



TECHNICAL MEMORANDUM

To: Mr. Eduardo Schonborn
Planning Manager, City of El Segundo

From: Rita Garcia
Project Manager

Date: January 18, 2023

Subject: 444 North Nash Street Data Center Project
(Environmental Assessment No. Ea-971, Revision A) (Project)
Initial Study/Mitigated Negative Declaration
Responses to Comments Raised During Public Review and Errata

1.0 INTRODUCTION

The Project's Initial Study/Mitigated Negative Declaration (IS/MND) was prepared pursuant to California Environmental Quality Act (CEQA) (Public Resources Code §§21000-21177) and State CEQA Guidelines §15063 requirements.

The IS/MND and supporting documentation were made available for public review pursuant to State CEQA Guidelines §15070. The public review period began on November 3, 2022 and ended on November 23, 2022. The IS/MND and supporting documentation were made available for public review at the following location:

- City of El Segundo Website:
<https://www.elsegundo.org/government/departments/community-development-department/planning-division/cumulative-projects-list>

The comment letters received during the public review period are listed below and provided in **Appendix A: Comment Letters** of this Technical Memorandum (TM).

Letter Number / Author / Date

1. Robert C Ferrante, Chief Engineer and General Manager. Los Angeles County Sanitation Districts. November 18, 2022
2. Sam Wang, Program Supervisor, CEQA-IGR. South Coast Air Quality Management District. November 23, 2022.

Although CEQA and the State CEQA Guidelines do not require a Lead Agency to prepare responses to comments raised regarding an IS/MND, as contrasted with the requirement to prepare responses to comments on a Draft Environmental Impact Report (State CEQA Guidelines §15088), the City has elected to prepare the following written responses in the spirit and with the intent of conducting a comprehensive and meaningful evaluation of the proposed Project. The number designations in the responses correlate with the comment letters.

Text changes have been included to clarify or correct information in the Public Review IS/MND as initiated by the Lead Agency staff or due to comments raised during the public review period. Revisions to the Public Review IS/MND are presented below as excerpts, with deleted text indicated as strikethrough (~~example~~) and added/modified text indicated as double underline (example).

Deleted IS/MND text <u>Added IS/MND text</u>

It is noted, none of the corrections or clarifications to the IS/MND identified below constitute significant new information pursuant to State CEQA Guidelines §15162. They do not involve substantial changes to the Project or environmental setting, or new information of substantial importance that required major revisions to the IS/MND. They do not show that the Project would have a new significant environmental effect that was not identified in the IS/MND or result in a substantial increase in the severity of a significant effect identified in the IS/MND. Additionally, they do not include any new or considerably different mitigation measures from those specified in the IS/MND.

2.0 RESPONSES TO COMMENTS

RESPONSE TO COMMENT LETTER 1

Robert C Ferrante, Chief Engineer and General Manager
Los Angeles County Sanitation Districts.
November 18, 2022

- 1-1 This comment introduces the Los Angeles County Sanitation District's (LACSD) comments regarding sewerage service. This comment does not address the IS/MND's adequacy or raise a significant environmental issue. As such, no further response is necessary.

- 1-2 This comment notes that rainwater discharge to LACSD sewer system is prohibited without prior approval. To clarify that the Project's drywell would connect to the City's storm drain, and not the LACSD sewer system, the IS/MND is revised as noted below. As such, no LACSD prior approval is necessary.

IS/MND Page 73 is revised as follows:

The drywell would also include a Bio Clean Screening Filter that would pre-treat captured water [stormwater runoff] before its return to the ~~wastewater system~~ City storm drain.

RESPONSE TO COMMENT LETTER 2

Sam Wang, Program Supervisor, CEQA-IGR
South Coast Air Quality Management District
November 23, 2022

- 2-1 This comment introduces the South Coast Air Quality Management District (SCAQMD). This comment does not address the IS/MND's adequacy or raise a significant environmental issue. As such, no further response is necessary.
- 2-2 This comment summarizes the Project characteristics as described in IS/MND Section 2. This comment does not address the IS/MND's adequacy or raise a significant environmental issue. As such, no further response is necessary.
- 2-3 This comment addresses the 2012 IS/MND for the existing data center, which approved up to 14 backup generators. As noted in the comment and depicted on IS/MND Exhibit 2-2, no modifications would occur on any other portions of the existing data center site. Thus, the Project's IS/MND focuses only on the data center's northern portion where modifications to the site are proposed, consisting of the proposed additional generators, drywell, and screening wall.

This comment states that, because the Project is an amendment to Environmental Assessment No. EA-971, the Project's baseline should be consistent with the baseline analyzed in the 2012 ISMND. However, the Project is an independent project from the 2012 ISMND, analyzed in a stand-alone IS/MND (rather than tiering off the 2012 ISMND), and changes within the Project site (e.g., construction and operation of additional backup generators) necessitate a different baseline from the 2012 ISMND. The comment also notes that SCAQMD facility ID and permit numbers for existing generators are not provided in the Project's IS/MND. IS/MND Table 2-2 summarizes existing, proposed, and permitted generators by size. As described on IS/MND page 7-8, the Project's environmental baseline assumes construction and operation of eight diesel backup generators (four existing and four under construction). To further clarify SCAQMD facility ID and permit numbers, the IS/MND is revised as noted below.

IS/MND Page 7 is revised as follows:

As also depicted on **Exhibit 2-3**, the overall data center property (SCAQMD facility ID 194472) is fully developed and occupied by an approximately 116,756-SF data center with 70 surface parking spaces. Three emergency backup diesel generators and a Southern California Edison substation are situated at the property's southeast corner. One additional emergency backup diesel generator is on the roof of the building. These include Permits to Operate, numbered G65311 through G65314 and G65319 through G65322.

IS/MND Page 7 is revised as follows:

As of this writing, four additional generators (SCAQMD Permits to Operate Numbers G65319 through G65322) are currently being installed (resulting in eight in total). Construction of the northerly building expansion (not a part of this Project) is anticipated to occur in late 2022.

Finally, the comment notes that the 2012 IS/MND is not available on the City website to verify facility design information, including the permit conditions and the technical specifications for the emergency engine equipment. The 2012 IS/MND did not contain such detailed information, but technical specifications for proposed generators will be provided to SCAQMD as part of the permitting process.

- 2-4 In this comment, the SCAQMD addresses the operational emissions analysis. As noted by the SCAQMD, the results of emissions calculations shown in Appendix A and Appendix D do not appear to match values presented on IS/MND Table 4.3-5. Please see corrections to IS/MND Table 4.3-5.

IS/MND Page 40 is revised as follows:

Table 4.3-5: Operational Emissions (Maximum Pounds Per Day)						
Source	Emissions (pounds per day) ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Coarse Particulate Matter (PM ₁₀)	Fine Particulate Matter (PM _{2.5})
Unmitigated Scenarios						
Generators ³	7.98	412.86	68.74	0.70	5.74	5.74
Project Trips	0.03	0.03	0.52	>0.01	0.19	0.05
Total	8.01	412.89	69.26	0.70	5.93	5.79
SCAQMD Threshold	55.00	55.00	550.00	150.00	150.00	55.00
SCAQMD Threshold Exceeded?	No	Yes	No	No	No	No
Mitigated Scenario²						
Generators ³	7.98 <u>2.02</u>	412.86 <u>54.66</u>	68.74 <u>10.96</u>	0.70 <u>0.09</u>	5.74 <u>0.72</u>	5.74 <u>0.72</u>
Project Trips	0.03	0.03	0.52	>0.01	0.19	0.05
Total	8.01 <u>2.05</u>	412.89 <u>54.69</u>	69.26 <u>11.48</u>	0.70 <u>0.09</u>	5.93 <u>0.19</u>	5.79 <u>0.77</u>
SCAQMD Threshold	55.00	55.00	550.00	150.00	150.00	55.00
SCAQMD Threshold Exceeded?	No	No	No	No	No	No
Notes:						
<ol style="list-style-type: none"> 1. Emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0, as recommended by the SCAQMD. Worst-case seasonal maximum daily emissions are reported. 2. Mitigated emissions include compliance with Mitigation Measure AQ-1, which requires that generator maintenance and testing be limited on any single day to no more than 440 <u>108</u> minutes for the entire facility (15 generators). 3. Potential to emit (PTE) of an engine is based on the 50 hour per year limit on maintenance and testing operations, in accordance with South Coast AQMD's policy and procedures No. EC-02-09, dated 2/24/2009. 						

