

DOCKETED

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Alamitos Energy Center

(13-AFC-01)

Data Response Set 6-R3

(Revised and Updated Data Responses to 131 to 133, Air
Quality)

Submitted to
California Energy Commission

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With Assistance from

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Introduction

Attached are AES Southland Development, LLC's (AES or the Applicant) revised and updated responses to the California Energy Commission (CEC) Staff Data Request, Set 6-R3 (Air Quality, numbers 131-R2, 132-R2, and 133-R3) regarding the Alamos Energy Center (AEC) (13-AFC-01) Supplemental Application for Certification (SAFC).

The responses are presented in the same order as the CEC presented them and are keyed to the Data Request numbers (131 through 133). New, updated or revised tables or attachments are numbered in reference to the Data Request number. For example, the first table used in response to Data Request 132 would be numbered Table DR132-1. The first attachment used in response to Data Request 132 would be Attachment DR132-1, and so on. Tables or attachments from previous Data Request submissions that have been revised have "R1", "R2", or "R3" following the original number, indicating revision 1, 2, or 3, respectively.

Air Quality (131–133)

CUMULATIVE

BACKGROUND

Section 5.1.7 (Cumulative Effects) and Appendix 5.1F (Dispersion Modeling Protocol), of the SAFC describe the methodology for the cumulative effects analysis, but the SAFC does not include the analysis because a project list had not been provided by the District at the time the SAFC was prepared. The cumulative analysis should include all reasonably foreseeable projects within a six mile radius, i.e. projects that have received construction permits but are not yet operational, and those that are in the permitting process or can be reasonably expected to be in the permitting process in the near future. A complete impacts analysis should identify all existing and planned stationary sources that affect the baseline conditions and consider them in the modeling effort.

DATA REQUESTS

131. Please provide a copy of the applicant's correspondence to and from the District regarding existing and planned cumulative sources located within six miles of the project site.

Response 131-R2: Please refer to Attachment DR131-1R2 for copies of recent correspondence with the South Coast Air Quality Management District (SCAQMD), which was not previously docketed, regarding existing and planned cumulative sources located within six miles of the project site. This attachment has been separately docketed due to file size (Transaction Number [TN] #212799).

132. Please provide a list of all sources to be considered in the cumulative air quality impact analysis for staff review and approval. Include a recommendation whether or not to include each source and the basis of this recommendation.

Response 132-R2: On October 23, 2015, the Applicant requested an updated list of projects that are within a 6-mile radius of the AEC and are either currently in the permitting process, undergoing California Environmental Quality Act (CEQA) review, or recently received a Permit to Construct from the SCAQMD. SCAQMD provided the information responsive to the request on February 16, 2016 (TN #210780). On February 26, 2016, following review of this information, the Applicant requested copies of permit applications and source test reports for twelve sources located amongst four facilities. Per correspondence provided in Attachment DR131-1R2 and correspondence previously docketed (TN #210780 and #211419), SCAQMD completed providing information responsive to the request on August 4, 2016.

Attachment DR132-1R1 presents the Applicant's evaluation of sources considered for inclusion in the updated cumulative air quality impact analysis. This evaluation steps through various refinements to the information provided by SCAQMD, as follows:

- Table 1 identifies which facilities are within six miles of the project site that emit greater than 5 tons per year (tpy) of a single criteria pollutant.
- Tables 2 through 9 summarize sources, by facility, to be included in the cumulative impacts analysis. The Applicant removed sources from the assessment if the source applications were for administrative changes only (i.e., no increase in air emissions expected), the permitted sources did not result in an increase in emissions, or the source's emissions were already captured in the ambient background.

Based on this evaluation, only one new source is proposed for inclusion in the cumulative impacts analysis: a regenerative thermal oxidizer (RTO) at Trend Offset Printing Services, Inc. (Facility ID 53729). The source location and emission rates were taken from Permit Application 567815, and the stack parameters were taken from Permit Application 579885. Both applications were received from SCAQMD on July 28, 2016.

The Applicant proposes to add the above source to the list of cumulative sources previously approved by the CEC (TN #211169). The Applicant also proposes a refinement to one of the previously modeled cumulative sources, as

described below. The emission and exhaust parameters for all sources proposed for use in the cumulative impacts analysis, including the addition of one source and proposed refinement to an existing source, are presented in Attachment DR132-2R1 for completeness.

The Applicant has previously modeled one of the two existing emergency diesel internal combustion engines (ICEs) located at the Los Angeles City, Department of Water and Power (DWP) Haynes Generating Station (Facility ID 800074), under the assumption that simultaneous testing of the ICEs is not reasonably expected to occur within the same hour. Although these units are permitted to operate for up to 50 hours per year for testing and maintenance, the SCAQMD has indicated that they are reasonably expected to operate only 12 hours per year.¹ Therefore, the Applicant proposes to limit emissions to a 30-minute testing period as being more reflective of expected operating conditions for emergency engine generators.

133. Upon approval of the list of sources to be included in the cumulative air quality impact analysis, please provide the cumulative modeling and impact analysis.

Response 133-R3: A cumulative air quality impact analysis will be prepared using the methodology presented in the *Dispersion Modeling Protocol for the Alamitos Energy Center* (see Appendix 5.1F of the AEC SAFC). The results of this analysis will be provided within 5 business days of receipt of CEC comments on the source list provided in response to Data Request 132.

¹ See Table 6 of the DWP's SCAQMD-issued Permit to Construct and Operate (Application No. 432610-15).

**Attachment DR131-1R2
Correspondence with SCAQMD Regarding
Cumulative Sources**

Attachment DR131-1R2 has been separately docketed. Refer to TN #212799 for details.

**Attachment DR132-1R1
Evaluation of Potential Sources for the Updated
Cumulative Air Quality Impacts Analysis**

Alamitos Energy Center
Attachment DR132-1R1 Table 1
Screening of Facilities by Distance and Emissions
August 2016

