT |
| 0033 FUEL GAS REGULATING SKID | 1083 WATER WASH DRAINING TANK |
| 0034 FUEL GAS DRAINING TANK | 1084 WATER WASH SKID |
| 0035 AIR COMPRESSORS | 1085 AC LINK REACTOR |
| 0036 DESICCANT AIR DRYER | 1086 FUEL GAS CHROMATOGRAPHY |
| 0037 AIR RECEIVER | 1087 HRSG |
| 0038 AUXILIARY BOILER AND ASSOCIATED EQUIPMENT | 1088 STACK |
| 0039 FUEL GAS COMPRESSOR SUCTION SCRUBBER | 1089 ROILER FEEDWATER PUMPS |
| 0040 EMERGENCY DIESEL GENERATOR 1 | 1090 BLOWDOWN TANK |
| 0041 EMERGENCY DIESEL GENERATOR 2 | 1091 BLOWDOWN TANK DRAIN SUMP |
| 0042 CONTRACTOR PROPOSED LOCATION FOR FUTURE CHEMICAL FEED EQUIPMENT | 1092 BLOWDOWN TANK DRAIN SUMP PUMPS |
| 0043 POTHEAD STRUCTURE | 1093 CONTINUOUS EMISSIONS MONITORING SYSTEMS BUILDING (CEMS) |
| 0044 230KV CIRCUIT BREAKER | 1094 AMMONIA FLOW CONTROL UNIT |
| 0045 ALTERNATE FEED TRANSFORMER | 1095 SCR REMOVAL AREA |
| 0046 STG GENERATOR BREAKER | 1096 FUEL GAS STARTUP HEATER CONTROL PANEL |
| 0047 ROILER FEEDWATER PUMP BUILDING | 1097 FUEL GAS STARTUP HEATER TRANSFORMER |
| 0048 STG ELECTRICAL ENCLOSURE | 1098 PIPE RACK |
| 0049 HRSG ELECTRICAL ENCLOSURE | 1099 STG PIPE RACK |
| 0050 AIR COOLED HEAT EXCHANGER | 1100 AMMONIA STORAGE TANK |
| 0051 STEAM TURBINE | 1101 AMMONIA FORWARDING PUMPS |
| 0052 STEAM TURBINE GENERATOR | 1102 AMMONIA CONTAINMENT AREA |
| 0053 ISLAND STEAM CONDENSER | 1103 AMMONIA UNLOADING CONTAINMENT AREA |
| 0054 STEAM JET AIR EJECTOR SKID | 1104 EXTERNAL HEAT EXCHANGER |
| 0055 VACUUM PUMP SKID | 1105 BLOWDOWN HEAT EXCHANGER |

- PRELIMINARY -
NOT FOR CONSTRUCTION
CONFIDENTIAL

THIS DRAWING IS CONFIDENTIAL. IT IS THE PROPERTY OF KIEWIT POWER CONSTRUCTORS CO. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. ANY UNAUTHORIZED REPRODUCTION OR TRANSMISSION OF THIS DRAWING IS PROHIBITED AND WILL BE SUBJECT TO PROSECUTION. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR THE PROTECTION OF ITS CONFIDENTIALITY. IF THE DRAWING IS NOT TO BE USED, IT SHALL BE RETURNED TO THE ORIGINATOR.

1	DESIGNED BY	T. CLARK	P. WEST	02-29-28
2	DESIGNED BY	C. MCKINNEY	N. WILLIAMS	5-18-28
3	DESIGNED BY	C. MCKINNEY	N. WILLIAMS	5-18-28
4	DESIGNED BY	D. MATTHEWS	C. JONES	08-25-27
5	DESIGNED BY	D. MATTHEWS	A. CHRISTENSEN	N/A
6	DESIGNED BY	D. MATTHEWS	A. CHRISTENSEN	04-01

KIEWIT POWER CONSTRUCTORS CO.

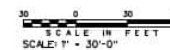
AES SOUTBLAND
BUNTINGTON BEACH ENERGY PROJECT



KIEWIT ENGINEERING GROUP INC.
2400 North Highway 101
Lawrenceville, Georgia 30046

PLOT PLAN

DESIGNED BY	D. MATTHEWS	DRAWING NUMBER	20009458-PP-001
LEAD ENG	A. GAFF		
ENG MGR	J. PISCIA		
PROJ MGR	B. SANDSON		



SD500 | 18.1L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary · EPA Tier 4 Final

GENERAC | INDUSTRIAL
POWER

Standby Power Rating

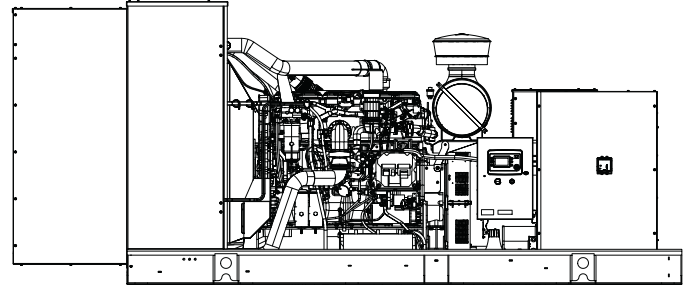
500 kW, 625 kVA, 60 Hz

Prime Power Rating*

456 kW, 570 kVA, 60 Hz



*Assembled in the USA using domestic and foreign parts



Codes and Standards

Not all codes and standards apply to all configurations. Contact factory for details.



UL2200, UL6200, UL1236, UL489,
UL142, UL S601C



BS5514 and DIN 6271



SAE J1349



NFPA 37, 70, 99, 110



NEC700, 701, 702, 708



NEMA ICS10, MG1, 250, ICS6,
AB1



ANSI C62.41

Powering Ahead

For over 60 years, Generac has provided innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial applications under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

SD500 | 18.1L | 500 kW
INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary - EPA Tier 4 Final



STANDARD FEATURES

ENGINE SYSTEM

- Oil Drain Extension
- Heavy Duty Air Cleaner
- Fan Guard
- Factory Filled Oil and Coolant
- Radiator Duct Adapter (Open Set Only)

FUEL SYSTEM

- Padlockable External DEF Fill Cap
- Two Fuel Filters and a Fuel/Water Separator

COOLING SYSTEM

- Factory-Installed Radiator
- 50/50 Ethylene Glycol Antifreeze
- Radiator Drain Extension

ELECTRICAL SYSTEM

- Battery Charging Alternator
- Battery Cables
- Battery Tray
- Rubber-Booted Engine Electrical Connections
- Solenoid Activated Starter Motor

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 Leads (3-Phase, Non-600V)
- Class H Insulation Material
- 2/3 Pitch
- Amortisseur Winding
- Permanent Magnet Excitation
- Sealed Bearings
- Full Load Capacity Alternator
- Protective Thermal Switch
- Main Line Circuit Breaker

GENERATOR SET

- Separation of Circuits - High/Low Voltage
- Separation of Circuits - Multiple Breakers
- 2 Year Limited Warranty (Standby and Demand Response Rated Units)
- 1 Year Limited Warranty (Prime Rated Units)

ENCLOSURE (If Selected)

- Rust-Proof Fasteners with Nylon Washers to Protect Finish
- High Performance Sound-Absorbing Material (Sound Attenuated Enclosures)
- Gasketed Doors
- Stamped Air-Intake Louvers
- Upward Facing Discharge Hoods (Radiator and Exhaust)
- Stainless Steel Lift Off Door Hinges
- Stainless Steel Lockable Handles
- RhinoCoat™ - Textured Polyester Powder Coat Paint

FUEL TANKS

- UL 142
- Double Wall
- Vents
- Factory Pressure Tested (2 psi)
- Rupture Basin Alarm
- Fuel Level Sender
- Stainless Steel Hardware
- Fuel Line Hose
- Electronic Fuel Level

SD500 | 18.1L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary · EPA Tier 4 Final

GENERAC | INDUSTRIAL
POWER

CONTROL SYSTEM



DSE G8601 Controller

KEY FEATURES

- Advanced PLC Functionality
- Multi-Purpose PIDs
- Virtual Inputs
- On-Screen Mimic (SLDs)
- Multiple Application Support
- Multi-Level Pin Protected Front Panel Editor
- Integral LCD Display Heater
- Enhanced High-Resolution 240 x 128 Pixel Display
- Single Generator Control
- Latest ECU/ECM Support
- Touch Screen Panel PC Support
- Zero Sequence Voltage Protection
- Integral Gasket (IP65 protection)

Standard Protections

- Low Coolant Level
- High/Low Coolant Temperature
- Oil Temperature
- Over/Under Speed
- Over/Under Voltage
- Over/Under Frequency
- Over/Under Current
- Over Load
- Battery Voltage
- Battery Charger Current
- Phase to Phase and Phase to Neutral Short Circuits (I²T Algorithm)
- Ground Fault

Control Panel

- Auto/Off/Manual
- Indication Through Display Screen
- Audible Alarm and Silence
- Not in Auto Indication

Voltage Regulation

- Digital Control
- Three-Phase Sensing
- Negative Power Limit
- Loss of Sensing Protection
- Fault Protection (I²T Function)
- High Voltage Limit
- Low Voltage Limit
- Maximum Power Limit
- $\pm 0.5\%$ Voltage Regulation

Governor Functionality

- Speed Control through ECM Integration
- Soft Start Ramping (Multiple Steps)

Qualification Testing

- Life Test in Environmental Chamber
- Temperature Rating -22 °F to +122 °F (-30 °C to +50 °C)
- Vibration Tested and Protected

Connections (Actual I/O May Vary Due to Configuration)

- 4 Analog Inputs
- 12 Digital Inputs
 - 9 Active Low Digital Outputs

Customer Ports

- Ethernet
- 2 RS-485
- 2 USB
- CANBus

Codes and Standards

- UL 6200
- CE
- NFPA 110 Capable

More Features

- Built-in Governor
- Digital AVR Support
- Multiple Language Support
- Three-Phase Generator Sensing and Protection
- Three-Phase Bus Sensing
- Generator Current, Protection and Power Monitoring
- Configurable Timers
- Integrated SNMP
- Data Logging
- PC Configuration
- DSENet[®] (Expansion Support)
- Flexible I/O (Inputs/Outputs)
- Automatic and Front Panel Breaker Control
- Power-Save Mode

SD500 | 18.1L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary · EPA Tier 4 Final