2-5 In this comment, the SCAQMD noted that operating the generator model with the maximum nitrogen oxides (NO_x) emission rate, the Caterpillar 3516C, 110 minutes would result in maximum potential emissions totaling 55.67 pounds per day (lbs/day) of NO_x. Limiting generator maintenance, staff training, and testing on any single day to no more than 108 minutes for the entire facility results in maximum daily emissions of 54.66 lbs/day from the generators, below the applicable SCAQMD significance threshold of 55 lbs/day. Please see corrections to IS/MND as shown below.

IS/MND Page 39 revised as follows:

...SCAQMD requires the facility to monitor and demonstrate compliance, including installing a non-resettable hour meter on each generator and recording the date, duration, and purpose of each generator run. The scheduled maintenance would be dictated in accordance with manufacturers recommendations, which are currently not available until possessions of units occurs...

...Mitigation Measure AQ-1 requires that generator run time associated with maintenance, staff training, and testing be limited to a cumulative total of not more than 108 minutes on any single day to no more than 140 minutes for all generators in the entire facility (up to 15 generators). A non-resettable hour meter capable of tracking to at least one-tenths of an hour, shall be installed and maintained on each generator. In addition, an engine operating log shall be maintained by the Applicant that shall list the daily run time each or any engine was operated for the purpose of maintenance, staff training, and/or testing. The engine operating log shall record each time the engine is manually started including the date of operation, the specific reason for operation, and the totalizing hour meter reading (in hours and tenths of hours) at the beginning and end of operation or operations for the specific date. Engine operating logs shall be retained on-site for a minimum of five calendar years and shall be made available to a City representative upon request. Further, upon request from the City but no more than one time per year, the Applicant shall have the engine manufacturers' service provider download from the engines' CPU the engines' run time for the year including date specific run times and fuel utilization.

- 2-6 In response to the SCAQMD's comment to further validate the LST screening analysis, the City undertook AAQS modeling for nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}) in order to verify the City's less than significant localized impact conclusion. Dispersion modeling was performed using the SCAQMD-preferred model, AERMOD, including building downwash considerations. Emissions were calculated using Project-specific emission data and factors. The maximum off-site concentrations of NO₂ and CO from project operations were added to the appropriate historical background concentrations and compared to the applicable AAQS. If an AAQS is not exceeded, the project is judged to not cause or contribute substantively to an AAQS violation for that pollutant. The SCAQMD has developed alternative significant impact thresholds for fugitive emissions of PM₁₀ and PM_{2.5}, as shown in Table A: Maximum Off-Site Concentrations from Operations. If a source's maximum impacts are below the applicable significant impact thresholds, the project

is judged to not cause or contribute significantly to an AAQS violation or cause an increment violation. Details regarding the refined dispersion modelling are included in **Appendix B: AAQS Supplemental Memo**, attached below.

As shown on Table A, maximum emissions from the Project during routine generator maintenance and testing will not cause or contribute to a violation of an applicable NO₂ or CO NAAQS or CAAQS or cause an increment exceedance of the SCAQMD significant impact levels for the annual and 24-hour averaging periods for PM₁₀ and PM_{2.5}.

Table A: Maximum Off-Site Concentrations from Operations							
Pollutant	Averaging Time	Maximum Modeled Concentration (µg/m ³)	Background Concentration (ppm)	Background Concentration ¹ (µg/m ³)	Total Ground Level Concentration (µg/m ³)	SCAQMD Threshold (µg/m ³) ²	Threshold Exceeded? ³
NO ₂ ⁴	1-hour	140.81	0.0597	112.34	253.15	339 (state)	No
	1-hour ⁵	55.49	0.0509	95.78	151.27	188 (federal)	No
	Annual	0.79	0.0095	17.88	18.67	57 (state)	No
	Annual					100 (federal)	No
CO	1-hour	5.39	1.6	1,832.97	1,838.36	23,000 (state)	No
	1-hour					40,000 (federal)	No
	8-hour	2.83	1.3	1,489.29	1,492.12	10,000 (state/fed)	No
PM ₁₀ ⁶	24-hour	0.13	--	--	0.13	2.5 (SCAQMD)	No
	Annual	0.01	--	--	0.01	1.0 (SCAQMD)	No
PM _{2.5} ⁶	24-hour	0.13	--	--	0.13	2.5 (SCAQMD)	No

Notes:

- Background concentrations are from the Southwest Coastal LA County Station #820 (2020).
- All thresholds are shown in micrograms per cubic meter (µg/m³) for comparison to modeled concentrations.
- Exceedances of the thresholds are indicated in bold.
- NO₂ concentrations were calculated per Tier 2 ARM2 ratios in U.S. EPA's 40 CFR Part 51 Appendix W, Section 4.2.3.4. Conversion of NO_x to NO₂ use U.S. EPA minimum and maximum default values NO₂/NO_x of 0.5 and 0.9, respectively.
- This comparison is to the federal NAAQS, which is a 98th percentile threshold. The background concentration is the average of the 8th highest daily maximum 1-hour concentration.
- The thresholds for PM₁₀ and PM_{2.5} are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The results of the refined AAQS modeling demonstrate that maximum off-site concentrations from operational emissions would not exceed any applicable NAAQS, CAAQS or SCAQMD thresholds and localized impacts are predicted to be less than significant. These results further demonstrate that the basis of the less than significant conclusion stated in the IS/MND was valid and appropriate.

- 2-7 The comment addresses Mitigation Measure MM AQ-1, suggesting that the City should not claim it as a mitigation measure if it is an applicable permit condition on the generators. The comment then suggests the City should consider additional mitigation measures.

The current Permits to Operate, numbered G65311 through G65314 and G65319 through G65322, issued to Nash DC, LLC under SCAQMD Facility ID 194472, contain language similar to or identical to the following condition related to maintenance and testing:

4. 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 purposes] and no more than 4.2 hours in any one month for maintenance and testing purposes.

MM AQ-1, limiting the daily time allowed for maintenance, training, and testing activities of one or multiple engines, is separate and different from the permit condition establishing monthly and annual limits on maintenance and testing for each engine. MM AQ-1 results in daily NOx emissions below the applicable operational CEQA threshold. Thus, consideration of other mitigation measures is not warranted.

- 2-8 In this comment, the SCAQMD suggests the City include a discussion of equipment that will require SCAQMD permits and identify SCAQMD as a Responsible Agency. In IS/MND Table 2-3, the generators included as part of the Project and included in the SCAQMD permits were identified. The Project includes Tier 2 diesel-powered generator sets. Five of the generators are 2,300 kw (3516C or similar) and two generators are 1,250 kw (C-32 or similar). As noted in Appendix A, proposed generators (CAT 3516C or similar) are EPA Tier 2 certified and certified through SCAQMD, and therefore meet the emission limits set under Rule 1470(c) (2)(C)(vii). Emission factors of proposed CAT 3516C are based on Certified Equipment Permits (CEP) Application Number 554732. To clarify the equipment types that would require a permit, the IS/MND is revised as presented below.