Facilities within a 6 Mile Radius of AEC									
Facility ID	Facility Name	Facility within a 6 Mile Radius?	Included (Y/N)	Reason for Exclusion	Location Street Address	Location City	Location State	Location Zip	Location Zip (Four)
3254	AMERIPEC INC	> 6 miles	N	More than 6 miles from AEC	6965 ARAGON CIR	BUENA PARK	CA	90620	1118
5023	CAL ST UNIV LONG BEACH EH&S	< 2 miles	N	Facility Emissions < 5 tpy	1250 BELLFLOWER BLVD SSA 341	LONG BEACH	CA	90840	0121
9519	SANYO FOODS CORP OF AMERICA	< 6 miles	N	Facility Emissions < 5 tpy	11955 MONARCH ST	GARDEN GROVE	CA	92841	
10267	SAINT MARY'S MEDICAL CENTER	< 5 miles	N	Facility Emissions < 5 tpy	1050 LINDEN AVE	LONG BEACH	CA	90813	
10971	CONTAINER SUPPLY CO INC	< 6 miles	N	Facility Emissions < 5 tpy	12571 WESTERN AVE	GARDEN GROVE	CA	92841	4012
12428	NEW NGC, INC.	> 6 miles	N	More than 6 miles from AEC	1850 PIER B ST	LONG BEACH	CA	90813	2604
13990	US GOVT, VETERANS AFFAIRS MEDICAL CENTER	< 2 miles	Y	N/A	5901 E 7TH ST	LONG BEACH	CA	90822	5299
16660	THE BOEING COMPANY	< 4 miles	N	Facility Emissions < 5 tpy	5301 BOLSA AVE	HUNTINGTON BEACH	CA	92647	2099
19185	NO ORANGE CO., COMM COLLEGE DIST, CYPRESS	~ 6 miles	N	Facility Emissions < 5 tpy	9200 VALLEY VIEW	CYPRESS	CA	90630	5897
19353	GOLDEN WEST COLLEGE, COMMUNITY COLLEGE	~ 6 miles	N	Facility Emissions < 5 tpy	15744 GOLDENWEST ST	HUNTINGTON BEACH	CA	92647	
20231	HUNTINGTON BEACH CITY, WATER DEPT	> 6 miles	N	More than 6 miles from AEC	19001-71 HUNTINGTON ST	HUNTINGTON BEACH	CA	92648	2211
21104	HUNTINGTON BEACH CITY, WATER DEPT	< 5 miles	Y	N/A	14561 SPRINGDALE ST	HUNTINGTON BEACH	CA	92647	
53729	TREND OFFSET PRINTING SERVICES, INC	< 4 miles	Y	N/A	3722-82 CATALINA ST	LOS ALAMITOS	CA	90720	2475
53733	HUNTINGTON BEACH CITY, WATER DEPT	> 6 miles	N	More than 6 miles from AEC	16192 SHER LN	HUNTINGTON BEACH	CA	92647	4150
68112	TIDELANDS OIL PRODUCTION COMPANY, ETAL	> 6 miles	N	More than 6 miles from AEC	228 PIER D AVE	LONG BEACH	CA	90802	
88359	ALAMITOS COMPANY	< 3 miles	N	Facility Emissions < 5 tpy	2001 PACIFIC COAST HWY	SEAL BEACH	CA	90740	
101977	SIGNAL HILL PETROLEUM INC	< 6 miles	Y	N/A	1215 E 29TH ST	SIGNAL HILL	CA	90755	
104280	ENVENT CORPORATION	Unknown	N	Facility Emissions < 5 tpy	VARIOUS LOCATIONS IN SCAQMD	SIGNAL HILL	CA	90755	
111238	RIBOST TERMINAL, LLC.	> 6 miles	N	More than 6 miles from AEC	1405 PIER "C" ST	LONG BEACH	CA	90802	
120651	HUNTINGTON BEACH HOSPITAL	> 6 miles	N	More than 6 miles from AEC	17772 BEACH BLVD	HUNTINGTON BEACH	CA	92647	6899
143740	DCOR LLC	Unknown	Y	N/A	OFFSHORE PLATFORM ESTHER PRC 3095 1	SEAL BEACH	CA	90740	
169754	SO CAL HOLDING, LLC	> 6 miles	N	More than 6 miles from AEC	20101 GOLDENWEST ST	HUNTINGTON BEACH	CA	92648	2628
176377	TESORO LOGISTICS MARINE TERMINAL 2	> 6 miles	N	More than 6 miles from AEC	1350 PIER B ST	LONG BEACH	CA	90813	
800420	PLAINS WEST COAST TERMINALS LLC	> 6 miles	N	More than 6 miles from AEC	2685 PIER S LN	LONG BEACH	CA	90802	
3134	THUMS LONG BEACH CO, UNIT NO.05	Unknown	N	Duplicate Facility per SCAQMD FIND No equipment list	ISLAND WHITE	SAN PEDRO	CA	90801	
5998	ALL AMERICAN ASPHALT	< 6 miles	N	Facility Emissions < 5 tpy	14490 EDWARDS ST	WESTMINSTER	CA	92683	
22551	THUMS LONG BEACH CO, SAN PEDRO BAY	Unknown	N	Duplicate Facility per SCAQMD FIND No equipment list	ISLAND GRISSOM L B UNIT	SAN PEDRO	CA	90801	
22556	THUMS LONG BEACH CO, UNIT NO.02	Unknown	N	Duplicate Facility per SCAQMD FIND No equipment list	ISLAND FREEMAN	SAN PEDRO	CA	90801	
24871	LA CITY, DEPT OF WATER & POWER-UNIT NO 1	< 1 mile	N	Facility Emissions < 5 tpy	6801 WESTMINSTER AVE	LONG BEACH	CA	90803	
39388	THUMS LONG BEACH CO, UNIT NO.03	Unknown	N	Duplicate Facility per SCAQMD FIND No equipment list	ISLAND CHAFEE	SAN PEDRO	CA	90801	
39496	THE LANSDALE COMPANY	< 2 miles	N	VOC only Pollutant of Concern	301-315 ULTIMO AVE	LONG BEACH	CA	90814	
45086	SIGNAL HILL PETROLEUM INC	< 5 miles	N	Facility Emissions < 5 tpy	2465 TEMPLE AVE	LONG BEACH	CA	90806	
58876	INDUSTRIAL MFG CO LLC DBA ARROWHEAD PROD	< 4 miles	N	Facility Emissions < 5 tpy	4411 KATELLA AVE	LOS ALAMITOS	CA	90720	
75306	LONG BEACH CITY, CONVENTION CENTER	< 6 miles	Y	N/A	300 E OCEAN BLVD	LONG BEACH	CA	90802	
80066	LAIRD COATINGS CORPORATION	< 5 miles	N	VOC only Pollutant of Concern	15541 COMMERCE LN	HUNTINGTON BEACH	CA	92649	
115394	AES ALAMITOS, LLC	0 miles	N	Preparing SAFC for this Facility	690 N STUDEBAKER RD	LONG BEACH	CA	90803	
116931	EQUILON ENT LLC, SHELL OIL PROD. U S	< 4 miles	N	VOC only Pollutant of Concern	2457 REDONDO AVE	SIGNAL HILL	CA	90806	
135256	BLOOMFIELD BAKERS	< 4 miles	N	Facility Emissions < 5 tpy	10711 BLOOMFIELD ST	LOS ALAMITOS	CA	90720	
137513	PACIFIC TERMINALS LLC	< 1 mile	N	Facility Emissions < 5 tpy	690-692 STUDEBAKER RD	LONG BEACH	CA	90803	
150235	BREITBURN OPERATING L.P.	< 3 miles	Y	N/A	2001 PACIFIC COAST HWY	SEAL BEACH	CA	90740	
158209	LCW OIL OPERATIONS LLC	< 1 mile	N	VOC only Pollutant of Concern	6433 WESTMINSTER BLVD	LONG BEACH	CA	90803	
800074	LA CITY, DWP HAYNES GENERATING STATION	< 1 mile	Y	N/A	6801 2ND ST	LONG BEACH	CA	90803	
800286	ARCO TERMINAL SERVICES CORP	< 4 miles	N	Facility Emissions < 5 tpy	2350 OBISPO AVE	LONG BEACH	CA	90804	
800416	PLAINS WEST COAST TERMINALS LLC	< 1 mile	N	Facility Emissions < 5 tpy	692 STUDEBAKER RD	LONG BEACH	CA	90803	

Notes:

If facility emission were not available in the SCAQMD FIND Database, it was assumed the facility emitted less than the reportable quantities of CO, NOx, SOx, and TSP.

Facilities were added to be consistent with previous Public Records Requests regarding facilities located within 6 miles of AEC.

