

Air Quality Dispersion Modeling

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1.0 Introduction

This appendix describes the methods and results of air dispersion modeling that predict the ground-level concentrations of criteria pollutants from construction and operation of the Berths 226–236 (Everport) Container Terminal.

The air dispersion modeling methodology was based on Los Angeles Harbor District’s (LAHD) Draft Criteria Pollutant Dispersion Modeling Protocol (LAHD 2012) and performed using the U.S. Environmental Protection Agency’s (USEPA) AERMOD Modeling system, version 15181, based on the Guideline on Air Quality Models (40 Code of Federal Regulation [CFR], Part 51, Appendix W, November 2005). Nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), particulate matter equal or less than 10 microns in diameter (PM₁₀), and particulate matter equal or less than 2.5 microns in diameter (PM_{2.5}), were modeled for the proposed Project, CEQA baseline, NEPA baseline, and project alternatives. The predicted ground-level concentrations were compared to the relevant South Coast Air Quality Management District (SCAQMD) air quality significance thresholds to determine ambient air quality impacts.

2.0 Development of Emission Scenarios Used in the Air Dispersion Modeling

2.1 Construction Emission Sources

Construction activities would use the following equipment:

- Offroad construction equipment: land-based equipment and marine-based equipment (dredging and pile driving equipment);
- On-road construction vehicles (haul trucks, delivery trucks);
- New crane delivery ship; and
- Harbor craft: tugboats (used to position dredging barges and scows) and dive boats.

In accordance with SCAQMD guidance, only onsite construction emission sources were modeled for criteria pollutant impacts (LAHD 2014E). Onsite emission sources included diesel engine exhaust from land and marine heavy construction equipment, haul trucks traveling and idling onsite, new crane delivery cargo ship auxiliary engines and boilers while hoteling at berth, harbor craft used in dredging and pile driving, and fugitive dust. Mitigated construction emissions were modeled only when the unmitigated modeled concentrations exceeded the SCAQMD air quality significance thresholds.

2.2 Construction Emissions

Emission inventories were developed for each year of the construction period (2018-2019).

Emissions associated with both ocean disposal and land disposal of the dredged materials in construction phases 1 and 2 were calculated, and the disposal method that resulted in the higher

emissions for each pollutant was used for impact determination in 2018. Short averaging times (one to 24 hours) were modeled using peak day ocean disposal emissions, whereas annual averaging times were modeled using upland disposal annual emissions. Only shorter averaging times (one to 24 hours) were modeled for 2019 to capture the peak day emission rates from new crane delivery. Annual emissions from construction in 2019 are substantially less than those in 2018.

Construction emissions were converted to model input emission rates assuming a 24-hour work day with 240 work days occurring per year (Monday – Friday). Appendix B1 of this EIS/EIR presents a summary of construction emissions from the proposed Project without and with mitigation, Alternative 1 (No Federal Action, also the NEPA Baseline) without and with mitigation, Alternative 3 (Reduced Project: Reduced Wharf Improvements) without and with mitigation, Alternative 4 (Reduced Project: No Backland Improvements) without and with mitigation, and Alternative 5 (Expanded On-Dock Railyard: Wharf and Backland Improvements with an Expanded Terminal Island Container Transfer Facility). Alternative 2 (No Project) has no construction activities and therefore are were not modeled for construction years.

The Everport Container Terminal would continue to operate during construction; construction and operational activities would overlap during this time. Total proposed project emissions from overlapping construction and operational activities are presented to show the overall impacts of the proposed Project. Appendix B1 of this EIS/EIR presents a summary of operational emissions used in the air dispersion modeling of the proposed Project without and with mitigation, Alternative 1 (No Federal Action, also the NEPA Baseline) without and with mitigation, Alternative 3 (Reduced Project: Reduced Wharf Improvements) without and with mitigation, Alternative 4 (Reduced Project: No Backland Improvements) without and with mitigation, and Alternative 5 (Expanded On-Dock Railyard: Wharf and Backland Improvements with an Expanded Terminal Island Container Transfer Facility) without and with mitigation.

2.3 Operational Emission Sources

Both on-site and off-site emission sources were included in the modeling of operational emissions. The following operational emission sources were included in the air dispersion modeling for NO₂, SO₂, CO, PM₁₀, and PM_{2.5}:

- Container ships transiting to and from berth. Ship transit emission sources are comprised of propulsion and auxiliary engines and boiler exhaust. Ship transit in SCAQMD waters consists of transit in the fairway, precautionary zone, and the harbor. Ships transiting were modeled as far as the SCAB overwater boundary, approximately 40 nautical miles.
- Berths 226–236 (Everport) Container Terminal Improvements requiring use of heavy duty off-road equipment including a derrick barge, supply barge, tug boats, dive boats, dump scows, clam buckets, excavators, sawcutters, backhoes, haul trucks, compactors, forklifts, concrete trucks, cranes, grading machines, water trucks, rollers, skip loaders, tack coat sprayers, striping machines, paving machines, cold planers, welders, tampers, regulators, speed swings, blade graders, and swivel dumps.

- Container ships hoteling while at berth and at anchorage in the harbor. Ship hoteling emission sources are comprised of ship auxiliary engines (except when using AMP) and boiler exhaust; propulsion engines would be turned off.
- Tugboats used to assist container ships between the Port breakwater and the berth. Two tugboats were assumed to assist each ship. Tugboat emission sources are comprised of propulsion and auxiliary engines.
- On-road trucks driving on near-Port roads, at the Everport Container Terminal, and idling on terminal and at the terminal gate. Truck transit emission sources are comprised of exhaust, brake wear, tire wear and entrained road dust. Trucks were modeled as far as approximately 4 miles north of the terminal, a distance established in prior LAHD NEPA/CEQA documents as sufficient to capture maximum concentrations for container terminal projects (LAHD, 2011).
- Locomotives switching and idling at the TICTF on-dock rail yard, and line haul locomotives pulling trains between the TICTF on-dock rail yard and the Alameda Corridor. Locomotives traveling were modeled as far as approximately 4 miles north of the terminal.
- Cargo handling equipment (CHE) operating at the Everport Container Terminal and TICTF, including forklifts, rubber-tired gantry cranes, top handlers, and yard tractors.
- Worker vehicles driving to and from the Everport Container Terminal. Worker vehicle emission sources are comprised of exhaust, brake wear, tire wear and entrained road dust. Worker vehicles were modeled as far as approximately 4 miles north of the terminal.

2.4 Operational Emissions

To evaluate the air quality impacts of project operations, peak operational emissions were calculated for the project analysis years 2019, 2026, 2033, and 2038. Appendix B1 of this EIS/EIR presents a summary of operational emissions for the proposed Project without and with mitigation, Alternative 1 (No Federal Action, also the NEPA Baseline) without and with mitigation, Alternative 2 (No Project), Alternative 3 (Reduced Project: Reduced Wharf Improvements) without and with mitigation, Alternative 4 (Reduced Project: No Backland Improvements) without and with mitigation, and Alternative 5 (Expanded On-Dock Railyard: Wharf and Backland Improvements with an Expanded Terminal Island Container Transfer Facility) without and with mitigation. The modeled operational emissions were adjusted to reflect the dispersion modeling domain, which was smaller than the entire SCAB emissions presented in Appendix B1. Peak day or peak month emission rates were used for 24 hour or less averaging times and annual average emission rates were used for annual averaging time.

3.0 Dispersion Modeling

3.1 Dispersion Model Selection and Inputs

The air dispersion modeling was performed using the USEPA AERMOD dispersion model, version 15181, based on the Guideline on Air Quality Models (40 CFR, Part 51, Appendix W; November 9, 2005). The AERMOD model is a steady-state, multiple source, Gaussian dispersion

model designed for use with emission sources situated in terrain where ground elevations can exceed the emission source stack heights. The AERMOD model requires hourly meteorological data consisting of wind direction, wind speed, temperature, stability class, and mixing height. Selection of the AERMOD model is well suited for this analysis because it is (1) accepted by the modeling community and regulatory agencies due to its ability to provide reasonable results for large industrial projects with multiple emission sources, (2) annual sets of hourly meteorological data is available in AERMOD format, and (3) the model can handle various sources types, including point, area, line, and volume source types. Finally, AERMOD is approved by the USEPA and SCAQMD for analysis of mobile sources.

Because no modeled CO concentrations were determined to be near or above the CO NAAQS, modeling of traffic-related CO impacts was not conducted and CO “hot spots” were not analyzed.

3.1.1 Construction Emission Sources

During project construction, the hoteling new crane delivery ship was modeled as a point source positioned in the expected docking locations. All other construction sources, including harborcraft, offroad construction equipment, trucks, and fugitive dust, were modeled as poly-area sources covering the portions of the construction site where those sources would be active.

Table 3-1 presents source parameters used in the dispersion modeling for project construction.

The source parameters are consistent with those developed and used in prior LAHD NEPA/CEQA documents (LAHD, 2008; LAHD, 2011).

Table 3-1. AERMOD Source Release Parameters – Construction Sources

Source Description	AERMOD Source Type	Release Height (m)	Initial Vertical Dimension (m) ^a	Exit Velocity (m/s)	Exit Temperature (K)	Stack Diameter (m)
New cranes delivery ship hoteling – auxiliary engines/boilers	point	44.01	--	7.711/18.2	578/559	0.469/0.494
Harbor craft	poly-area	15.24	3.54	--	--	--
Offroad construction equipment	poly-area	4.57	1.06	--	--	--
Haul/delivery trucks idling and transiting onsite ^b	poly-area	4.57	1.06	--	--	--
Construction fugitive dust	poly-area	1.0	0.23	--	--	--

Notes:

a. The initial vertical dimension of the plume (σ_z) was estimated by dividing the initial vertical thickness by 4.3 for elevated releases and by 2.15 for ground-based releases.

b. Release height and initial vertical dimension are consistent with prior LAHD documents (LAHD, 2008; LAHD, 2011).

3.1.2 Operational Emission Sources

Operational characteristics of each source type determined the release parameters of each volume, line, area, or point source. The following identifies how source release parameters were determined:

- Ship Transiting (harbor, precautionary zone, and fairway transit segments): Emissions from ships in transit were simulated as a series of separated volume sources extending from the Everport Container Terminal berths to the SCAB overwater boundary. Emissions associated with each transit segment were apportioned equally among the volume sources representing that segment.
- Ship Hoteling: Hoteling ships were modeled as stack point sources, located adjacent to each Everport berth.
- Ships at Anchorage: Occasionally, arriving ships are required to anchor temporarily inside the harbor for inspection or to await an open berth. Ships at anchorage were modeled as polygon area sources within the harbor.
- Tugboats: Emissions from tugboats assisting container ships were modeled as a series of separated volume sources extending from the Everport Container Terminal berths to the Port breakwater.
- Locomotives: Emissions from locomotives were modeled as a series of separated volume sources positioned along rail lines used by switch and line haul locomotives. Based on the methodology in the Roseville Rail Yard Study, the volume source heights for locomotives in transit were set to different heights for daytime conditions compared to nighttime conditions (CARB, 2004).
- Container Trucks: Trucks driving and idling on the terminal were modeled as polygon area sources covering the areas of the terminal where truck activity would occur. Trucks driving off-site were modeled as line sources positioned along the major truck routes to and from the terminal.
- Cargo handling equipment: Cargo handling equipment was modeled as polygon area sources within the Everport Container Terminal and TICTF. Emissions were spread uniformly over the polygons.
- Worker Vehicles: Worker vehicles driving on the terminal were modeled as polygon area sources covering the areas of the terminal where worker vehicles would drive and park. Worker vehicles driving off-site were modeled as line sources positioned along the major travel routes to and from the terminal.

Emission sources were positioned using the Universal Transverse Mercator (UTM) coordinate system (NAD83) referenced to topographic data obtained from the US Geologic Survey (USGS). Table 3-2 presents the operational source parameters used in this analysis. Source locations are shown on Figure 3-1.

Table 3-2. AERMOD Source Release Parameters – Operational Sources

Source Description	AERMOD Source Type	Release Height (m)	Source Spacing (m)	Initial Vertical Dimension (m) ^a	Initial Horizontal Dimension (m) ^h	Exit Velocity (m/s)	Exit Temperature (K)	Stack Diameter (m)
Ship transit: propulsion engines, auxiliary engines, auxiliary boilers ^b	volume	59.13	100 in harbor	13.75	46.5	--	--	--
		49.07	300 in precautionary zone	11.41	139.5	--	--	--
		49.07	1,000 in fairway	11.41	465.1	--	--	--
Ship hoteling: auxiliary engines ^b	point	44.01	--	--	--	7.7	578	0.47
Ship hoteling: boilers ^b	point	44.01	--	--	--	18.2	559	0.49
Ship hoteling at anchorage: auxiliary engines and boilers ^b	poly-area	44.01	--	10.23	--	--	--	--
Tugboats: propulsion and auxiliary engines ^c	volume	15.24	100	3.54	46.5	--	--	--
Locomotives transit: day (6am-6pm)	volume	5.6 ^d	50	2.60 ^e	23.2	--	--	--
Locomotives transit: night (6pm-6am)	volume	14.6 ^d	50	6.77 ^e	23.2	--	--	--
Container trucks: idling at in/out gate, driving on terminal ^f	poly-area	4.57	--	1.07	--	--	--	--
Container trucks transit offsite	line	4.57	--	1.07	--	--	--	--
Cargo handling equipment- ^f	poly-area	4.57	--	1.07	--	--	--	--
Worker vehicles onsite ^g	poly-area	0.61	--	1.07	--	--	--	--
Worker vehicles offsite	line	0.61	--	1.07	--	--	--	--

Notes:

- a. The initial vertical dimension of the plume (σ_z) was estimated by dividing the initial vertical thickness by 4.3 for elevated releases and by 2.15 for ground-based releases.
- b. Source of ship parameters: LAHD APL EIR/EIS for release height and China Shipping EIR/EIS for other parameters.
- c. Source of tugboat parameters: LAHD APL EIR/EIS for release height.
- d. Source of locomotive release height: Roseville Railyard Study, page G-3.
- e. Source: Roseville Railyard Study divided source height by 2.15 (page 40).
- f. Consistent with prior LAHD documents.
- g. Source of worker vehicle parameters: Consistent with LAHD recommendations (LAHD 2012).
- h. The initial horizontal dimension (σ_y) is the source spacing divided by a standard deviation of 2.15.

Figure 3-1. Everport Container Terminal Source Locations



3.1.3 Meteorological Data

The dominant terrain features/water bodies that may influence wind patterns in this part of the Los Angeles Basin include the Pacific Ocean to the west, the hills of the Palos Verdes Peninsula to the west/southwest and the San Pedro Bay and shipping channels to the south of the study area. Although the area in the immediate vicinity of the Ports of Los Angeles (POLA or the Port) and Long Beach (POLB) is generally flat, these terrain features/water bodies may result in significant variations in wind patterns over relatively short distances (LAHD 2010). Attachment B2.2 presents a wind rose diagram showing how wind speed and direction are typically distributed in the vicinity of the proposed Project.

POLA and POLB currently operate monitoring stations that collect meteorological data from several locations within port boundaries. The data sets contain hourly observations of wind speed, wind direction, temperature, atmospheric stability, and mixing height recorded at each of the monitoring stations in the network. The meteorological data stations to the west of the Palos Verdes Hills and within approximately 5 kilometers of the San Pedro Bay generally exhibit predominant winds from the northwest and from the south or southeast. The consistency of the predominant winds among these stations indicates that the Palo Verdes Hills are channeling the winds from the northwest and that the San Pedro Bay and shipping channels influence the winds from the south and southeast (LAHD 2010).

For this dispersion analysis, the meteorological data collected at the Terminal Island Treatment Plant (TITP) was used for dispersion modeling. TITP is located just east of the Everport Container Terminal on Pier 300, less than 0.5 miles from the center of the terminal. The data used was collected between September 2006 and August 2007 (LAHD 2014E).

The meteorological data were processed using the USEPA's approved AERMET (version 12345) meteorological data preprocessor for the AERMOD dispersion model. AERMET uses three steps to preprocess and combine the surface and upper-air soundings to output the data in a format which is compatible with the AERMOD model. The first step extracts the data and performs a brief quality assurance check of the data. The second step merges the meteorological data sets. The third step outputs the data in AERMOD-compatible format while also incorporating surface characteristics surrounding the collection or application site. The output from the AERMET model consists of two separate files: the surface conditions file and a vertical profile dataset. AERMOD utilizes these two files in the dispersion modeling algorithm to predict pollutant concentrations resulting from a source's emissions.

The 2006-2007 meteorological data were compared to the more recent meteorological data collected during years 2009 to 2012. It was determined that the 2006-2007 data period is representative in comparison to the 2009 to 2012 data period. To reach this conclusion, ENVIRON evaluated the completeness of the data by quarter, the average wind speed, and visually examined the wind pattern based on wind roses. The evaluation showed that the average wind speed and wind pattern of the original data period is very similar to that of the 2009 to 2012

data period across the stations at both POLA and POLB. Therefore, it was concluded that the original data period is representative (LAHD 2014e).

3.1.4 Model Options

Regulatory default technical options were selected for the AERMOD model. Use of these options follows the USEPA modeling guidance (USEPA, 2009; and 40 CFR, Appendix W; November 2005).

For NO₂ modeling, the non-default AERMOD Ozone Limiting Method (OLM) was used. With OLM, the nitrous oxide to nitrogen dioxide (NO → NO₂) conversion rate is controlled by ambient ozone concentration. Hourly ozone measurements from the North Long Beach monitoring station were used as model input.

Receptor and source base elevations were determined from USGS National Elevation Dataset (NED) files using AERMAP, version 11103 (USEPA 2011). All coordinates were referenced to UTM NAD83, Zone 11.

3.1.5 Temporal Distribution Assumptions

For dispersion modeling purposes, construction and operational emissions were assumed to occur during the times specified in Table 3-3. Emissions were assumed to be uniformly distributed during the specific time periods described in the table. The temporal distribution assumptions are identical for the CEQA baseline, NEPA baseline, proposed Project, and project alternatives.

Table 3-3. Temporal Distribution of Emissions for CEQA Baseline, NEPA Baseline, Proposed Project and Alternatives

Source Description	Temporal Distribution
Construction-related sources ^a	24 hours per day
Ships Hoteling	24 hours per day
Ships Transiting	24 hours per day
Tugboats assisting ships	24 hours per day
Container Trucks ^b	Temporal distribution varies by project year and pollutant.
Locomotives	24 hours per day (offsite); 5:00 am – 9:00 pm (onsite)
Cargo Handling Equipment	7:00 am – 3:00 am
Worker Trips ^b	Temporal distribution varies by project year and pollutant.

Notes:

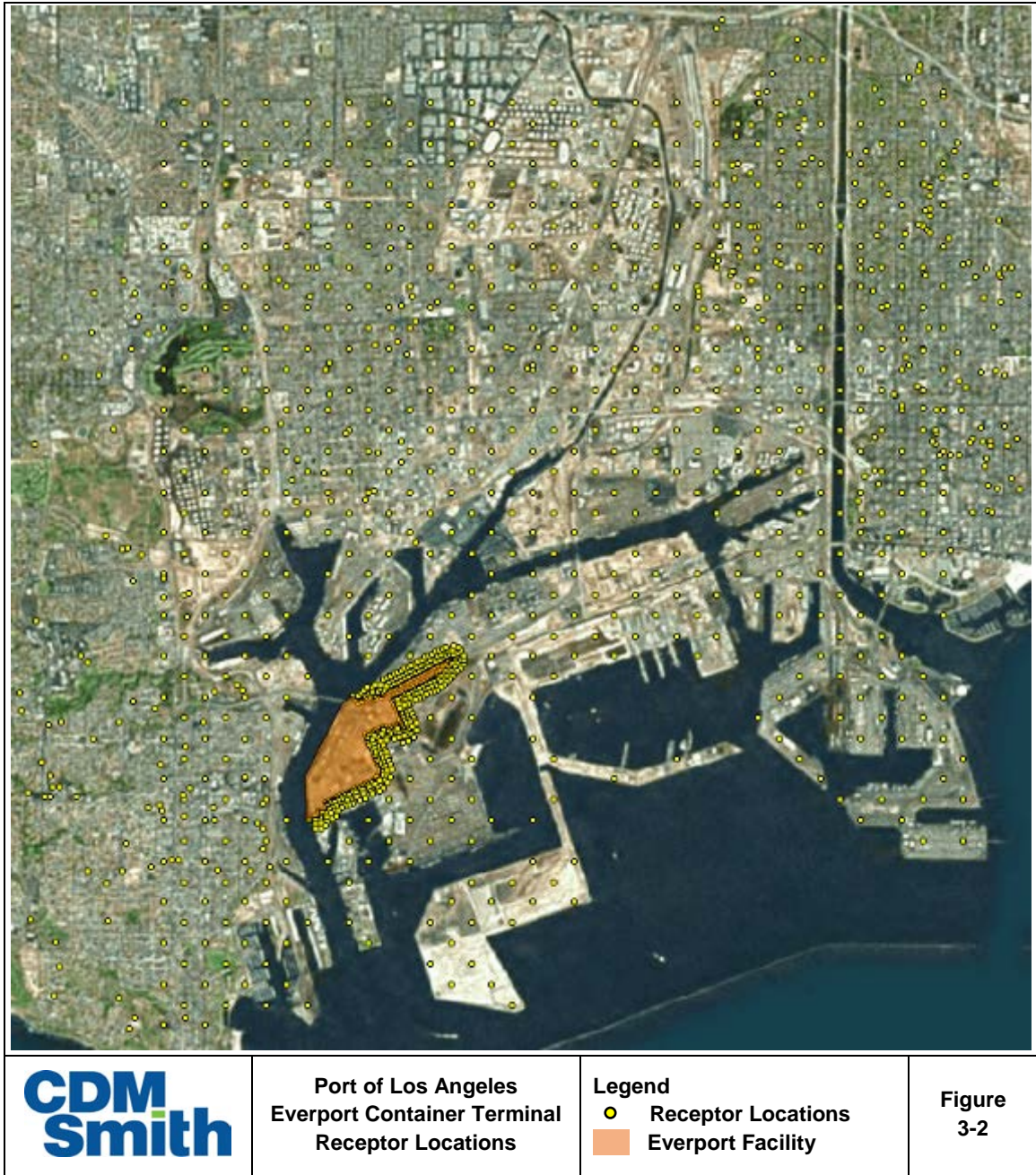
a. There is no construction for Alternative 2 (No Project).

b. The temporal distributions for container trucks and worker trips were derived from the traffic study.