IS/MND Page 36 revised as follows:

The Project’s operations were analyzed for impacts concerning the additional seven generators; see Appendix A for model inputs, and see Table 2-2 2-3 for the quantity and engine type of the proposed generators. The Project includes Tier 2 diesel-powered generator sets. Five of the generators are 2,300 kw (3516C or similar) and two generators are 1,250 kw (C-32 or similar). As noted in Appendix A, proposed generators (CAT 3516C or similar) are EPA Tier 2 certified and certified through SCAQMD, and therefore meet the emission limits set under Rule 1470(c) (2)(C)(vii). Emission factors of proposed CAT 3516C are based on Certified Equipment Permits (CEP) Application Number 554732. Cumulative impacts included the existing eight generators plus the additional seven generators, as detailed below.

Additionally, the comment suggested the City to identify which SCAQMD Rules apply to the proposed Projects’ equipment. Corrections will be made in the IS/MND as shown below.

IS/MND Page 47 is revised as follows:

Additionally, adherence to SCAQMD rules and regulations, specifically Rule 431.2, Sulfur Content of Liquid Fuels¹⁵ and Rule 1110.2, Emissions from Gaseous and Liquid-Fueled Engines¹⁶, which would alleviate potential impacts related to cumulative or future conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant.

¹⁵ South Coast AQMD. Rule 431.2 – Sulfur Content of Liquid Fuels. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf>

¹⁶ South Coast AQMD. Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines. Accessed at: <http://www.aqmd.gov/docs/default-source>.

- 2-9 The comment is general in nature, summarizing the requirement, in accordance with the CEQA guidelines, for the City to consider comments received during the public review process when considering adoption of an IS/MND. The comment further requests that the City give reasons why specific comments and suggestions are not accepted.

The responses provided herein address each of the SCAQMD’s suggestions and comments, as required. The responses, along with the revisions to the IS/MND, provide the evidence needed for the City to consider adoption of the IS/MND.

3.0 ERRATA TO THE IS/MND

Text changes are intended to clarify or correct information in the Public Review IS/MND as initiated by the Lead Agency staff or due to comments raised during the public review period. Revisions to the Public Review IS/MND are presented below as excerpts, with deleted text indicated as strikethrough (~~example~~) and added/modified text indicated as double underline (example).

~~Deleted IS/MND text~~ Added IS/MND text

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The Project's operations were analyzed for impacts concerning the additional seven generators; see Appendix A for model inputs, and see Table 2-2 2-3 for the quantity and engine type of the proposed generators. The Project includes Tier 2 diesel-powered generator sets. Five of the generators are 2,300 kw (3516C or similar) and two generators are 1,250 kw (C-32 or similar). As noted in Appendix A, proposed generators (CAT 3516C or similar) are EPA Tier 2 certified and certified through SCAQMD, and therefore meet the emission limits set under Rule 1470(c) (2)(C) (vii). Emission factors of proposed CAT 3516C are based on Certified Equipment Permits (CEP) Application Number 554732. Cumulative impacts included the existing eight generators plus the additional seven generators, as detailed below.

IS/MND Page 39 revised as follows:

...Mitigation Measure AQ-1 requires that generator run time associated with maintenance, staff training, and testing be limited to a cumulative total of not more than 108 minutes on any single day to no more than 140 minutes for all generators in the entire facility (up to 15 generators). A non-resettable hour meter capable of tracking to at least one-tenths of an hour, shall be installed and maintained on each generator. In addition, an engine operating log shall be maintained by the Applicant that shall list the daily run time each or any engine was operated for the purpose of maintenance, staff training, and/or testing. The engine operating log shall record each time the engine is manually started including the date of operation, the specific reason for operation, and the totalizing hour meter reading (in hours and tenths of hours) at the beginning and end of operation or operations for a specific date. Engine operating logs shall be retained on-site for a minimum of five calendar years and shall be made available to a City representative upon request. Further, upon request from the City but no more than one time per year, the Applicant shall have the engine manufacturers' service provider download from the engines' CPU the engines' run time for the year including date specific run times and fuel utilization.

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Table 4.3-5: Operational Emissions (Maximum Pounds Per Day)						
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Unmitigated Scenarios						
Generators ³	7.98	412.86	68.74	0.70	5.74	5.74
Project Trips	0.03	0.03	0.52	>0.01	0.19	0.05
Total	8.01	412.89	69.26	0.70	5.93	5.79
SCAQMD Threshold	55.00	55.00	550.00	150.00	150.00	55.00
SCAQMD Threshold Exceeded?	No	Yes	No	No	No	No
Mitigated Scenario²						
Generators ³	0.41 <u>2.02</u>	25.19 <u>54.66</u>	3.73 <u>10.96</u>	0.04 <u>0.09</u>	0.34 <u>0.72</u>	0.34 <u>0.72</u>
Project Trips	0.03	0.03	0.52	>0.01	0.19	0.05
Total	0.44 <u>2.05</u>	25.22 <u>54.69</u>	4.25 <u>11.48</u>	0.04 <u>0.09</u>	0.53 <u>0.19</u>	0.39 <u>0.77</u>
SCAQMD Threshold	55.00	55.00	550.00	150.00	150.00	55.00
SCAQMD Threshold Exceeded?	No	No	No	No	No	No
Notes:						
<ol style="list-style-type: none"> 1. Emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0, as recommended by the SCAQMD. Worst-case seasonal maximum daily emissions are reported. 2. Mitigated emissions include compliance with Mitigation Measure AQ-1, which requires that generator maintenance and testing be limited on any single day to no more than 440 108 minutes for the entire facility (15 generators). 3. Potential to emit (PTE) of an engine is based on the 50 hour per year limit on maintenance and testing operations, in accordance with South Coast AQMD's policy and procedures No. EC-02-09, dated 2/24/2009. 						

IS/MND Page 42 is revised as follows:

Table 4.3-6: Significance of Localized Emissions				
Source/Activity	Emissions (pounds per day)¹			
	NO_x	CO	PM₁₀	PM_{2.5}
Construction Emissions				
Demolition 2022	16.81	13.19	1.76	0.93
Grading 2022	11.78	6.55	8.73	4.55
Building Construction 2022	14.15	13.90	0.72	0.68
Paving 2022	7.85	9.24	0.39	0.36
SCAQMD Localized Screening Threshold (1 acre of disturbance at 100 meters)	107	1,156	28	9
Exceed SCAQMD Threshold?	No	No	No	No
Operational Emissions				
On-Site Emissions (Generators) ¹	25.31 <u>54.69</u>	4.37 <u>11.48</u>	0.54 <u>0.19</u>	0.95 <u>0.77</u>
SCAQMD Localized Screening Threshold (1 acre of disturbance at 50 meters)	107	1,156	7	3
Exceed SCAQMD Threshold?	No	No	No	No
1. Source: CalEEMod version 2020.4.0. Refer to Appendix A: Air Quality and Greenhouse Gas Technical Memorandum for model data outputs. 2. This includes Mitigation Measure AQ-1 which limits maintenance and testing of the emergency generators.				

IS/MND Page 47 is revised as follows:

Additionally, adherence to SCAQMD rules and regulations, specifically Rule 431.2, Sulfur Content of Liquid Fuels¹⁵ and Rule 1110.2, Emissions from Gaseous and Liquid-Fueled Engines¹⁶, which would alleviate potential impacts related to cumulative or future conditions on a project-by-project basis. Project operations would not contribute a cumulatively considerable net increase of any nonattainment criteria pollutant.

¹⁵ South Coast AQMD. Rule 431.2 – Sulfur Content of Liquid Fuels. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf>

¹⁶ South Coast AQMD. Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1110-2.pdf>.