Alamitos Energy Center
Attachment DR132-1R1 Table 1
Screening of Facilities by Distance and Emissions
August 2016

Facility ID	Facility Name	Facility Data from SCAQMD (tpy)																											
		2009				2010				2011				2012				2013				2014				2015			
		CO	NOx	SOx	TSP	CO	NOx	SOx	TSP	CO	NOx	SOx	TSP	CO	NOx	SOx	TSP	CO	NOx	SOx	TSP	CO	NOx	SOx	TSP	CO	NOx	SOx	TSP
3254	AMERIPEC INC																												
5023	CAL ST UNIV LONG BEACH EH&S	3.412	4.131	0.029	0.966	3.018	3.737	0.025	0.909	3.498	4.351	0.030	0.953	3.629	4.418	0.025	0.959	3.477	4.244	0.025	0.945	2.680	4.008	0.028	0.934	Data not available			
9519	SANYO FOODS CORP OF AMERICA	Data not available				0.397	0.474	0.002	1.983	Data not available				Data not available				Data not available				0.693	0.175	0.006	0.230	Data not available			
10267	SAINT MARY'S MEDICAL CENTER	2.802	3.715	0.026	0.279	2.046	2.752	0.019	0.206	2.343	3.184	0.023	0.238	2.598	3.380	0.018	0.254	3.055	3.957	0.021	0.298	2.770	2.014	0.019	2.737	2.740	1.945	0.019	2.731
10971	CONTAINER SUPPLY CO INC	0.286	1.063	0.004	1.864	0.298	1.108	0.005	1.867	0.300	1.116	0.005	1.867	0.292	1.085	0.005	1.882	0.317	1.178	0.005	1.887	Data not available				Data not available			
12428	NEW NGC, INC.																												
13990	US GOVT, VETERANS AFFAIRS MEDICAL CENTER	5.150	6.620	0.047	0.498	5.604	7.043	0.052	0.533	0.761	2.448	0.050	0.553	1.053	2.581	0.042	0.547	5.906	3.280	0.042	3.008	6.126	6.606	0.041	2.648	Data not available			
16660	THE BOEING COMPANY	0.822	1.815	0.018	0.612	0.763	1.656	0.016	0.647	3.771	1.878	0.037	1.947	0.853	1.719	0.022	1.757	0.780	1.904	0.024	1.770	0.693	1.695	0.021	1.727	Data not available			
19185	NO ORANGE CO., COMM COLLEGE DIST, CYPRESS	Data not available				Data not available				Data not available				Data not available				Data not available				Data not available							
19353	GOLDEN WEST COLLEGE, COMMUNITY COLLEGE	Data not available				Data not available				Data not available				Data not available				Data not available				Data not available							
20231	HUNTINGTON BEACH CITY, WATER DEPT																												
21104	HUNTINGTON BEACH CITY, WATER DEPT	16.584	0.581	0.015	0.265	16.350	0.573	0.015	0.261	12.044	0.422	0.011	1.927	14.528	0.509	0.013	0.232	12.954	0.453	0.012	0.207	2.866	0.345	0.011	0.189	1.993	0.322	0.009	0.157
53729	TREND OFFSET PRINTING SERVICES, INC	1.253	4.653	0.021	8.660	1.318	4.895	0.022	8.698	1.345	5.002	0.023	8.727	1.473	5.476	0.025	8.728	Data not available				2.013	7.476	0.034	8.840	Data not available			
53733	HUNTINGTON BEACH CITY, WATER DEPT																												
68112	TIDELANDS OIL PRODUCTION COMPANY, ETAL																												
88359	ALAMITOS COMPANY	Data not available				Data not available				Data not available				Data not available				Data not available				0.408	0.797	0.006	0.079	Data not available			
101977	SIGNAL HILL PETROLEUM INC	1.400	3.485	0.167	1.413	2.519	4.277	0.173	1.395	1.435	4.080	0.173	1.406	1.761	3.738	0.185	1.505	Data not available				1.975	6.306	0.182	1.511	Data not available			
104280	ENVENT CORPORATION	0.559	1.280	0.268	0.016	0.610	1.469	0.315	0.019	0.284	1.137	0.408	0.024	0.249	0.999	0.359	0.021	0.769	1.786	0.422	0.059	0.224	0.897	0.322	0.019	Data not available			
111238	RIBOST TERMINAL, LLC.																												
120651	HUNTINGTON BEACH HOSPITAL																												
143740	DCOR LLC	7.208	12.545	0.144	0.725	6.727	2.246	0.069	0.376	3.708	0.709	0.016	0.108	0.304	1.305	0.009	0.204	4.192	0.819	0.005	0.125	3.304	0.621	0.004	0.088	Data not available			
169754	SO CAL HOLDING, LLC																												
176377	TESORO LOGISTICS MARINE TERMINAL 2																												
800420	PLAINS WEST COAST TERMINALS LLC																												
3134	THUMS LONG BEACH CO, UNIT NO.05																												
5998	ALL AMERICAN ASPHALT	3.211	1.644	0.021	4.034	3.110	1.605	0.021	4.353	3.061	1.617	0.021	3.974	2.488	1.286	0.015	3.047	1.301	1.483	0.018	4.498	0.841	1.133	0.014	4.379	Data not available			
22551	THUMS LONG BEACH CO, SAN PEDRO BAY																												
22556	THUMS LONG BEACH CO, UNIT NO.02																												
24871	LA CITY, DEPT OF WATER & POWER-UNIT NO 1	Data not available				Data not available				Data not available				Data not available				Data not available				Data not available							
39388	THUMS LONG BEACH CO, UNIT NO.03																												
39496	THE LANSDALE COMPANY	Only VOC data available				Only VOC data available				Only VOC data available				Only VOC data available				Only VOC data available				Only VOC data available							
45086	SIGNAL HILL PETROLEUM INC	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Data not available				0.272	0.672	0.017	0.215	0.113	0.279	0.007	0.091
58876	INDUSTRIAL MFG CO LLC DBA ARROWHEAD PROD	0.365	0.435	0.002	0.033	0.407	0.485	0.002	0.036	0.419	0.498	0.002	0.037	0.425	0.506	0.003	0.038	0.426	0.252	0.003	0.038	0.178	0.431	0.002	0.040	Data not available			
75306	LONG BEACH CITY, CONVENTION CENTER	0.687	1.087	0.010	17.393	0.085	0.275	0.007	1.371	0.350	0.701	0.017	1.005	0.302	0.626	0.011	0.974	0.309	0.634	0.011	0.974	Data not available				Data not available			
80066	LAIRD COATINGS CORPORATION	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	Only VOC data available				Only VOC data available			
115394	AES ALAMITOS, LLC																												
116931	EQUILON ENT LLC, SHELL OIL PROD. U S	0.000	0.000	0.000	0.000	Only VOC data available				Only VOC data available				Only VOC data available				Data not available				Only VOC data available				Only VOC data available			
135256	BLOOMFIELD BAKERS	0.919	1.004	0.015	0.197	1.029	1.124	0.017	0.220	0.414	0.453	0.007	0.088	0.045	0.168	0.000	0.009	Data not available				Data not available				Data not available			
137513	PACIFIC TERMINALS LLC	Data not available				Data not available				Data not available				Data not available				Data not available				Data not available							
150235	BREITBURN OPERATING L.P.	Data not available				Data not available				Data not available				Data not available				9.912	7.438	0.010	0.135	9.259	5.467	0.001	0.024	Data not available			
158209	LCW OIL OPERATIONS LLC	Data not available				Only VOC data available				Only VOC data available				Only VOC data available				Data not available				Data not available							
800074	LA CITY, DWP HAYNES GENERATING STATION	133.630	109.041	7.422	55.586	72.547	105.139	7.252	42.574	194.233	105.511	6.042	41.776	280.487	79.615	6.066	59.121	72.566	109.689	3.616	44.522	128.610	89.560	3.263	34.480	Data not available			
800286	ARCO TERMINAL SERVICES CORP	0.174	0.117	0.000	0.001	0.587	0.106	0.001	0.005	0.824	0.271	0.001	0.008	1.266	0.339	0.001	0.010	Data not available				Data not available				Data not available			
800416	PLAINS WEST COAST TERMINALS LLC	0.306	0.456	0.005	0.065	Data not available				Data not available				Data not available				0.017	0.023	0.000	0.003	0.008	0.012	0.000	0.001	Data not available			

Notes:
If facility emission were not available in the SCAQMD FIND Database, it was assumed the facility emitted less than the reportable quantities of CO, NOx, SOx, and TSP.