3.1.6 Receptor Locations

To identify the extent and location of maximum impacts, two coarse Cartesian receptor grids were placed surrounding the project area, with receptors spaced 500 meters apart in each grid out to a distance of 5 km. The two grids were offset from one another by 250 meters in the north and east directions, creating a “honeycomb” grid pattern. Receptors were also placed around the property line at 100 meter intervals. On-site receptors were excluded from the analysis. Figure 3-2 presents the coarse grid and fenceline receptors. To refine the locations of maximum impacts, fine receptor grids were placed around the property line. Receptors around the property were spaced 50 meters apart extending out to 250 meters. Additional fine receptor grids were placed around maximum impact receptors outside of the property line at 50 meter spacing, extending to 250 meters in each direction.

Figure 3-2. Everport Container Terminal Grid and Fenceline Receptor Locations



3.2 Concentration Significance Thresholds

Table 3-4 presents the SCAQMD significance thresholds used in the dispersion modeling analysis of criteria pollutant concentrations.

The significance thresholds for NO₂, SO₂, and CO are absolute thresholds based on the ambient air quality standards. This means that the highest modeled project concentrations must be added to the monitored ambient background concentrations to yield total concentrations for comparison to the thresholds. Ambient background concentrations were obtained from the Source-Dominated monitoring station, located at the TITP. For operation, the modeled project concentrations represent the change relative to existing Everport Container Terminal operation (i.e., modeled project minus modeled 2013 terminal operation). This approach was also used in the determination of operational and combined construction and operational impacts. When construction-only impacts were modeled, the modeled project concentrations were directly added to the ambient background concentrations without subtracting 2013 Everport Container Terminal operations, because the construction impacts were evaluated independently from Everport Container Terminal operations.

The significance thresholds for PM₁₀ and PM_{2.5} are incremental thresholds. Therefore, the CEQA and NEPA impacts were determined by subtracting the modeled CEQA and NEPA baseline concentrations from the modeled project concentrations (i.e., project minus baseline) at each receptor. Because the thresholds are incremental, the background concentrations are not added to the incremental concentrations. Significance is determined by comparing the modeled receptor with the greatest increment to the thresholds. In the case of the CEQA increment for construction only concentrations, the CEQA baseline is zero and therefore the CEQA increment is equivalent to the modeled project construction concentrations.

Table 3-4. SCAQMD Significance Thresholds for Ambient Air Quality Concentrations

Air Pollutant ^a	Ambient Concentration Threshold
Nitrogen Dioxide (NO ₂) ^{b c} 1-hour average (federal) ^d 1-hour average (state) Annual average (federal) Annual average (state)	0.100 ppm (188 µg/m ³) (98 th percentile) 0.18 ppm (338 µg/m ³) 0.0534 ppm (100 µg/m ³) 0.030 ppm (57 µg/m ³)
Sulfur Dioxide (SO ₂) ^b 1-hour average (federal) ^e 1-hour average (state) 24-hour average	0.075 ppm (197 µg/m ³) (99 th percentile) 0.250 ppm (655 µg/m ³) 0.040 ppm (105 µg/m ³)
Carbon Monoxide (CO) ^b 1-hour average 8-hour average	20 ppm (23,000 µg/m ³) 9.0 ppm (10,000 µg/m ³)
Inhalable Particulates (PM ₁₀) ^f 24-hour average 24-hour average Annual Average	10.4 µg/m ³ (construction) 2.5 µg/m ³ (operation) 1.0 µg/m ³
Fine Particulates (PM _{2.5}) ^f 24-hour average 24-hour average	10.4 µg/m ³ (construction) 2.5 µg/m ³ (operation)

Notes:

-
- a. The SCAQMD has also established concentration thresholds for sulfates and lead. However, SCAQMD staff does not consider sulfates a pollutant of concern for port projects that do not involve sulfur piles, and therefore does not request dispersion modeling of sulfate emissions in NEPA/CEQA documents (SCAQMD 2015). Lead emissions would be negligible; thus concentration standards would not be exceeded.
 - b. The NO₂, SO₂, and CO thresholds are absolute thresholds; the maximum predicted impact from proposed Project and alternatives operations is added to the background concentration and compared to the threshold.
 - c. To evaluate Project impacts to ambient NO₂ levels, the analysis included the use of both the current SCAQMD NO₂ threshold (0.18 ppm) and the newer, more stringent 1-hour Federal ambient air quality standard (0.100 ppm). To attain the Federal standard, the 3-year average of the 98th percentile of the daily maximum 1-hour averages at a receptor must not exceed 0.100 ppm.
 - d. The Federal 1-hour average NO₂ concentration is based on the NAAQS because it is more stringent than the SCAQMD thresholds.
 - e. To attain the SO₂ federal 1-hour standard, the 3-year average of the 99th percentile of the daily maximum 1-hour averages at a receptor must not exceed 0.075 ppm.
 - f. The PM₁₀ and PM_{2.5} thresholds are incremental thresholds; the maximum predicted impact from construction activities (without adding the background concentration) is compared to these thresholds.

Sources: SCAQMD 2015, USEPA 2017.

3.3 Predicted Air Quality Impacts

3.3.1 Construction Impacts

Construction impacts were evaluated for the unmitigated and mitigated proposed Project, Alternative 1, Alternative 3, Alternative 4, and Alternative 5. Construction would not occur under Alternative 2. Impacts for federal 1-hour NO₂ were modeled to represent the 98th percentile of the daily maximum 1-hour averages. Impacts for SO₂ were modeled to represent the 99th percentile of the daily maximum 1-hour averages. Background concentrations for NO₂, SO₂, and CO were obtained from the TITP station. Concentration increments represent the modeled scenario minus the CEQA or NEPA baseline. Due to maximum modeled baseline and modeled scenario concentrations potentially occurring at different receptors, presented scenario and baseline concentrations may not necessarily subtract to equal the presented increment. Additionally, exceedances of a SCAQMD threshold are indicated in bold.

3.3.1.1 Proposed Project

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated proposed Project construction emissions under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of the proposed Project; construction and operational activities would overlap during this time. Total proposed Project emissions from overlapping construction and operational activities are presented to show the overall impacts of the proposed Project. AERMOD dispersion modeling results of mitigated and unmitigated proposed Project overlapping construction and operational emissions are also presented. NO₂, SO₂, and CO concentrations due to construction were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to the project and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-5. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Construction without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.061	0.149	0.100	Yes
	State 1-hour	0.11	0.07	0.18	0.18	Yes
	Federal annual	0.017	0.004	0.021	0.053	No
	State annual	0.017	0.004	0.021	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-6. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Proposed Project Construction without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	3.8	0.0	3.8	10.4	No
	Annual	0.8	0.0	0.8	1.0	No
PM _{2.5}	24-hour	3.2	0.0	3.2	10.4	No

Table 3-7. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Combined Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes
	State 1-hour	0.11	0.04	0.16	0.18	No
	Federal annual	0.017	0.010	0.028	0.053	No
	State annual	0.017	0.010	0.028	0.030	No
SO ₂	Federal 1-hour	0.038	0.0000	0.038	0.075	No
	State 1-hour	0.05	0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-8. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Proposed Project Combined Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	24.0	8.2	18.0	10.4	Yes
	Annual	14.7	3.8	12.3	1.0	Yes
PM _{2.5}	24-hour	6.5	4.0	3.7	10.4	No

Table 3-9. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Construction with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.058	0.146	0.100	Yes
	State 1-hour	0.11	0.07	0.18	0.18	No

Table 3-10. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Combined Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

Table 3-11. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Proposed Project Combined Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	23.9	8.2	17.9	10.4	Yes
	Annual	14.7	3.8	12.3	1.0	Yes

Table 3-12. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Construction without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.057	0.145	0.100	Yes
	State 1-hour	0.11	0.06	0.18	0.18	No
	Federal annual	0.017	0.002	0.020	0.053	No
	State annual	0.017	0.002	0.020	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No

	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-13. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Proposed Project Construction without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	3.8	1.7	2.8	10.4	No
	Annual	0.8	0.3	0.5	1.0	No
PM _{2.5}	24-hour	3.2	0.4	2.9	10.4	No

Table 3-14. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Combined Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.034	0.122	0.100	Yes
	State 1-hour	0.11	0.04	0.15	0.18	No
	Federal annual	0.017	0.002	0.019	0.053	No
	State annual	0.017	0.002	0.019	0.030	No
SO ₂	Federal 1-hour	0.038	0.0004	0.038	0.075	No
	State 1-hour	0.05	0.0004	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-15. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Proposed Project Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	24.0	24.4	2.8	10.4	No
	Annual	14.7	15.0	0.5	1.0	No
PM _{2.5}	24-hour	6.5	6.7	2.9	10.4	No

Table 3-16. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Combined Construction with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.054	0.142	0.100	Yes

Table 3-17. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Proposed Project Combined Construction and Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated proposed Project pollutant concentrations under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of the proposed Project; construction and operational activities would overlap during this time. Total proposed Project emissions from overlapping construction and operational activities are presented to show the overall impacts of the proposed Project. Peak locations of AERMOD dispersion modeling results of both mitigated and unmitigated proposed Project overlapping construction and operational concentrations are also presented.

Figure 3-3. Maximum Air Quality Impact Locations – Proposed Project Construction without Mitigation under CEQA

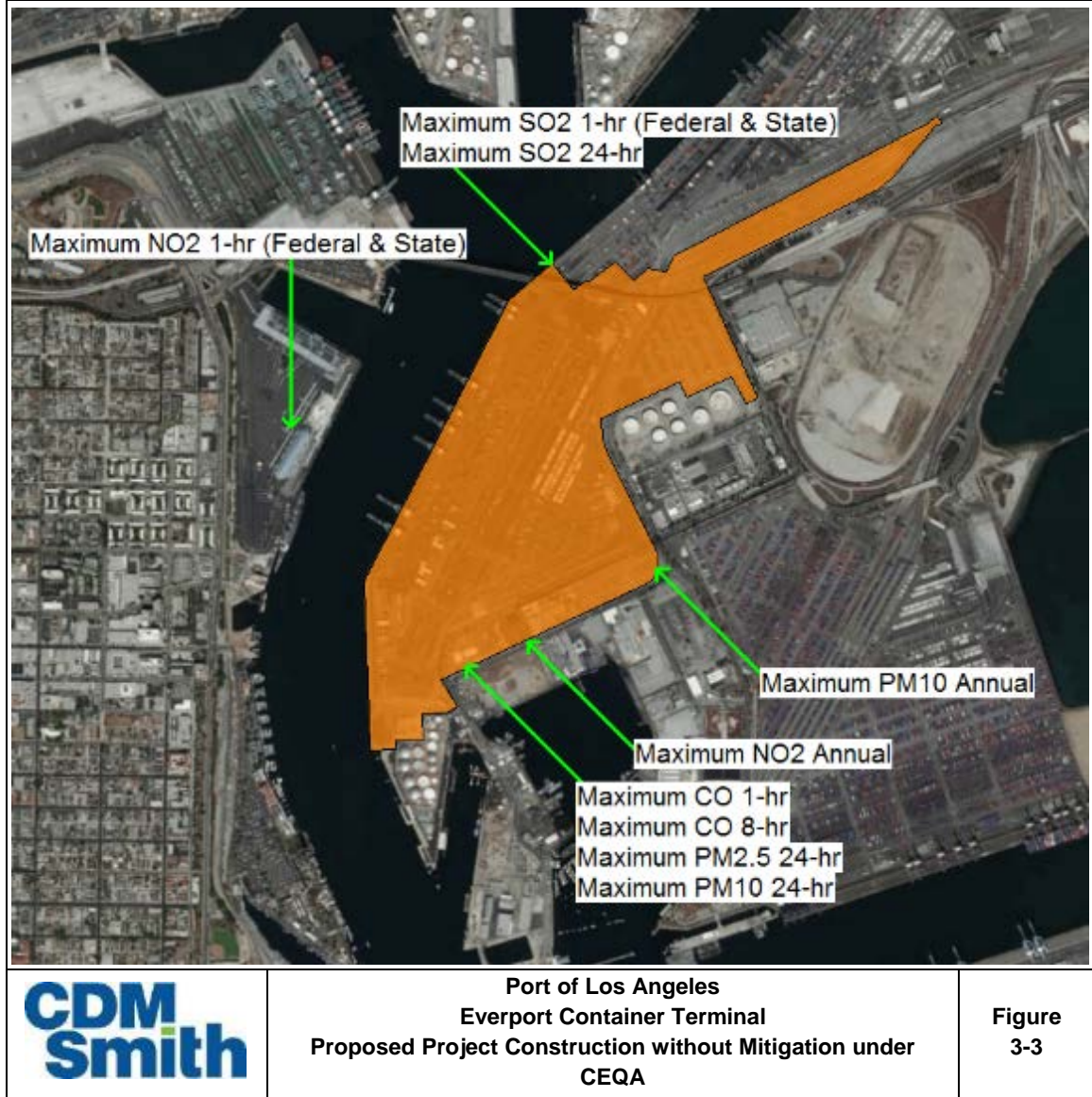


Figure 3-4. Maximum Air Quality Impact Locations – Proposed Project Combined Construction & Operations without Mitigation under CEQA

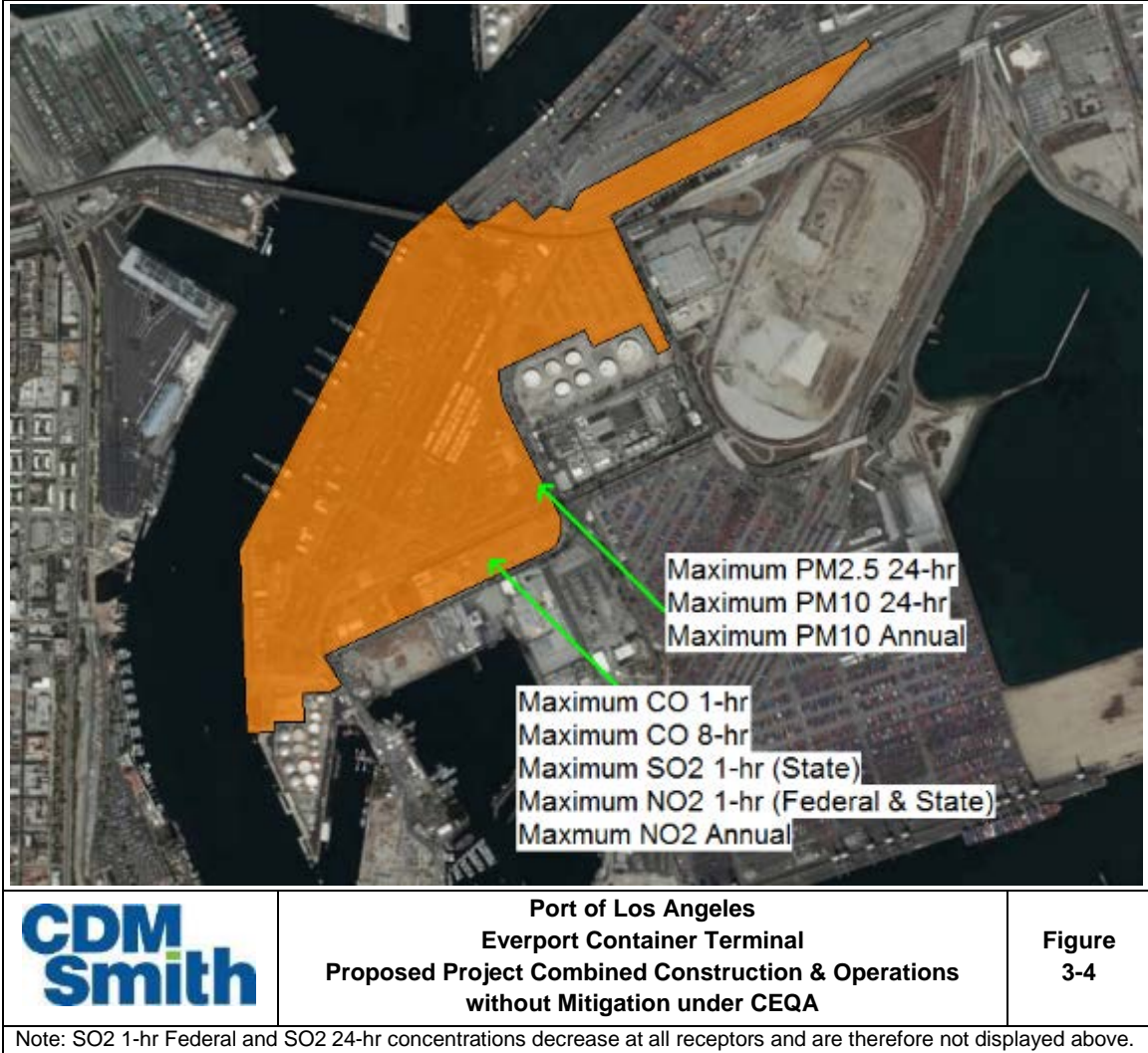


Figure 3-5. Maximum Air Quality Impact Locations – Proposed Project Construction with Mitigation under CEQA



Figure 3-6. Maximum Air Quality Impact Locations – Proposed Project Combined Construction & Operations with Mitigation under CEQA

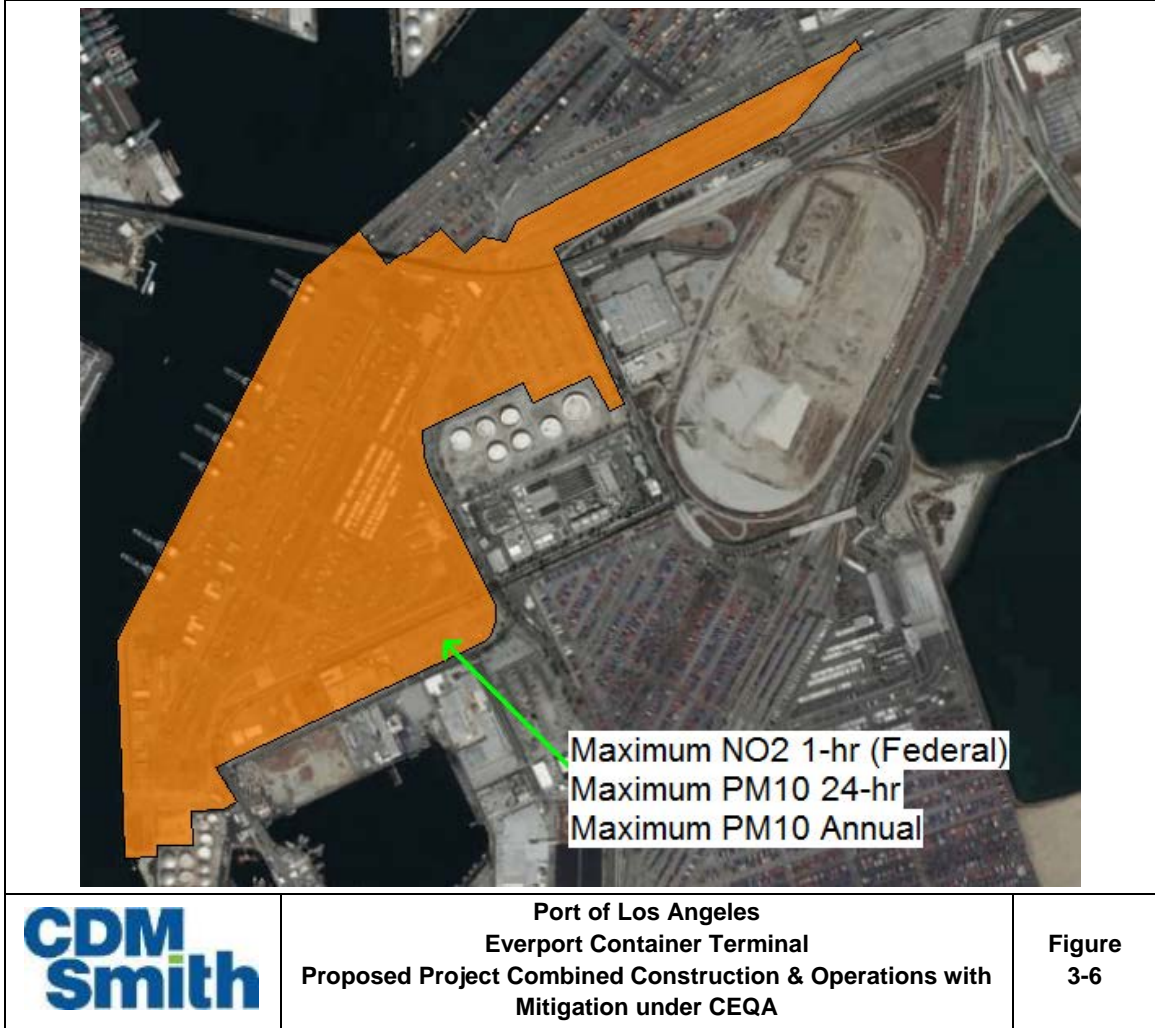


Figure 3-7. Maximum Air Quality Impact Locations – Proposed Project Construction without Mitigation under NEPA