IS/MND Page 47 is revised as follows:

Mitigation Measures

MM AQ-1 Generator run time associated with maintenance, staff training, and testing shall be limited to a cumulative total of not more than 108 minutes on any single day for all generators in the facility. A non-resettable totalizing hour meter capable of tracking to at least one-tenth of an hour shall be installed and maintained on each generator. In addition, an engine operating log shall be maintained by the Applicant that shall list the daily run time that each or any engine was operated for the purposes of maintenance, staff training and/or testing. The engine operating log shall record each time the subject engine is manually started including the date of operation, the specific reason for operation, and the totalizing hour meter reading (in hours and tenths of hours) at the beginning and end of operation or operations for the specific date. Engine operating logs shall be retained on-site for a minimum of five calendar years and shall be made available to a City representative upon request. Further, upon request from the City but no more than one time per year, the Applicant shall have the engine manufacturers' service provider download from the engines' CPU the engines' run time for the year including date specific run times and fuel utilization. Generator maintenance, staff training, and testing shall be limited on any single day to no more than 110 minutes for the entire facility (up to 15 generators).

IS/MND Page 73 revised as follows:

The drywell would also include a Bio Clean Screening Filter that would pre-treat captured water [stormwater runoff] before its return to the wastewater system City storm drain.



APPENDIX A: COMMENT LETTERS



November 18, 2022

Ref. DOC 6748179

Mr. Eduardo Schonborn
City of El Segundo
350 Main Street
El Segundo, CA 90245

Dear Mr. Schonborn:

NOI Response to 444 North Nash Street Data Center Project (EA-971, Revision A)

The Los Angeles County Sanitation Districts (Districts) received a Notice of Intent (NOI) to Adopt a Mitigated Negative Declaration (MND) for the subject project on November 3, 2022. The proposed project is located within the jurisdictional boundaries of District No. 5. We offer the following comment:

- **Section 4.10 Hydrology and Water Quality**, *response to item 4.10a*, first paragraph on page 73 of the MND: the response stated that “The drywell would also include a Bio Clean Screening Filter that would pre-treat captured water [stormwater runoff] before its return to the wastewater system.” Please note that any discharge of rainwater to the Districts’ sewerage system is prohibited without prior approval. Controlled discharge of rainwater or stormwater to the sewerage system may be allowed on a case-by-case basis and would require a Districts’ permit for Industrial Wastewater Discharge. Project developers should contact the Districts’ Industrial Waste Section at (562) 908-4288, extension 2900, to reach a determination on this matter. Project developers will be required to forward copies of final plans and supporting information for the proposed project to the Districts for review and approval before beginning project construction. For additional Industrial Wastewater Discharge Permit information, please visit <https://www.lacsd.org/services/wastewater-programs-permits/industrial-waste-pretreatment-program/industrial-wastewater-discharge-permits>.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2743, or mandyhuffman@lacsd.org.

Very truly yours,

Mandy Huffman

Mandy Huffman
Environmental Planner
Facilities Planning Department

MNH:mnh

cc: J. Chung



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:

November 23, 2022

eschonborn@elsegundo.org

Eduardo Schonborn, Planning Manager
City of El Segundo, Community Development Department
350 Main Street,
El Segundo, CA 90245

**Public Review Initial Study/Mitigated Negative Declaration (IS/MND) for the Proposed
444 North Nash Street Data Center Project (Proposed Project)
(State Clearinghouse No. 2022110041)**

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The City of El Segundo is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project. The following comments include reviewing the requirements in CEQA Statute & Guidelines, recommended revisions to the CEQA regional and localized operation air quality impacts analysis, air quality mitigation measures, and information about South Coast AQMD rules and permits that the Lead Agency should incorporate in the Revised or Final IS/MND.

South Coast AQMD Staff's Summary of Project Information in the IS/MND

Based on the IS/MND, the Lead Agency proposes to install up to seven additional emergency backup diesel generators on a 0.5-acre portion of an approximately 6.14-acre property,¹ which results in a total of 15 backup diesel generators.² The Proposed Project would have four backup generators installed on platforms on top of existing generators, and three other backup generators would be built on concrete foundations.³ The Proposed Project is located at 444 North Nash Street, El Segundo.⁴ Based on a review of aerial photographs, South Coast AQMD staff found that the nearest sensitive receptor (e.g., Da Vinci School) is approximately 1,300 feet south-southeast of the Proposed Project. Construction of the Proposed Project is anticipated to last approximately two months, beginning in mid-2022 and ending in late 2022.⁵

South Coast AQMD Staff's Comments

Recommend reviewing the requirements in CEQA Statute & Guidelines, providing background information on the facility, and making determinations on the type of appropriate CEQA document, baseline, and scope to be used for the Proposed Project

¹ IS/MND. Page 7.

² *Ibid.* Page 14.

³ *Ibid.*

⁴ *Ibid.* Page 7.

⁵ *Ibid.* Page 21.

Pursuant to State CEQA Guidelines Article 4 and Article 5, the environmental setting, scope, and baseline of IS/MND prepared and conducted by the Lead Agency for the Proposed Project amend Environmental Assessment No. EA-971 should be consistent with the original IS/MND (2012 discretionary City approval for the existing data center and up to 14 emergency backup diesel generators). However, it appears the IS/MND uses only the northeast portion of the property and includes the seven additional emergency generators when defining the scope and baseline of the Proposed Project for the environmental impact assessment. In addition, South Coast AQMD is the responsible agency for the permitted and proposed emergency engines. However, the background information of the facility (e.g., South Coast AQMD's facility ID and permit numbers of those permitted equipment) is not provided. The original IS/MND is also not available on the website to verify facility design information, including the permit conditions and the technical specifications for the emergency engine equipment. It is unclear what basis was used to evaluate the environmental impacts in the original IS/MND. It is recommended that the Lead Agency review the requirement in CEQA Statute & Guidelines, providing background information on the facility, and making determinations on the type of appropriate CEQA document, baseline, and scope to be used for the Proposed Project.

Recommend Revisions to the CEQA Regional Operation Air Quality Impacts Analysis

Regional Operational Emissions Analysis

In the IS/MND, the Lead Agency discusses and concludes that the Proposed Project's unmitigated operational emissions would exceed the South Coast AQMD CEQA regional air quality significance thresholds for NOx emissions.⁶ Due to the NOx emissions exceedance, the Lead Agency proposes Mitigation Measures (MM) AQ-1 to limit the generator maintenance, staff training, and testing on any single day to no more than 110 minutes for the entire facility of up to 15 generators.⁷ Hence, the Proposed Project's mitigated operational emissions are reduced and less than the South Coast AQMD CEQA regional air quality significance thresholds.⁸ Table 4.3-5: Operational Emissions (Maximum pounds per day) in the IS/MND show unmitigated and mitigated operation emissions, with the emissions calculated using California Emissions Estimator Model (CalEEMod).⁹ However, the operational emissions from CalEEMod output files¹⁰ and the emissions calculations spreadsheet in Appendix D¹¹ do not match the values presented in the IS/MND. For instance, the IS/MND shows the NOx emissions as 412.89 lbs/day (unmitigated) and 25.19 lbs/day (mitigated),¹² but the CalEEMod output files and the emissions calculations spreadsheet in Appendix D show different values. Therefore, South Coast AQMD staff is not able to verify any of the unmitigated and mitigated operational emissions in the IS/MND and its appendices. South Coast AQMD staff recommends that the Lead Agency provide a more detailed explanation of how the operational emissions are calculated with supporting evidence and include them in the Revised or Final IS/MND. Alternatively, if the explanation is not provided in the Revised or Final IS/MND to verify the emissions values, the Lead Agency should review and

⁶ *Ibid.* Page 39.

⁷ *Ibid.* Page 47.

⁸ *Ibid.* Page 39.

⁹ *Ibid.* Page 40.

¹⁰ Appendix A. CalEEMod Output Files.

¹¹ Appendix D. Page 12 of PDF.

¹² IS/MND. Page 40.

revise both IS/MND, CalEEMod output files, and the emissions calculations spreadsheet to ensure that all documents present the emissions consistently to avoid any discrepancies and include the revisions in the Revised or Final IS/MND. If the revisions are not included in the Revised or Final IS/MND, the Lead Agency should provide reasons for not having it supported by substantial evidence in the record.