Facilities were added to be consistent with previous Public Records Requests regarding facilities located within 6 miles of AEC.

Alamitos Energy Center
Attachment DR132-1R1 Table 2
Source List for Facility ID 13990
August 2016

Facility Name: US Govt, Veterans Affairs Medical Center								Step 2 - Source Applicability (FIND Data)	
Address: 5901 E. 7th Street, Long Beach, CA 90822									
FIND Date: 2/23/2016									
Control #: N/A									
Miles from AEC: < 2 miles									
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status	Source Included? (Yes or No)	Application Type
572242				Basic	TITLE V PERMIT RENEWAL APPLICATION	2/6/2015	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action

Notes:

All permit applications dated 3/18/2014 and before were analyzed in the previous cumulative source analysis.

Alamitos Energy Center
Attachment DR132-1R1 Table 3
Source List for Facility ID 53729
August 2016

Facility Name: Trend Offset Printing Services, Inc.								Step 2 - Source Applicability (FIND Data)		Step 3 - Source Applicability (PRR Data)			Source Information					
Address: 3722-82 Catalina Street, Los Alamitos, CA 90720																		
FIND Date: 2/23/2016																		
Control #: 85107																		
Miles from AEC: < 4 miles																		
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status	Source Included? (Yes or No)	Application Type	PRR Data Received	Source Included? (Yes or No)	Reference of Data for Analysis / Reason for Exclusion from Analysis	Source Make	Source Model	Source Size	Size Units	Location UTM (X)	Location UTM (Y)
579885				Control	AFTERBURNER, DIRECT FLAME	11/18/2015	ASSIGNED TO ENGINEER - CLASS I	Yes	Permit to Construct	Yes	No	Application was to obtain a Permit to Construct for the source associated with Application 567815. Will only include this new emission source under Application 567815, since that was to obtain the source's Permit to Operate.						
579886				Basic	FACILITY PERMIT AMEND-RECLAIM/TITLE V	11/18/2015	ASSIGNED TO ENGINEER - CLASS III	No	Administrative Action									
579075				Basic	Printing Press w/ IR or UV Oven	10/21/2015	ASSIGNED TO ENGINEER - CLASS I	No	Source not expected to emit pollutants of concern									
574662				Basic	RULE 1415 PLAN NOTIFICATIONS	4/30/2015	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action									
571374				Basic	TITLE V PERMIT RENEWAL APPLICATION	1/2/2015	ASSIGNED TO ENGINEER - CLASS III	No	Administrative Action									
567816				Basic	FACILITY PERMIT AMEND-RECLAIM/TITLE V	8/21/2014	ASSIGNED TO ENGINEER - CLASS III	No	Administrative Action									
567813				Basic	PRINTING PRESS LITHOGRAPHIC AIR DRY	8/21/2014	ASSIGNED TO ENGINEER - CLASS III	No	Source not expected to emit pollutants of concern									
567814				Basic	PRINTING PRESS LITHOGRAPHIC HEAT SET	8/21/2014	ASSIGNED TO ENGINEER - CLASS III	No	Source not expected to emit pollutants of concern									
567815				Control	AFTERBURNER, DIRECT FLAME	8/21/2014	ASSIGNED TO ENGINEER - CLASS III	Yes	Permit to Operate without Permit to Construct	Yes	Yes	Installing printing system and RTO.	Adwest Technologies, Inc.	Model 13.0 RTO-95, with Maxon Kinedizer LE 4" Low-NOx Burner	3,757,000	BTU/hr	401332	3741184

Notes:
All permit applications dated 9/12/2013 and before were analyzed in the previous cumulative source analysis.

Alamitos Energy Center
Attachment DR132-1R1 Table 3
Source List for Facility ID 53729
August 2016

Facility Name: Trend Offset Printing Services, Inc.								Stack Parameters				Short Term Emissions (lb/hr)						Annual Emissions (lb/yr)			Annual Emissions (tpy)					
Address: 3722-82 Catalina Street, Los Alamitos, CA 90720																										
FIND Date: 2/23/2016																										
Control #: 85107																										
Miles from AEC: < 4 miles																										
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status	Height (ft)	Diameter (ft)	Temperature (°F)	Velocity (ft/s)	NOx	1-hr CO	8-hr CO	1-hr SO ₂	3-hr SO ₂	24-hr SO ₂	24-hr PM ₁₀	24-hr PM _{2.5}	NOx	PM ₁₀	PM _{2.5}	NOx	CO	SO ₂	PM _{10/2.5}
579885				Control	AFTERBURNER, DIRECT FLAME	11/18/2015	ASSIGNED TO ENGINEER - CLASS I																			
579886				Basic	FACILITY PERMIT AMEND-RECLAIM/TITLE V	11/18/2015	ASSIGNED TO ENGINEER - CLASS III																			
579075				Basic	Printing Press w/ IR or UV Oven	10/21/2015	ASSIGNED TO ENGINEER - CLASS I																			
574662				Basic	RULE 1415 PLAN NOTIFICATIONS	4/30/2015	BANKING/ PLAN GRANTED, NON BILLABLE																			
571374				Basic	TITLE V PERMIT RENEWAL APPLICATION	1/2/2015	ASSIGNED TO ENGINEER - CLASS III																			
567816				Basic	FACILITY PERMIT AMEND-RECLAIM/TITLE V	8/21/2014	ASSIGNED TO ENGINEER - CLASS III																			
567813				Basic	PRINTING PRESS LITHOGRAPHIC AIR DRY	8/21/2014	ASSIGNED TO ENGINEER - CLASS III																			
567814				Basic	PRINTING PRESS LITHOGRAPHIC HEAT SET	8/21/2014	ASSIGNED TO ENGINEER - CLASS III																			
567815				Control	AFTERBURNER, DIRECT FLAME	8/21/2014	ASSIGNED TO ENGINEER - CLASS III	28.5	2.67	1,500	38.8	0.14	0.13	0.13	0.0022	0.0022	0.0022	0.027	0.027	1,200	235	235	0.60	0.55	0.0094	0.12

Notes:
All permit applications dated 9/12/2013 and before were analyzed in the previous cumulative source analysis.