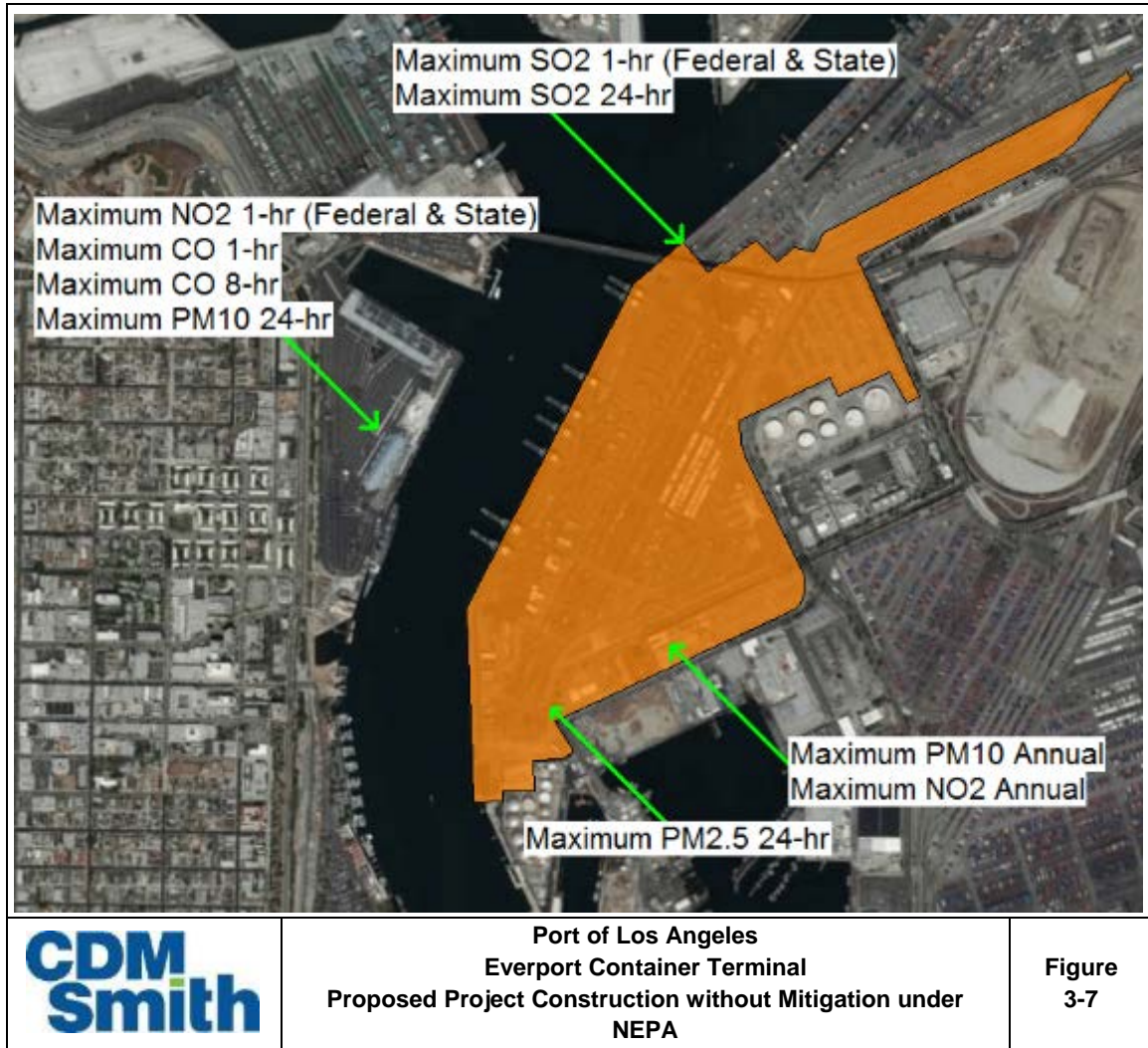


Figure 3-8. Maximum Air Quality Impact Locations – Proposed Project Combined Construction & Operations without Mitigation under NEPA

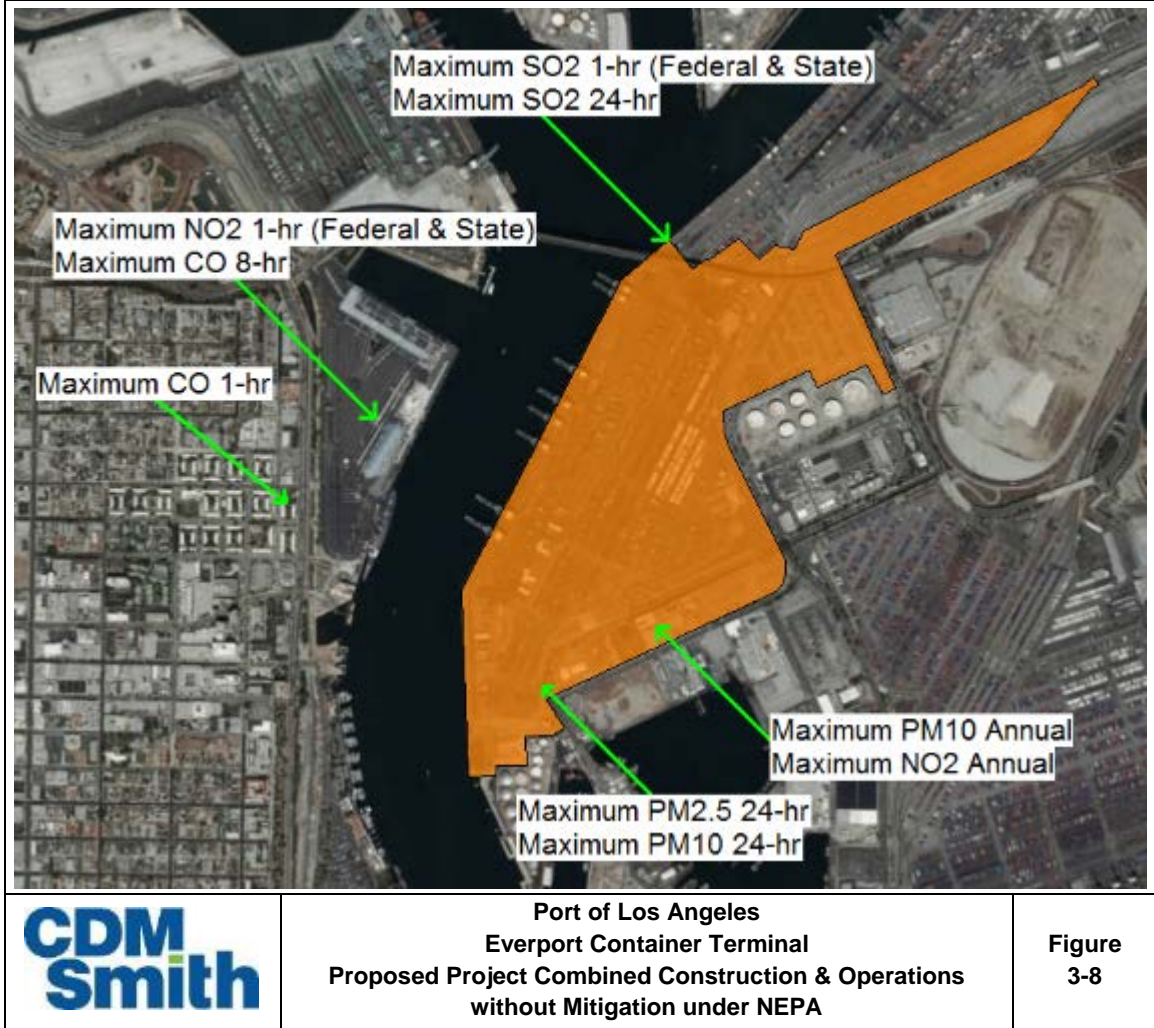


Figure 3-9. Maximum Air Quality Impact Locations – Proposed Project Construction with Mitigation under NEPA



Figure 3-10. Maximum Air Quality Impact Locations – Proposed Project Combined Construction & Operations with Mitigation under NEPA



3.3.1.2 Alternative 1

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 1 construction emissions under CEQA. The Everport Container Terminal would continue to operate during construction of Alternative 1; construction and operational activities would overlap during this time. Total Alternative 1 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 1. AERMOD modeling results of mitigated and unmitigated Alternative 1 overlapping construction and operational emissions are also presented. NO₂, SO₂, and CO concentrations due to construction were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 3 and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-18. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 1 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.041	0.129	0.100	Yes
	State 1-hour	0.11	0.05	0.16	0.18	No
	Federal annual	0.017	0.003	0.020	0.053	No
	State annual	0.017	0.003	0.020	0.030	No
SO ₂	Federal 1-hour	0.038	0.0001	0.038	0.075	No
	State 1-hour	0.05	0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-19. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 1 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	4.0	0.0	4.0	10.4	No
	Annual	0.7	0.0	0.7	1.0	No
PM _{2.5}	24-hour	2.6	0.0	2.6	10.4	No

Table 3-20. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 1 Combined Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.000	0.088	0.100	No
	State 1-hour	0.11	0.00	0.11	0.18	No
	Federal annual	0.017	0.000	0.018	0.053	No
	State annual	0.017	0.000	0.018	0.030	No
SO ₂	Federal 1-hour	0.038	-0.0002	0.037	0.075	No
	State 1-hour	0.05	-0.0002	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.0	7	20 / 35	No
	8-hour	1.8	0.0	1.8	9.0	No

Table 3-21. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 1 Combined Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	11.0	8.2	3.4	10.4	No
	Annual	5.5	3.8	1.7	1.0	Yes
PM _{2.5}	24-hour	3.9	4.0	1.7	10.4	No

Table 3-22. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 1 Construction with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.026	0.114	0.100	Yes

Table 3-23. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 1 Combined Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	Annual	5.5	3.8	1.7	10.4	No

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 1 pollutant concentrations under CEQA. The Everport Container Terminal would continue to operate during construction of Alternative 1; construction and operational activities would overlap during this time. Total Alternative 1 emissions from overlapping construction

and operational activities are presented to show the overall impacts of Alternative 1. Peak locations of AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 1 overlapping construction and operational concentrations are also presented.

Figure 3-11. Maximum Air Quality Impact Locations – Alternative 1 Construction without Mitigation under CEQA

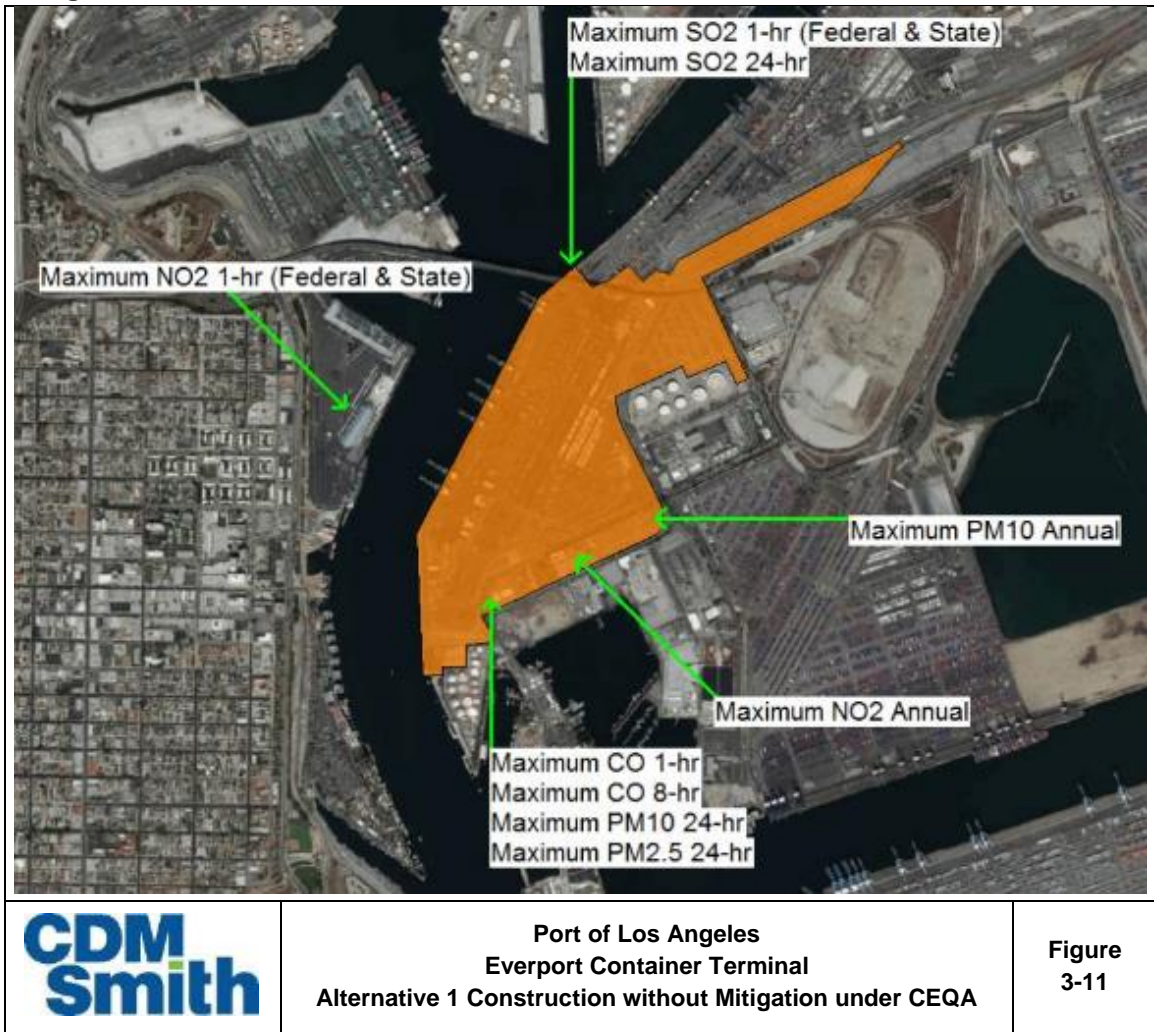
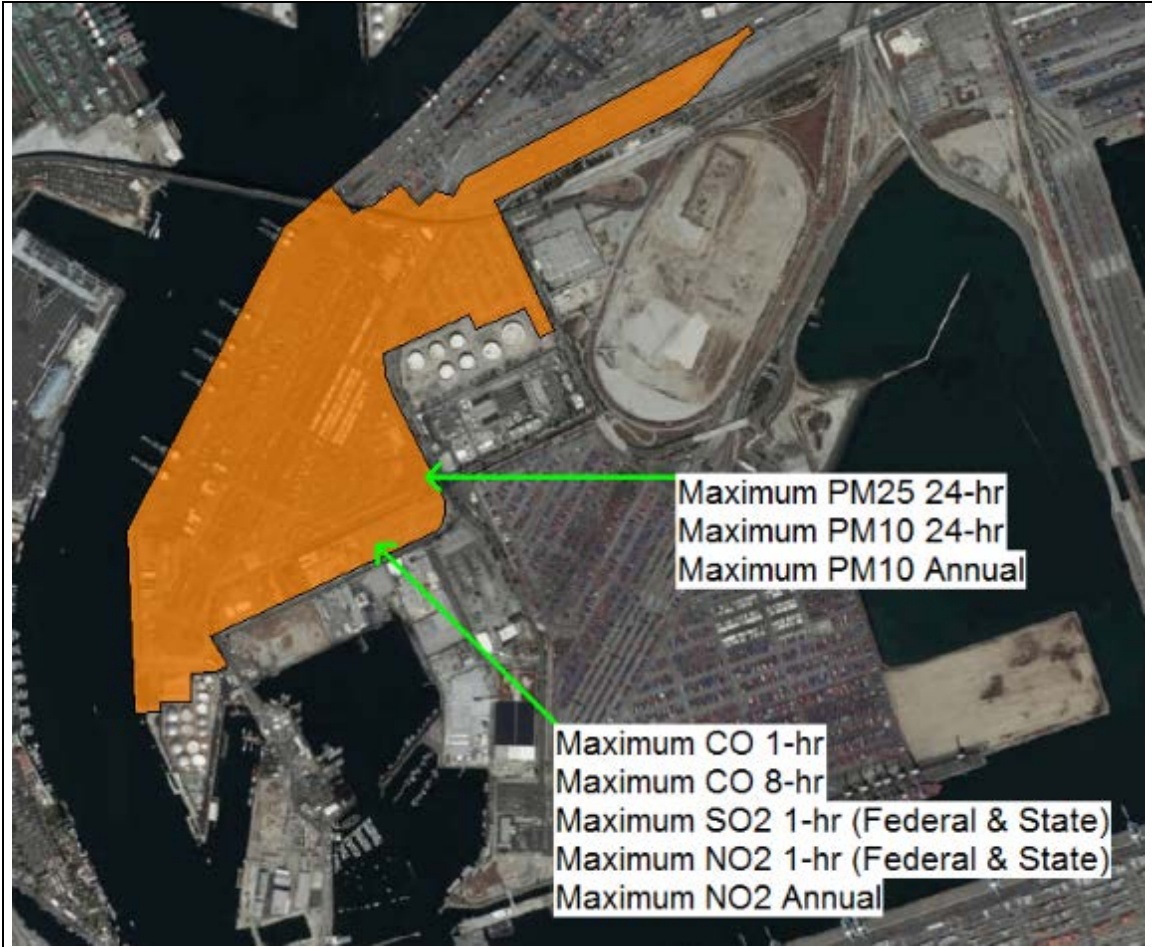


Figure 3-12. Maximum Air Quality Impact Locations – Alternative 1 Combined Construction and Operations without Mitigation under CEQA




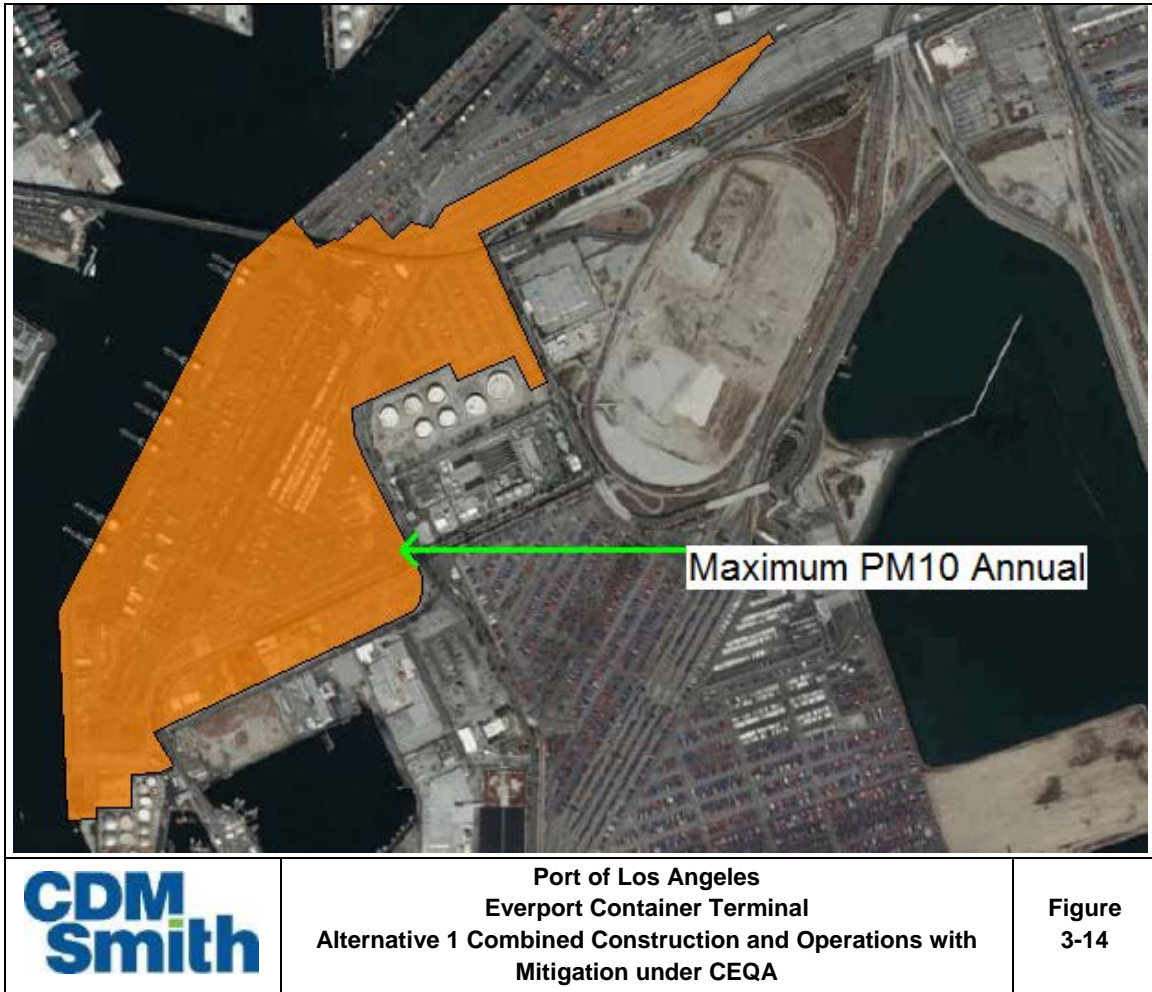
	<p>Port of Los Angeles Everport Container Terminal Alternative 1 Combined Construction and Operations without Mitigation under CEQA</p>	<p>Figure 3-12</p>
<p>Note: SO2 24-hr concentrations decrease at all receptors and are therefore not displayed above.</p>		

Figure 3-13. Maximum Air Quality Impact Locations – Alternative 1 Construction with Mitigation under CEQA



Figure 3-14. Maximum Air Quality Impact Locations – Alternative 1 Combined Construction and Operations with Mitigation under CEQA



3.3.1.3 Alternative 2

There is no construction under Alternative 2.

3.3.1.4 Alternative 3

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 3 construction emissions under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of Alternative 3; construction and operational activities would overlap during this time. Total Alternative 3 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 3. AERMOD modeling results of mitigated and unmitigated Alternative 3 overlapping construction and operational emissions are also presented. NO₂, SO₂, and CO concentrations due to construction were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 3 and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-24. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.058	0.146	0.100	Yes
	State 1-hour	0.11	0.06	0.18	0.18	No
	Federal annual	0.017	0.004	0.021	0.053	No
	State annual	0.017	0.004	0.021	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.2	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-25. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	3.1	0.0	3.1	10.4	No
	Annual	0.7	0.0	0.7	1.0	No
PM _{2.5}	24-hour	2.1	0.0	2.1	10.4	No

Table 3-26. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.032	0.120	0.100	Yes
	State 1-hour	0.11	0.05	0.16	0.18	No
	Federal annual	0.017	0.010	0.027	0.053	No
	State annual	0.017	0.010	0.027	0.030	No
SO ₂	Federal 1-hour	0.038	0.0000	0.038	0.075	No
	State 1-hour	0.05	0.0000	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-27. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	23.6	8.2	17.6	10.4	Yes
	Annual	14.3	3.8	12.0	1.0	Yes
PM _{2.5}	24-hour	6.5	4.0	3.7	10.4	No

Table 3-28. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.054	0.142	0.100	Yes

Table 3-29. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

Table 3-30. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	23.6	8.2	17.5	10.4	Yes
	Annual	14.3	3.8	12.0	1.0	Yes

Table 3-31. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.056	0.144	0.100	Yes
	State 1-hour	0.11	0.06	0.17	0.18	No
	Federal annual	0.017	0.002	0.019	0.053	No
	State annual	0.017	0.002	0.019	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.2	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-32. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Construction without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	3.1	1.7	1.7	10.4	No
	Annual	0.7	0.3	0.4	1.0	No
PM _{2.5}	24-hour	2.1	0.4	1.7	10.4	No

Table 3-33. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.028	0.116	0.100	Yes
	State 1-hour	0.11	0.03	0.15	0.18	No
	Federal annual	0.017	0.002	0.019	0.053	No
	State annual	0.017	0.002	0.019	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.0	1.9	9.0	No

Table 3-34. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	23.6	24.4	1.6	10.4	No
	Annual	14.3	15.0	0.4	1.0	No
PM _{2.5}	24-hour	6.5	6.7	1.7	10.4	No

Table 3-35. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.051	0.139	0.100	Yes

Table 3-36. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 3 Construction and Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.026	0.114	0.100	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 3 pollutant concentrations under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of Alternative 3; construction and operational activities would overlap during this time. Total Alternative 3 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 3. Peak locations of AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 3 overlapping construction and operational concentrations are also presented.