GENERAC® | **INDUSTRIAL
POWER**

CONFIGURABLE OPTIONS

ENGINE SYSTEM

- Engine Coolant Heater with Isolation Ball Valves
- Oil Heater
- Fuel Filter Heater
- Crankcase Ventilation Heater

ELECTRICAL SYSTEM

- 20A UL Listed Battery Charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing

CIRCUIT BREAKER OPTIONS

- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- Extended Factory Testing (3-Phase Only)
- 12 Position Load Center

ENCLOSURE

- Level 0 Sound Attenuated
- Level 1 Sound Attenuated
- Level 2 Sound Attenuated
- Level 2 Sound Attenuated with Motorized Dampers
- Steel Enclosure
- Aluminum Enclosure
- IBC Seismic Certification/OSHPD Preapproval
- Up to 200 MPH Wind Load Rating (Contact Factory for Availability)
- AC Enclosure Lighting Kit
- Enclosure Heaters (Motorized Dampers Only)

CONTROL SYSTEM

- NFPA 110 Compliant 21-Light Remote Annunciator
- Remote Relay Assembly (8 or 16)
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- 10A Engine Run Relay
- Ground Fault Annunciator
- Damper Alarm Contacts (Motorized Dampers Only)
- 100 dB Alarm Horn
- 120V GFCI and 240V Outlets

WARRANTY (Standby Gensets Only)

- 2 Year Extended Limited Warranty
- 5 Year Limited Warranty
- 5 Year Extended Limited Warranty
- 7 Year Extended Limited Warranty
- 10 Year Extended Limited Warranty

FUEL TANKS (Size on Last Page)

- Mechanical Fuel Level
- External Fill and Vents Tank

ENGINEERED OPTIONS

ENGINE SYSTEM

- Fluid Containment Pan

CONTROL SYSTEM

- Battery Disconnect Switch

GENERATOR SET

- Special Testing

ENCLOSURE

- Door Open Alarm Horn

TANKS

- Overfill Protection Valve
- UL2085 Tank
- Stainless Steel Tank
- Special Fuel Tanks
- Vent Extensions
- 5 Gallon Spill Containment Box
- Dealer Supplied AHJ Requirements

SD500 | 18.1L | 500 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary - EPA Tier 4 Final

APPLICATION AND ENGINEERING DATA

ENGINE SPECIFICATIONS

General

Make (Model)	Perkins (2806F-E18TAG1)
EPA Emissions Compliance	Tier 4 Final
After-Treatment System	EGR, DOC, SCR, and DPf
Cylinder #	6
Type	In-line
Displacement - in ³ (L)	1,104 (18.1)
Bore - in (mm)	5.7 (145)
Stroke - in (mm)	7.2 (183)
Compression Ratio	16.0:1
Intake Air Method	Turbocharged/Aftercooled

Engine Governing

Governor	Electronic
Frequency Regulation (Steady State)	±0.75%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Spin-On Cartridge
Crankcase Capacity - qt (L)	78.2 (74.0)

Cooling System

Cooling System Type	Water Cooled
Water Pump Type	Engine Gear Driven
Fan Type	Pusher
Fan Speed	Variable Speed Clutch
Fan Diameter - in (mm)	46 (1,168)

Fuel System

Fuel Type	Ultra Low Sulfur Diesel
Fuel Specifications	ASTM D975 D2
Fuel Filtering (Microns)	Primary: 10 Final: 4
Fuel Pump Type	Engine Gear Driven Lift Pump
Injector Type	Electronically Controlled Unit Injector (MEUI)

Engine Electrical System

System Voltage	24 VDC
Battery Size	See Battery Index 0161970SBY
Battery Voltage	(2) - 12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	K0552124N27
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	<5% (3-Phase)
Telephone Interference Factor (TIF)	<50

Standard Excitation	Permanent Magnet
Bearings	Sealed Cartridge
Coupling	Direct via Flexible Disc
Prototype Short Circuit Test	Yes
Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	±0.5%

SD500 | 18.1L | 500 kW

INDUSTRIAL DIESEL GENERATOR SET

EPA Certified Stationary - EPA Tier 4 Final

GENERAC® | **INDUSTRIAL POWER**

OPERATING DATA

POWER RATINGS

		Standby
Three-Phase 120/208 VAC @0.8p	500 kW	Amps: 1,735
Three-Phase 120/240 VAC @0.8pf	500 kW	Amps: 1,504
Three-Phase 277/480 VAC @0.8pf	500 kW	Amps: 752

MOTOR STARTING CAPABILITIES (SKVA)

skVA vs. Voltage Dip			
277/480 VAC	30%	120/208 VAC	30%
K0552124N27	Contact Factory	G/D0500124N27	Contact Factory
K0600124N27	Contact Factory	G/D0528124N27	Contact Factory

FUEL CONSUMPTION RATES*

Fuel Pump Lift- ft (m)	Diesel - gph (Lph)			% Load DEF	gph (Lph)
9.8 (3)	Percent Load	Standby	Prime	100	1.3 (4.9)
Total Fuel Pump Flow (Combustion + Return) - gph (Lph)	25%	12.3 (46.4)	—	91.2	1.2 (4.5)
	50%	19.7 (74.9)	—	75	1.0 (3.8)
	70%	26.1 (99.0)	—	70	0.9 (3.4)
	75%	27.8 (105.3)	—	50	0.7 (2.6)
	91.2%	—	33.0 (124.9)	25	0.4 (1.5)
	100%	36.5 (138.3)	—		

*Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

		Standby
Coolant Flow	gpm (Lpm)	97.7 (370)
Coolant System Capacity	gal (L)	16.7 (63.2)
Heat Rejection to Coolant	BTU/hr (kW)	966,495 (283)
Inlet Air	cfm (m³/min)	25,603 (725)
Maximum Radiator Backpressure	in H ₂ O (kPa)	2.57 (0.64)

COMBUSTION AIR REQUIREMENTS

	Standby
Flow at Rated Power cfm — (m³/min)	1,338 (37.3)

ENGINE

		Standby
Rated Engine Speed	rpm	1,800
Horsepower at Rated kW**	hp	744
Piston Speed	ft/min (m/min)	2,20 (616)
BMEP	psi (kPa)	246 (2,041)

** See "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

EXHAUST

		Standby
Exhaust Flow (Rated Output)	cfm (m³/min)	935 (26.5)
Maximum Allowable Back Pressure (Post Turbo)	in H ₂ O (kPa)	168 (42)
Exhaust Temp (Rated Output - Post Silencer)	°F (°C)	911 (2,041)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions.

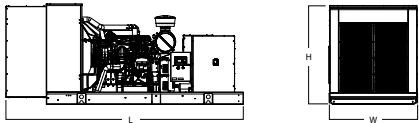
Please contact a Generac Power Systems Industrial Ottomotores CAT® Dealer for additional details. All performance ratings in accordance with BS5514 and DIN6271 standards.

Standby — See Bulletin 10000018933

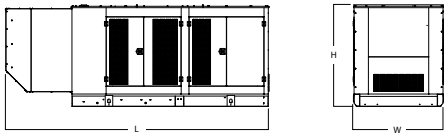
Prime — See Bulletin 10000018926

SD500 | 18.1L | 500 kW
INDUSTRIAL DIESEL GENERATOR SET
EPA Certified Stationary - EPA Tier 4 Final

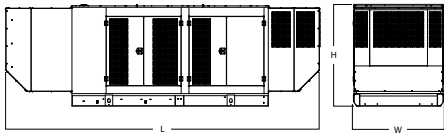
DIMENSIONS AND WEIGHTS*



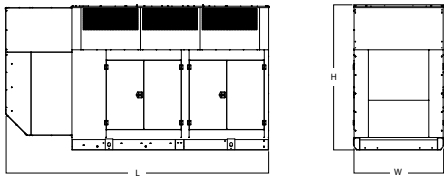
OPEN SET				
Run Time Hours**	Usable Capacity Gal (L)	L x W x H - in (mm)		Weight - lbs (kg)
26.9	703 (2,661)	188.5 (4,790) x 71.0 (1,803) x 116.8 (2,967)		Contact Factory



LEVEL 0 SOUND ATTENUATED ENCLOSURE				
Run Time Hours**	Usable Capacity Gal (L)	L x W x H - in (mm)		Weight - lbs (kg) Enclosure Only
26.9	703 (2,661)	207.5 (5,270) x 71.0 (1,803) x 115.9 (2,944)		Steel: 2,467 (1,119) Aluminum: 1,380 (626)



LEVEL 1 SOUND ATTENUATED ENCLOSURE				
Run Time Hours**	Usable Capacity Gal (L)	L x W x H - in (mm)		Weight - lbs (kg) Enclosure Only
26.9	703 (2,661)	247.5 (6,287) x 71.0 (1,803) x 115.7 (2,940)		Steel: 3,472 (1,575) Aluminum: 1,812 (822)



LEVEL 2 SOUND ATTENUATED ENCLOSURE				
Run Time Hours**	Usable Capacity Gal (L)	L x W x H - in (mm)		Weight - lbs (kg) Enclosure Only
26.9	703 (2,661)	207.4 (5,268) x 71.0 (1,803) x 157.2 (3,992) Height without louvers: 149.9 (3807)		Steel: 3,809 (1,728) Aluminum: 1,955 (887)

* All measurements are approximate and for estimation purposes only.
** Runtime is calculated at 70% Emergency Standby Power (ESP).

YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings

STATEMENT OF EXHAUST EMISSIONS

2025 PERKINS Diesel Fueled Generator

The measured emissions values provided here are proprietary to Generac and its authorized dealers. This information may only be disseminated upon request to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Generac Power Systems, Inc.. The data provided shall not be meant to include information made public by Generac.