Facility Name: Signal Hill Petroleum Inc.								Step 2 - Source Applicability (FIND Data)		Step 3 - Source Applicability (PRR Data)		
Address: 1215 E 29th Street, Signal Hill, CA 90755												
FIND Date: 2/23/2016												
Control #: 85106												
Miles from AEC: < 6 miles												
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status	Source Included? (Yes or No)	Application Type	PRR Data Received	Source Included? (Yes or No)	Reference of Data for Analysis / Reason for Exclusion from Analysis
571380				Basic	ERC - CHANGE OF TITLE	1/13/2015	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
567757			ACTIVE	Basic	CRUDE OIL WELLS-R1148.1(1-4)	8/21/2014	PERMIT TO OPERATE GRANTED	No	Administrative Action			
560809			ACTIVE	Basic	NATURAL GAS DEHYDRATION	2/27/2014	PERMIT TO OPERATE GRANTED	No	Source not expected to emit pollutants of concern			
560810			ACTIVE	Control	Unspecified Equip/Process (Sch C)	2/27/2014	PERMIT TO OPERATE GRANTED	Yes	Permit to Construct	Yes	No	Installs a non-combustion control device, which would only reduce emissions.
560808			ACTIVE	Control	VAPOR RECOVERY SERVING CRUDE OIL PRODUCTION SYSTEM	2/27/2014	PERMIT TO OPERATE GRANTED	No	Emission Control Technology			
560811				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	2/27/2014	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
530983			ACTIVE	Basic	CRUDE OIL WELLS-R-1148.1 (13-14)	12/27/2011	PERMIT TO OPERATE GRANTED	No	Administrative Action			
512158				Basic	RECLAIM AMEND-NO ENGR EVAL	6/25/2010	APPLICATION CANCELLED	No	Application Cancelled			
504570			ACTIVE	Basic	CRUDE OIL WELLS-R-1148 (61-64)	12/17/2009	PERMIT TO OPERATE GRANTED	No	Administrative Action			
512547			ACTIVE	Basic	CRUDE OIL WELLS-R1148.1(1-4)	12/17/2009	PERMIT TO OPERATE GRANTED	No	Administrative Action			
494140			INACTIVE	Control	VAPOR RECOVERY SERVING CRUDE OIL PRODUCTION SYSTEM	12/19/2008	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
492565			ACTIVE	Basic	TURBINE ENGINE (<=50 MW) OTHER FUEL	12/3/2008	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
492566				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	12/3/2008	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
479396				Basic	PLAN RULE 1166-VOC SOIL, VAR LOC	3/14/2008	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
476528			INACTIVE	Basic	CRUDE OIL WELLS-R-1148 (69-72)	12/19/2007	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
476478			ACTIVE	Basic	Crude Oil/Gas/Water Separation >=400 BPD	12/18/2007	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
476479				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	12/18/2007	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
463790			INACTIVE	Basic	CRUDE OIL WELLS R-1148 (93-96)	12/13/2006	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
463799			ACTIVE	Basic	WASTE WATER TREATING (>50000 GAL/DAY)	12/13/2006	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
463796			ACTIVE	Control	SELECTIVE CATALYTIC REDUCTION	12/13/2006	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
463800				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	12/13/2006	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
463797				Basic	RECLAIM AMEND-NO ENGR EVAL	12/13/2006	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
454417				Basic	INITIAL TITLE V PERMIT APPLICATION	2/28/2006	APPLICATION CANCELLED	No	Prior to 01/01/2009			
450599			INACTIVE	Basic	TURBINE ENGINE (<=50 MW) NAT GAS ONLY	11/16/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
450600				Basic	RECLAIM AMEND-NO ENGR EVAL	11/16/2005	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
462303			INACTIVE	Basic	CRUDE OIL WELLS- R-1148.1 (37-40)	12/14/2004	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
462304			INACTIVE	Basic	CRUDE OIL WELLS-R1148.1(1-4)	12/14/2004	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
426765			INACTIVE	Basic	I C E (>500 HP) EM ELEC GEN DIESEL	3/12/2004	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
426766				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	3/12/2004	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
425953				Basic	I C E (>500 HP) EM ELEC GEN-NG & DIST	2/17/2004	APPLICATION REJECTED	No	Prior to 01/01/2009			
410501				Basic	ERC - CHANGE OF TITLE	1/10/2003	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
407962				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	10/22/2002	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
403510				Basic	TURBINE ENGINE (<=50 MW) NAT GAS ONLY	7/2/2002	APPLICATION CANCELLED	No	Prior to 01/01/2009			
403511				Control	SELECTIVE CATALYTIC REDUCTION	7/2/2002	APPLICATION CANCELLED	No	Prior to 01/01/2009			
390553				Basic	R-2009.1 NON POWER FAC. OPT 1	8/31/2001	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
385990				Basic	TITLEV-R3008, DEMO PTE EXEMPTION	5/9/2001	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
376018				Control	FLARE, OTHER	10/18/2000	APPLICATION CANCELLED	No	Prior to 01/01/2009			
375354				Control	FLARE, OTHER	10/13/2000	APPLICATION CANCELLED	No	Prior to 01/01/2009			
374732				Basic	I C E (50-500 HP) EM ELEC GEN-DIESEL	9/28/2000	APPLICATION CANCELLED	No	Prior to 01/01/2009			
365074			ACTIVE	Basic	Bulk Load/Unload Stn (1/30/2000	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
364625				Basic	I C E (50-500 HP) N-EM STAT NAT GAS ONLY	12/16/1999	APPLICATION CANCELLED	No	Prior to 01/01/2009			
362338			INACTIVE	Basic	NATURAL GAS DEHYDRATION	11/18/1999	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
340059				Basic	INITIAL TITLE V PERMIT APPLICATION	3/24/1998	APPLICATION CANCELLED	No	Prior to 01/01/2009			
323272				Basic	NATURAL GAS COMPRESSION PLANT	1/9/1997	APPLICATION CANCELLED	No	Prior to 01/01/2009			
292044			INACTIVE	Basic	CRUDE OIL/GAS/WATER SEP SYS (>5 TKS)	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
292045			INACTIVE	Basic	Crude Oil/Gas/Water Separation >=400 BPD	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294022			INACTIVE	Basic	GASOLINE SEPARATION-LIQUID PRODUCTION	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294026			INACTIVE	Basic	I C E (50-500 HP) EM ELEC GEN-NAT GAS	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294027			INACTIVE	Basic	I C E (50-500 HP) EM ELEC GEN-NAT GAS	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294028			INACTIVE	Basic	I C E (50-500 HP) EM ELEC GEN-NAT GAS	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294029			INACTIVE	Basic	I C E (50-500 HP) N-EM STAT NAT GAS ONLY	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294023			INACTIVE	Basic	STORAGE TANK GASOLINE	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294025			INACTIVE	Basic	TANK TRUCK LOADING LPG	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
294021			INACTIVE	Basic	WASTE WATER SEPARATION	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
292045			INACTIVE	Control	VAPOR BALANCE SYSTEM	4/25/1994	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			

Notes:
All applications were evaluated for this facility since it was not evaluated (at the equipment level) as part of our previous modeling efforts.