Figure 3-15. Maximum Air Quality Impact Locations – Alternative 3 Construction without Mitigation under CEQA

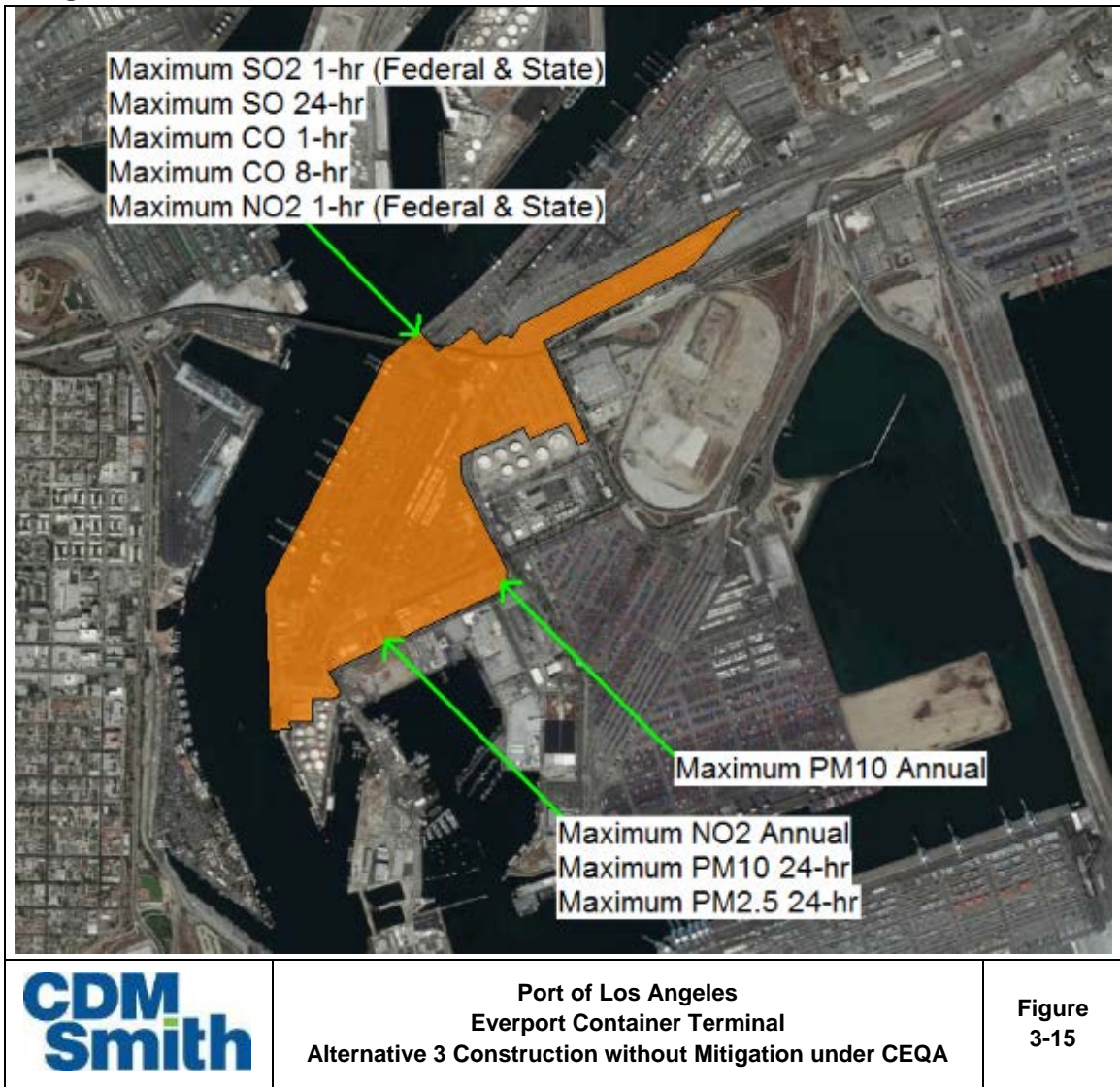


Figure 3-16. Maximum Air Quality Impact Locations – Alternative 3 Combined Construction and Operations without Mitigation under CEQA

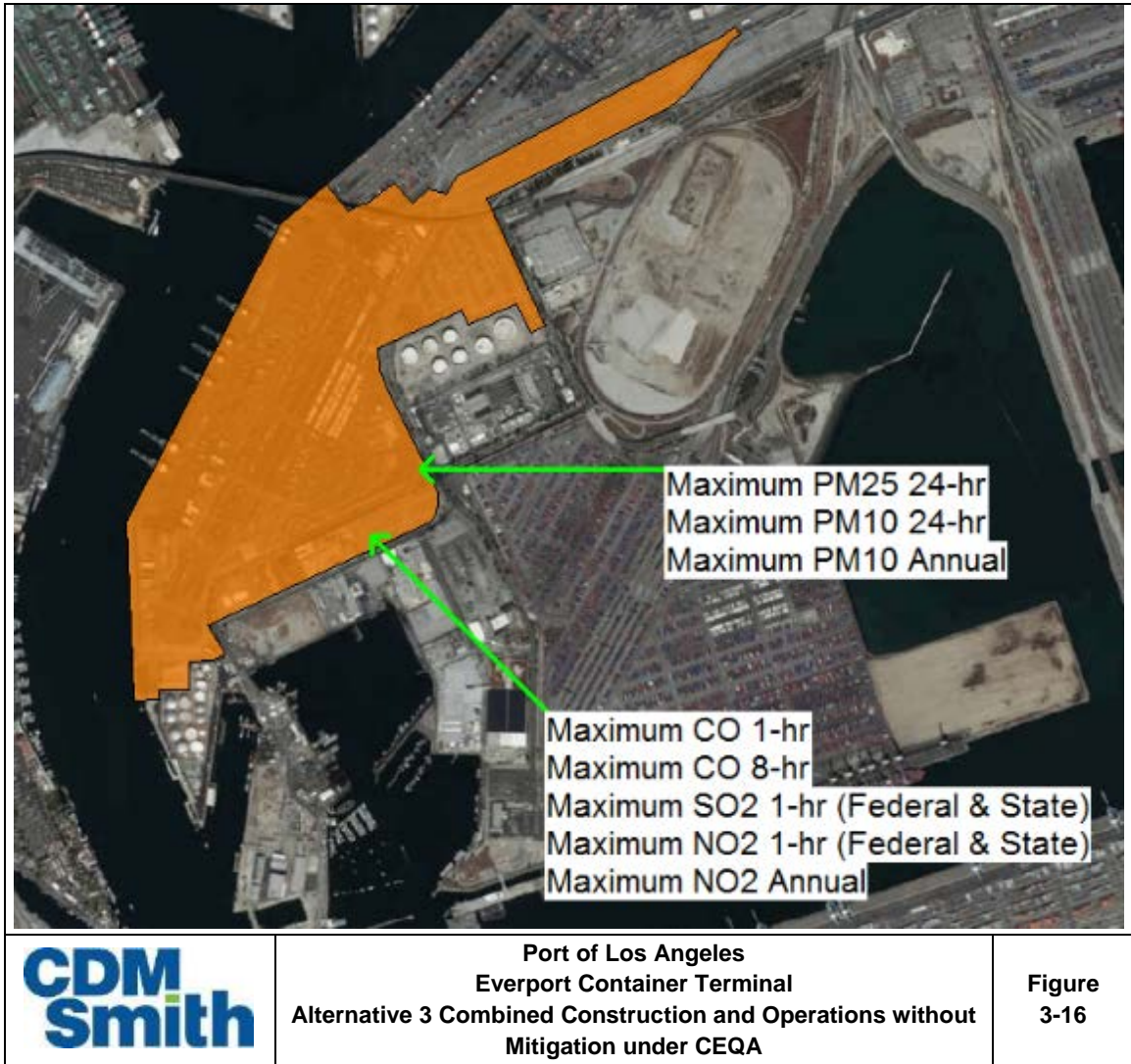


Figure 3-17. Maximum Air Quality Impact Locations – Alternative 3 Construction with Mitigation under CEQA



Figure 3-18. Maximum Air Quality Impact Locations – Alternative 3 Combined Construction and Operations with Mitigation under CEQA

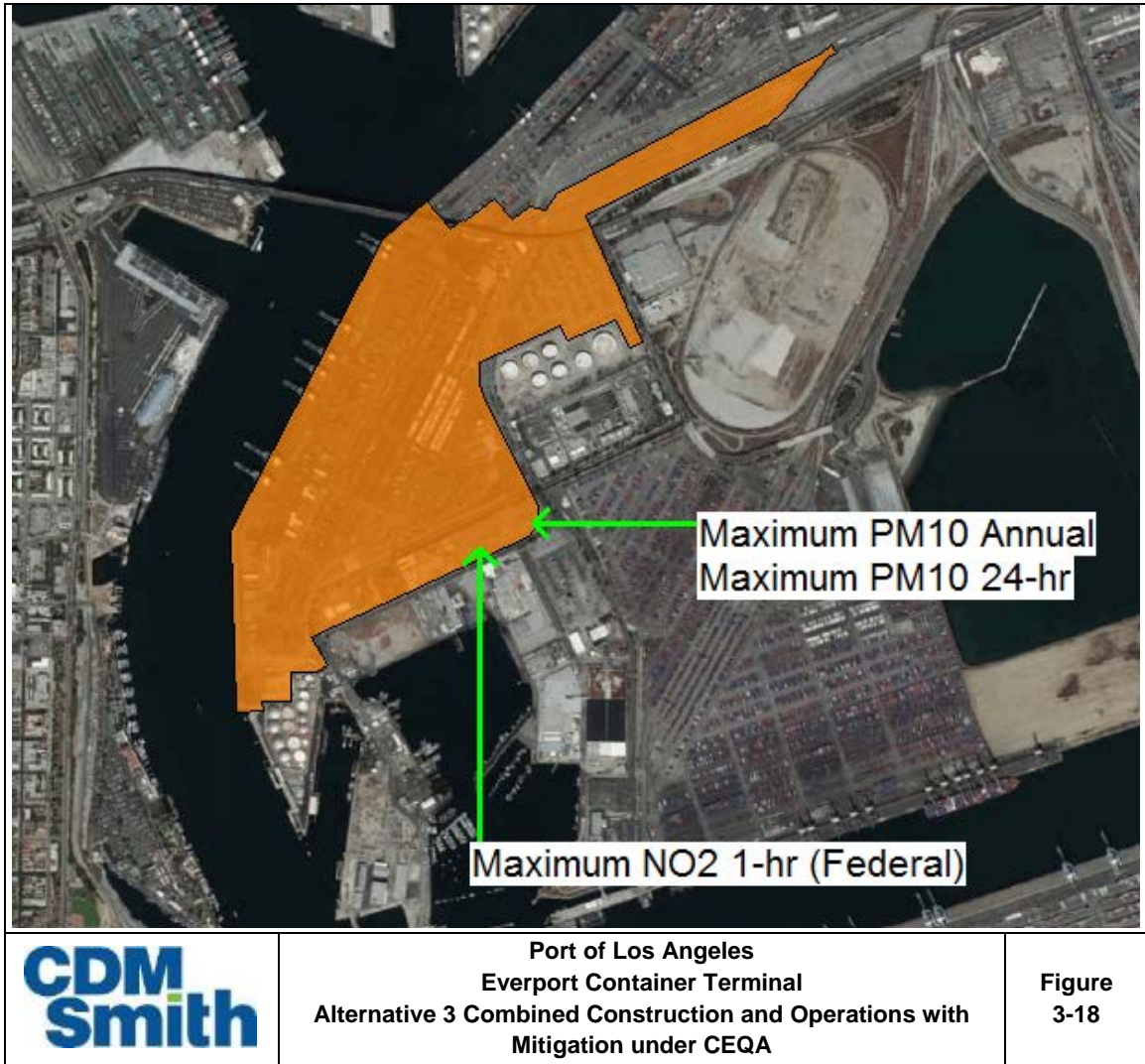


Figure 3-19. Maximum Air Quality Impact Locations – Alternative 3 Construction without Mitigation under NEPA



Figure 3-20. Maximum Air Quality Impact Locations – Alternative 3 Combined Construction and Operations without Mitigation under NEPA



Figure 3-21. Maximum Air Quality Impact Locations – Alternative 3 Construction with Mitigation under NEPA

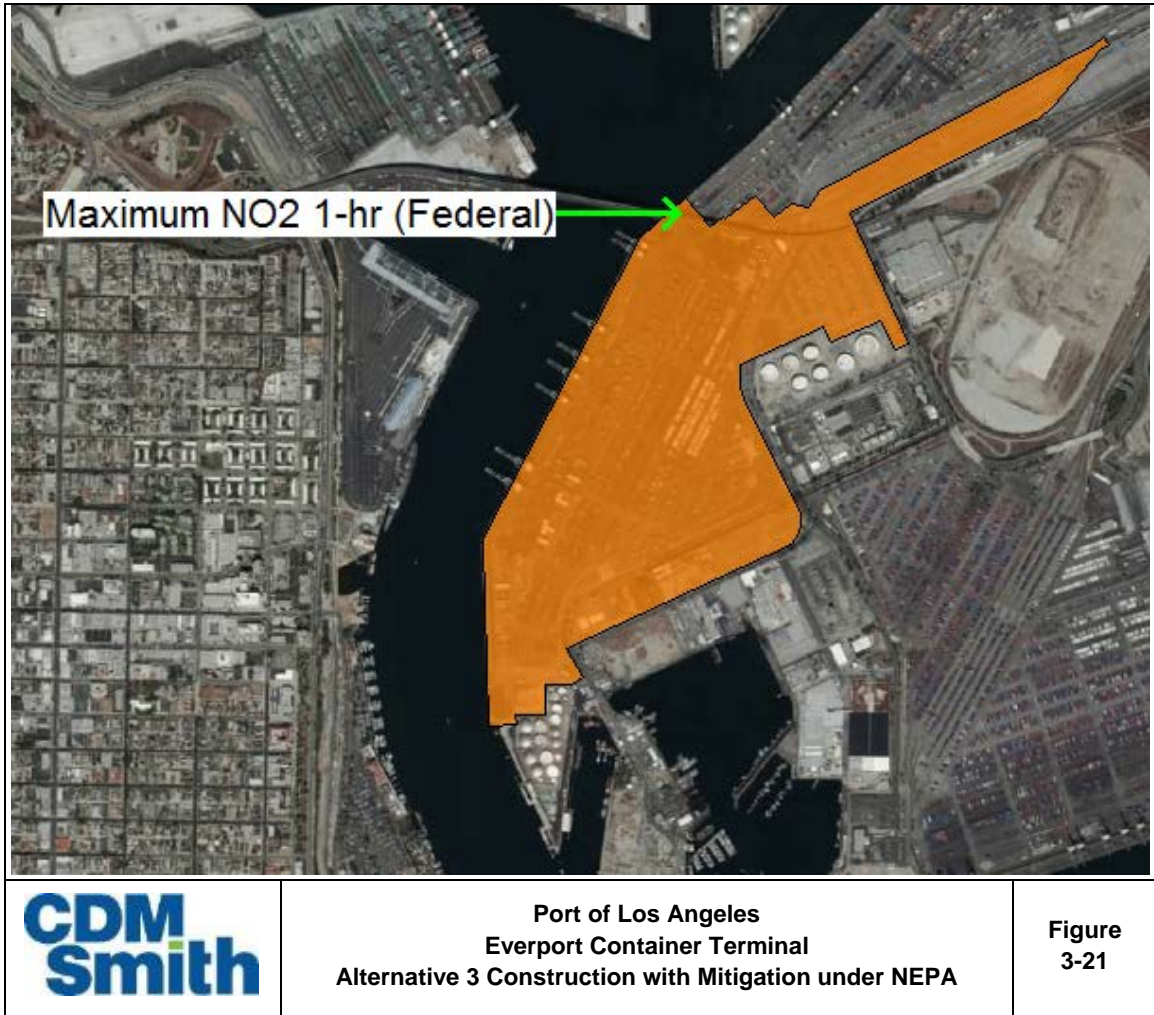


Figure 3-22. Maximum Air Quality Impact Locations – Alternative 3 Combined Construction and Operations with Mitigation under NEPA



3.3.1.5 Alternative 4

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 4 construction emissions under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of Alternative 4; construction and operational activities would overlap during this time. Total Alternative 4 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 4. AERMOD modeling results of mitigated and unmitigated Alternative 4 overlapping construction and operational emissions are also presented. NO₂, SO₂, and CO concentrations due to construction were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 4 and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-37. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.061	0.149	0.100	Yes
	State 1-hour	0.11	0.07	0.18	0.18	Yes
	Federal annual	0.017	0.001	0.018	0.053	No
	State annual	0.017	0.001	0.018	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-38. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	2.8	0.0	2.8	10.4	No
	Annual	0.1	0.0	0.1	1.0	No
PM _{2.5}	24-hour	2.5	0.0	2.5	10.4	No

Table 3-39. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.014	0.102	0.100	Yes
	State 1-hour	0.11	0.01	0.13	0.18	No
	Federal annual	0.017	0.003	0.020	0.053	No
	State annual	0.017	0.003	0.020	0.030	No
SO ₂	Federal 1-hour	0.038	-0.0002	0.037	0.075	No
	State 1-hour	0.05	-0.0002	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-40. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	10.8	8.2	3.0	10.4	No
	Annual	5.5	3.8	1.7	1.0	Yes
PM _{2.5}	24-hour	3.4	4.0	1.8	10.4	No

Table 3-41. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.057	0.145	0.100	Yes
NO ₂	State 1-hour	0.11	0.066	0.18	0.100	Yes

Table 3-42. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.010	0.098	0.100	No

Table 3-43. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM10	Annual	5.5	3.8	1.6	1.0	Yes

Table 3-44. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.057	0.145	0.100	Yes
	State 1-hour	0.11	0.06	0.18	0.18	No
	Federal annual	0.017	0.001	0.018	0.053	No
	State annual	0.017	0.001	0.018	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-45. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Construction without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	2.8	1.7	2.6	10.4	No
	Annual	0.1	0.3	0.1	1.0	No
PM _{2.5}	24-hour	2.5	0.4	2.5	10.4	No

Table 3-46. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.034	0.122	0.100	Yes
	State 1-hour	0.11	0.04	0.15	0.18	No
	Federal annual	0.017	0.017	0.035	0.053	No
	State annual	0.017	0.017	0.035	0.030	Yes
SO ₂	Federal 1-hour	0.038	0.0005	0.038	0.075	No
	State 1-hour	0.05	0.0005	0.05	0.25	No

	24-hour	0.01	0.0002	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-47. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	10.8	24.4	4.8	10.4	No
	Annual	5.5	15.0	2.8	1.0	Yes
PM _{2.5}	24-hour	3.4	6.7	2.5	10.4	No

Table 3-48. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.054	0.142	0.100	Yes

Table 3-49. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Construction and Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes
	State annual	0.017	0.017	0.035	0.030	Yes

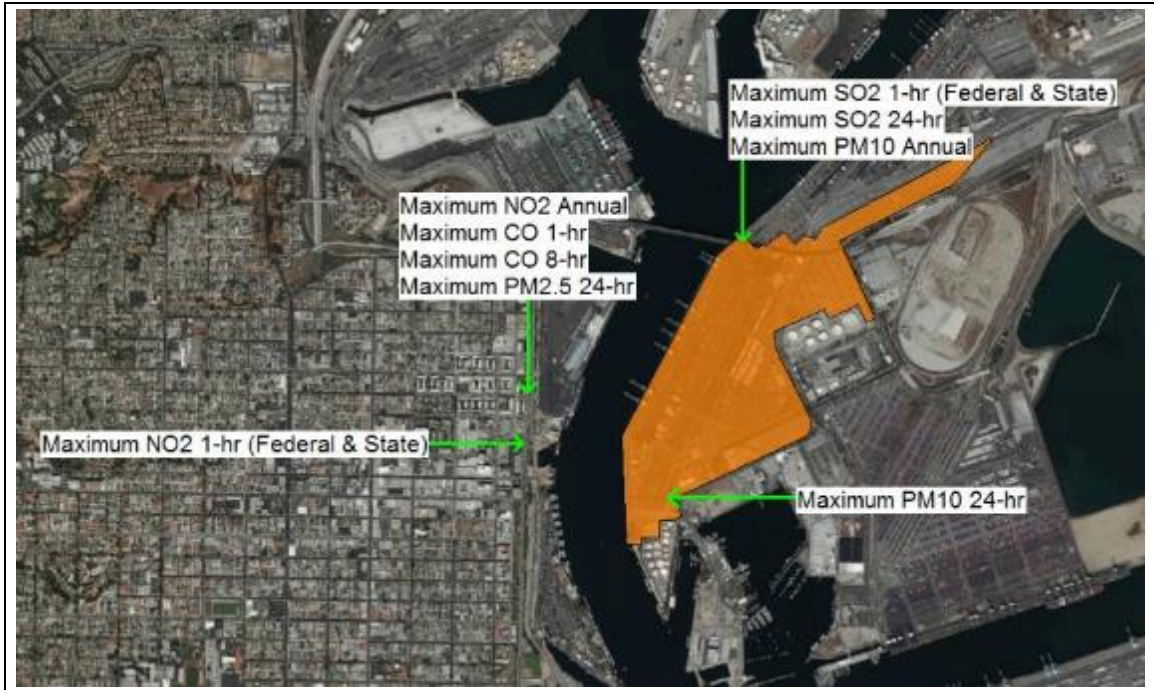
Table 3-50. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Construction and Operation with Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	Annual	5.5	15.0	2.8	1.0	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 4 pollutant concentrations under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of Alternative 4; construction and operational activities would overlap during this time. Total Alternative 4 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 4. Peak locations of AERMOD dispersion modeling results of both

mitigated and unmitigated Alternative 4 overlapping construction and operational concentrations are also presented.