In addition, the Lead Agency discusses that with the proposed MM AQ-1, the mitigated operation emissions are less than South Coast AQMD CEQA Regional Operational Air Quality Significance Thresholds.¹³ South Coast AQMD staff is not able to verify and replicate the mitigated operation emissions that the Lead Agency includes in the IS/MND due to the lack of supporting evidence. Based on the emissions calculations spreadsheet in Appendix D, the Caterpillar 3516C, rated at 3,643 horsepower (hp), has the highest NOx emission factors out of 15 generators. Therefore, South Coast AQMD staff uses this generator model's emissions factor to re-calculate the mitigated operation emissions by using the proposed limit of 110 minutes as the maximum operating time for more conservative results and finds that the mitigated NOx emission is 55.67 lbs/day, which slightly exceeds the South Coast AQMD CEQA Regional Operational Air Quality Significance Thresholds for NOx. It is recommended that the Lead Agency review the definitions of CEQA Environmental Setting for the project baseline (per CEQA Guidelines Section 15125) for the Proposed Project, determine which emission source would be included and result in an emissions increase, and revise the emission calculations with the most accurate and conservative results and include them in the Revised or Final IS/MND. If the mitigated operational NOx emissions are found to be exceeded the significance thresholds, the Lead Agency should propose and discuss other additional air quality mitigation measures to further reduce the emissions, re-calculate operation emissions with the implementation of new mitigation measures, and include them in the Revised or Final IS/MND. If the revision and/or new air quality mitigation measures are not included in the Revised or Final IS/MND, the Lead Agency should provide reasons for not having it supported by substantial evidence in the record.

Localized Operational Emissions Analysis

In the IS/MND, the Lead Agency discusses the localized construction and operation emissions and shows in Table 4.3-6: Significance of Localized Emissions.¹⁴ The localized emissions are calculated using the Mass Rate LST Lookup Table in the IS/MND.¹⁵ However, based on the aerial maps, the Proposed Project is surrounded by two-stories buildings. Therefore, South Coast AQMD staff suggests the Lead Agency re-evaluate the localized operational emissions by conducting dispersion modeling to include building downwash in order to predict more accurate and conservative results, determine the significance levels, and include the revised localized operation emissions in the Revised or Final IS/MND. If the revision is not included in the Revised or Final IS/MND, the Lead Agency should provide reasons for not having it supported by substantial evidence in the record.

¹³ *Ibid.* Page 47.

¹⁴ *Ibid.* Page 42.

¹⁵ South Coast AQMD LST Mass Rate Lookup Table can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

Recommend Revisions to the Air Quality Mitigation Measures

In the IS/MND, the Lead Agency proposes Mitigation Measure MM AQ-1 as “Generator maintenance, staff training, and testing shall be limited on any single day to no more than 110 minutes for the entire facility (up to 15 generators).¹⁶ However, if this statement is one of the permit conditions for the generators, the Lead Agency should not claim it as a mitigation measure since the Lead Agency needs to have those generators in compliance pursuant to the permit conditions. Additionally, as mentioned in the first comment, if the mitigated operation NOx emissions exceed the South Coast AQMD CEQA Regional Operational Air Quality Significance Thresholds, other additional mitigation measures should be considered and discussed in the Revised or Final IS/MND to further reduce the NOx emissions to be below the significance thresholds. Therefore, South Coast AQMD staff recommends that the Lead Agency proposes and discusses other additional mitigation measures to further reduce the operational emissions of the Proposed Project and includes them in the Revised or Final IS/MND. If the revision is not included in the Revised or Final IS/MND, the Lead Agency should provide reasons for not having it supported by substantial evidence in the record.

Responsible Agency and South Coast AQMD Permits

In the event that the Proposed Project or implementation of the Proposed Project requires modifying the existing or the use of new stationary equipment, permits from South Coast AQMD are required unless a written permit is not required.¹⁷ The Lead Agency should use good-faith effort to include a discussion of equipment that will require South Coast AQMD permits and identify South Coast AQMD as a Responsible Agency for the Proposed Project in the Revised or Final IS/MND. If any activities involve using equipment that either emits or controls air pollution, the Lead Agency should consult with South Coast AQMD staff to determine whether or not permits or plans are required and approved by South Coast AQMD prior to the construction and operation. The Lead Agency should determine which South Coast AQMD Rules apply to the Proposed Projects’ equipment, such as Rule 431.2 – Sulfur Content of Liquid Fuels¹⁸ and Rule 1110.2 – Emissions from Gaseous and Liquid-Fueled Engines,¹⁹ will be applicable and discussed in the Revised or Final IS/MND. Please contact South Coast AQMD’s Engineering and Permitting staff at (909) 396-3385 or visit South Coast AQMD’s web page for more general information on permits: <http://www.aqmd.gov/home/permits>.

Conclusion

According to CEQA Guidelines Section 15074, prior to approving the Proposed Project, the Lead Agency shall consider the IS/MND for adoption together with any comments received during the public review process. Please provide South Coast AQMD with written responses to all comments contained herein prior to the adoption of the Revised or Final IS/MND. When the Lead Agency’s position is at variance with recommendations raised in the comments, the issues raised in the comments should be addressed in detail, giving reasons why specific comments and suggestions

¹⁶ IS/MND. Page 47.

¹⁷ South Coast AQMD. Rule 219. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-ii/Rule-219.pdf>.

¹⁸ South Coast AQMD. Rule 431.2 – Sulfur Content of Liquid Fuels. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf>.

¹⁹ South Coast AQMD. Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines. Accessed at: <http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1110-2.pdf>.

are not accepted. There should be good faith and reasoned analysis in response. Conclusory statements unsupported by factual information do not facilitate the purpose and goal of CEQA on public disclosure and are not meaningful, informative, or useful to decision-makers and the public who are interested in the Proposed Project.

South Coast AQMD staff is available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact Danica Nguyen, Air Quality Specialist, at dnguyen1@aqmd.gov should you have any questions.

Sincerely,

Sam Wang

Sam Wang

Program Supervisor, CEQA-IGR

Planning, Rule Development, and Implementation

SW:DN

LAC221108-09

Control Number



APPENDIX B: AAQS SUPPLEMENTAL MEMO

MEMORANDUM

To: Mr. Eduardo Schonborn
Planning Manager, City of El Segundo

From: Heidi Rous and Noemi Wyss
Kimley-Horn and Associates, Inc.

Date: January 18, 2023

Subject: 444 Nash Street IS/MND – AAQS Modeling Technical Memorandum

Methodology

This technical memorandum was prepared to summarize the analysis performed to determine whether the project would cause or contribute significantly to an ambient air quality standards (AAQS) from routine testing of emergency generators proposed to be located at 444 Nash Street, in El Segundo, California (Project Site). The methodology implemented is consistent with applicable SCAQMD guidance which largely follows Office of Environmental Health Hazard Assessment (OEHHA) but includes some notable local preferences, as discussed below.

Dispersion Modeling

The air dispersion modeling for the operational risk assessment was performed using United States Environmental Protection Agency (U.S. EPA) AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. AERMOD regulatory defaults, the “Urban” modeling option for the County, and “Elevated” terrain were used for this analysis. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the project. Surface and upper air meteorological data is provided by CARB. Surface and upper air meteorological data from the Los Angeles International Airport was selected as being the most representative for meteorology based on proximity to the project site.