Generator Model	kW _e	Engine Disp (L)	Engine Family	Engine Model	Rated Engine Power (BHP)	Fuel Consumption (gal/hr)	Aspiration	Rated RPM	EPA Certificate #	CARB Certificate #	SCAQMD CEP #	Emissions Standard Category	Certification Type
SD010NA	10	2.2	SPKXL02.2NLC	404D-22G	32.5	1.6	Naturally Aspirated	1,800	SPKXL02.2NLC-006	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD015NA	15	2.2	SPKXL02.2NLC	404D-22G	32.5	1.6	Naturally Aspirated	1,800	SPKXL02.2NLC-006	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD020NA	20	2.2	SPKXL02.2NLC	404D-22G	32.5	1.6	Naturally Aspirated	1,800	SPKXL02.2NLC-006	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD010TA	10	2.2	SPKXL02.2TCC	404D-22TAG	48.8	2.77	Turbocharged/Aftercooled	1,800	SPKXL02.2TCC-007	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD015TA	15	2.2	SPKXL02.2TCC	404D-22TAG	48.8	2.77	Turbocharged/Aftercooled	1,800	SPKXL02.2TCC-007	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD020TA	20	2.2	SPKXL02.2TCC	404D-22TAG	48.8	2.77	Turbocharged/Aftercooled	1,800	SPKXL02.2TCC-007	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD025TA	25	2.2	SPKXL02.2TCC	404D-22TAG	48.8	2.77	Turbocharged/Aftercooled	1,800	SPKXL02.2TCC-007	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD030TA	30	2.2	SPKXL02.2TCC	404D-22TAG	48.8	2.77	Turbocharged/Aftercooled	1,800	SPKXL02.2TCC-007	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SDC015	15	2.2	SPKXL02.2NLC	404D-22G	32.5	1.6	Naturally Aspirated	1,800	SPKXL02.2NLC-006	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SDC020	20	2.2	SPKXL02.2NLC	404D-22G	32.5	1.6	Naturally Aspirated	1,800	SPKXL02.2NLC-006	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SDC030	30	2.2	SPKXL02.2TCC	404D-22TAG	48.8	2.77	Turbocharged/Aftercooled	1,800	SPKXL02.2TCC-007	N/A	N/A	Tier 4 Interim	Stationary Emergency CI
SD/MD400	400	12.5	SCPXL12.5NYS	2206D-E13TAG3	619	28.7	Turbo/Aftercooled	1,800	SCPXL12.5NYS-024	N/A	545375	Tier 3	Stationary Emergency CI
SB/MB500	500	15.2	SCPXL15.2NZS	2806F-E18TAG1	744	31.2	Turbo/Aftercooled	1,800	SCPXL15.2NZS-026	N/A	545376	Tier 2	Stationary Emergency CI
SD/MD500	500	15.2	SCPXL15.2NZS	2506C-E15TAG3	762	36.4	Turbo/Aftercooled	1,800	SCPXL15.2NZS-026	N/A	545376	Tier 2	Stationary Emergency CI
SD/MD500	500	18.1	SCPXL18.1HTH	2806F-E18TAG1	744	36.5	Turbo/Aftercooled	1,800	SCPXL18.1HTH-008	U-R-001-0699	647269	Tier 4	Stationary Emergency CI
SB/MB600	600	18.1	SCPXL18.1NYS	2806C-E18TAG3	909	41.4	Turbo/Aftercooled	1,800	SCPXL18.1NYS-032	N/A	545379	Tier 2	Stationary Emergency CI
SD/MD600	600	18.1	SCPXL18.1NYS	2806C-E18TAG3	909	41.4	Turbo/Aftercooled	1,800	SCPXL18.1NYS-032	N/A	545379	Tier 2	Stationary Emergency CI
SD/MD750	750	18.1	SCPXL18.1NYS	2806C-E18TAG7	1,112	54.3	Turbo/Aftercooled	1,800	SCPXL18.1NYS-032	N/A	618807	Tier 2	Stationary Emergency CI

STATEMENT OF EXHAUST EMISSIONS 2025 PERKINS Diesel Fueled Generator

Emissions Based on Engine Power of Specific Engine Model
These Values are Actual Composite Weighted Exhaust Emissions Results Over the EPA 5-Mode Test Cycle

Generator Model	CO	NOx + NMHC	PM	Grams/kW-hr Grams/bhp-hr
SD010NA	1.0	5.2	0.17	Grams/kW-hr
	0.7	3.8	0.1	Grams/bhp-hr
SD015NA	1.2	5.2	0.17	Grams/kW-hr
	0.7	3.8	0.1	Grams/bhp-hr
SD020NA	1.0	5.2	0.17	Grams/kW-hr
	0.7	3.8	0.1	Grams/bhp-hr
SD010TA	1.0	5.3	0.13	Grams/kW-hr
	0.7	3.9	0.1	Grams/bhp-hr
SD015TA	1.0	5.3	0.13	Grams/kW-hr
	0.7	3.9	0.1	Grams/bhp-hr
SD020TA	1.0	5.3	0.13	Grams/kW-hr
	0.7	3.9	0.1	Grams/bhp-hr
SD025TA	1.0	5.3	0.13	Grams/kW-hr
	0.7	3.9	0.1	Grams/bhp-hr
SD030TA	1.0	5.3	0.13	Grams/kW-hr
	0.7	3.9	0.1	Grams/bhp-hr
SDC015	1.0	5.2	0.17	Grams/kW-hr
	0.7	3.8	0.1	Grams/bhp-hr
SDC020	1.0	5.2	0.17	Grams/kW-hr
	0.7	3.8	0.1	Grams/bhp-hr
SDC030	1.0	5.3	0.13	Grams/kW-hr
	0.7	3.9	0.1	Grams/bhp-hr
SD/MD400	2.7	3.7	0.16	Grams/kW-hr
	2.0	2.7	0.1	Grams/bhp-hr
SB/MB500	1.6	5.5	0.09	Grams/kW-hr
	1.17	4.04	0.07	Grams/bhp-hr
SD/MD500	1.6	5.5	0.09	Grams/kW-hr
	1.2	4.1	0.07	Grams/bhp-hr
SD/MD500	0.00	0.12	0.01	Grams/kW-hr
	0.07	0.08	0.01	Grams/bhp-hr
SB/MB600	0.80	5.8	0.11	Grams/kW-hr
	0.60	4.3	0.08	Grams/bhp-hr
SD/MD600	0.80	5.8	0.11	Grams/kW-hr
	0.60	4.3	0.08	Grams/bhp-hr
SD/MD750	0.80	5.8	0.11	Grams/kW-hr
	0.60	4.3	0.08	Grams/bhp-hr

STATEMENT OF EXHAUST EMISSIONS 2025 PERKINS Diesel Fueled Generator

These Values are 100% Load Data Exhaust Emissions Results.

Generator Model	CO	NOx + NMHC	PM	Grams/kW-hr Grams/bhp-hr
SD/MD400	1.66	6.18	0.07	Grams/kW-hr
	1.22	4.55	0.05	Grams/bhp-hr
SB/MB500	0.85	6.25	0.04	Grams/kW-hr
	0.63	4.6	0.03	Grams/bhp-hr
SD/MD500	0.84	6.14	0.04	Grams/kW-hr
	0.63	4.58	0.03	Grams/bhp-hr
SD/MD500	0.00	0.05	0.01	Grams/kW-hr
	0.00	0.03	0.01	Grams/bhp-hr
SB/MB600	0.62	7.71	0.04	Grams/kW-hr
	0.46	5.75	0.03	Grams/bhp-hr
SD/MD600	0.62	7.71	0.04	Grams/kW-hr
	0.46	5.75	0.03	Grams/bhp-hr
SD/MD750	0.30	7.27	0.04	Grams/kW-hr
	0.22	5.42	0.03	Grams/bhp-hr

- The stated values are actual exhaust emission test measurements obtained from an engine representative of the type described above.
- Values based on 5-Mode testing are official data of record as submitted to regulatory agencies for certification purposes. Testing was conducted in accordance with prevailing EPA protocol, which is typically accepted by SCAQMD and other regional authorities.
- No emissions values provided above are to be construed as guarantees of emission levels for any given Generac generator unit.
- Generac Power Systems, Inc. reserves the right to revise this information without prior notice.
- Consult state and local regulatory agencies for specific permitting requirements.
- The emission performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation process. State and local regulations may vary on a case-by-case basis and local agencies must be consulted by the permit application/equipment owner prior to equipment purchase or installation. The data supplied herein by Generac Power Systems Inc. cannot be construed as a guarantee of installability of the generating set.

Policy: CARB Emission Factors for CI Diesel Engines – Percent HC in Relation to NMHC + NOx

Policy	When the non-methane hydrocarbon (NMHC) and nitrogen oxide (NOx) emission factor is combined, assume a breakdown of 5% and 95%, respectively.
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Effective date	June 28, 2004
-----------------------	---------------

Definitions	The following is a list of associated definitions. • CI Engine – Compression Ignition Engine is an internal combustion engine with operating characteristics significantly similar to the theoretical diesel combustion cycle. • HC – Organic compound consistently entirely of hydrogen and carbon. • NMHC – Non-Methane Hydrocarbon is the sum of all hydrocarbon air pollutants except methane. • NOx – Nitrogen Oxides are compounds of nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen, which are typically created during combustion processes.
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Contact	Randy Frazier, x4672
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Document Control	Version	Revised By	Description	Date
	1.1	HL	New Policy: CARB Emission Factors – Percent HC in Relation to NMHC + NOx	06/28/04
	1.2	MCL	Mapping of Policy	3/13/08

Approval	Name & Title	Signature	Date
	Brian Bateman, Director of Engineering	Signed by Brian Bateman	2/28/2008

Table 2

RECLAIM SO_x Emission Factors

Sulfur Oxides Basic Equipment	Fuel	"Throughput" Units	Starting Emission Factor *	Ending Emission Factor *
Air Blown Asphalt		hours of operation	RV	RV
Asphalt Concrete	Cold Ag Handling	tons produced	RV	0.032
Calcliner	Petroleum Coke	Calcined Coke	RV	0.000
Catalyst Regeneration		hours of operation	RV	RV
Cement Kiln	Distillate Oil	1000 gallons	RV	RV
Cement Mfg	Kilns, Dry Process	tons produced	RV	RV
Claus Unit		pounds	RV	RV
Cogen	Coke	pounds per ton	RV	RV
Non Fuel Use		hours of operation	RV	RV
External Combustion Equipment / Incinerator	Natural Gas	mmcf	RV	0.830
External Combustion Equip/Incinerator	LPG, Propane, Butane	1000 gallons	RV	4.600
External Combustion Equip/Incinerator	Diesel Light Dist. (0.05% S)	1000 gallons	7.00	5.600
External Combustion Equip/Incinerator	Residual Oil	1000 gallons	8.00	6.400
External Combustion Equip/Incinerator	Refinery Gas	mmcf	RV	6.760
Fiberglass	Recuperative Furn, Textile-Type Fiber	tons produced	RV	2.145
Fluid Catalytic Cracking Units		1000 bbls refinery feed	RV	13.700
Glass Mfg, Forming/Fin	Container Glass		RV	RV
Grain Milling	Flour Mill	tons Grain Processed	RV	RV
ICEs	Natural Gas	mmcf	RV	0.600
ICEs	LPG, Propane, Butane	1000 gallons	RV	0.350
ICEs	Gasoline	1000 gallons	RV	4.240
ICEs	Diesel Oil	1000 gallons	6.24	4.990
Industrial	Cogeneration, Bituminous Coal	tons produced	RV	RV
Industrial (scc 10200804)	Cogeneration, Coke	tons produced	RV	RV
Inorganic Chemicals	General, H ₂ SO ₄ Chamber	tons produced	RV	RV
Inorganic Chemicals	Absrbr 98.0% Conv, H ₂ SO ₄ Contact	tons produced	RV	RV