Figure 3-23. Maximum Air Quality Impact Locations – Alternative 4 Construction without Mitigation under CEQA



Port of Los Angeles
Everport Container Terminal
Alternative 4 Construction without Mitigation under CEQA

Figure
3-23

Figure 3-24. Maximum Air Quality Impact Locations – Alternative 4 Combined Construction and Operations without Mitigation under CEQA

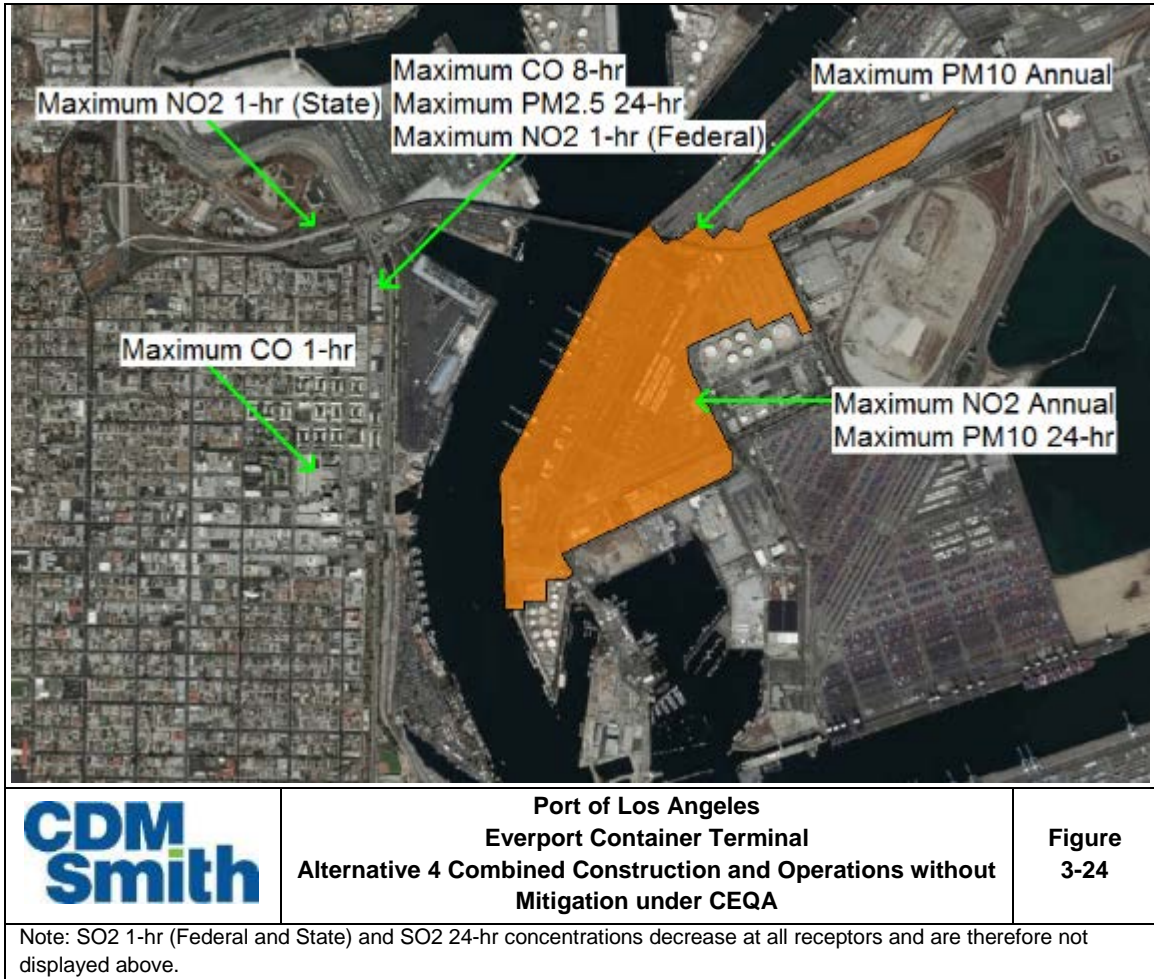


Figure 3-25. Maximum Air Quality Impact Locations – Alternative 4 Construction with Mitigation under CEQA



Figure 3-26. Maximum Air Quality Impact Locations – Alternative 4 Combined Construction and Operations with Mitigation under CEQA

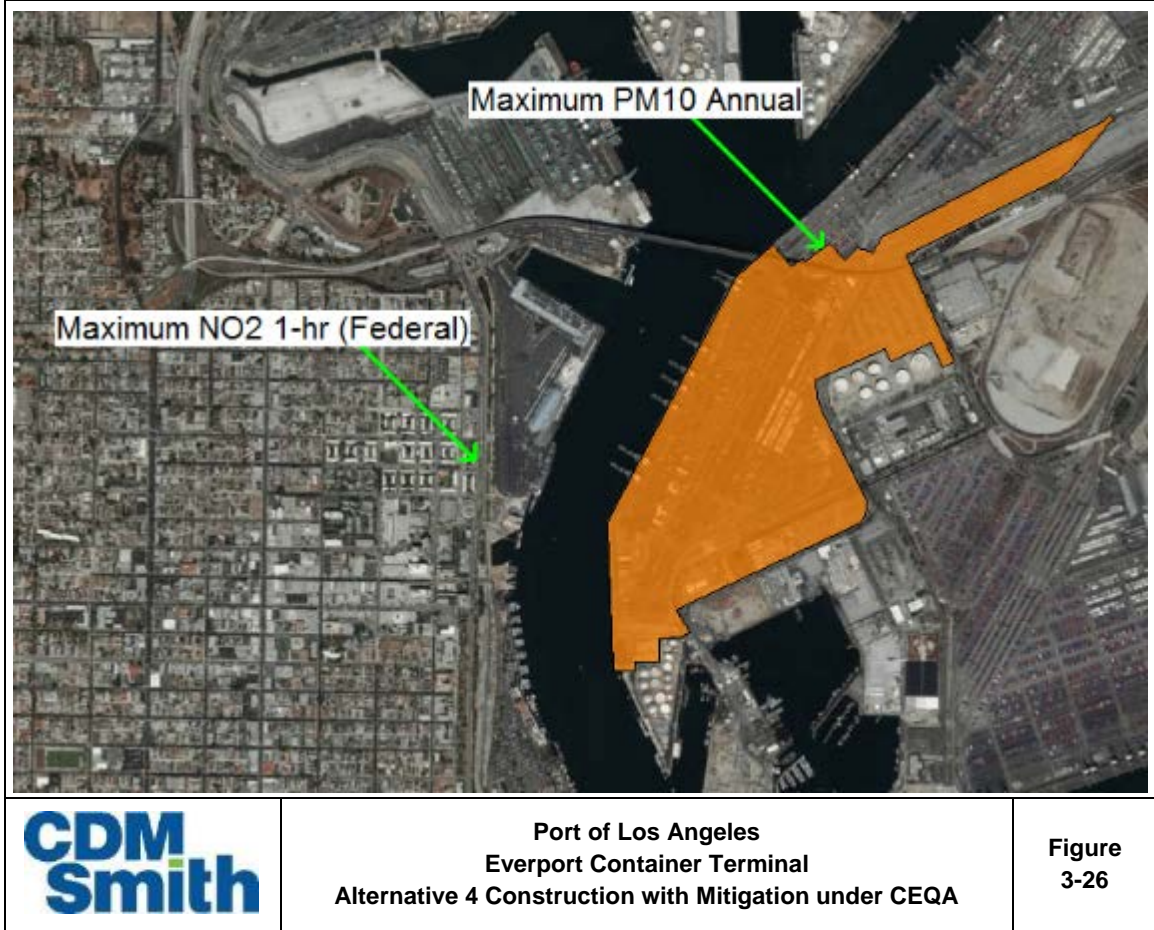


Figure 3-27. Maximum Air Quality Impact Locations – Alternative 4 Construction without Mitigation under NEPA

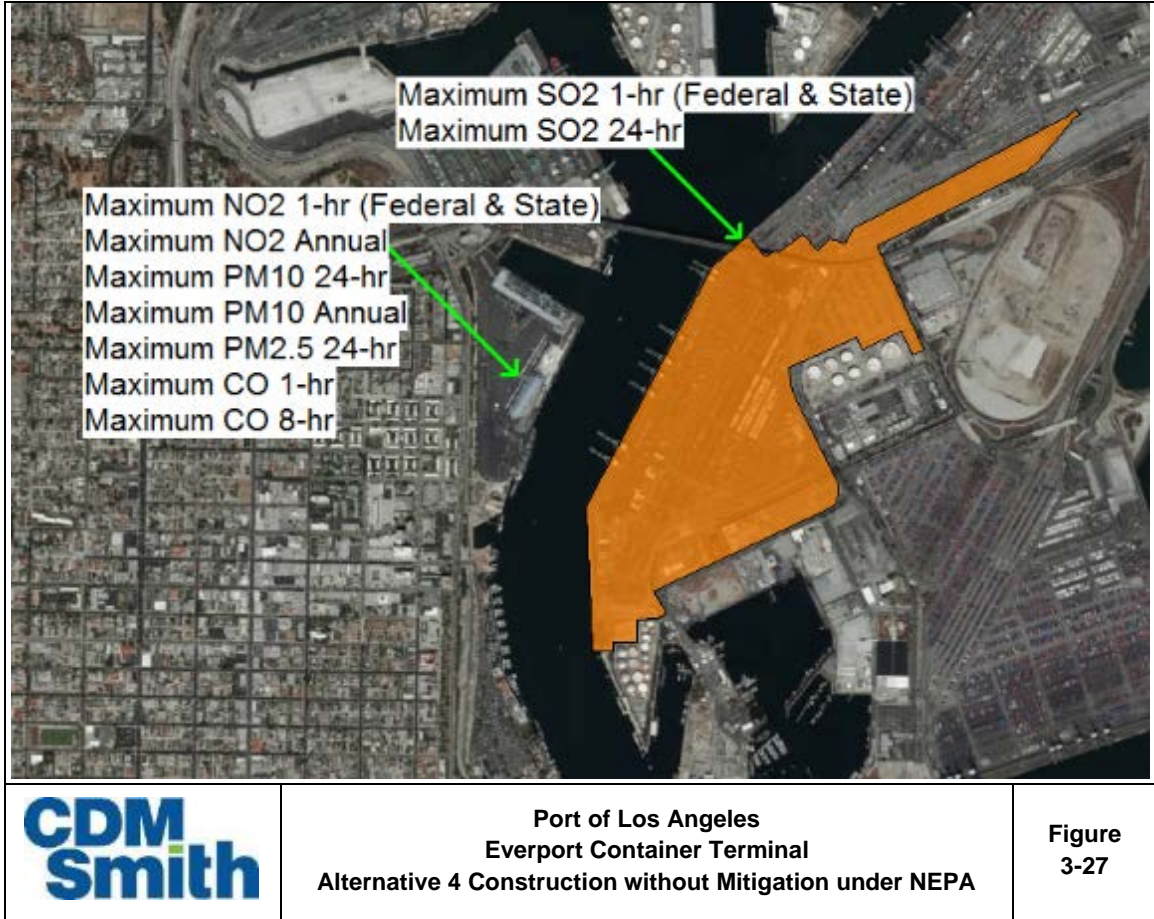


Figure 3-28. Maximum Air Quality Impact Locations – Alternative 4 Combined Construction and Operations without Mitigation under NEPA

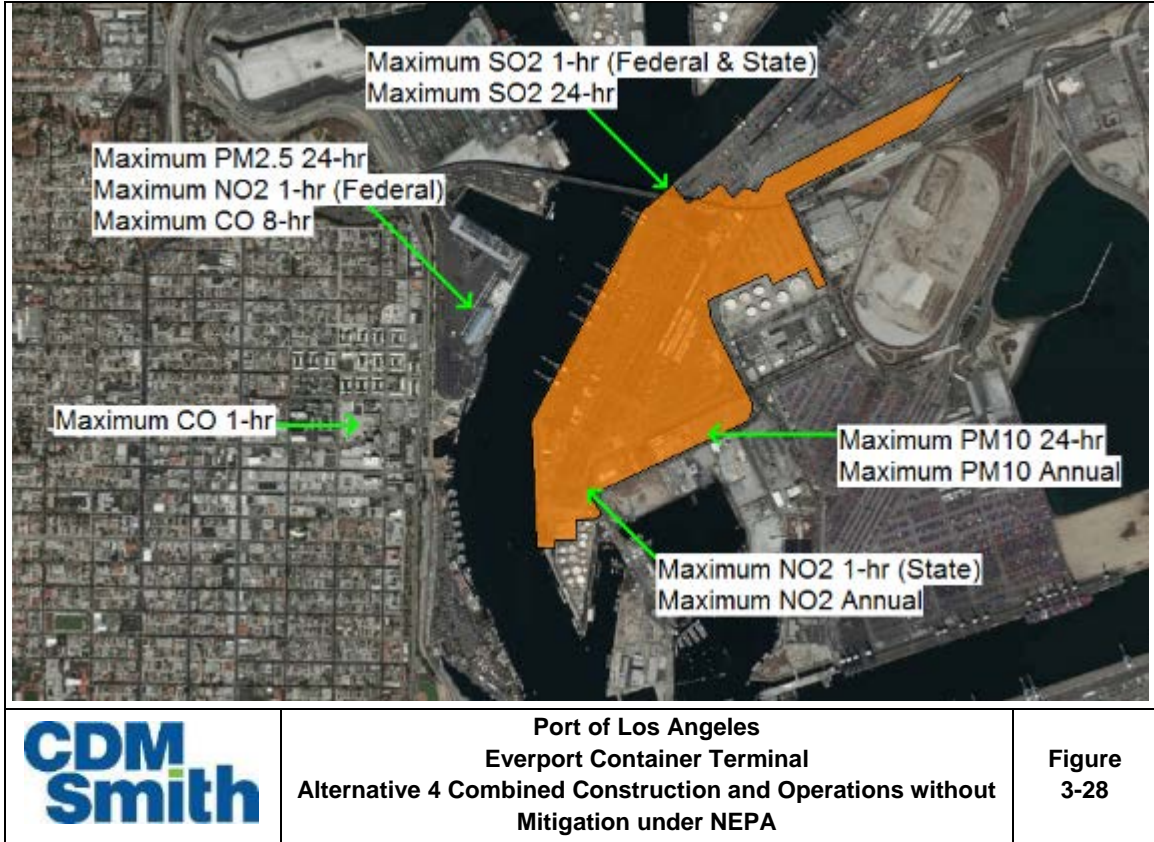
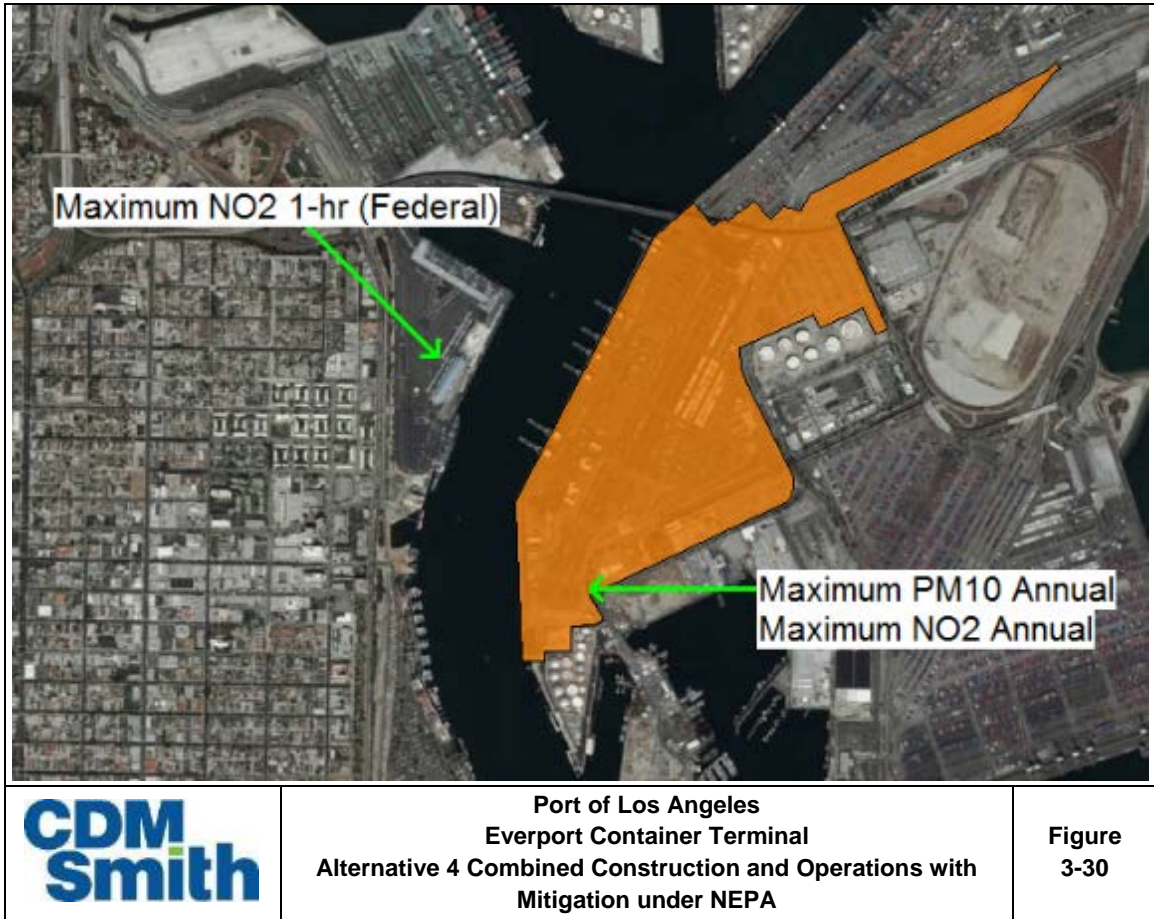


Figure 3-29. Maximum Air Quality Impact Locations – Alternative 4 Construction with Mitigation under NEPA



Figure 3-30. Maximum Air Quality Impact Locations – Alternative 4 Combined Construction and Operations with Mitigation under NEPA



3.3.1.6 Alternative 5

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 5 construction emissions under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of Alternative 5; construction and operational activities would overlap during this time. Total Alternative 5 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 5. AERMOD modeling results of mitigated and unmitigated Alternative 5 overlapping construction and operational emissions are also presented. NO₂, SO₂, and CO concentrations due to construction were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 5 and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-51. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.061	0.149	0.100	Yes
	State 1-hour	0.11	0.07	0.18	0.18	Yes
	Federal annual	0.017	0.004	0.021	0.053	No
	State annual	0.017	0.004	0.021	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-52. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Construction without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	4.9	0.0	4.9	10.4	No
	Annual	0.8	0.0	0.8	1.0	No
PM _{2.5}	24-hour	4.3	0.0	4.3	10.4	No

Table 3-53. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes
	State 1-hour	0.11	0.04	0.16	0.18	No
	Federal annual	0.017	0.010	0.028	0.053	No
	State annual	0.017	0.010	0.028	0.030	No
SO ₂	Federal 1-hour	0.038	0.0000	0.038	0.075	No
	State 1-hour	0.05	0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-54. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Construction and Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	24.0	8.2	18.0	10.4	Yes
	Annual	14.7	3.8	12.3	1.0	Yes
PM _{2.5}	24-hour	6.5	4.0	3.7	10.4	No

Table 3-55. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.058	0.146	0.100	Yes
NO ₂	State 1-hour	0.11	0.066	0.18	0.100	Yes

Table 3-56. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

Table 3-57. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Construction and Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	23.9	8.2	17.9	10.4	Yes
	Annual	14.7	3.8	12.3	1.0	Yes

Table 3-58. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.058	0.146	0.100	Yes
	State 1-hour	0.11	0.07	0.18	0.18	No
	Federal annual	0.017	0.003	0.020	0.053	No
	State annual	0.017	0.003	0.020	0.030	No
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-59. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Construction without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	4.9	1.7	4.7	10.4	No
	Annual	0.8	0.3	0.5	1.0	No
PM _{2.5}	24-hour	4.3	0.4	4.2	10.4	No

Table 3-60. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.036	0.124	0.100	Yes
	State 1-hour	0.11	0.04	0.15	0.18	No
	Federal annual	0.017	0.003	0.020	0.053	No
	State annual	0.017	0.003	0.020	0.030	No
SO ₂	Federal 1-hour	0.038	0.0004	0.038	0.075	No
	State 1-hour	0.05	0.0004	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-61. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Construction and Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	24.0	24.4	4.1	10.4	No
	Annual	14.7	15.0	0.5	1.0	No
PM _{2.5}	24-hour	6.5	6.7	3.9	10.4	No

Table 3-62. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.054	0.142	0.100	Yes

Table 3-63. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Construction and Operation with Mitigation under NEPA

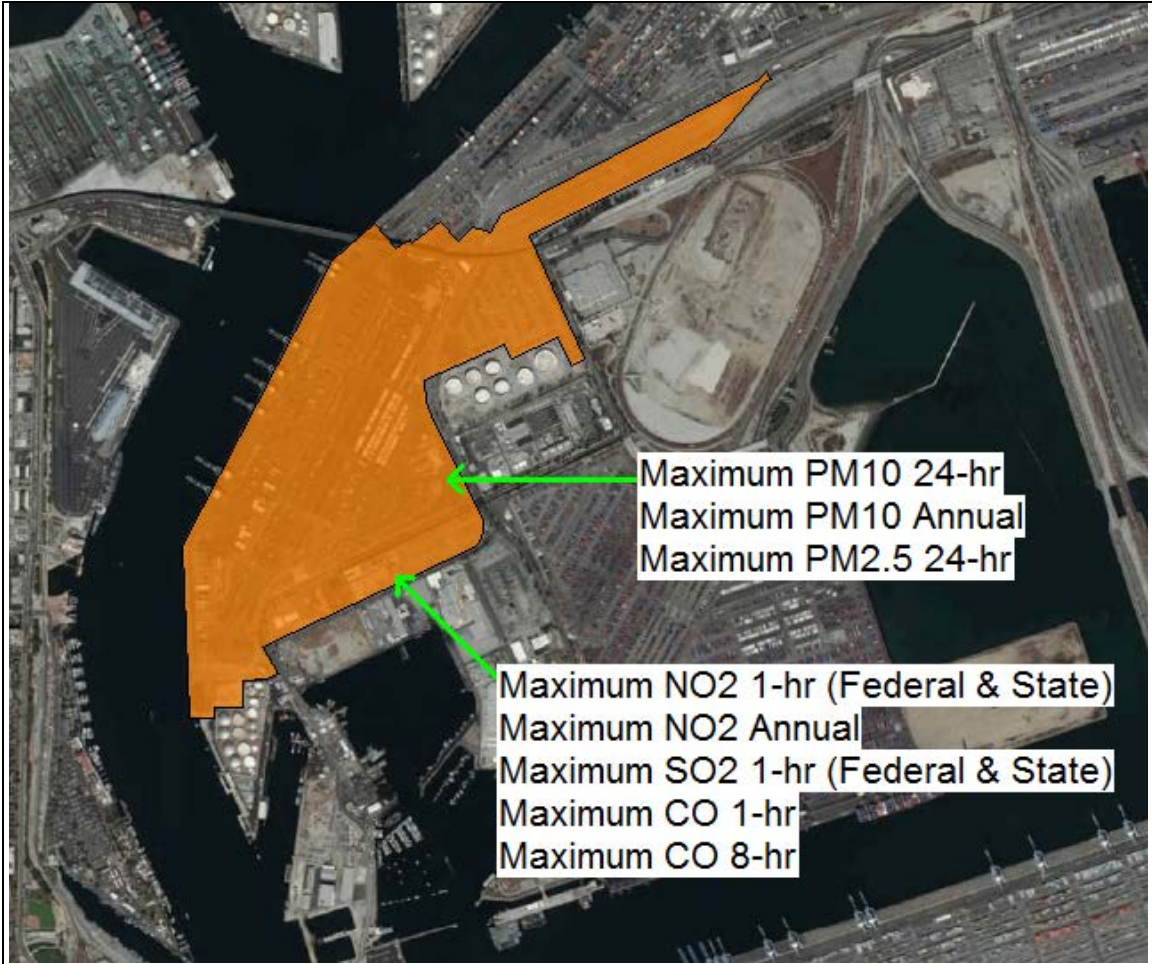
Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 5 pollutant concentrations under CEQA & NEPA. The Everport Container Terminal would continue to operate during construction of Alternative 5; construction and operational activities would overlap during this time. Total Alternative 5 emissions from overlapping construction and operational activities are presented to show the overall impacts of Alternative 5. Peak locations of AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 5 overlapping construction and operational concentrations are also presented.