Emissions of nitrogen dioxide (NO₂), carbon monoxide (CO), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}) were calculated based on the largest generator’s emission rates, which is conservative since regular maintenance and testing may involve short-duration operations from multiple generator models, including those with lower

emission rates. The emission sources were entered into AERMOD as point sources with a release height of 20 feet (6.1 meters), which is appropriate for emergency generators

AERMOD was run to obtain the peak 1-hour, 8-hour, 24-hour and annual average (period) concentrations in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) at the nearby receivers at the property line and beyond. According to the SCAQMD, in order “to identify the maximum impacted receptors ... a grid spacing of 100 meters or less must be used” (see page 16 of SCAQMD’s Supplemental Guidelines). Due to the size of the Project site, receptors were modeled with a maximum of 50-meter grid spacing. The receiver grid extended 1,000 feet in every direction from the Project Site boundary. In addition, National Elevation Dataset (NED) terrain data was imported into AERMOD for the Project. The modeling and analysis was prepared in accordance with the SCAQMD Modeling Guidance for AERMOD.¹ To incorporate the building downwash analysis the existing onsite building was digitized with a height of 10.67 meters (35 feet) and a plant boundary was drawn surrounding the Project site. The building profile input program (BPIP) was run to incorporate into the AERMOD program. The outputs from AERMOD include potential downwash effects.

Background of Air Quality Standards

For the purposes of establishing background concentrations of applicable criteria pollutants, this AAQA relied on SCAQMD monitoring values, the raw data for which were collected during the years 2020, 2019, and 2018 at CARB/SCAQMD monitoring stations. Background values were selected from the monitoring station with the closest proximity to the Project site and from the year with the highest NO_2 , CO, PM_{10} . And $\text{PM}_{2.5}$ concentrations.

AAQS Modeling Analysis

Dispersion modeling was performed using the SCAQMD-preferred model, AERMOD, including building downwash considerations. Emissions were calculated using project-specific emission data and factors. The maximum off-site concentrations of NO_2 and CO from Project operations were added to the appropriate historical background concentrations and compared to the applicable AAQS. If an AAQS is not exceeded, the project is judged to not cause or contribute substantively to an AAQS violation for that pollutant. The SCAQMD has developed alternative significant impact thresholds for fugitive emissions of PM_{10} and $\text{PM}_{2.5}$, as shown in Table A: Maximum Off-Site Concentrations from Operations. If a source’s maximum impacts are below the applicable significant impact thresholds,

¹ South Coast Air Quality Management District, *SCAQMD Modeling Guidance for AERMOD*, www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/modeling-guidance, accessed January 19, 2022.

the project is judged to not cause or contribute significantly to an AAQS violation or cause an increment violation.

As shown on Table A, maximum emissions from the Project during routine generator maintenance and testing will not cause or contribute to a violation of an applicable NO₂ or CO NAAQS or CAAQS or cause an increment exceedance of the SCAQMD significant impact levels for the annual and 24-hour averaging periods for PM₁₀ and PM_{2.5}.

Table A: Maximum Off-Site Concentrations from Operations							
Pollutant	Averaging Time	Maximum Modeled Concentration (µg/m³)	Background Concentration (ppm)	Background Concentration¹ (µg/m³)	Total Ground Level Concentration (µg/m³)	SCAQMD Threshold (µg/m³)²	Threshold Exceeded?³
NO ₂ ⁴	1-hour	140.81	0.0597	112.34	253.15	339 (state)	No
	1-hour ⁵	55.49	0.0509	95.78	151.27	188 (federal)	No
	Annual	0.79	0.0095	17.88	18.67	57 (state)	No
	Annual					100 (federal)	No
CO	1-hour	5.39	1.6	1,832.97	1,838.36	23,000 (state)	No
	1-hour					40,000 (federal)	No
	8-hour	2.83	1.3	1,489.29	1,492.12	10,000 (state/fed)	No
PM ₁₀ ⁶	24-hour	0.13	--	--	0.13	2.5 (SCAQMD)	No
	Annual	0.01	--	--	0.01	1.0 (SCAQMD)	No
PM _{2.5} ⁶	24-hour	0.13	--	--	0.13	2.5 (SCAQMD)	No

Notes:

- Background concentrations are from the Southwest Coastal LA County Station #820 (2020).
- All thresholds are shown in micrograms per cubic meter (µg/m³) for comparison to modeled concentrations.
- Exceedances of the thresholds are indicated in bold.
- NO₂ concentrations were calculated per Tier 2 ARM2 ratios in U.S. EPA's 40 CFR Part 51 Appendix W, Section 4.2.3.4. Conversion of NO_x to NO₂ use U.S. EPA minimum and maximum default values NO₂/NO_x of 0.5 and 0.9, respectively.
- This comparison is to the federal NAAQS, which is a 98th percentile threshold. The background concentration is the average of the 8th highest daily maximum 1-hour concentration.
- The thresholds for PM₁₀ and PM_{2.5} are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

Conclusion

The results of the refined AAQS modeling demonstrate that maximum off-site concentrations from operational emissions would not exceed any applicable NAAQS, CAAQS or SCAQMD thresholds and localized impacts are predicted to be less than significant.

Appendix A

Modeling Data

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** AERMOD Input Produced by:
** AERMOD View Ver. 11.0.1
** Lakes Environmental Software Inc.
** Date: 1/10/2023
** File: C:\Lakes\AERMOD View\Ollie\Ollie__PM10\Ollie__PM10.ADI
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** AERMOD Control Pathway
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CO STARTING
  TITLEONE C:\Lakes\AERMOD View\Ollie\Ollie__PM10\Ollie__PM10.isc
  MODELOPT DFAULT CONC
  AVERTIME 24 ANNUAL
  URBANOPT 10040000 LA_County
  POLLUTID PM_10
  RUNORNOT RUN
  ERRORFIL Ollie__PM10.err