* RV = Reported Value

*** Applies retroactively to January 1, 1994 for Cycle 1 facilities and July 1, 1994 for Cycle 2 facilities.

Appendix B

Page 14 of 26

Emission Factor
(same emission factor
for all combustion
equipment types)

Fuel Type	kg/mmBtu			lb/mmBtu		
	CO ₂	CH ₄	N ₂ O	CO ₂	CH ₄	N ₂ O
Diesel	73.96	0.003	0.0006	163.01	6.61E-03	1.32E-03
Gasoline	70.22	0.003	0.0006	154.76	6.61E-03	1.32E-03
Landfill Gas	52.07	0.0032	0.00063	114.76	7.05E-03	1.39E-03
LPG	61.71	0.003	0.0006	136.01	6.61E-03	1.32E-03
Natural Gas	53.06	0.001	0.0001	116.94	2.20E-03	2.20E-04

Note

From Distillate Fuel Oil No.2
From Motor Gasoline

Data Source: https://www.ecfr.gov/cgi-bin/text-idx?SID=1d653629ba1ed0a9fee443920aa261e0&mc=true&node=ap40.23.98_138.1&rgn=div9
https://www.ecfr.gov/cgi-bin/text-idx?SID=5d2c6b432404dc9cfd5fb33ac1becb5b&mc=true&node=ap40.23.98_138.2&rgn=div9

40 CFR Subpart 98: Table C-1 to Subpart C of Part 98—Default CO₂ Emission Factors and High Heat Values for Various Types of Fuel [78 FR 71950, Nov. 29, 2013]
Table C-2 to Subpart C of Part 98—Default CH₄ and N₂O Emission Factors for Various Types of Fuel [78 FR 71952, Nov. 29, 2013]

Equipment Type

Boiler-Commercial
Boiler-Industrial
Engine-Agricultural
Engine-Emergency
Engine-Prime Power
Other Combustion Equipment

Fuel Type

Diesel
Gasoline
Landfill Gas
LPG
Natural Gas

FOR ALL WEIGHT, AND COG DETAILS SEE
CORRESPONDING OPEN SET DRAWING PER UNIT CONFIGURATION.

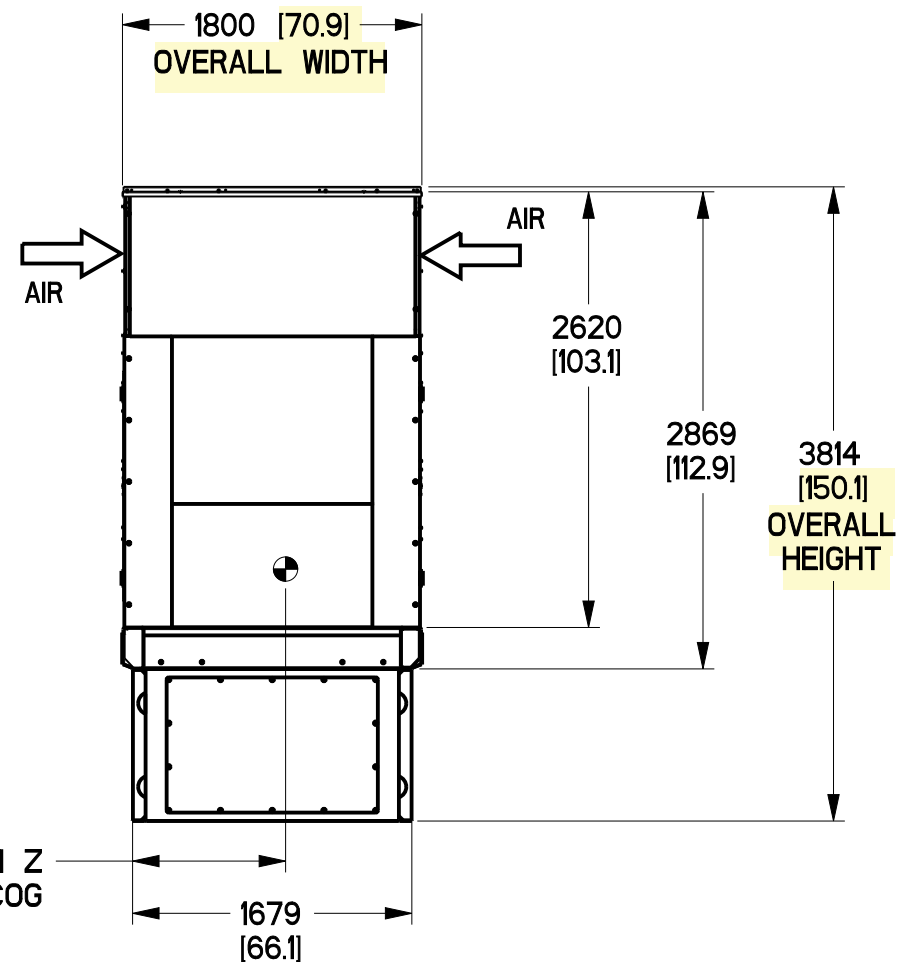
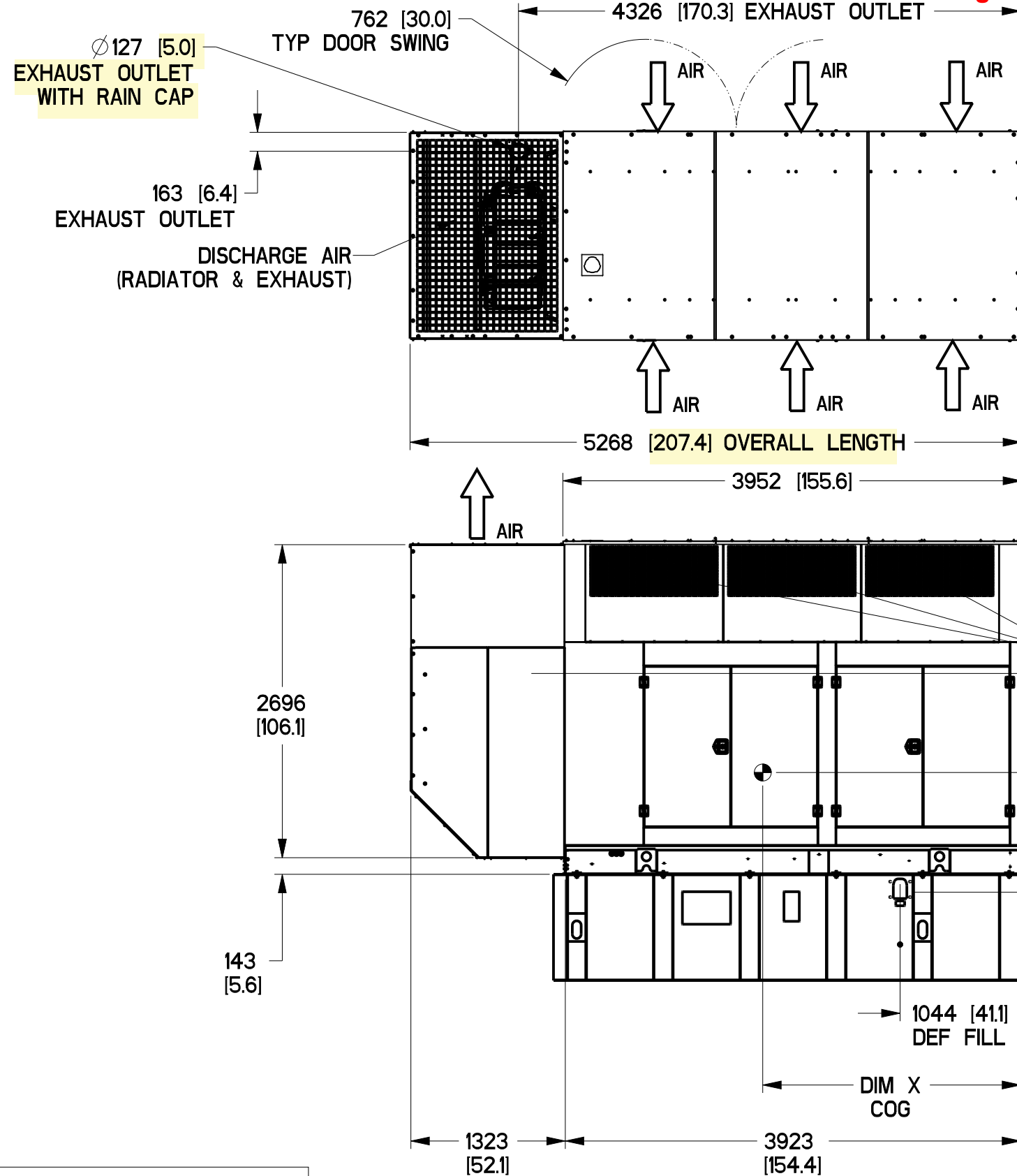
(FOR STUB-UP LOCATIONS AND INSTALLATION OF FUEL TANK TO
PAD REFER TO INSTALL DRAWING OF THE BASE TANK)

B

B

A

A



DRAWING CREATED FROM PRO/ENGINEER
3D FILE. ECO MODIFICATION TO BE
APPLIED TO SOLID MODEL ONLY.