Figure 3-31. Maximum Air Quality Impact Locations – Alternative 5 Construction without Mitigation under CEQA



Figure 3-32. Maximum Air Quality Impact Locations – Alternative 5 Combined Construction and Operations without Mitigation under CEQA



	<p>Port of Los Angeles Everport Container Terminal Alternative 5 Combined Construction and Operations without Mitigation under CEQA</p>	<p>Figure 3-32</p>
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Note: SO2 24-hr concentrations decrease at all receptors and are therefore not displayed above.

Figure 3-33. Maximum Air Quality Impact Locations – Alternative 5 Construction with Mitigation under CEQA

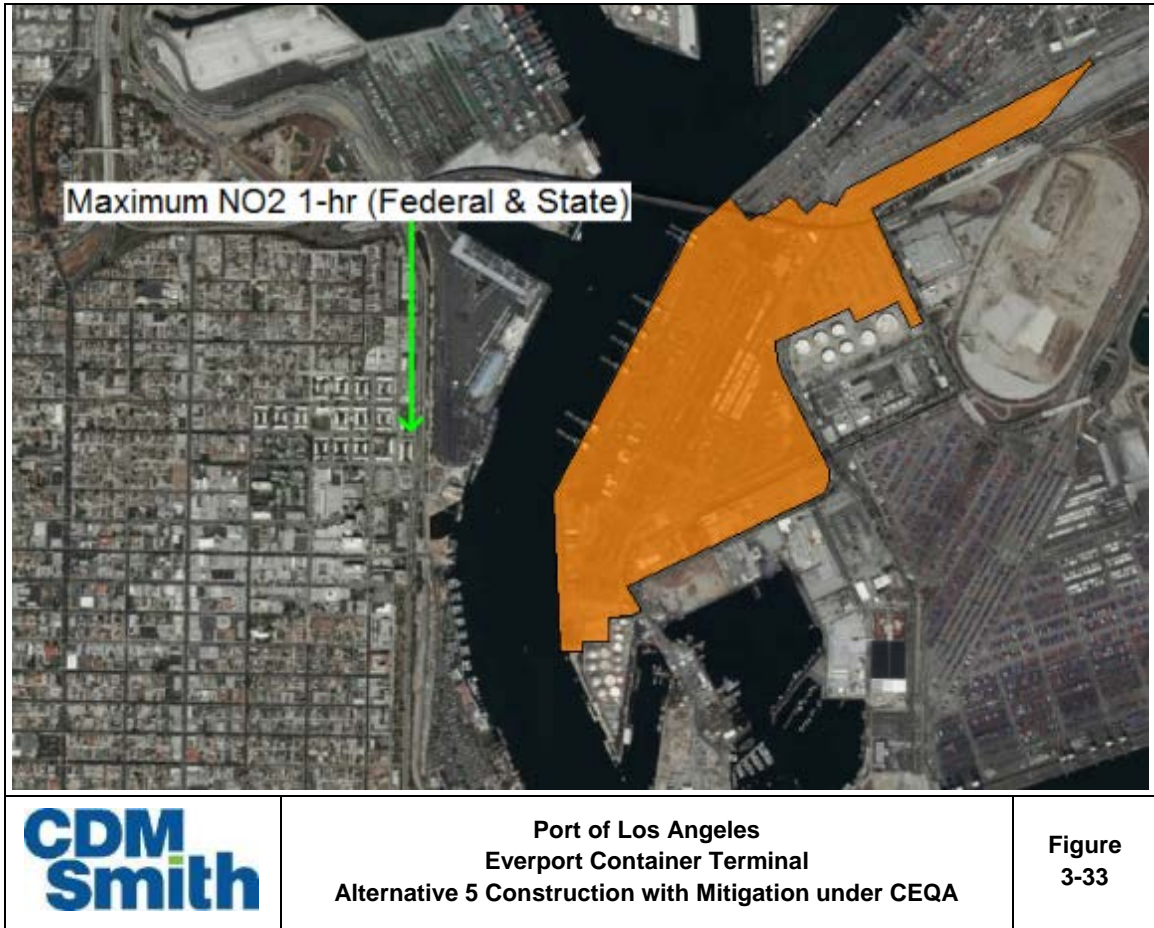


Figure 3-34. Maximum Air Quality Impact Locations – Alternative 5 Combined Construction and Operations with Mitigation under CEQA

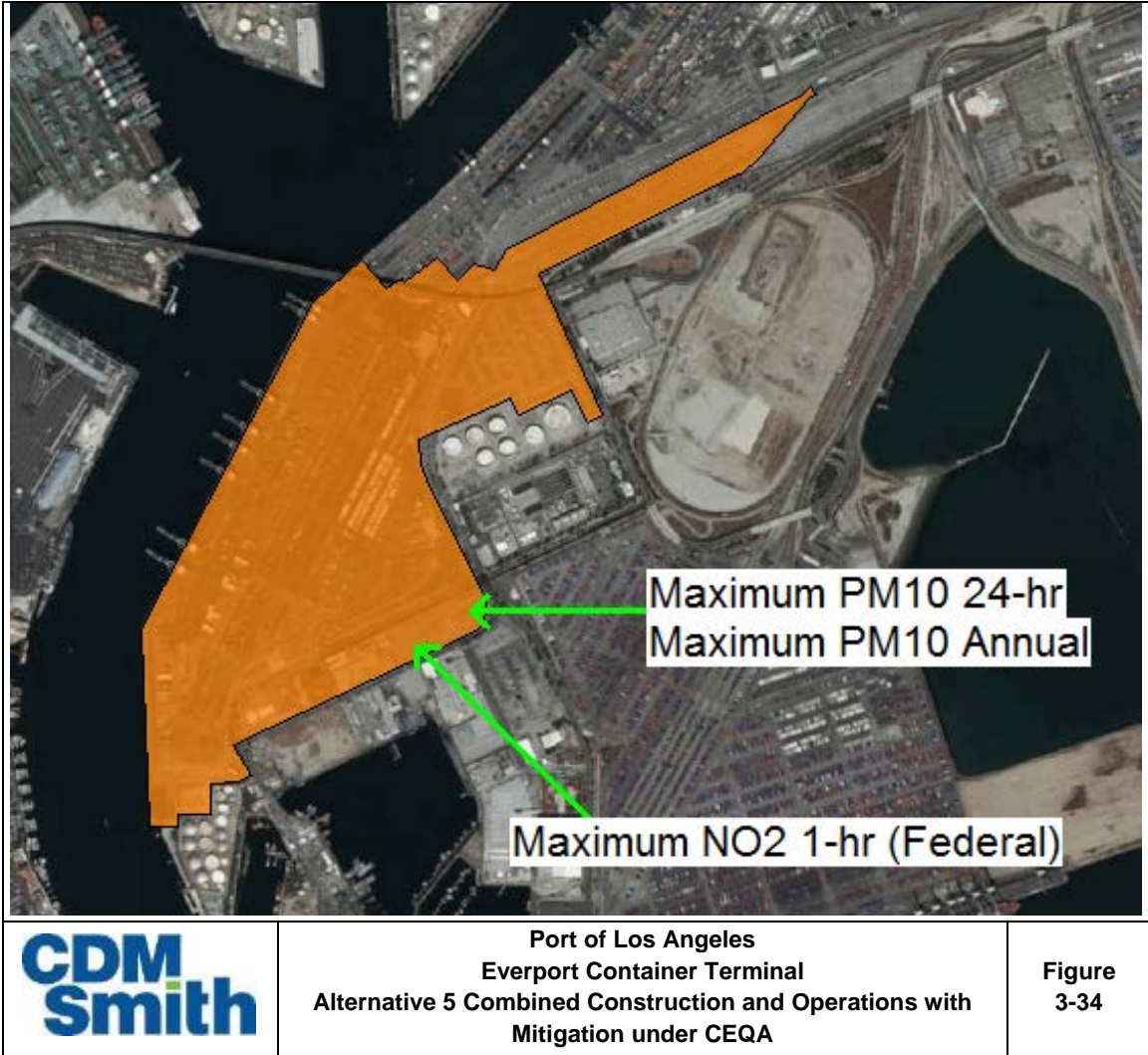


Figure 3-35. Maximum Air Quality Impact Locations – Alternative 5 Construction without Mitigation under NEPA

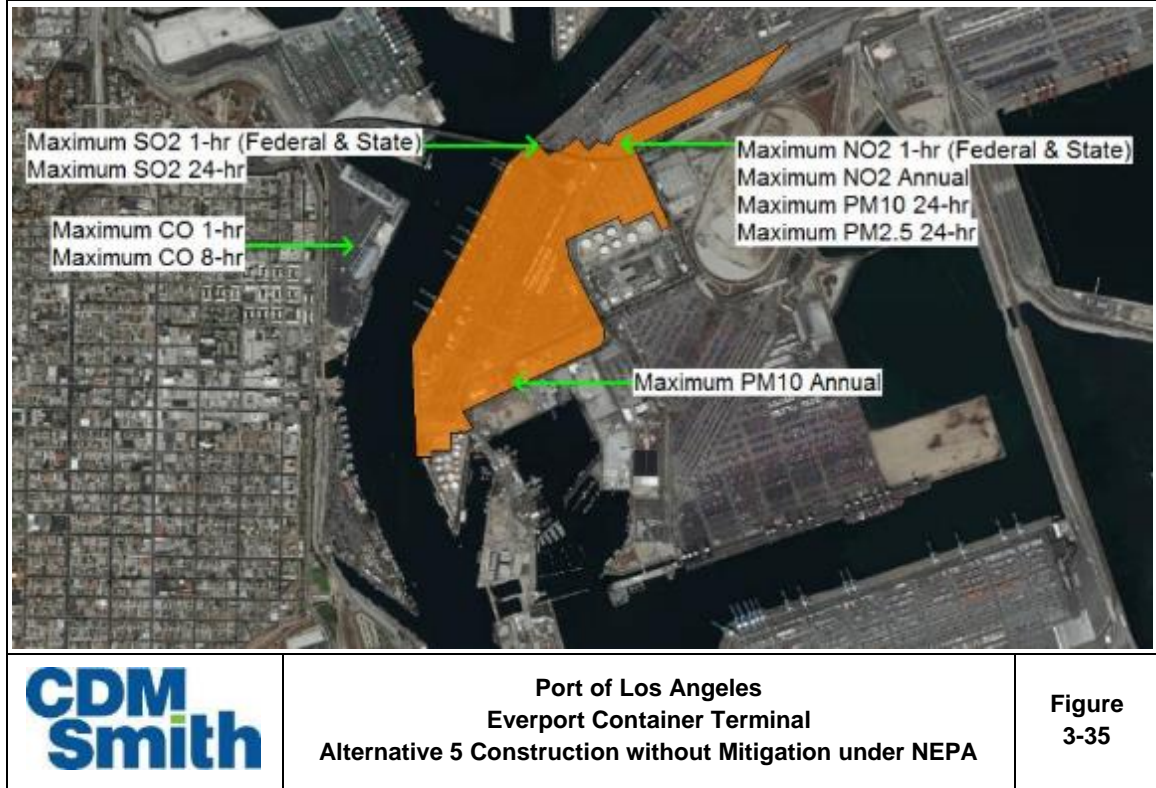


Figure 3-36. Maximum Air Quality Impact Locations – Alternative 5 Combined Construction and Operations without Mitigation under NEPA

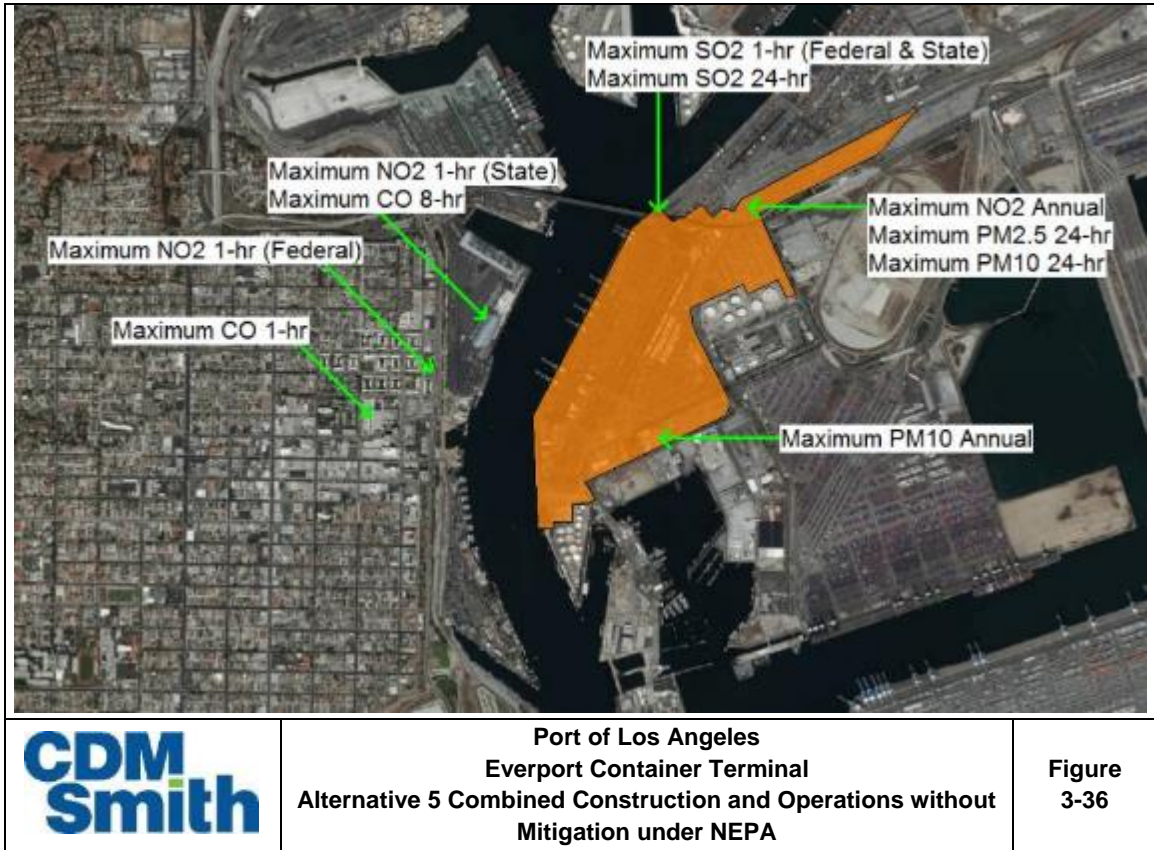


Figure 3-37. Maximum Air Quality Impact Locations – Alternative 5 Construction with Mitigation under NEPA

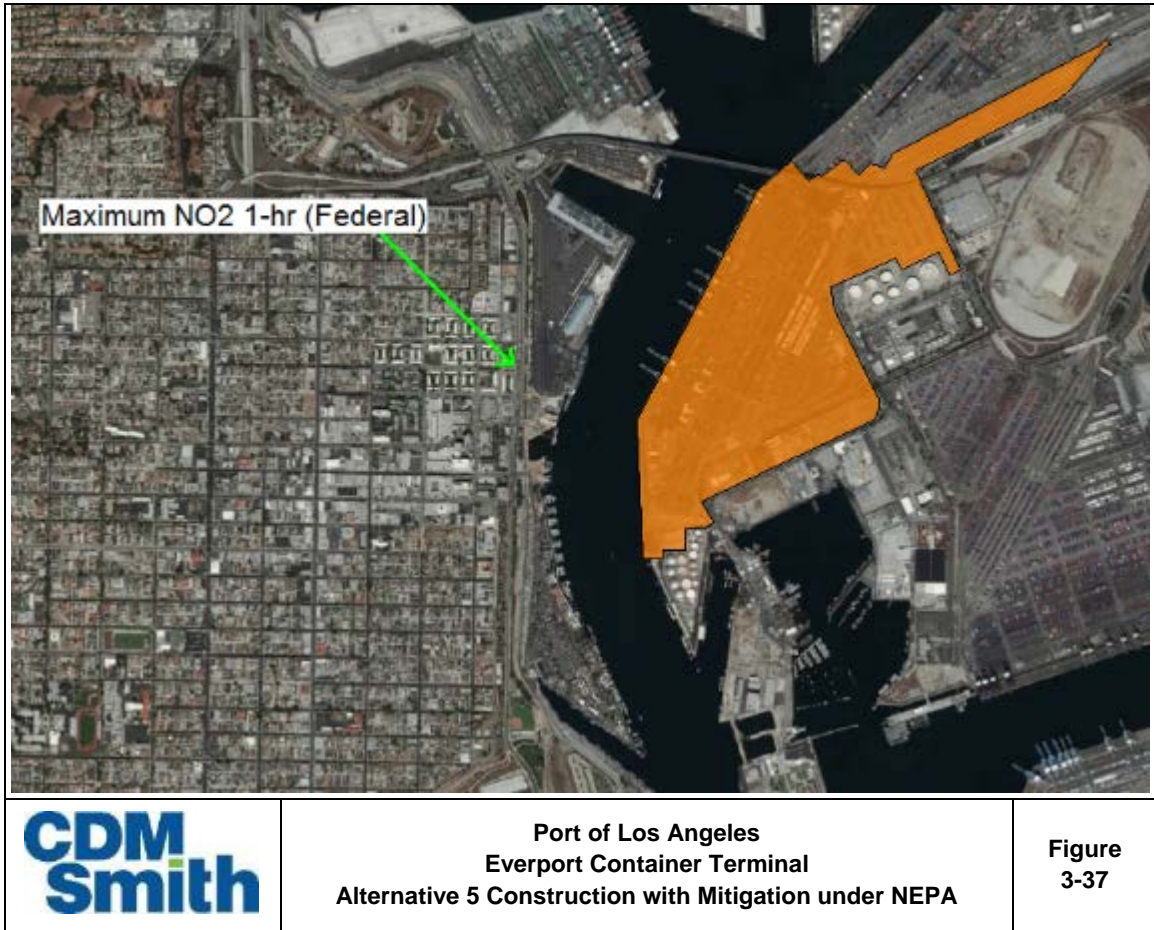
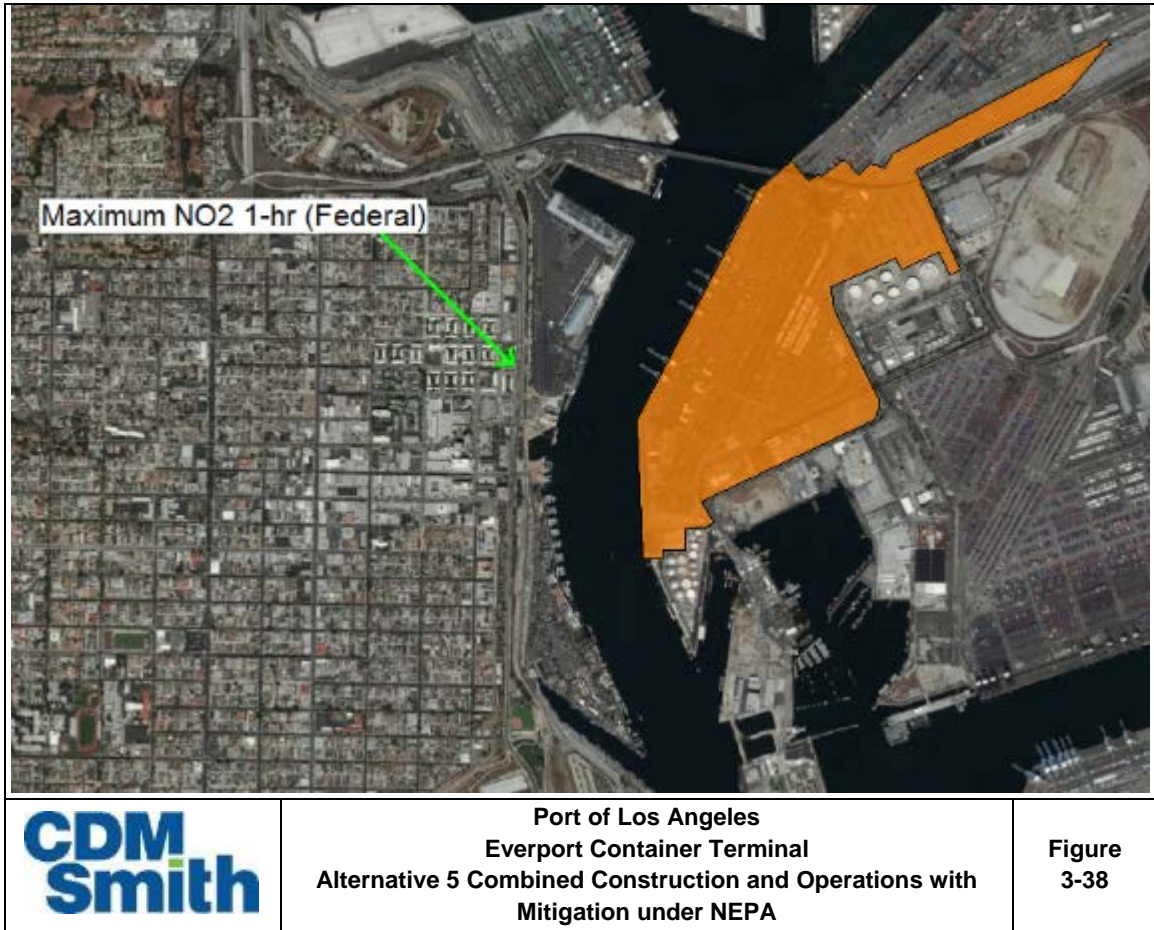


Figure 3-38. Maximum Air Quality Impact Locations – Alternative 5 Combined Construction and Operations with Mitigation under NEPA



3.3.2 Operational Impacts

Operational impacts were evaluated for the CEQA baseline; the NEPA baseline; the unmitigated Alternative 2; and the unmitigated and mitigated proposed Project, Alternative 1, Alternative 3, Alternative 4, and Alternative 5. Mitigation is not required under Alternative 2. Impacts for federal 1-hour NO₂ were modeled to represent the 98th percentile of the daily maximum 1-hour averages. Impacts for SO₂ were modeled to represent the 99th percentile of the daily maximum 1-hour averages. Background concentrations for NO₂, SO₂, and CO were obtained from the TITP station. Concentration increments represent the modeled scenario minus the CEQA or NEPA baseline. Due to maximum modeled baseline and modeled scenario concentrations potentially occurring at different receptors, presented scenario and baseline concentrations may not necessarily subtract to equal the presented increment. Additionally, exceedances of a SCAQMD threshold are indicated in bold.