Facility Name: DCOR LLC								Step 2 - Source Applicability (FIND Data)		Step 3 - Source Applicability (PRR Data)		
Address: Offshore Platform Esther, Seal Beach, CA 90740												
FIND Date: 2/23/2016												
Control #: 85113												
Miles from AEC: Unknown								Source Included? (Yes or No)	Application Type	PRR Data Received	Source Included? (Yes or No)	Reference of Data for Analysis / Reason for Exclusion from Analysis
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status					
579443			ACTIVE	Control	SCRUBBER, OTHER VENTING S.S.	10/28/2015	PERMIT TO OPERATE GRANTED	No	Emission Control Technology			
579444				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	10/28/2015	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
568467				Basic	ERC - CHANGE OF TITLE	9/23/2014	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
562649				Basic	RULE 1415.1 PLAN NOTIFICATIONS	3/25/2014	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
561638				Control	FLARE, OTHER	3/4/2014	ASSIGNED TO ENGINEER - CLASS I	Yes	Permit to Construct	Yes	No	DCOR LLC cancelled this permit application, as the project has been cancelled.
561639				Control	FLARE, OTHER	3/4/2014	ASSIGNED TO ENGINEER - CLASS I	Yes	Permit to Construct	Yes	No	DCOR LLC cancelled this permit application, as the project has been cancelled.
561640				Control	FLARE, OTHER	3/4/2014	ASSIGNED TO ENGINEER - CLASS I	Yes	Permit to Construct	Yes	No	DCOR LLC cancelled this permit application, as the project has been project cancelled.
561641				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	3/4/2014	ASSIGNED TO ENGINEER - CLASS III	No	Administrative Action			
530762				Basic	RULE 1415.1 PLAN NOTIFICATIONS	12/22/2011	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
518223			ACTIVE	Basic	GAS TURBINE-DIG. GAS/LDF	1/20/2011	PERMIT TO OPERATE GRANTED	Yes	Change of Conditions	Yes	No	Administrative Change to revise the period for the RTC limits; no change to emissions
518222			ACTIVE	Basic	GAS TURBINE-DIG. GAS/LDF	1/20/2011	PERMIT TO OPERATE GRANTED	Yes	Change of Conditions	Yes	No	Administrative Change to revise the period for the RTC limits; no change to emissions
518224			ACTIVE	Basic	I C E (50-500 HP) N-EM STAT DIESEL	1/20/2011	PERMIT TO OPERATE GRANTED	Yes	Change of Conditions	Yes	No	Administrative Change to revise the period for the RTC limits; no change to emissions
518221				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	1/20/2011	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
505908				Basic	RULE 1415 PLAN NOTIFICATIONS	1/28/2010	BANKING/ PLAN GRANTED, NON BILLABLE	No	Administrative Action			
489830			INACTIVE	Basic	I C E (50-500 HP) N-EM STAT DIESEL	10/14/2008	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
489831				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	10/14/2008	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
486556				Basic	PLAN RULE 1110.2- Inspection & Monitoring Plan	8/5/2008	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
476638				Basic	RULE 1415 PLAN NOTIFICATIONS	12/26/2007	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
467167			INACTIVE	Basic	I C E (50-500 HP) N-EM STAT DIESEL	4/17/2007	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
466417				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	3/13/2007	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
466415				Basic	GAS TURBINE-DIG. GAS/LDF	3/13/2007	APPLICATION CANCELLED	No	Prior to 01/01/2009			
466416				Basic	GAS TURBINE-DIG. GAS/LDF	3/13/2007	APPLICATION CANCELLED	No	Prior to 01/01/2009			
462849				Basic	FACILITY PERMIT AMEND- RECLAIM ONLY	11/14/2006	APPLICATION CANCELLED	No	Prior to 01/01/2009			
462850				Basic	I C E (50-500 HP) N-EM STAT DIESEL	11/14/2006	APPLICATION CANCELLED	No	Prior to 01/01/2009			
451836				Basic	RULE 1415 PLAN NOTIFICATIONS	12/27/2005	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			
446188				Basic	COMPLIANCE PLAN- RULE 1470-EMER ICE>3 OPERATORS	7/5/2005	APPLICATION CANCELLED	No	Prior to 01/01/2009			
441316			ACTIVE	Basic	Crude Oil/Gas/Water Separation >=400 BPD	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441318			ACTIVE	Basic	I C E (50-500 HP) EM FIRE FGHT-DIESEL	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441317			INACTIVE	Basic	I C E (50-500 HP) N-EM STAT DIESEL	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441320			ACTIVE	Basic	NATURAL GAS DEHYDRATION	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441313			INACTIVE	Basic	NATURAL GAS ODORIZING UNIT	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441311			ACTIVE	Basic	Waste H2O Treating >50,000 GPD	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441315			ACTIVE	Control	VAPOR RECOVERY SERVING CRUDE OIL PRODUCTION SYSTEM	3/2/2005	PERMIT TO OPERATE GRANTED	No	Prior to 01/01/2009			
441310				Basic	TV/RECLAIM REVISION-NOEVAL	3/2/2005	BANKING/ PLAN GRANTED, NON BILLABLE	No	Prior to 01/01/2009			

Notes:
All applications were evaluated for this facility since it was not evaluated as part of our previous modeling efforts.

Alamitos Energy Center
Attachment DR132-1R1 Table 6
Source List for Facility ID 800074
August 2016

Facility Name: LA City, DWP Haynes Generating Station								Step 2 - Source Applicability (FIND Data)		Step 3 - Source Applicability (PRR Data)		
Address: 6801 2nd St, Long Beach, CA 90803												
FIND Date: 2/24/2016												
Control #: 85112												
Miles from AEC: < 1 mile												
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status	Source Included? (Yes or No)	Application Type	PRR Data Received	Source Included? (Yes or No)	Reference of Data for Analysis / Reason for Exclusion from Analysis
581336				Basic	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL	1/19/2016	ASSIGNED TO ENGINEER - CLASS I	Yes	Change of Conditions	Yes	No	No longer using diesel fuel; only running on natural gas. Should have no effect (or reduce) emissions because was likely permitted at PTE regardless of fuel type.
581337				Basic	BOILER UTILITY (>50 MW)NAT.GAS/RESID.OIL	1/19/2016	ASSIGNED TO ENGINEER - CLASS I	Yes	Change of Conditions	Yes	No	No longer using diesel fuel; only running on natural gas. Should have no effect (or reduce) emissions because was likely permitted at PTE regardless of fuel type.
581335				Basic	FACILITY PERMIT AMEND-RECLAIM/TITLE V	1/19/2016	APPLICATION READY FOR PRESCREENING	Yes	RECLAIM/Title V Minor Permit Revision	Yes	No	Administrative change of conditions, as described in Applications 581336 and 581337
572277				Basic	COMPLIANCE PLAN- RULE 1470-EMER ICE>3 OPERATORS	1/29/2015	ASSIGNED TO ENGINEER - CLASS III	No	Administrative Action			

Notes:
All permit applications dated 1/16/2014 and before were analyzed in the previous cumulative source analysis.

Alamitos Energy Center
 Attachment DR132-1R1 Table 7
 Source List for Facility ID 21104
 August 2016

Facility Name: Huntington Beach City, Water Dept.							
Address: 14561 Springdale Street, Huntington Beach, CA 92647							
FIND Date: 2/23/2016							
Control #: N/A							
Miles from AEC: < 5 miles							
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status

Notes:
 All permit applications dated 3/27/2014 and before were analyzed in the previous cumulative source analysis. There have been no permit applications filed since 3/27/2014.

Alamitos Energy Center
 Attachment DR132-1R1 Table 8
 Source List for Facility ID 75306
 August 2016

Facility Name: Long Beach City, Convention Center							
Address: 300 E Ocean Blvd, Long Beach, CA 90802							
FIND Date: 2/24/2016							
Control #: N/A							
Miles from AEC: < 6 miles							
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status

Notes:
 All permit applications dated 3/19/2014 and before were analyzed in the previous cumulative source analysis. There have been no permit applications filed since 3/19/2014.