INSTALLATION DRAWING

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ELECTRONICALLY APPROVED
INSIDE WINDCHILL

GENERAC

TITLE

INSTALL L2A ENCL D18.1L T4F

ISSUE DATE:

SIZE
B

CAGE NO
N/A

DWG NO

A0004257208

REV
A

SCALE 0.022

WT-KG

2034.362

SHEET

1 of 1



South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

Section D	Page: 2
Facility ID:	115389
Revision #:	22
Date:	August 01, 2023

FACILITY PERMIT TO OPERATE AES HUNTINGTON BEACH, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: POWER GENERATION - BOILERS					
STACK, FOR BOILER NO. 2, HEIGHT: 200 FT ; DIAMETER: 27 FT 3 IN A/N: 641791	S24	D25			
REACTOR, UREA-TO-AMMONIA SYSTEM SERVING SCR SYSTEMS C AND D A/N: 372925	D96				E193.1
Process 2: INTERNAL COMBUSTION					
System 3: EMERGENCY FIRE PUMP ENGINES					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, LEAN BURN, NO. 1, DIESEL FUEL, JOHN DEERE, MODEL 6081AF001, WITH AFTERCOOLER, TURBOCHARGER, 275 BHP A/N: 576783	D113		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 8.5 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 6.9 GRAM/BHP-HR (4) [RULE 2005, 12-4-2015]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 2012, 12-4-2015]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.38 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; ROG: 1 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005; RULE 2011, 12-4-2015]	C1.6, E448.4, H23.5, K67.4

- | | |
|---|---|
| <p>* (1) (1A) (1B) Denotes RECLAIM emission factor</p> <p>(3) Denotes RECLAIM concentration limit</p> <p>(5) (5A) (5B) Denotes command and control emission limit</p> <p>(7) Denotes NSR applicability limit</p> <p>(9) See App B for Emission Limits</p> | <p>(2) (2A) (2B) Denotes RECLAIM emission rate</p> <p>(4) Denotes BACT emission limit</p> <p>(6) Denotes air toxic control rule limit</p> <p>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</p> <p>(10) See section J for NESHAP/MACT requirements</p> |
|---|---|
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

Section D	Page: 3
Facility ID:	115389
Revision #:	22
Date:	August 01, 2023

FACILITY PERMIT TO OPERATE AES HUNTINGTON BEACH, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: INTERNAL COMBUSTION					
INTERNAL COMBUSTION ENGINE, EMERGENCY FIRE, LEAN BURN, NO. 2, DIESEL FUEL, JOHN DEERE, MODEL 6081AF001, WITH AFTERCOOLER, TURBOCHARGER, 275 BHP A/N: 576784	D114		NOX: PROCESS UNIT**; SOX: PROCESS UNIT**	CO: 8.5 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; NOX: 6.9 GRAM/BHP-HR (4) [RULE 2005, 12-4-2015]; NOX: 469 LBS/1000 GAL DIESEL (1) [RULE 1212, 12-4-2015]; PM: (9) [RULE 404, 2-7-1986]; PM10: 0.38 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; ROG: 1 GRAM/BHP-HR (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]; SOX: 6.24 LBS/1000 GAL DIESEL (1) [RULE 2011, 5-6-2005; RULE 2011, 12-4-2015]	C1.6, E448.4, H23.5, K67.4
Process 3: POWER GENERATION - GAS TURBINES					

- | | |
|---|---|
| <p>* (1) (1A) (1B) Denotes RECLAIM emission factor</p> <p>(3) Denotes RECLAIM concentration limit</p> <p>(5) (5A) (5B) Denotes command and control emission limit</p> <p>(7) Denotes NSR applicability limit</p> <p>(9) See App B for Emission Limits</p> | <p>(2) (2A) (2B) Denotes RECLAIM emission rate</p> <p>(4) Denotes BACT emission limit</p> <p>(6) Denotes air toxic control rule limit</p> <p>(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)</p> <p>(10) See section J for NESHAP/MACT requirements</p> |
|---|---|
- ** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.



FACILITY PERMIT TO OPERATE AES HUNTINGTON BEACH, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : C147]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition : D115, D124]

B. Material/Fuel Type Limits

B61.1 The operator shall not use natural gas containing the following specified compounds:

Compound	grain per 100 scf
H2S greater than	.25

This concentration limit is an annual average based on monthly sample of natural gas composition or gas supplier documentation. Gaseous fuel samples shall be tested using District Method 307-91 for total sulfur calculated as H2S

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D115, D124, D145]

C. Throughput or Operating Parameter Limits

C1.6 The operator shall limit the operating time to no more than 200 hour(s) in any one year.



FACILITY PERMIT TO OPERATE AES HUNTINGTON BEACH, LLC

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The 200 hours per year shall include no more than 30 hours in any one year for maintenance and testing purposes.

To comply with this condition, the operator shall install and maintain a(n) non-resettable elapsed time meter to accurately indicate the elapsed operating time of the engine.

[RULE 1110.2, 2-1-2008; RULE 1110.2 , 12-4-2015; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1470, 5-4-2012; RULE 2005, 5-6-2005; RULE 2005, 12-4-2015]

[Devices subject to this condition : D113, D114]

- C1.7 The operator shall limit the number of start-ups to no more than 62 in any one calendar month.



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PRE MODIFICATION PTE

The pre modification PTE calculations reflect the operational restriction on Boiler 2 heat input (refer to A/N 641971) but do not reflect the proposed increase in annual operating hours for the 2 turbines.

Pollutant	CCTG 1 & 2 PTE	Auxiliary Boiler PTE	Boiler 2 PTE
	tpy	tpy	tpy
NO _x	125.8	0.7	18.4
CO	196.7	3.8	797.5
VOC	64.8	0.5	11.2
PM ₁₀	56.44	0.7	4.3
PM _{2.5}	56.44	0.7	4.3
SO ₂	9.96	0.2	1.7
NH ₃	94.6	0.2	9.7
CO _{2e}	1,747,875	11,076	248,769.5
HAPs	11.7	0.1	0.08

Refer to Appendices A B and C for the turbine calculations and refer to AN 613956 for the auxiliary boiler calculations. Note that emission estimates for Boiler 2 are now based on exhaust flow of 20.54 mmscf/hr and fuel use of 1.94 mmscf/hr (previous was 29 mmscf/hr exhaust and 2.3 mmscf/hr fuel use) and a PM₁₀ EF of 2.1 lbs/mmscf, refer to A/N 641971 for Boiler 2 calculations.

Hazardous Air Pollutants (HAPs) Potential to Emit

Pollutant	CCTG 1&2	Boiler No. 2	Aux Boiler	Total	
	Lbs/yr	Lbs/yr	lbs/yr	Lbs/yr	Tons/yr
1,3 Butadiene	12.6	////////	////////	14.49	7.25E-03
Acetaldehyde	5163.12	15.29	0.56	5959.38	2.98E+00
Acrolein	105.84	13.60	0.49	138.37	6.92E-02
Benzene	95.52	28.89	1.04	145.24	7.26E-02
Ethyl Benzene	935.1	33.99	1.24	1117.47	5.59E-01
Formaldehyde	10527.02	61.18	2.21	12187.18	6.09E+00
Naphthalene	38.14	5.10	0.05	49.99	2.50E-02
PAH	26.34	1.70	0.02	32.33	1.62E-02
Propylene Oxide	849.04	////////	////////	976.92	4.88E-01
Toluene	3814.98	132.56	4.77	4551.3	2.28E+00
Xylene	1873.06	98.57	3.55	2275.71	1.14E+00
Hexane	////////	22.09	0.83	27.03	1.35E-02
Propylene	////////	263.41	95.40	408.30	2.04E-01
Total, lbs/yr	23440.8	676.38	110.16		
Total 4 sources, tpy			12.1		



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Turbine emissions based on factors from AP-42, Boiler emissions based on factors from Ventura County APCD. Refer to A/N 641971 for the Boiler 2 calculations, and refer to AN 613956 for the auxiliary boiler calculations. Note that emission estimates for Boiler 2 are now based on fuel use of 1.94 mmscf/hr (previous was 2.3 mmscf/hr).

Pre Modification Facility Annual PTE Summary

Pollutant	Facility PTE, tpy	Major Source?		
		PSD	Title V	1325
NOx	144.9	Y	Y	Y
CO	998.0	Y	Y	////////
VOC	76.5	Y	Y	Y
PM10	61.4	Y	Y	////////
PM2.5	61.4	Y	Y	N
SO2	11.9	N	N	N
NH3	104.5	////////	////////	Y
CO2e	2,007,721	Y	////////	////////
HAPs	12.1	////////	N	////////

Emissions from the emergency fire pump engine and emergency diesel generator engine are not included because they are negligible.

POST MODIFICATION PTE

The post modification PTE calculations reflect both the operational restriction on Boiler 2 heat input (refer to A/N 641971), as well as the increase in annual operating hours for the 2 turbines from 6640 hrs/yr to 7640 hrs/yr

Pollutant	CCTG 1 & 2 PTE	Auxiliary Boiler PTE	Boiler 2 PTE
	tpy	tpy	tpy
NOx	142.6	0.7	18.4
CO	204.4	3.8	797.5
VOC	70.6	0.5	11.2
PM10	64.9	0.7	4.3
PM2.5	64.9	0.7	4.3
SO2	11.5	0.2	1.7
NH3	110.3	0.2	9.7
CO2e	2,011,109	11,076	248,769.5
HAPs	13.5	0.1	0.08



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Refer to Appendices A B and C for the turbine calculations, and refer to AN 613956 for the auxiliary boiler calculations. Note that emission estimates for Boiler 2 are now based on exhaust flow of 20.54 mmscf/hr and fuel use of 1.94 mmscf/hr (previous was 29 mmscf/hr exhaust and 2.3 mmscf/hr fuel use) and a PM10 EF of 2.1 lbs/mmscf, refer to A/N 641971 for Boiler 2 calculations.

Hazardous Air Pollutants (HAPs) Potential to Emit

Pollutant	CCTG 1&2	Boiler No. 2	Aux Boiler	Total	
	Lbs/yr	Lbs/yr	lbs/yr	Lbs/yr	Tons/yr
1,3 Butadiene	14.49	////////	////////	14.49	7.25E-03
Acetaldehyde	5940.72	3.67	0.56	5959.38	2.98E+00
Acrolein	121.78	3.26	0.49	138.37	6.92E-02
Benzene	109.90	6.93	1.04	145.24	7.26E-02
Ethyl Benzene	1075.93	8.16	1.24	1117.47	5.59E-01
Formaldehyde	12112.47	14.68	2.21	12187.18	6.09E+00
Naphthalene	43.90	1.22	0.05	49.99	2.50E-02
PAH	30.30	0.41	0.02	32.33	1.62E-02
Propylene Oxide	976.92	////////	////////	976.92	4.88E-01
Toluene	4389.53	31.81	4.77	4551.3	2.28E+00
Xylene	2155.16	23.66	3.55	2275.71	1.14E+00
Hexane	////////	5.30	0.83	27.03	1.35E-02
Propylene	////////	63.22	95.40	408.30	2.04E-01
Total, lbs/yr	26971.1	162.33	110.16		
Total 4 sources, tpy			13.68		

Turbine emissions based on factors from AP-42, Boiler emissions based on factors from Ventura County APCD. Refer to A/N 641971 for the Boiler 2 calculations, and refer to AN 613956 for the auxiliary boiler calculations. Note that emission estimates for Boiler 2 are now based on fuel use of 1.94 mmscf/hr (previous was 2.3 mmscf/hr).