3.3.2.1 Proposed Project

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated proposed Project operational emissions under CEQA & NEPA. NO₂, SO₂, and CO concentrations due to operation were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to the project relative to the CEQA & NEPA baselines and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-64. Maximum Offsite NO₂, SO₂, and CO Concentrations—Proposed Project Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes
	State 1-hour	0.11	0.04	0.16	0.18	No
	Federal annual	0.017	0.010	0.028	0.053	No
	State annual	0.017	0.010	0.028	0.030	No
SO ₂	Federal 1-hour	0.038	0.0001	0.038	0.075	No
	State 1-hour	0.05	0.0002	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.2	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-65. Maximum Offsite PM₁₀ and PM_{2.5} Concentrations—Proposed Project Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	33.8	8.2	27.3	2.5	Yes
	Annual	19.0	3.8	16.6	1.0	Yes
PM _{2.5}	24-hour	9.0	4.0	6.1	2.5	Yes

Table 3-66. Maximum Offsite NO₂, SO₂ and CO Concentrations—Proposed Project Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

Table 3-67. Maximum Offsite PM₁₀ and PM_{2.5} Concentrations—Proposed Project Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	33.8	8.2	27.3	2.5	Yes
	Annual	19.0	3.8	16.6	1.0	Yes
PM _{2.5}	24-hour	8.9	4.0	6.1	2.5	Yes

Table 3-68. Maximum Offsite NO₂, SO₂, and CO Concentrations—Proposed Project Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.015	0.103	0.100	Yes
	State 1-hour	0.11	0.02	0.13	0.18	No
	Federal annual	0.017	0.005	0.022	0.053	No
	State annual	0.017	0.005	0.022	0.030	No
SO ₂	Federal 1-hour	0.038	0.0002	0.038	0.075	No
	State 1-hour	0.05	0.0002	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.0	1.9	9.0	No

Table 3-69. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Proposed Project Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	33.8	25.2	8.6	2.5	Yes
	Annual	19.0	15.0	5.2	1.0	Yes
PM _{2.5}	24-hour	9.0	6.8	2.2	2.5	No

Table 3-70. Maximum Offsite NO₂, SO₂ and CO Concentrations—Proposed Project Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.011	0.099	0.100	No

Table 3-71. Maximum Offsite PM₁₀ and PM_{2.5} Concentrations—Proposed Project Operation with Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	33.8	25.2	8.5	2.5	Yes
	Annual	19.0	15.0	5.2	1.0	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated proposed Project pollutant concentrations under CEQA & NEPA.

Figure 3-39. Maximum Air Quality Impact Locations – Proposed Project Operations without Mitigation under CEQA

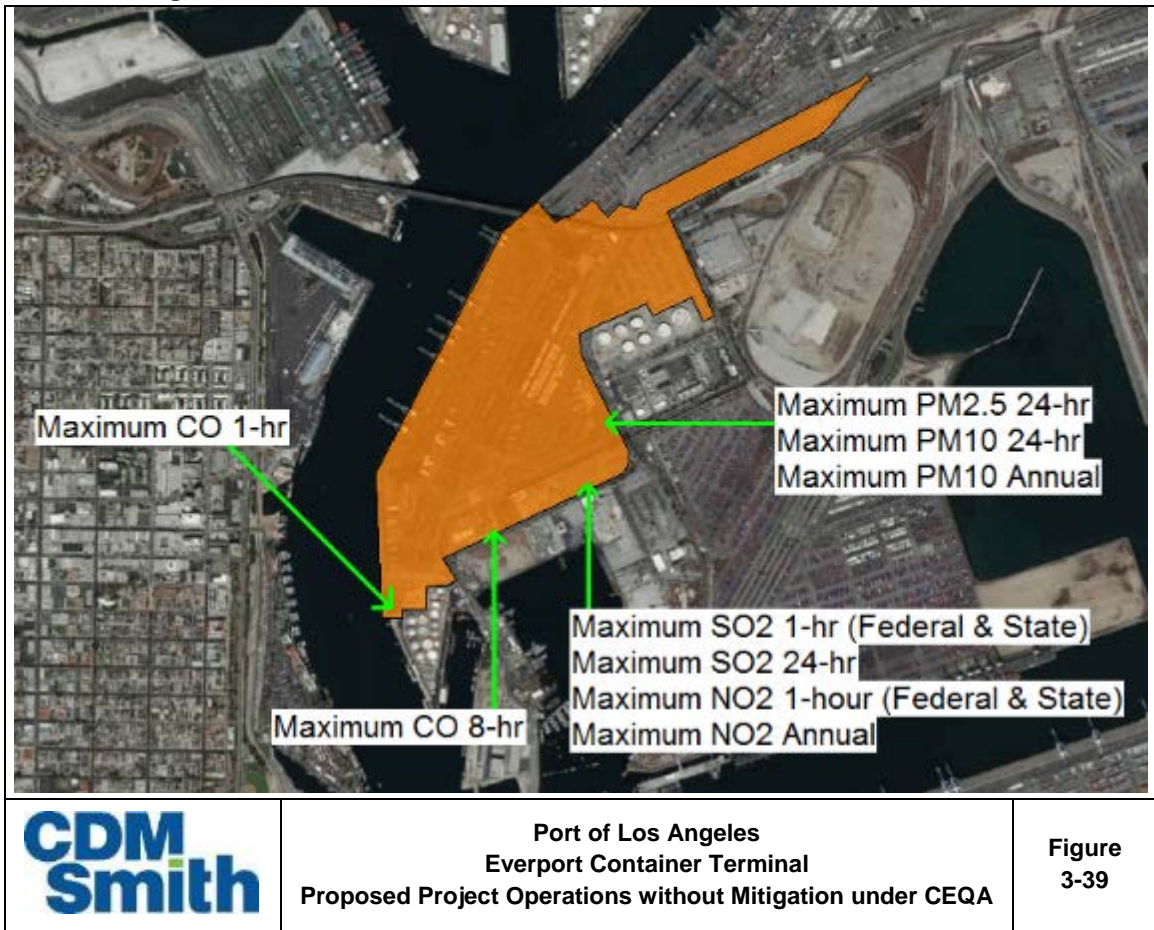


Figure 3-40. Maximum Air Quality Impact Locations – Proposed Project Operations with Mitigation under CEQA

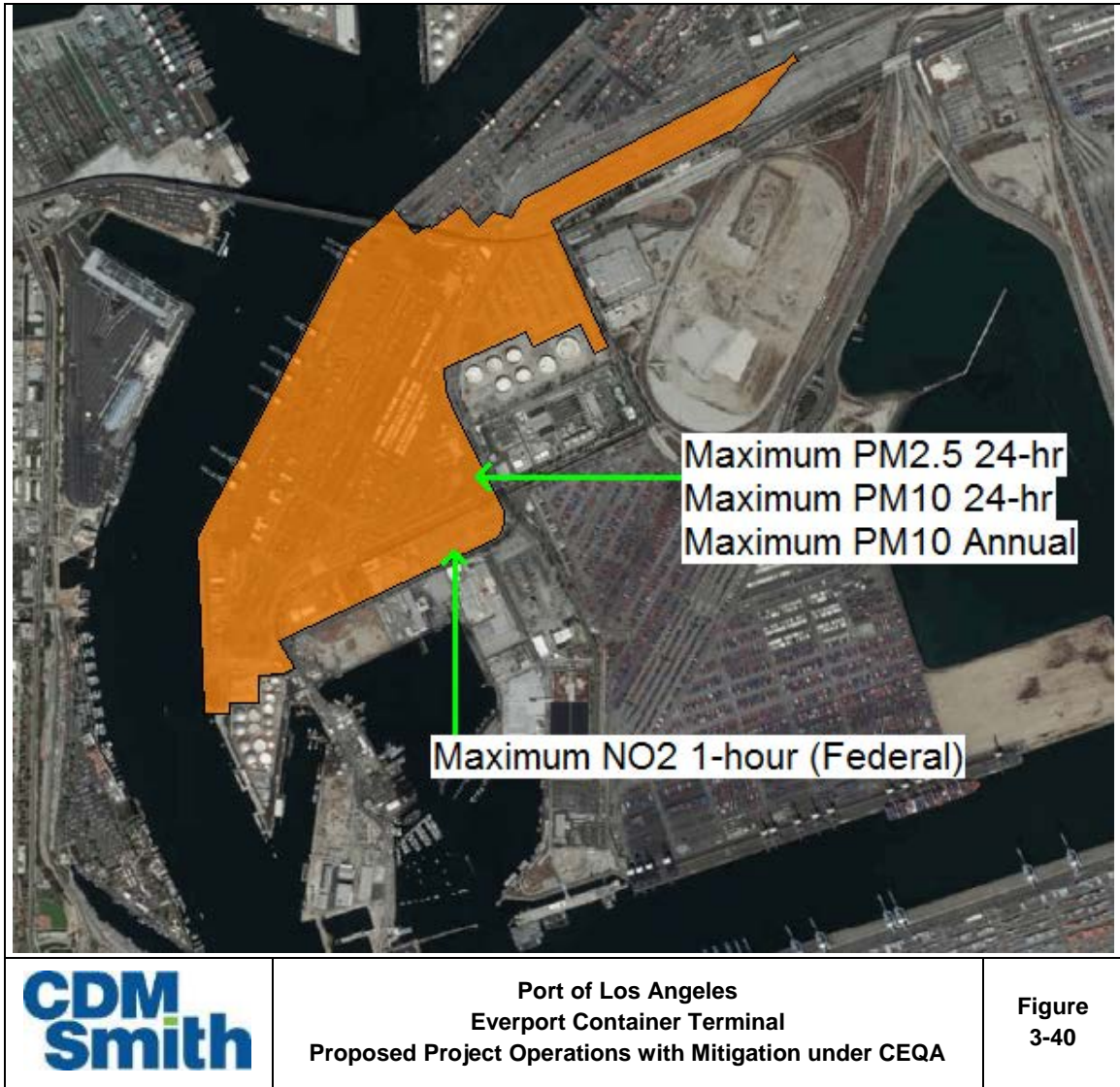


Figure 3-41. Maximum Air Quality Impact Locations – Proposed Project Operations without Mitigation under NEPA

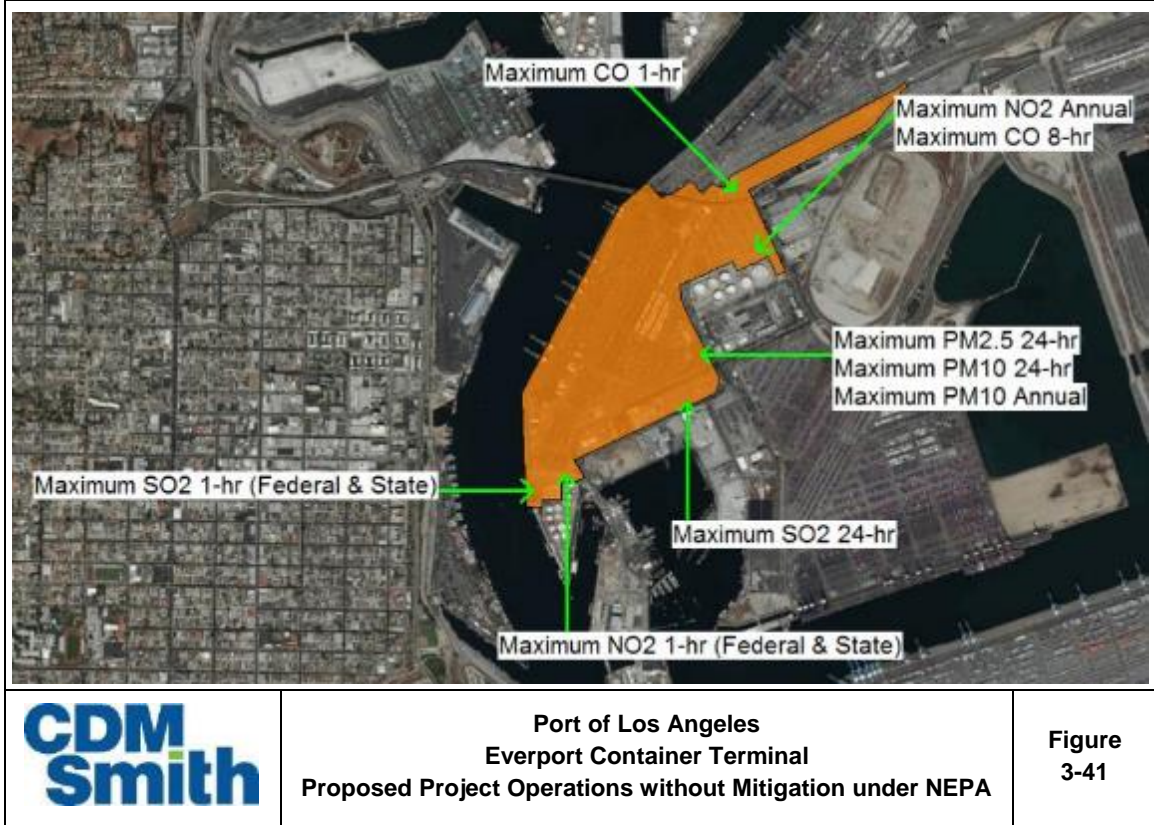
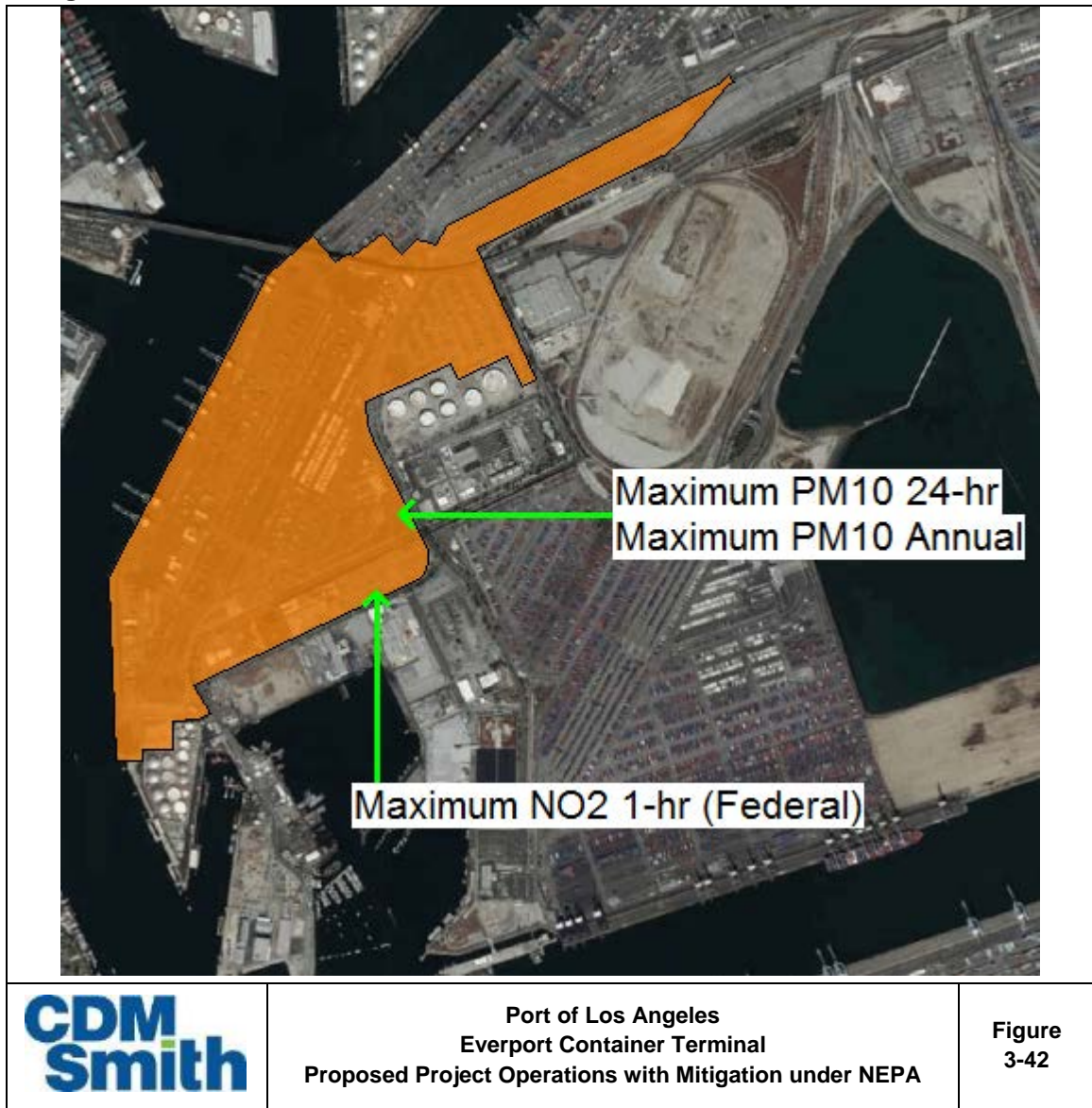


Figure 3-42. Maximum Air Quality Impact Locations – Proposed Project Operations with Mitigation under NEPA



3.3.2.2 Alternative 1

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated proposed Project operational emissions under CEQA. NO₂, SO₂, and CO concentrations due to operation were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 1 relative to the CEQA baseline and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-72. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 1 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.029	0.117	0.100	Yes
	State 1-hour	0.11	0.04	0.15	0.18	No
	Federal annual	0.017	0.012	0.029	0.053	No
	State annual	0.017	0.012	0.029	0.030	No
SO ₂	Federal 1-hour	0.038	0.0000	0.038	0.075	No
	State 1-hour	0.05	0.0000	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-73. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 1 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	25.3	8.2	18.8	2.5	Yes
	Annual	15.0	3.8	12.6	1.0	Yes
PM _{2.5}	24-hour	6.8	4.0	4.0	2.5	Yes

Table 3-74. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 1 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.029	0.117	0.100	Yes

Table 3-75. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 1 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	25.2	8.2	18.7	2.5	Yes
	Annual	15.0	3.8	12.6	1.0	Yes
PM _{2.5}	24-hour	6.8	4.0	4.0	2.5	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 1 pollutant concentrations under CEQA.