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CO FINISHED

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** AERMOD Source Pathway
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SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
  LOCATION STCK1      POINT      371900.716   3754412.638       30.880
** DESCRSRC Generator 1 (3516C)
** Source Parameters **
  SRCPARAM STCK1      0.005047222      5.000      763.850  224.390836796445      0.229

```

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** Building Downwash **
  BUILDHGT STCK1      10.67      10.67      10.67      10.67      10.67      10.67
  BUILDHGT STCK1      10.67      10.67      0.00      0.00      0.00      0.00
  BUILDHGT STCK1      0.00      0.00      0.00      0.00      10.67      0.00
  BUILDHGT STCK1      0.00      10.67      10.67      10.67      10.67      10.67
  BUILDHGT STCK1      10.67      10.67      0.00      0.00      0.00      0.00
  BUILDHGT STCK1      0.00      0.00      0.00      0.00      10.67      10.67

  BUILDWID STCK1      113.75      124.11      130.70      133.31      131.87      126.43

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EMISFACT STCK1 HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT STCK1 HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL

SO FINISHED

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** AERMOD Receptor Pathway

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RE FINISHED

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** AERMOD Meteorology Pathway

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ME STARTING

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PROFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.PFL

SURFDATA 23174 2012 LOS_ANGELES/INT'L_ARPT

UAIRDATA 3190 2012

PROFBASE 30.0 METERS

ME FINISHED

**

** AERMOD Output Pathway

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OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 24 1ST

** Maximum Annual Average POST files for Each Met Year

POSTFILE ANNUAL ALL PLOT OLLIE__PM10.AD\ANNUAL_G001.PLT 31

** Auto-Generated Plotfiles

PLOTFILE 24 ALL 1ST OLLIE__PM10.AD\24H1GALL.PLT 32

PLOTFILE ANNUAL ALL OLLIE__PM10.AD\AN00GALL.PLT 33

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OU FINISHED

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** Project Parameters

** PROJCTN CoordinateSystemUTM

** DESCPTN UTM: Universal Transverse Mercator

** DATUM World Geodetic System 1984

** DTMRGN Global Definition

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** ZONE     11
** ZONEINX  0
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** AERMOD Input Produced by:

** AERMOD View Ver. 11.0.1

** Lakes Environmental Software Inc.

** Date: 1/10/2023

** File: C:\Lakes\AERMOD View\Ollie\Ollie_CO\Ollie_CO.ADI

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** AERMOD Control Pathway

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CO STARTING

TITLEONE C:\Lakes\AERMOD View\Ollie\Ollie_CO\Ollie_CO.isc

MODELOPT DFAULT CONC

AVERTIME 1 8

URBANOPT 10040000 LA_County

POLLUTID CO

RUNORNOT RUN

ERRORFIL Ollie_CO.err

CO FINISHED

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** AERMOD Source Pathway

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SO STARTING

** Source Location **

** Source ID - Type - X Coord. - Y Coord. **

LOCATION	STCK1	POINT	371900.716	3754412.638	30.880
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** DESCRSRC Generator 1 (3516C)

** Source Parameters **

SRCPARAM	STCK1	0.045425	5.000	763.850	224.390836796445	0.229
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** Building Downwash **

BUILDHGT	STCK1	10.67	10.67	10.67	10.67	10.67	10.67
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BUILDHGT	STCK1	10.67	10.67	0.00	0.00	0.00	0.00
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BUILDHGT	STCK1	0.00	0.00	0.00	0.00	10.67	0.00
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BUILDHGT	STCK1	0.00	10.67	10.67	10.67	10.67	10.67
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BUILDHGT	STCK1	10.67	10.67	0.00	0.00	0.00	0.00
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BUILDHGT	STCK1	0.00	0.00	0.00	0.00	10.67	10.67
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BUILDWID	STCK1	113.75	124.11	130.70	133.31	131.87	126.43
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EMISFACT STCK1 HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT STCK1 HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL

SO FINISHED

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** AERMOD Receptor Pathway

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RE FINISHED

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** AERMOD Meteorology Pathway

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ME STARTING

SURFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.SFC

PROFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.PFL

SURFDATA 23174 2012 LOS_ANGELES/INT'L_ARPT

UAIRDATA 3190 2012

PROFBASE 30.0 METERS

ME FINISHED

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** AERMOD Output Pathway

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OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 1 1ST

RECTABLE 8 1ST

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST OLLIE_CO.AD\01H1GALL.PLT 31

PLOTFILE 8 ALL 1ST OLLIE_CO.AD\08H1GALL.PLT 32

SUMMFILE Ollie_CO.sum

OU FINISHED

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** Project Parameters

** PROJCTN CoordinateSystemUTM

** DESCPTN UTM: Universal Transverse Mercator

** DATUM World Geodetic System 1984

** DTMRGN Global Definition

** UNITS m

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** ZONE    11
** ZONEINX 0
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** AERMOD Input Produced by:

** AERMOD View Ver. 11.0.1

** Lakes Environmental Software Inc.

** Date: 1/10/2023

** File: C:\Lakes\AERMOD View\Ollie\Ollie_NOx\Ollie_NOx.ADI

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** AERMOD Control Pathway

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CO STARTING

TITLEONE C:\Lakes\AERMOD View\Ollie\Ollie_NOx\Ollie_NOx.isc

MODELOPT DFAULT CONC ARM2

AVERTIME 1 ANNUAL

URBANOPT 10040000 LA_County

POLLUTID NO2

RUNORNOT RUN

** NO2 Conversion Options

ARMRATIO 0.500 0.900

ERRORFIL Ollie_NOx.err

CO FINISHED

**

** AERMOD Source Pathway

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SO STARTING

** Source Location **

** Source ID - Type - X Coord. - Y Coord. **

LOCATION STCK1 POINT 371900.716 3754412.638 30.880

** DESCRSRC Generator 1 (3516C)

** Source Parameters **

SRCPARAM STCK1 0.382579444 5.000 763.850 224.390836796445 0.229

** Building Downwash **

BUILDHGT STCK1 10.67 10.67 10.67 10.67 10.67 10.67

BUILDHGT STCK1 10.67 10.67 0.00 0.00 0.00 0.00

BUILDHGT STCK1 0.00 0.00 0.00 0.00 10.67 0.00

BUILDHGT STCK1 0.00 10.67 10.67 10.67 10.67 10.67

BUILDHGT STCK1 10.67 10.67 0.00 0.00 0.00 0.00

BUILDHGT STCK1 0.00 0.00 0.00 0.00 10.67 10.67

BUILDWID	STCK1	113.75	124.11	130.70	133.31	131.87	126.43
BUILDWID	STCK1	117.15	104.30	0.00	0.00	0.00	0.00
BUILDWID	STCK1	0.00	0.00	0.00	0.00	113.75	0.00
BUILDWID	STCK1	0.00	124.11	130.70	133.31	131.87	126.43
BUILDWID	STCK1	117.15	104.30	0.00	0.00	0.00	0.00
BUILDWID	STCK1	0.00	0.00	0.00	0.00	113.75	99.94
BUILDLN	STCK1	104.30	117.15	126.43	131.87	133.31	130.70
BUILDLN	STCK1	124.11	113.75	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	104.30	0.00
BUILDLN	STCK1	0.00	117.15	126.43	131.87	133.31	130.70
BUILDLN	STCK1	124.11	113.75	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	104.30	88.29
XBADJ	STCK1	-126.31	-137.87	-145.24	-148.19	-146.65	-140.65
XBADJ	STCK1	-130.37	-116.13	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	5.19	0.00
XBADJ	STCK1	0.00	20.72	18.80	16.32	13.34	9.95
XBADJ	STCK1	6.26	2.38	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	-109.50	-110.91
YBADJ	STCK1	36.07	22.65	8.53	-5.84	-20.03	-33.62