Post Modification Facility Annual PTE Summary

Pollutant	Facility PTE, tpy	Major Source?		
		PSD	Title V	1325
NOx	161.7	Y	Y	Y
CO	1005.7	Y	Y	////////
VOC	82.3	Y	Y	Y
PM10	69.9	N	Y	////////
PM2.5	69.9	Y	Y	N
SO2	13.4	N	N	N
NH3	120.2	////////	////////	Y
CO2e	2,270,955	Y	////////	////////
HAPs	13.68	////////	N	////////



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Emissions from the emergency fire pump engine and emergency diesel generator engine are not included because they are negligible.

////////////////////////////////////CAM////////////////////////////////////

The CAM Regulations of 40CFR 64 apply on a pollutant specific basis to units at major sources required to obtain a part 70 or 71 permit which have pre-control potential to emit (PTE) emission levels exceeding the major source thresholds.

Turbine Emission Rates

	NO _x	CO	VOC	PM ₁₀	SO _x
Normal Operations Uncontrolled (lbs/hr)	75.4	51.0	5.8	8.5	1.5
Cold Start (total lbs)	61.0	325.0	36.0	8.5	1.5
Non-cold Start (total lbs)	17.0	137.0	25.0	4.25	0.75
Shutdown (total lbs)	10.0	133.0	32.0	4.25	0.75

Turbine Annual Operating Schedule

Event	# Per Year	Duration/event	Duration/yr, hrs
Cold Start	80	1 hour	80
Non-cold Start	420	30 minutes	210
Shutdown	500	30 minutes	250
100% Load @ 65.8 deg F	////////////////////////////////	////////////////////////////////	7100
		Total Hrs	7640

Turbine Pre Control Annual PTE and Major Source Determination



South Coast Air Quality Management District
Engineering & Permitting

*Policies &
Procedures*

Subject: Rule Implementation Guidance, Rule 212
Public Notices

Date: January 31, 2019

No. E2019-01
(Supersedes E2006-01)

ISSUE

This policy and procedure is intended to provide clarification and guidance on determining the applicability of the public notice requirements under Rule 212 – Standards for Approving Permits and Issuing Public Notice. This document also provides guidance on what information should be contained in the public notice, if one is required, and the distribution of the public notice. This policy and procedure supersedes all previous documents dealing with Rule 212 public notices whenever there is a conflict between the two documents.

DISCUSSION and GUIDELINES

There are three basic questions that have to be answered in determining the requirements and compliance with the public notice provisions in Rule 212. They are:

1. Are the Rule 212 notice requirements applicable to the application or project?
2. Is a Rule 212 notice required due to any of the following three criteria?
 - (a) The equipment is located within 1,000 feet of a school [Rule 212(c)(1)]
 - (b) The new or modified facility or equipment has an increase in criteria air contaminant emissions exceeding at least one of the corresponding thresholds in Rule 212(g) [Rule 212(c)(2) and Rule 212(g)]
 - (c) The toxic air contaminant emissions result in a risk that exceeds the specified threshold in Rule 212(c)(3) [Rule 212(c)(3)]
3. What information should be included in the public notice and how should it be distributed?

1. Are the Rule 212 Public Notice Requirements Applicable?

Rule 212(c) requires a 30-day public notice prior to granting a permit for projects that meet specified criteria. This rule section applies to permit to construct (P/C) applications for new equipment, P/C applications for modifications of existing equipment, and permit to operate (P/O) applications for modifications of an existing permit when the new permit to operate is required prior to the modification (for example a change of condition application).

subdivisions (b) and (ad) and determined in accordance with Rule 1306, subdivision (b).

Equipment Replacement

Under Rule 212(c)(1), a replacement of an existing permit unit will trigger the public notice requirement unless the replacement (new permit unit) will result in a reduction of emissions of air contaminants from the facility and it can be shown that no increase in health risk will occur at any receptor location; notification is not triggered when there is no potential to affect emissions. The equipment being replaced must be removed from service (operation) and its P/O surrendered to the SCAQMD prior to the operation of the replacement (new) equipment. For implementation purposes, there is no increase in health risk at any receptor location and there is no potential to affect emissions if all of the following criteria are met as demonstrated by the applicant.

1. The new equipment is installed at the same location or an adjacent location within the same area of the facility where the old equipment was installed;
2. The new equipment does not result in an incremental increase in the MICR of one in ten million (0.1×10^{-6}) and/or the HIC or HIA of 0.1 relative to the replaced equipment as determined in accordance with the procedures identified in Rule 1401; and,
3. The equipment replacement will not lead to an increase of one pound or more per day of the facility's potential to emit of any air contaminant as defined by Rule 1302, subdivisions (b) and (ad), determined in accordance with Rule 1306, subdivision (b).

Facility Modification

Under Rule 212(c)(1), a modification to an existing facility will trigger the public notice requirement unless the modification will result in a reduction of emissions of air contaminants from the facility and it can be shown that no increase in health risk will occur at any receptor location; notification is not triggered when there is no potential to affect emissions. For implementation purposes, there is no increase in health risk at any receptor location and there is no potential to affect emissions if all of the following criteria are met as demonstrated by the applicant.

1. The modification does not result in any emissions being released closer to any school located within 1,000 feet from the facility;
2. The maximum risk (MICR, HIA, and HIC) from the modified facility is no greater than the maximum risk (MICR, HIA and HIC) from the pre-modified facility; and,
3. The facility modification does not lead to an increase in air contaminants, meaning any increase above de minimus values of toxic air contaminants as defined by Rule 1401 or result in an increase of one pound per day or more of the facility's potential to emit of any air contaminant as defined by Rule 1302, subdivisions (b) and (ad), and determined in accordance with Rule 1306.

b) Public Notice Based on Exceeded Daily Maximums of Air Contaminants Relating to NAAQS Implementation

Rule 212(c)(2) and (g) require a public notice for any new or modified facility or source(s)

[permit unit(s)], respectively, resulting in an emission increase exceeding any of the daily maximums specified in subdivision (g) of the rule. When determining if a project consisting of multiple applications triggers a public notice under Rule 212(c)(2), the total emissions from all of the project's applications shall be used to determine if the emission increases at the facility exceed any of the daily maximums in subdivision (g). For a project consisting of multiple applications, a public notice is required under Rule 212(g) if the emissions from any individual application or the sum of the emissions from all of the applications exceed any of the daily maximums in subdivision (g). Thus, there may be instances where the requirements of Rule 212(g) apply without necessarily requiring the notifications performed under Rule 212(c)(2). For basic equipment that is vented to air pollution control equipment, use the controlled emissions to determine if any of the daily maximums in subdivision (g) are exceeded for both Rule 212(c)(2) and (g) implementation. To determine if the emission thresholds specified in subdivision (g) are exceeded, use either:

1. The emissions calculated by dividing the maximum monthly emissions by 30 whenever the resulting permit will contain a monthly emission limit for the pollutant in question, or
2. The maximum daily emissions whenever the resulting permit will not contain a monthly emission limit for the pollutant in question.

For multiple application projects that include the removal from service of an existing piece of equipment or a modification of an existing piece of equipment that results in a reduction in emissions, determination of whether daily maximums in subdivision (g) are exceeded shall be calculated as follows.

1. For equipment removed from service that had a P/O with a monthly emission limit, use the maximum monthly emission limit divided by 30. When the equipment removed from service does not have a monthly emission limit, use the maximum daily emissions based on a daily permit emission limit or equipment rated capacity, whichever is less.
2. For equipment modifications that result in a reduction in emissions, the pre-modification emissions will be:
 - A. The emissions calculated by dividing the maximum monthly emission limit by 30 if the P/O contained a monthly emission limit, or
 - B. The maximum daily emissions based on a daily permit emission limit or equipment rated capacity, whichever is less.

The post-modification emissions will be:

- A. The maximum monthly emission limit divided by 30 if the P/O will contain a monthly emission limit, or
- B. The maximum daily emissions based on a daily permit emission limit or equipment rated capacity, whichever is less.

The following examples will help clarify when a public notice is required under Rule 212(c)(2) or (g).

APPENDIX C - EMISSION CALCULATIONS

Figure / Table No.	Contains
Table C.1	<u>Engine Data (per Engine)</u> Table C.1 contains Engine size, fuel consumption, and operating schedule information.
Table C.2	<u>Engine Criteria Pollutant Emission Factors and Emission Calculations (per Engine)</u> Table C.2 contains criteria pollutant emission factors and emission calculations for each Engine. Emissions are calculated from the emission factors and ‘throughput’ information from Table C.1. Emissions shown are per Engine.
Table C.3	<u>Engine Toxic Air Contaminant Emission Factors and Emission Calculations (per Engine)</u> Table C.3 contains TAC emission factors and emissions for each Engine. DPM is assumed to be equivalent to the PM10/PM2.5 emissions from Table C.2. Emissions shown are per Engine.
Table C.4	<u>Engine Greenhouse Gas Emission Factors and Emission Calculations (per Engine and Total)</u> Table C.4 contains GHG emission factors and emissions for the Engines. Emissions are calculated from the emission factors and ‘throughput’ information from Table C.1. Emissions shown are per Engine.
Table C.5	<u>Project Increase in Emissions</u> Table C.5 contains the project increase in emissions, which is calculated as the criteria pollutant, TAC, and GHG emissions for all four Engines from Tables C.2, C.3, and C.4, respectively.
Table C.6	<u>Pre-Project and Post-Project Emissions</u> Table C.6 shows the Pre-Project and Post-Project criteria pollutant, ammonia, GHG, and HAP emissions. Pre-Project emissions are from A/N’s 6622199/622200. Post-Project emissions are calculated from Pre-Project emissions and the emissions from Table C.5.
Figure C.1	<u>Engine Locations</u> Figure C.1 shows the (close-up) location of each of the four Engines.
Table C.7	<u>Stack Data</u> Table C.7 shows stack data used throughout the application package.
Table C.8	<u>Rule 404</u> Table C.8 shows the Rule 404 demonstration for the Engines.
Table C.9	<u>Rule 212 HRA Models</u> Table C.9 shows the dispersion modeling/HRA models used to prepare the Rule 212 HRA.