Alamitos Energy Center
 Attachment DR132-1R1 Table 9
 Source List for Facility ID 150235
 August 2016

Facility Name: Breitburn Operating L.P.							
Address: 2001 Pacific Coast Hwy, Seal Beach, CA 90740							
FIND Date: 2/24/2016							
Control #: N/A							
Miles from AEC: < 3 miles							
Application Number	Permit Number	Permit Issued Date	Permit Status	Equipment Type	Equipment Description	Application Date	Application Status

Notes:
 All permit applications dated 1/30/2007 and before were analyzed in the previous cumulative source analysis. There have been no permit applications filed since 1/30/2007.

**Attachment DR132-2R1
Proposed Emission Rates and Exhaust Parameters
for the Cumulative Air Quality Impacts Analysis**

Alamitos Energy Center
Attachment DR132-2R1 Table 1
Cumulative Modeling Parameters - Stack Parameters
August 2016

Point Sources

Facility	Source ID	Source Type	Easting (X) (m)	Northing (Y) (m)	Base Elevation (m)	Stack Height (m)	Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)
AEC (1-hour SO ₂ [state])	GE 7FA.05-01 Scenario 2	CCGT	398058	3736934	4.57	42.7	354	15.6	6.10
	GE 7FA.05-02 Scenario 2	CCGT	398058	3736890	4.57	42.7	354	15.6	6.10
AEC (CO, 1-hour NO ₂ [federal])	GE 7FA.05-01 Scenario 3	CCGT	398058	3736934	4.57	42.7	350	12.2	6.10
	GE 7FA.05-02 Scenario 3	CCGT	398058	3736890	4.57	42.7	350	12.2	6.10
AEC (1-hour SO ₂ [federal], 3-hour SO ₂ , 24-hour SO ₂)	GE 7FA.05-01 Scenario 6	CCGT	398058	3736934	4.57	42.7	353	14.9	6.10
	GE 7FA.05-02 Scenario 6	CCGT	398058	3736890	4.57	42.7	353	14.9	6.10
AEC (Annual NO ₂ , PM ₁₀ , PM _{2.5})	GE 7FA.05-01 Scenario 7	CCGT	398058	3736934	4.57	42.7	350	11.8	6.10
	GE 7FA.05-02 Scenario 7	CCGT	398058	3736890	4.57	42.7	350	11.8	6.10
AEC (1-hour SO ₂ [state])	GE LMS 100PB-01 Scenario 1	SCGT	398252	3737139	4.57	24.4	693	33.3	4.11
	GE LMS 100PB-02 Scenario 1	SCGT	398252	3737124	4.57	24.4	693	33.3	4.11
	GE LMS 100PB-03 Scenario 1	SCGT	398251	3737012	4.57	24.4	693	33.3	4.11
	GE LMS 100PB-04 Scenario 1	SCGT	398251	3736997	4.57	24.4	693	33.3	4.11
AEC (CO, 1-hour NO ₂ [federal])	GE LMS 100PB-01 Scenario 3	SCGT	398252	3737139	4.57	24.4	749	23.8	4.11
	GE LMS 100PB-02 Scenario 3	SCGT	398252	3737124	4.57	24.4	749	23.8	4.11
	GE LMS 100PB-03 Scenario 3	SCGT	398251	3737012	4.57	24.4	749	23.8	4.11
	GE LMS 100PB-04 Scenario 3	SCGT	398251	3736997	4.57	24.4	749	23.8	4.11
AEC (1-hour SO ₂ [federal], 3-hour SO ₂ , 24-hour SO ₂)	GE LMS 100PB-01 Scenario 5	SCGT	398252	3737139	4.57	24.4	699	33.0	4.11
	GE LMS 100PB-02 Scenario 5	SCGT	398252	3737124	4.57	24.4	699	33.0	4.11
	GE LMS 100PB-03 Scenario 5	SCGT	398251	3737012	4.57	24.4	699	33.0	4.11
	GE LMS 100PB-04 Scenario 5	SCGT	398251	3736997	4.57	24.4	699	33.0	4.11
AEC (Annual NO ₂ , PM ₁₀ , PM _{2.5})	GE LMS 100PB-01 Scenario 7	SCGT	398252	3737139	4.57	24.4	746	23.6	4.11
	GE LMS 100PB-02 Scenario 7	SCGT	398252	3737124	4.57	24.4	746	23.6	4.11
	GE LMS 100PB-03 Scenario 7	SCGT	398251	3737012	4.57	24.4	746	23.6	4.11
	GE LMS 100PB-04 Scenario 7	SCGT	398251	3736997	4.57	24.4	746	23.6	4.11
AEC (All Pollutants)	Auxiliary Boiler	Auxiliary Boiler	398086	3736829	4.57	24.4	432	21.2	0.91
U.S. Government, Veteran Affairs Medical Center (USVA)	USVA1	Emergency Diesel ICE	396394	3738074	24.4	6.10	828	61.5	0.20
	USVA2	Emergency Diesel ICE	396394	3738074	24.4	8.53	768	44.4	0.51
	USVA3	Emergency Diesel ICE	396394	3738074	24.4	8.53	768	44.4	0.51
	USVA4	Emergency Diesel ICE	396394	3738074	24.4	6.10	739	29.2	0.15
	USVA5	Emergency Diesel ICE	396394	3738074	24.4	6.10	756	52.8	0.20
	USVA6	Emergency Diesel ICE	396394	3738074	24.4	6.10	755	58.9	0.25
Trend Offset Printing Services, Inc. (TOPS)	TOPS1	RTO	401349	3741225	9.14	13.4	1,089	9.31	1.27
	TOPS2	RTO	401350	3741236	9.14	13.4	1,089	9.31	1.27
	TOPS3	RTO	401332	3741184	9.14	8.69	1,089	11.8	0.81
Los Angeles City, DWP Haynes Generating Station (LADWP)	LADWP1	Emergency Diesel ICE	398536	3737108	1.22	5.49	768	44.4	0.51
	LADWP2	Emergency Diesel ICE	398543	3737108	1.22	5.49	768	44.4	0.51
	LADWP3	SCGT	398554	3736805	2.74	45.7	627	21.6	4.11
	LADWP4	SCGT	398554	3736811	2.67	45.7	627	21.6	4.11
	LADWP5	SCGT	398554	3736912	2.60	45.7	627	21.6	4.11
	LADWP6	SCGT	398554	3736919	2.61	45.7	627	21.6	4.11
	LADWP7	SCGT	398554	3737019	2.60	45.7	627	21.6	4.11
	LADWP8	SCGT	398554	3737025	2.60	45.7	627	21.6	4.11

CCGT = combined-cycle natural gas turbine
ICE = internal combustion engine
RTO = regenerative thermal oxidizer
SCGT = simple-cycle natural gas turbine

Alamitos Energy Center
Attachment DR132-2R1 Table 2
Cumulative Modeling Parameters - Emission Rates
August 2016