YBADJ	STCK1	-46.18	-57.35	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	-59.26	0.00
YBADJ	STCK1	0.00	-22.65	-8.53	5.84	20.03	33.62
YBADJ	STCK1	46.18	57.35	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	59.26	48.40

URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"

** Variable Emission Scenario: "Scenario 2"

EMISFACT STCK1 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

EMISFACT STCK1 HROFDY 1.0 1.0 1.0 1.0 1.0 1.0

EMISFACT STCK1 HROFDY 1.0 1.0 1.0 1.0 0.0 0.0

EMISFACT STCK1 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED Ollie_NOx.rou

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.SFC

PROFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.PFL

SURFDATA 23174 2012 LOS_ANGELES/INT'L_ARPT

UAIRDATA 3190 2012

PROFBASE 30.0 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST 8TH

RECTABLE 1 1ST 8TH

** Maximum Annual Average POST files for Each Met Year

POSTFILE ANNUAL ALL PLOT OLLIE_NOX.AD\ANNUAL_G001.PLT 31

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST OLLIE_NOX.AD\01H1GALL.PLT 32

PLOTFILE 1 ALL 8TH OLLIE_NOX.AD\01H8GALL.PLT 33

PLOTFILE ANNUAL ALL OLLIE_NOX.AD\AN00GALL.PLT 34

MXDYBYR ALL OLLIE_NOX.AD\MXDYBYR_ALL_NO2.DAT 35

MAXDAILY ALL OLLIE_NOX.AD\MAXDAILY_ALL_NO2.DAT 36

SUMMFILE Ollie_NOx.sum

OU FINISHED

**

** Project Parameters

** PROJCTN CoordinateSystemUTM

** DESCPTN UTM: Universal Transverse Mercator

** DATUM World Geodetic System 1984

** DTMRGN Global Definition

** UNITS m

** ZONE 11

** ZONEINX 0

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** AERMOD Input Produced by:

** AERMOD View Ver. 11.0.1

** Lakes Environmental Software Inc.

** Date: 1/10/2023

** File: C:\Lakes\AERMOD View\Ollie\Ollie_NOx_1hr\Ollie_NOx_1hr.ADI

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** AERMOD Control Pathway

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CO STARTING

TITLEONE C:\Lakes\AERMOD View\Ollie\Ollie_NOx_1hr\Ollie_NOx_1hr.isc

MODELOPT DFAULT CONC ARM2

AVERTIME 1

URBANOPT 10040000 LA_County

POLLUTID NO2

RUNORNOT RUN

** NO2 Conversion Options

ARMRATIO 0.500 0.900

ERRORFIL Ollie_NOx_1hr.err

CO FINISHED

**

** AERMOD Source Pathway

**

**

SO STARTING

** Source Location **

** Source ID - Type - X Coord. - Y Coord. **

LOCATION STCK1 POINT 371900.716 3754412.638 30.880

** DESCRSRC Generator 1 (3516C)

** Source Parameters **

SRCPARAM STCK1 3.825794 5.000 763.850 224.390836796445 0.229

** Building Downwash **

BUILDHGT STCK1 10.67 10.67 10.67 10.67 10.67 10.67

BUILDHGT STCK1 10.67 10.67 0.00 0.00 0.00 0.00

BUILDHGT STCK1 0.00 0.00 0.00 0.00 10.67 0.00

BUILDHGT STCK1 0.00 10.67 10.67 10.67 10.67 10.67

BUILDHGT STCK1 10.67 10.67 0.00 0.00 0.00 0.00

BUILDHGT STCK1 0.00 0.00 0.00 0.00 10.67 10.67

BUILDWID	STCK1	113.75	124.11	130.70	133.31	131.87	126.43
BUILDWID	STCK1	117.15	104.30	0.00	0.00	0.00	0.00
BUILDWID	STCK1	0.00	0.00	0.00	0.00	113.75	0.00
BUILDWID	STCK1	0.00	124.11	130.70	133.31	131.87	126.43
BUILDWID	STCK1	117.15	104.30	0.00	0.00	0.00	0.00
BUILDWID	STCK1	0.00	0.00	0.00	0.00	113.75	99.94
BUILDLN	STCK1	104.30	117.15	126.43	131.87	133.31	130.70
BUILDLN	STCK1	124.11	113.75	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	104.30	0.00
BUILDLN	STCK1	0.00	117.15	126.43	131.87	133.31	130.70
BUILDLN	STCK1	124.11	113.75	0.00	0.00	0.00	0.00
BUILDLN	STCK1	0.00	0.00	0.00	0.00	104.30	88.29
XBADJ	STCK1	-126.31	-137.87	-145.24	-148.19	-146.65	-140.65
XBADJ	STCK1	-130.37	-116.13	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	5.19	0.00
XBADJ	STCK1	0.00	20.72	18.80	16.32	13.34	9.95
XBADJ	STCK1	6.26	2.38	0.00	0.00	0.00	0.00
XBADJ	STCK1	0.00	0.00	0.00	0.00	-109.50	-110.91
YBADJ	STCK1	36.07	22.65	8.53	-5.84	-20.03	-33.62
YBADJ	STCK1	-46.18	-57.35	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	-59.26	0.00
YBADJ	STCK1	0.00	-22.65	-8.53	5.84	20.03	33.62
YBADJ	STCK1	46.18	57.35	0.00	0.00	0.00	0.00
YBADJ	STCK1	0.00	0.00	0.00	0.00	59.26	48.40

URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"

** Variable Emission Scenario: "Scenario 2"

EMISFACT STCK1 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

EMISFACT STCK1 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

EMISFACT STCK1 HROFDY 1.0 0.8 0.0 0.0 0.0 0.0

EMISFACT STCK1 HROFDY 0.0 0.0 0.0 0.0 0.0 0.0

SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED Ollie_NOx_1hr.rou

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.SFC

PROFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.PFL

SURFDATA 23174 2012 LOS_ANGELES/INT'L_ARPT

UAIRDATA 3190 2012

PROFBASE 30.0 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST 8TH

RECTABLE 1 1ST 8TH

** Auto-Generated Plotfiles

PLOTFILE 1 ALL 1ST OLLIE_NOX_1HR.AD\01H1GALL.PLT 31

PLOTFILE 1 ALL 8TH OLLIE_NOX_1HR.AD\01H8GALL.PLT 32

MXDYBYR ALL OLLIE_NOX_1HR.AD\MXDYBYR_ALL_NO2.DAT 33

MAXDAILY ALL OLLIE_NOX_1HR.AD\MAXDAILY_ALL_NO2.DAT 34

SUMMFILE Ollie_NOx_1hr.sum

OU FINISHED

**

** Project Parameters

** PROJCTN CoordinateSystemUTM

** DESCPTN UTM: Universal Transverse Mercator

** DATUM World Geodetic System 1984

** DTMRGN Global Definition

** UNITS m

** ZONE 11

** ZONEINX 0

**

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**

** AERMOD Input Produced by:

** AERMOD View Ver. 11.0.1

** Lakes Environmental Software Inc.

** Date: 1/10/2023

** File: C:\Lakes\AERMOD View\Ollie\Ollie_PM2\Ollie_PM2.ADI

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** AERMOD Control Pathway

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**

CO STARTING

TITLEONE C:\Lakes\AERMOD View\Ollie\Ollie_PM2\Ollie_PM2.isc

MODELOPT DFAULT CONC

AVERTIME 24 PERIOD

URBANOPT 10040000 LA_County

POLLUTID PM_2.5

RUNORNOT RUN

ERRORFIL Ollie_PM2.err

CO FINISHED

**

** AERMOD Source Pathway

**

**

SO STARTING

** Source Location **

** Source ID - Type - X Coord. - Y Coord. **

LOCATION	STCK1	POINT	371900.716	3754412.638	30.880
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** DESCRSRC Generator 1 (3516C)

** Source Parameters **

SRCPARAM	STCK1	0.005047222	5.000	763.850	224.390836796445	0.229
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** Building Downwash **

BUILDHGT	STCK1	10.67	10.67	10.67	10.67	10.67	10.67
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BUILDHGT	STCK1	10.67	10.67	0.00	0.00	0.00	0.00
----------	-------	-------	-------	------	------	------	------

BUILDHGT	STCK1	0.00	0.00	0.00	0.00	10.67	0.00
----------	-------	------	------	------	------	-------	------

BUILDHGT	STCK1	0.00	10.67	10.67	10.67	10.67	10.67
----------	-------	------	-------	-------	-------	-------	-------

BUILDHGT	STCK1	10.67	10.67	0.00	0.00	0.00	0.00
----------	-------	-------	-------	------	------	------	------

BUILDHGT	STCK1	0.00	0.00	0.00	0.00	10.67	10.67
----------	-------	------	------	------	------	-------	-------

BUILDWID	STCK1	113.75	124.11	130.70	133.31	131.87	126.43
----------	-------	--------	--------	--------	--------	--------	--------

EMISFACT STCK1 HRDOW7 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0
EMISFACT STCK1 HRDOW7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP ALL

SO FINISHED

**

** AERMOD Receptor Pathway

**

**

RE STARTING

INCLUDED Ollie_PM2.rou

RE FINISHED

**

** AERMOD Meteorology Pathway

**

**

ME STARTING

SURFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.SFC

PROFFILE LosAngelesInt'lAirportADJU\KLAX_V9_ADJU\KLAX_v9.PFL

SURFDATA 23174 2012 LOS_ANGELES/INT'L_ARPT

UAIRDATA 3190 2012

PROFBASE 30.0 METERS

ME FINISHED

**

** AERMOD Output Pathway

**

**

OU STARTING

RECTABLE ALLAVE 1ST

RECTABLE 24 1ST

** Auto-Generated Plotfiles

PLOTFILE 24 ALL 1ST OLLIE_PM2.AD\24H1GALL.PLT 31

PLOTFILE PERIOD ALL OLLIE_PM2.AD\PE00GALL.PLT 32

SUMMFILE Ollie_PM2.sum

OU FINISHED

**

** Project Parameters

** PROJCTN CoordinateSystemUTM

** DESCPTN UTM: Universal Transverse Mercator

** DATUM World Geodetic System 1984

** DTMRGN Global Definition

** UNITS m

** ZONE 11

** ZONEINX 0
**