Application for Permits to Construct: Four (4) Diesel-Fueled Emergency ICEs
AES Huntington Beach, LLC

Figure / Table No.	Contains
Table C.10	<u>Rule 212 Dispersion Model Options / Assumptions</u> Table C.10 shows the AERMOD options / assumptions used to prepare the dispersion modeling portion of the Rule 212 HRA.
Table C.11	<u>Rule 212 HARP2 Model Options / Assumptions</u> Table C.11 shows the HARP2 options / assumptions used to prepare the Rule 212 HRA.
Table C.12	<u>Rule 212 HARP2 Output</u> Table C.12 shows the locations and MICR at the maximally impacted receptors for each Engine.
Figure C.2	<u>Rule 212 HRA – Locations of Table C.12 Receptors</u> Figure C.2 shows the locations of each receptor identified in Table C.12.

AES Huntington Beach, LLC
Application for Permits to Construct: Four (4) Tier 4 Final Diesel-Fueled Emergency Internal Combustion Engines

Appendix C Engine Emission Calculations

Client Name: AES Huntington Beach, LLC
Client Contact: Ms. Charlene He

Contact Phone:
Contact E-mail: Charlene.He@aes.com
Mailing Address: 690 North Studebaker Road
Long Beach, CA 92646

Equipment Location: 21730 Newland Street
Huntington Beach, CA 92646

Facility ID: 115389

Author:
Peer Reviewer:
Date:

Other Notes:

Facility: AES Huntington Beach, LLC
Facility ID: 115389

AES Huntington Beach, LLC
Application for Permits to Construct: Four (4) Tier 4 Final Diesel-Fueled Emergency Internal Combustion Engines

Appendix C Engine Emission Calculations

Table C.1 Engine Data (per Engine)

Engine Make ¹	Engine Model ¹	Engine Size ² (hp)	Engine Tier ¹	Engine Fuel Consumption ² (gph)	Hours per Day / Hours per Month ³ (M&T)	Hours per Year ³ (M&T)
Perkins	2806F-E18TAG1	744	Tier 4 Final	36.5	4.2	50

¹ From Appendix B, Page 6 of 26.

² From Appendix B, Page 9 of 26.

³ Annual M&T hours from Rule 1470(c)(2)(C)(i). Monthly and Daily M&T hours = Annual M&T hours / 12 mo/yr.

Table C.2 Engine Criteria Pollutant Emission Factors and Emission Calculations (per Engine)

Criteria Pollutant	Emission Rate ¹ (g/bhp-hr)	Emission Factor ² (lb/mgal)	Hourly Emissions ³ (lb/hr)	Daily Emissions ⁴ (lb/day)	Annual Emissions ⁵ (lb/yr)	Monthly Emissions ⁴ (lb/mo)	30-Day Average Emissions ⁶ (lb/30-day)
NOx ¹	0.076	3.412	0.125	0.525	6.25	0.53	0.018
CO ¹	0.07	3.143	0.115	0.483	5.75	0.48	0.016
VOC ¹	0.004	0.180	0.007	0.029	0.35	0.03	0.001
SOx	--	6.24	0.228	0.958	11.40	0.96	0.032
PM10/PM2.5 ¹	0.01	0.449	0.016	0.067	0.80	0.07	0.002

¹ Appendix B, Pages 10-11 of 26 show emission rates for both 'Actual Composite Weighted Exhaust Emissions Results Over the EPA 5-Mode Test Cycle' and '100% Load Data Exhaust Emissions Results'.

All values are in units of g/bhp-hr. PM is assumed to be equal to PM10/PM2.5 and Diesel Particulate Matter (DPM).

Appendix B, Page 11 of 26 shows the CO value at 100% Load as 0.00 g/bhp-hr. 0.0049 g/bhp-hr is shown here, as this rounds to 0.00 g/bhp-hr.

	Weighted	100% Load
NOx+NMHC	0.08	0.03
CO	0.07	0.0049
PM	0.01	0.01
NOx	0.076	0.0285
VOC	0.004	0.0015

0.95 <-- NOx Fraction of NOx+NMHC.

0.05 <-- VOC Fraction of NOx+NMHC.

From Appendix B, Page 12 of 26.

Emission calculations are based on the weighted emission rates.

² **NOx, CO, VOC, PM10**

Emission Factor (lb/mgal) = Emission Rate (g/bhp-hr) x Engine Size (bhp) / Conv1 (g/lb) / Engine Fuel Consumption (gph) * Conv2 (gal/mgal)

Engine Size	744	bhp
Conv1	454	g/lb
Engine Fuel Cons.	36.5	gph
Conv2	1000	gal/mgal

SOx

Starting Emission Factor from South Coast AQMD Rule 2002, Table 2.

Emission Factor	0.21	lb/mgal
-----------------	------	---------

³ Hourly Emissions (lb/hr) = Emission Factor (lb/mgal) x Engine Fuel Consumption (gph) / Conv (gal/mgal)

Engine Fuel Cons.	36.5	gph
Conv	1000	gal/mgal

⁴ Daily Emissions (lb/day) = Monthly Emissions (lb/mo) = Hourly Emissions (lb/hr) x Hours per Day/Month (M&T)

Hours per Day/Mo	4.2	M&T
------------------	-----	-----

⁵ Annual Emissions (lb/yr) = Hourly Emissions (lb/hr) x Hours per Year (M&T)

Hours per Year	50	M&T
----------------	----	-----

⁶ 30-Day Average Emissions (lb/30-day) = Monthly Emissions (lb/mo) / 30

Facility: AES Huntington Beach, LLC
Facility ID: 115389

AES Huntington Beach, LLC
Application for Permits to Construct: Four (4) Tier 4 Final Diesel-Fueled Emergency Internal Combustion Engines

Appendix C Engine Emission Calculations

Table C.3 Engine Toxic Air Contaminant Emission Factors and Emission Calculations (per Engine)

TAC	CAS No.	Emission Factor ¹ (lb/mgal)	Hourly Emissions ¹ (lb/hr)	Annual Emissions ¹ (lb/yr)
Diesel Particulate Matter (DPM)	9901	0.449	0.016	0.80

¹ DPM is assumed to be equal to PM10/PM2.5. All values are from Table C.2.

Table C.4 Engine Greenhouse Gas Emission Factors and Emission Calculations (per Engine and Total)

GHG	Emission Factor ¹ (lb/mmBtu)	Emission Factor ² (lb/mgal)	Annual Diesel Consumption ³ (mgal/yr) [per Engine]	Annual Emissions ⁴ (lb/yr)	CO ₂ e Eq ¹	CO ₂ e ⁵ (MT/yr)
CO ₂	163.01	22.332	1.825	40,756.58	1	18.48
CH ₄	6.61E-03	9.056E-01		1.65	25	0.02
N ₂ O	1.32E-03	1.808E-01		0.33	298	0.04

Total CO₂e (MT/yr) [per Engine] 18.55

Total CO₂e⁵ (MT/yr) [Total] 74.19

¹ Emission factors and CO₂e Eq are from South Coast AQMD's 'Combustion Emission Estimator'. Emission factors are also shown in Appendix B, Page 14 of 26.

[http://www.aqmd.gov/docs/default-source/permitting/ceqa-2017/ghg-estimator-\(2018-11\).xlsx?sfvrsn=6](http://www.aqmd.gov/docs/default-source/permitting/ceqa-2017/ghg-estimator-(2018-11).xlsx?sfvrsn=6)

² Emission Factor (lb/mgal) = Emission Factor (lb/mmBtu) x HHV (mmBtu/mgal)

HHV 137 mmBtu/mgal. Rule 2012 Appendix A Chapter 3, Table 3-D.

³ Annual Diesel Consumption (mgal/yr) = Engine Fuel Consumption (gph) / Conv1 x Hours per Year (M&T)

Engine Fuel Cons. 36.5 gph

Conv1 1000 gal/mgal

Hours per Year 50 M&T

⁴ Annual Emissions (lb/yr) = Emission Factor (lb/mgal) x Annual Diesel Consumption (mgal/yr)

⁵ CO₂e (MT/yr) = Annual Emissions (lb/yr) x CO₂e Eq / 2,205

⁶ Total CO₂e (MT/yr) [Total] = Total CO₂e (MT/yr) [per Engine] x No. of Engines

No. of Engines 4

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Table C.5 Project Increase in Emissions

Pollutant	Hourly Emissions ¹ (lb/hr)	Daily Emissions ¹ (lb/day)	Annual Emissions ¹ (lb/yr)	Monthly Emissions ¹ (lb/mo)	30-Day Average Emissions ¹ (lb/30-day)	Annual Emissions ² (ton/yr)	CO ₂ e ³ (MT/yr)
NO _x	0.500	2.100	25.00	2.12	0.072	0.0125	--
CO	0.460	1.932	23.00	1.92	0.064	0.0115	--
VOC	0.028	0.116	1.40	0.12	0.004	0.0007	--
SO _x	0.912	3.832	45.60	3.84	0.128	0.0228	--
PM ₁₀ /PM _{2.5}	0.064	0.268	3.20	0.28	0.008	0.0016	--
Ammonia	--	--	--	--	--	Negligible	--
CO ₂ e	--	--	--	--	--	--	74.19
HAPs	--	--	--	--	--	Negligible	--

¹ Emissions from Table C.2, multiplied by the number of engines.
Number of Engines 4

² Criteria Pollutants

Annual Emissions (ton/yr) = Annual Emissions (lb/yr) / Conv
Conv 2,000 lb/ton

Non-Criteria Pollutants

Ammonia emissions associated with the Engines are not calculated. Pre-project facility-wide emissions are greater than the Rule 1325 Major Source Threshold.

HAP emissions associated with the Engines are not calculated. Pre-project facility-wide emissions are less than the Major Source thresholds.

The Engines will not result in an increase in facility-wide emissions levels above the Major Source thresholds.

³ Emissions are from Table C.4.

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Appendix C Engine Emission Calculations

Table C.6 Pre-Project and Post-Project Emissions

Pollutant	CCGT 1 and 2 ¹ Annual Emissions (tpy)	Auxiliary Boiler ¹ Annual Emissions (tpy)	Boiler No. 2 ¹ Annual Emissions (tpy)	Fire Pumps ² Annual Emissions (tpy)	Pre-Project ³ Annual Emissions (tpy)	4 Engines ⁴ Annual Emissions (tpy)	Post-Project ⁵ Annual Emissions (tpy)
NOx	142.6	0.7	18.4	--	161.7	0.0125	161.7
CO	204.4	3.8	797.5	--	1,005.7	0.0115	1,005.7
VOC	70.6	0.5	11.2	--	82.3	0.0007	82.3
SOx	11.5	0.2	1.7	--	13.4	0.0228	13.4
PM10/PM2.5	64.9	0.7	4.3	0.0069	69.9	0.0016	69.9
Ammonia	110.3	0.2	9.7	--	120.2	Negligible	120.2
CO2e	2,011,109.0	11,076.0	248,759.5	--	2,270,945	82	2,271,026
HAPs	13.5	0.1	0.08	--	13.68	Negligible	13.68

¹ From Appendix B, Page 21 of 26.