Emission Rates for 1-hour, 3-hour, 8-hour, and 24-hour Modeling^a

Source ID	State 1-hour NO ₂		Federal 1-hour NO ₂ ^b		1-hour CO		8-hour CO		State 1-hour SO ₂		Federal 1-hour SO ₂ ^b		3-hour SO ₂		24-hour SO ₂		24-hour PM ₁₀		24-hour PM _{2.5}	
	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)	(g/s)	(lb/hr)
GE 7FA.05-01	7.69	61.0	7.69	61.0	41.0	325	14.9	118	0.48	3.84	0.47	3.72	0.47	3.72	0.47	3.72	1.07	8.50	1.07	8.50
GE 7FA.05-02	7.69	61.0	7.69	61.0	41.0	325	14.9	118	0.48	3.84	0.47	3.72	0.47	3.72	0.47	3.72	1.07	8.50	1.07	8.50
GE LMS 100PB-01	2.67	21.2	2.67	21.2	5.66	44.9	1.89	15.0	0.20	1.62	0.20	1.61	0.20	1.61	0.20	1.61	0.79	6.23	0.79	6.23
GE LMS 100PB-02	2.67	21.2	2.67	21.2	5.66	44.9	1.89	15.0	0.20	1.62	0.20	1.61	0.20	1.61	0.20	1.61	0.79	6.23	0.79	6.23
GE LMS 100PB-03	2.67	21.2	2.67	21.2	5.66	44.9	1.89	15.0	0.20	1.62	0.20	1.61	0.20	1.61	0.20	1.61	0.79	6.23	0.79	6.23
GE LMS 100PB-04	2.67	21.2	2.67	21.2	5.66	44.9	1.89	15.0	0.20	1.62	0.20	1.61	0.20	1.61	0.20	1.61	0.79	6.23	0.79	6.23
Auxiliary Boiler	0.054	0.42	0.054	0.42	0.36	2.83	0.30	2.37	0.018	0.14	0.018	0.14	0.018	0.14	0.0057	0.046	0.020	0.16	0.020	0.16
USVA1	-	-	-	-	-	-	0.013	0.11	-	-	-	-	0.00034	0.0027	0.000043	0.00034	0.00053	0.0042	0.00053	0.0042
USVA2	-	-	-	-	-	-	0.084	0.67	-	-	-	-	0.0016	0.013	0.00020	0.0016	0.00042	0.0034	0.00042	0.0034
USVA3	3.72	29.5	-	-	0.67	5.35	0.084	0.67	0.0049	0.039	-	-	0.0016	0.013	0.00020	0.0016	0.00042	0.0034	0.00042	0.0034
USVA4	-	-	-	-	-	-	0.029	0.23	-	-	-	-	0.00014	0.0011	0.000017	0.00014	0.00056	0.0045	0.00056	0.0045
USVA5	-	-	-	-	-	-	0.068	0.54	-	-	-	-	0.00021	0.0017	0.000027	0.00021	0.0013	0.010	0.0013	0.010
USVA6	-	-	-	-	-	-	0.083	0.66	-	-	-	-	0.00045	0.0036	0.000056	0.00045	0.0016	0.013	0.0016	0.013
TOPS1	0.0050	0.040	0.0050	0.040	0.0013	0.010	0.0013	0.010	0.0013	0.010	0.0013	0.010	0.0013	0.010	0.0013	0.010	0.0038	0.030	0.0038	0.030
TOPS2	0.0063	0.050	0.0063	0.050	0.030	0.24	0.030	0.24	0.0013	0.010	0.0013	0.010	0.0013	0.010	0.0013	0.010	0.0038	0.030	0.0038	0.030
TOPS3	0.017	0.14	0.017	0.14	0.016	0.13	0.016	0.13	0.00028	0.0022	0.00028	0.0022	0.00028	0.0022	0.00028	0.0022	0.0034	0.027	0.0034	0.027
LADWP1 ^c	1.86	14.8	-	-	0.34	2.68	0.084	0.67	0.0023	0.019	-	-	0.0016	0.012	0.00020	0.0016	0.00029	0.0023	0.00029	0.0023
LADWP2 ^c	-	-	-	-	-	-	0.084	0.67	-	-	-	-	0.0016	0.012	0.00020	0.0016	0.00029	0.0023	0.00029	0.0023
LADWP3	1.02	8.09	1.02	8.09	0.99	7.88	0.99	7.88	0.019	0.15	0.019	0.15	0.019	0.15	0.019	0.15	0.73	5.80	0.73	5.80
LADWP4	1.02	8.09	1.02	8.09	0.99	7.88	0.99	7.88	0.019	0.15	0.019	0.15	0.019	0.15	0.019	0.15	0.73	5.80	0.73	5.80
LADWP5	1.02	8.09	1.02	8.09	0.99	7.88	0.99	7.88	0.019	0.15	0.019	0.15	0.019	0.15	0.019	0.15	0.73	5.80	0.73	5.80
LADWP6	1.02	8.09	1.02	8.09	0.99	7.88	0.99	7.88	0.019	0.15	0.019	0.15	0.019	0.15	0.019	0.15	0.73	5.80	0.73	5.80
LADWP7	1.02	8.09	1.02	8.09	0.99	7.88	0.99	7.88	0.019	0.15	0.019	0.15	0.019	0.15	0.019	0.15	0.73	5.80	0.73	5.80
LADWP8	1.02	8.09	1.02	8.09	0.99	7.88	0.99	7.88	0.019	0.15	0.019	0.15	0.019	0.15	0.019	0.15	0.73	5.80	0.73	5.80

Emission Rates for Annual Modeling

Source ID	Annual NO ₂		Annual PM ₁₀		Annual PM _{2.5}	
	(g/s)	(tpy)	(g/s)	(tpy)	(g/s)	(tpy)
GE 7FA.05-01	0.79	27.3	0.57	19.7	0.57	19.7
GE 7FA.05-02	0.79	27.3	0.57	19.7	0.57	19.7
GE LMS 100PB-01	0.29	10.0	0.21	7.35	0.21	7.35
GE LMS 100PB-02	0.29	10.0	0.21	7.35	0.21	7.35
GE LMS 100PB-03	0.29	10.0	0.21	7.35	0.21	7.35
GE LMS 100PB-04	0.29	10.0	0.21	7.35	0.21	7.35
Auxiliary Boiler	0.019	0.66	0.019	0.68	0.019	0.68
USVA1	0.0057	0.20	0.000077	0.0027	0.000077	0.0027
USVA2	0.021	0.74	0.000058	0.0020	0.000058	0.0020
USVA3	0.021	0.74	0.000058	0.0020	0.000058	0.0020
USVA4	0.0014	0.048	0.000077	0.0027	0.000077	0.0027
USVA5	0.0052	0.18	0.00018	0.0062	0.00018	0.0062
USVA6	0.0063	0.22	0.00022	0.0076	0.00022	0.0076
TOPS1	0.0050	0.17	0.0038	0.13	0.0038	0.13
TOPS2	0.0063	0.22	0.0038	0.13	0.0038	0.13
TOPS3	0.017	0.60	0.0034	0.12	0.0034	0.12
LADWP1	0.021	0.74	0.000040	0.0014	0.000040	0.0014
LADWP2	0.021	0.74	0.000040	0.0014	0.000040	0.0014
LADWP3	0.89	30.9	0.41	14.2	0.41	14.2
LADWP4	0.89	30.9	0.41	14.2	0.41	14.2
LADWP5	0.89	30.9	0.41	14.2	0.41	14.2
LADWP6	0.89	30.9	0.41	14.2	0.41	14.2
LADWP7	0.89	30.9	0.41	14.2	0.41	14.2
LADWP8	0.89	30.9	0.41	14.2	0.41	14.2

^a Sources identified as emergency diesel ICEs are permitted for 50 hours per year of maintenance and testing. The simultaneous testing of all ICEs at a single facility is not expected to occur within the same hour. Therefore, only the single emergency ICE with the highest hourly emission rates was modeled.

^b Emergency sources (like the ICEs) were not modeled for the federal 1-hour NO₂ and SO₂ standards as these are statistical average standards that will not likely be influenced by sources permitted to operate for up to 50 hours per year for testing and maintenance.

^c Of the two emergency generators located at the LADWP facility, it was assumed that a single generator would be tested for only 30 minutes in a given hour.