² Fire pump emissions are calculated for PM2.5 only, to confirm Post-Project PTE is unchanged, and are based on the horsepower rating and PM10 emission rates from the permit. From Appendix B, Pages 16-19 of 26.

PM2.5 Emissions (tpy) = Engine Horsepower (bhp) x PM10 Emission Rate (g/bhp-hr) x M&T Hours (hr/yr) / Conv1 / Conv2 x No. of Fire Pumps

Engine Horsepower	275	bhp
PM10 Emission Rate	0.38	g/bhp-hr
M&T Hours	30	hr/yr
Conv1	454	g/lb
Conv2	2,000	lb/ton
No. of Fire Pumps	2	

³ Pre-Project = CCGT and 1 + Auxiliary Boiler + Boiler No. 2 + Fire Pumps

⁴ Non-CO2e emissions are directly from Table C.5.

CO2e emissions from Table C.5 are converted to short tons in Table C.6.

CO2e (tpy) = CO2e (MT/yr) x Conv

Conv 1.1023

⁵ Post-Project = Pre-Project + 4 Engines

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Appendix C Engine Emission Calculations

Figure C.1 Engine Locations



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Appendix C Engine Emission Calculations

Table C.7 Stack Data

Engine ID	UTM E (m)	UTM N (m)	Orientation ¹	Weather Cap ²	Release Height ³ (ft)	Inner Diameter ⁴ (ft)	Exit Temperature ⁵ (Deg F)	Exit Flowrate ⁶ (acfm)	Exit Flowrate ⁷ (wscfm)	Exit Flowrate ⁸ (dscfm)	AERMOD Source ID
Engine No. 1	409372.01	3723223.40	Vertical	Flapper	12.5	0.5	911	935	360	321	ICEA1
Engine No. 2	409373.83	3723226.38	Vertical	Flapper	12.5	0.5	911	935	360	321	ICEA2
Engine No. 3	409488.05	3723212.23	Vertical	Flapper	12.5	0.5	911	935	360	321	ICEB1
Engine No. 4	409487.95	3723209.99	Vertical	Flapper	12.5	0.5	911	935	360	321	ICEB2

¹ Per the drawing in Appendix B, Page 15 of 26, the stack is just under the grill, as shown at the top of the page.

² Per the equipment supplier, the 'rain cap' identified on Page 15 of 26 from Appendix B is a flapper cap. Flapper caps are not considered rain caps for dispersion modeling purposes.

³ Per the drawing in Appendix B, Page 15 of 26, the stack is just under the grill, as shown at the top of the page.

Overall Height 150 inches
 12.5 feet

⁴ Per the equipment supplier, the stack has 6" inner diameter.

Inner Diameter 6 inches
 0.5 feet

⁵ Exit Temperature (Deg F) is shown at the bottom of Appendix B, Page 7 of 26.

Exit Temp 911 Deg F

⁶ Exit Flowrate is shown at the bottom of Appendix B, Page 7 of 26. This value is assumed to be in units of acfm.

Exit Flowrate 935 acfm

⁷ Exit Flowrate (wscfm) = Exit Flowrate (acfm) x (460 + 68) / (460 + Stack Temp. (Deg F))

⁸ As an approximation, exit flowrate in units of dscfm is estimated from exit flowrate in units of wscfm and the dry and wet F-factors for diesel from Table 19-2 of the US Environmental Protection Agency's Method 19.

Exit Flowrate (dscfm) = Exit Flowrate (wscfm) / Fw (wscf/mmBtu) x Fd (dscf/mmBtu)

Fw 10,320 wscf/mmBtu

Fd 9,190 dscf/mmBtu

Exit flowrate in units of dscfm is needed only for the Rule 404 demonstration. The accuracy of this approximation is not expected to affect the outcome of the Rule 404 demonstration.

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Appendix C

Engine Emission Calculations

Table C.8

Rule 404

Estimated Exhaust Flow ¹ (dscfm)	PM10 Emissions ² (lb/hr)	PM Concentration ³ (gr/dscf)	Allowable PM Concentration ⁴ (gr/dscf)	PM Concentration ≤ Allowable PM Concentration?
321	0.0160	0.0058	0.1960	Yes

¹ Estimated exhaust flowrate is from Table C.7.

² Engine PM10 emissions are from Table C.2.

³ Assuming PM = PM10 (combustion sources):
PM Concentration (gr/dscf) = PM10 Emissions (lb/hr) x 7,000 gr/lb / (Estimated Exhaust Flow (dscfm) x 60 min/hr)

⁴ Rule 404, Table 404(a). Allowable concentration is less than or equal to 0.196 gr/dscf since exhaust flowrate in units of dscfm is estimated to be less than 883 dscfm.

Rule 404 (Cont.)				(Amended February 7, 1986)			
TABLE 404(a)							
Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter ^a Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476

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Appendix C Engine Emission Calculations

Table C.9 Rule 212 HRA Models

Dispersion Modeling
AERMOD v 24142 AERMET v 22112 AERMAP v 24142 <u>Software Interface:</u> Lakes Environmental Software; AERMOD View™, Version 13.0.0

Health Risk Assessment
HARP2 ADMRT (dated 22118) Health Table Version 25268

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Appendix C Engine Emission Calculations

Table C.10 Rule 212 Dispersion Model Options / Assumptions

Parameter	Value				Comments
Control Pathway					
Regulatory Options	Default	☒	Non-Default	☐	--
Output Type	Concentration	☒	Dry Deposition	☐	--
	Total Deposition	☐	Wet Deposition	☐	
Depletion Options	Dry Depletion	☐	Wet Depletion	☐	--
	Disable Dry Depletion	☐	Disable Wet Depletion	☐	
Pollutant	Other				--
Averaging Time Options	Highest 1-Hour; Period Average				--
Dispersion Coefficient	Rural	☒	Urban	☐	More than 50% of the land in a 3-kilometer circle around the location of the Engines may be classified as rural. Additionally, rural is likely to give a more conservative result than urban.
Terrain Height Options	Elevated		☒	--	
	Non-Default Regulatory Options				
	Flat	☐	Flat & Elevated	☐	
Receptor Elevations / Hill Heights	Run AERMOD using the AERMAP Receptor Output file (*.ROU)				--
Source Pathway					
Building Downwash	Include	☒	Exclude	☐	--
Background Concentrations	Include	☐	Exclude	☒	This project does not consider background concentrations.
Source Groups	Single Source Group for each Engine.				--
Urban Groups	N/A. This project uses rural dispersion coefficients.				--

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Appendix C Engine Emission Calculations

Table C.10 Rule 212 Dispersion Model Options / Assumptions

Parameter	Value				Comments
Receptor Pathway					
Flagpole Receptors	Include	☐	Exclude	☒	South Coast AQMD default.
Discrete Receptors	Discrete receptors are included to account for certain specific locations.				--
Multi-Tier Grid	Grid Origin: Centroid of Sources Polygon (409430.46, 3723218.00)				--
	Tier		Distance from Center (m)	Tier Spacing (m)	
	1		500	20	
	2		750	50	
	3		2000	200	
Plant Boundary	Receptor Spacing: 20 m				Conservative receptor spacing. Onsite gridded receptors are disabled.
Meteorology Pathway					
Meteorological Data	Station: KSNA Years: 2019, 2020, 2021, 2022, 2023 Base Elevation of Surface Station: 12.95 m				Meteorological data from South Coast AQMD website.
Terrain Pathway					
Data File	USGS_NED_13_n34w118.tif USGS_NED_13_n34w119.tif				NED GEOTIFF Digital Terrain Files. Resolution: 1/3-arcsecond (10 meters).
AERMAP Domain Options	Not Specified	☐	User-Defined Domain	☒	Elevations and hill heights are calculated from a region measuring approximately 7,500 meters by 7,500 meters.

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Appendix C Engine Emission Calculations

Table C.11 Rule 212 HARP2 Model Options / Assumptions

Parameter	Value				Comments
Multi-Pathway					
Inhalation	Res	☒	Work	☒	DPM does not have multipathway effects. The Rule 212 HRA considers only the Inhalation exposure pathway.
Soil	Res	☐	Work	☐	
Dermal	Res	☐	Work	☐	
Mother's Milk	Res	☐	Work	☐	
Drinking Water	Res	☐	Work	☐	
Fish	Res	☐	Work	☐	
Homegrown Produce	Res	☐	Work	☐	
Beef/Dairy	Res	☐	Work	☐	
Pigs, Chickens, and/or Eggs	Res	☐	Work	☐	
Deposition Velocity	N/A				
Residential Cancer Risk Assumptions					
Exposure Duration	30 years				--
Fraction of Time at Home	3 rd Trimester to 16 years: On 16 years to 30 years: On				With both parameters set to 'Off', there are no schools with cancer risk greater than 1 in one million. Therefore, the Rule 212 HRA has both parameters set to 'On'.
Inhalation Rate Basis	RMP				
Analysis Option	RMP Using the Derived Method				
Worker Cancer Risk Assumptions					
Exposure Duration	25 years				--
Analysis Option	OEHHA Derived Method				--
Inhalation Rate Basis	8-hr Breathing Rates, Moderate Intensity				--
Worker Adjustment Factor	1				The Engines do not have a set operating schedule.

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Appendix C Engine Emission Calculations

Table C.12 Rule 212 HARP2 Output

Engine	Residential Receptor			Off-Site Worker Receptor		
	UTM E (m)	UTM N (m)	MICR (in a million)	UTM E (m)	UTM N (m)	MICR (in a million)
Engine No. 1	409090.47	3723358.00	0.0436	409335.23	3723320.60	0.0153
Engine No. 2	409090.47	3723358.00	0.0438	409335.23	3723320.60	0.0152
Engine No. 3	409980.47	3723418.00	0.0438	409335.23	3723320.60	0.0055
Engine No. 4	409980.47	3723418.00	0.0439	409335.23	3723320.60	0.0054

Figure C.2 Rule 212 HRA - Locations of Table C.12 Receptors