Figure 3-43. Maximum Air Quality Impact Locations – Alternative 1 Operations without Mitigation under CEQA

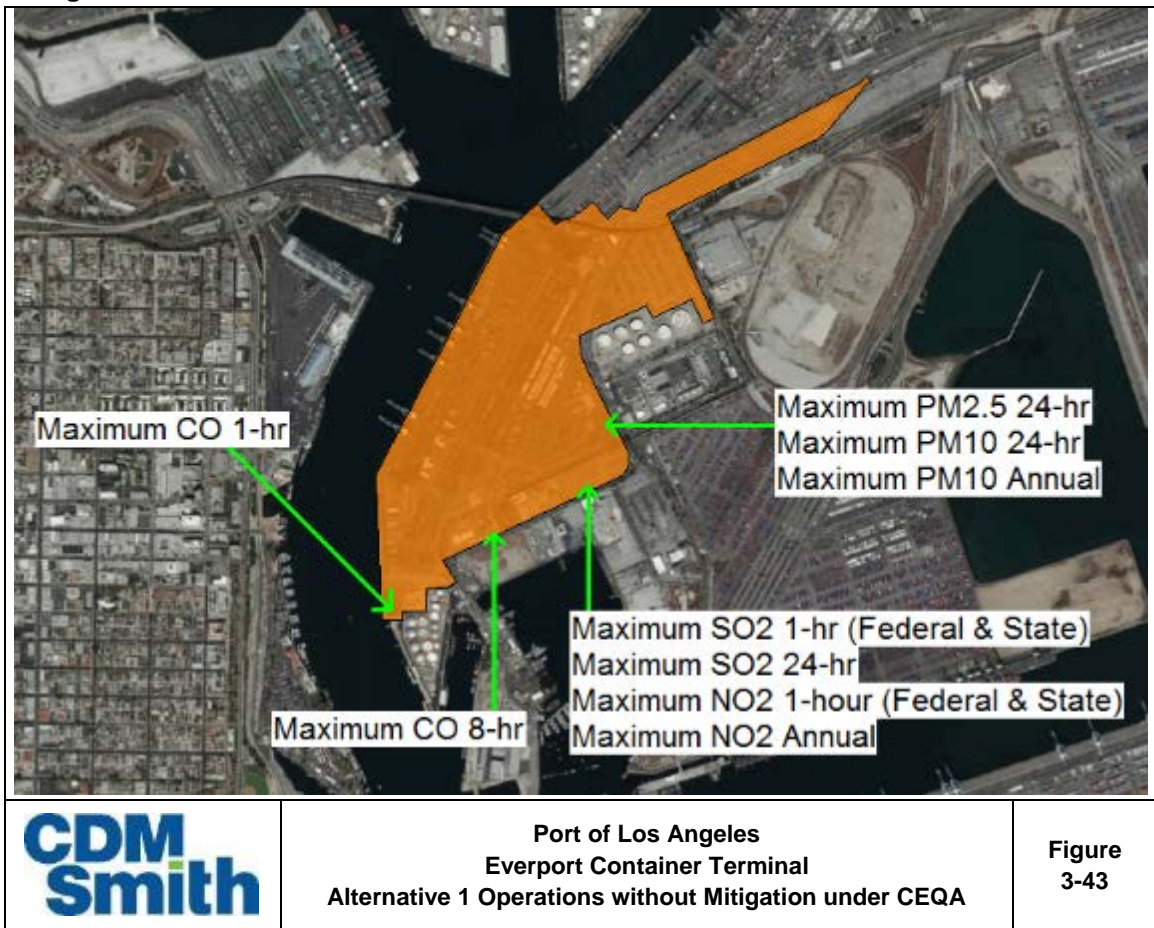
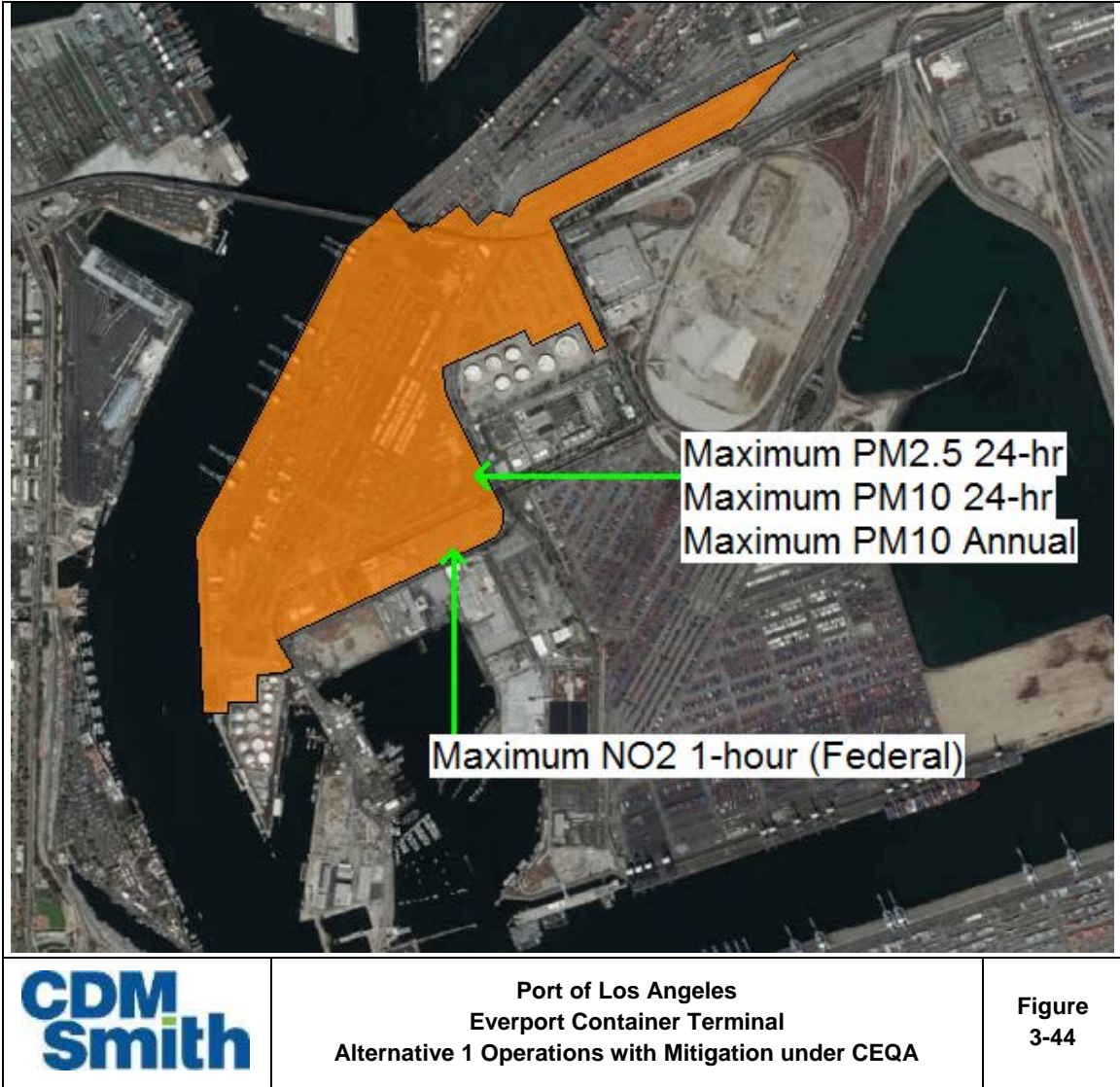


Figure 3-44. Maximum Air Quality Impact Locations – Alternative 1 Operations with Mitigation under CEQA



3.3.2.3 Alternative 2

The following tables summarize the AERMOD dispersion modeling results of the unmitigated Alternative 2 operational emissions under CEQA. NO₂, SO₂, and CO concentrations due to operation were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 2 relative to the CEQA baseline and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-76. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 2 Operation without Mitigation under CEQA

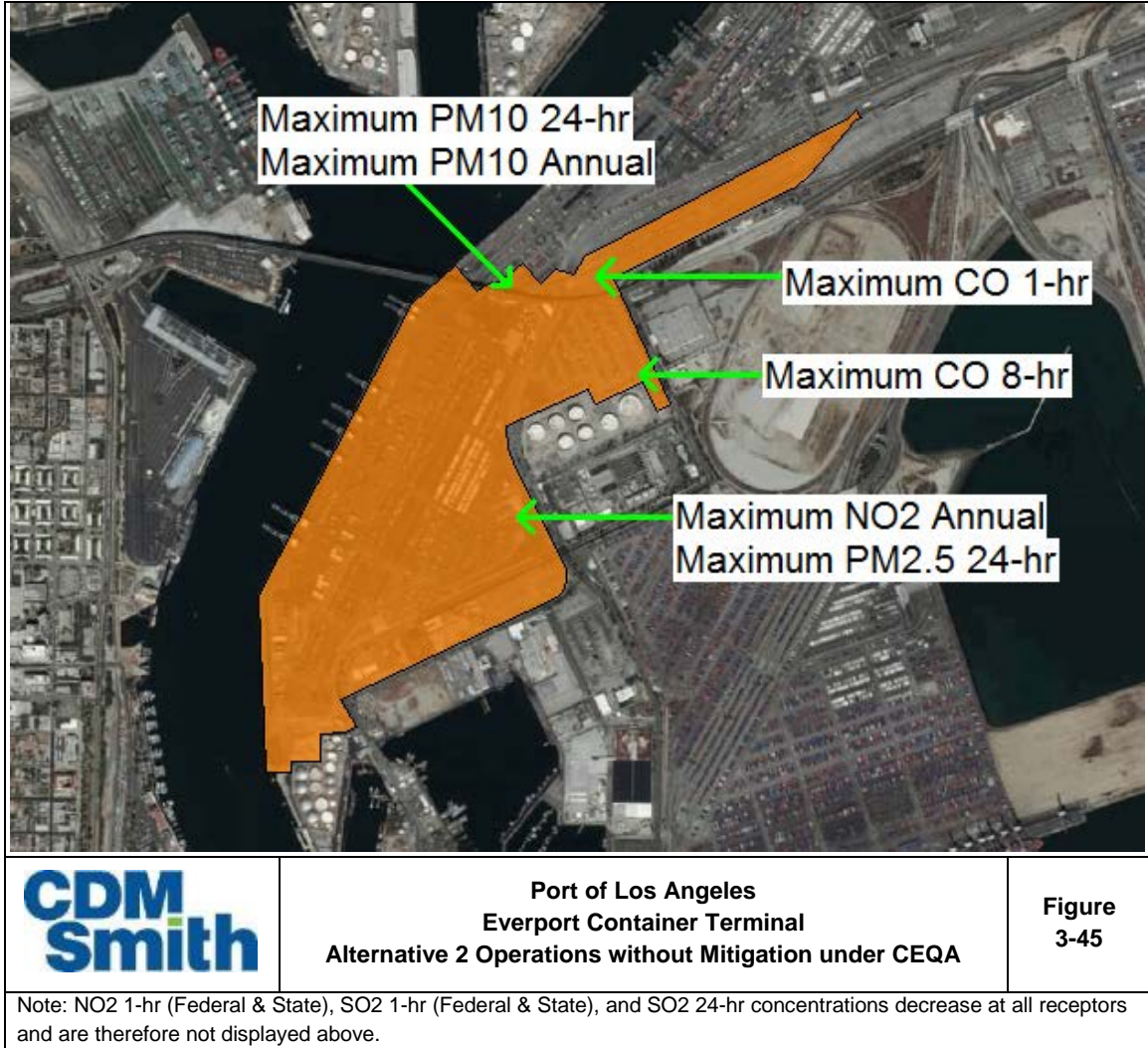
Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.000	0.088	0.100	No
	State 1-hour	0.11	0.00	0.11	0.18	No
	Federal annual	0.017	0.004	0.021	0.053	No
	State annual	0.017	0.004	0.021	0.030	No
SO ₂	Federal 1-hour	0.038	-0.0002	0.037	0.075	No
	State 1-hour	0.05	-0.0002	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-77. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 2 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	13.4	8.2	5.2	2.5	Yes
	Annual	6.5	3.8	2.7	1.0	Yes
PM _{2.5}	24-hour	4.0	4.0	0.5	2.5	No

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both unmitigated Alternative 2 pollutant concentrations under CEQA.

Figure 3-45. Maximum Air Quality Impact Locations – Alternative 2 Operations without Mitigation under CEQA



3.3.2.4 Alternative 3

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 3 operational emissions under CEQA & NEPA. NO₂, SO₂, and CO concentrations due to operation were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 2 relative to both the CEQA & NEPA baselines and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-78. Maximum Offsite NO₂, SO₂, and CO Concentrations—Alternative 3 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.029	0.117	0.100	Yes
	State 1-hour	0.11	0.04	0.15	0.18	No
	Federal annual	0.017	0.010	0.027	0.053	No
	State annual	0.017	0.010	0.027	0.030	No
SO ₂	Federal 1-hour	0.038	0.0001	0.038	0.075	No
	State 1-hour	0.05	0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-79. Maximum Offsite PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	31.8	8.2	25.2	2.5	Yes
	Annual	17.8	3.8	15.4	1.0	Yes
PM _{2.5}	24-hour	8.4	4.0	5.6	2.5	Yes

Table 3-80. Maximum Offsite NO₂, SO₂ and CO Concentrations—Alternative 3 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.029	0.117	0.100	Yes

Table 3-81. Maximum Offsite PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	31.7	8.2	25.2	2.5	Yes
	Annual	17.8	3.8	15.4	1.0	Yes
PM _{2.5}	24-hour	8.4	4.0	5.5	2.5	Yes

Table 3-82. Maximum Offsite NO₂, SO₂, and CO Concentrations—Alternative 3 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.017	0.105	0.100	Yes
	State 1-hour	0.11	0.02	0.13	0.18	No
	Federal annual	0.017	0.003	0.021	0.053	No
	State annual	0.017	0.003	0.021	0.030	No
SO ₂	Federal 1-hour	0.038	0.0001	0.038	0.075	No
	State 1-hour	0.05	0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.0	1.8	9.0	No

Table 3-83. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	31.8	25.2	6.5	2.5	Yes
	Annual	17.8	15.0	3.9	1.0	Yes
PM _{2.5}	24-hour	8.4	6.8	1.7	2.5	No

Table 3-84. Maximum Offsite NO₂, SO₂ and CO Concentrations—Alternative 3 Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.009	0.097	0.100	No

Table 3-85. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 3 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	31.7	25.2	6.5	2.5	Yes
	Annual	17.8	15.0	3.9	1.0	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 3 pollutant concentrations under CEQA & NEPA.

Figure 3-46. Maximum Air Quality Impact Locations – Alternative 3 Operations without Mitigation under CEQA

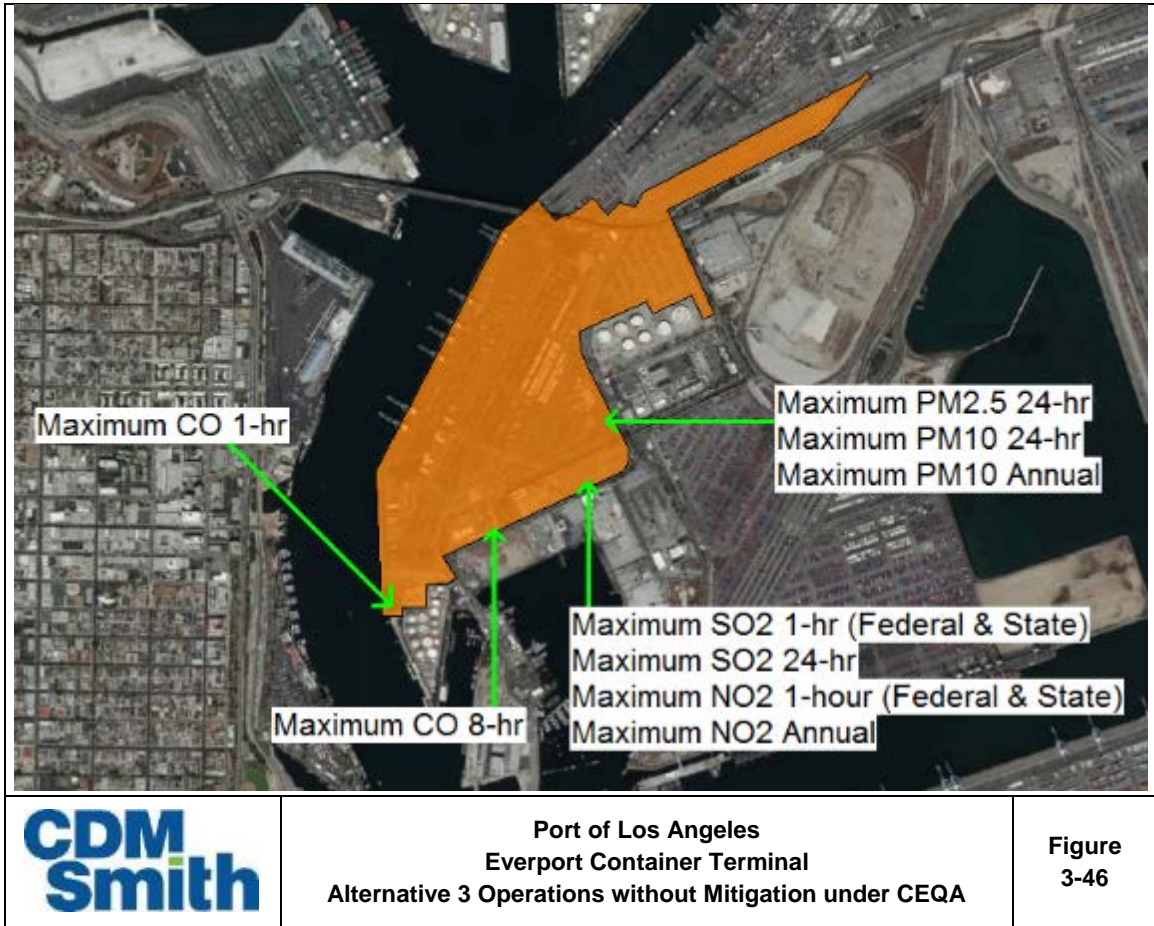


Figure 3-47. Maximum Air Quality Impact Locations – Alternative 3 Operations with Mitigation under CEQA

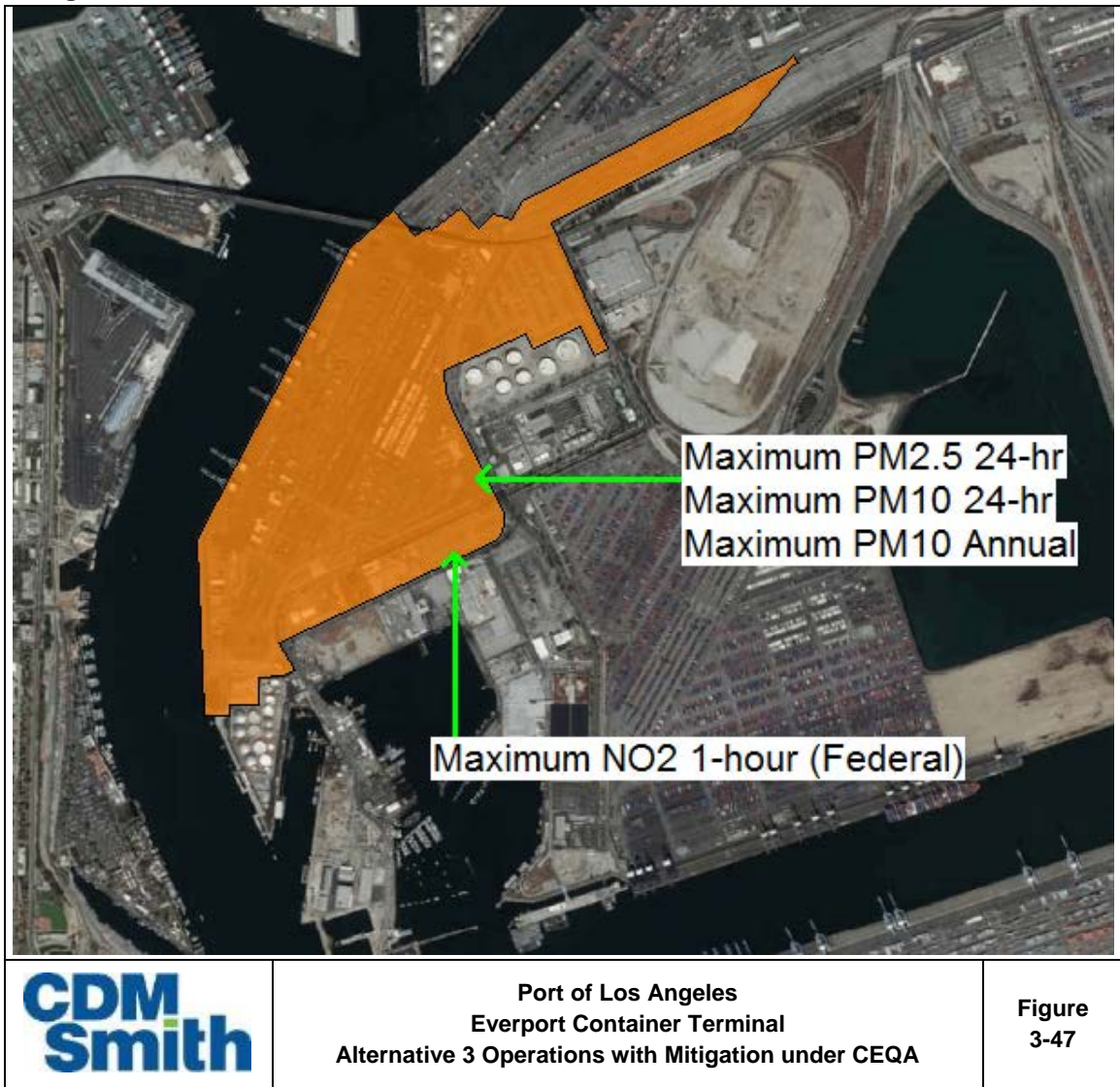


Figure 3-48. Maximum Air Quality Impact Locations – Alternative 3 Operations without Mitigation under NEPA

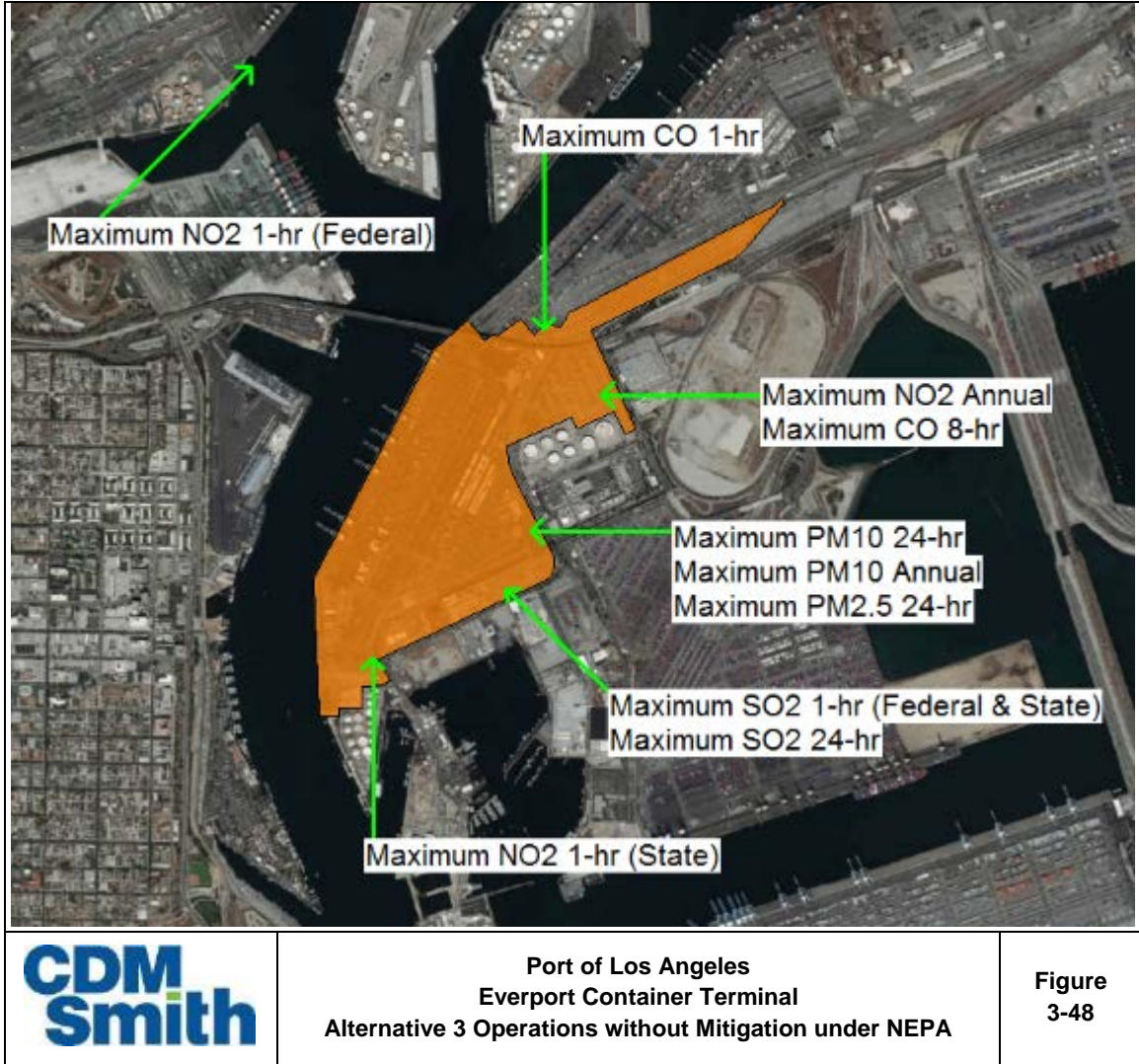
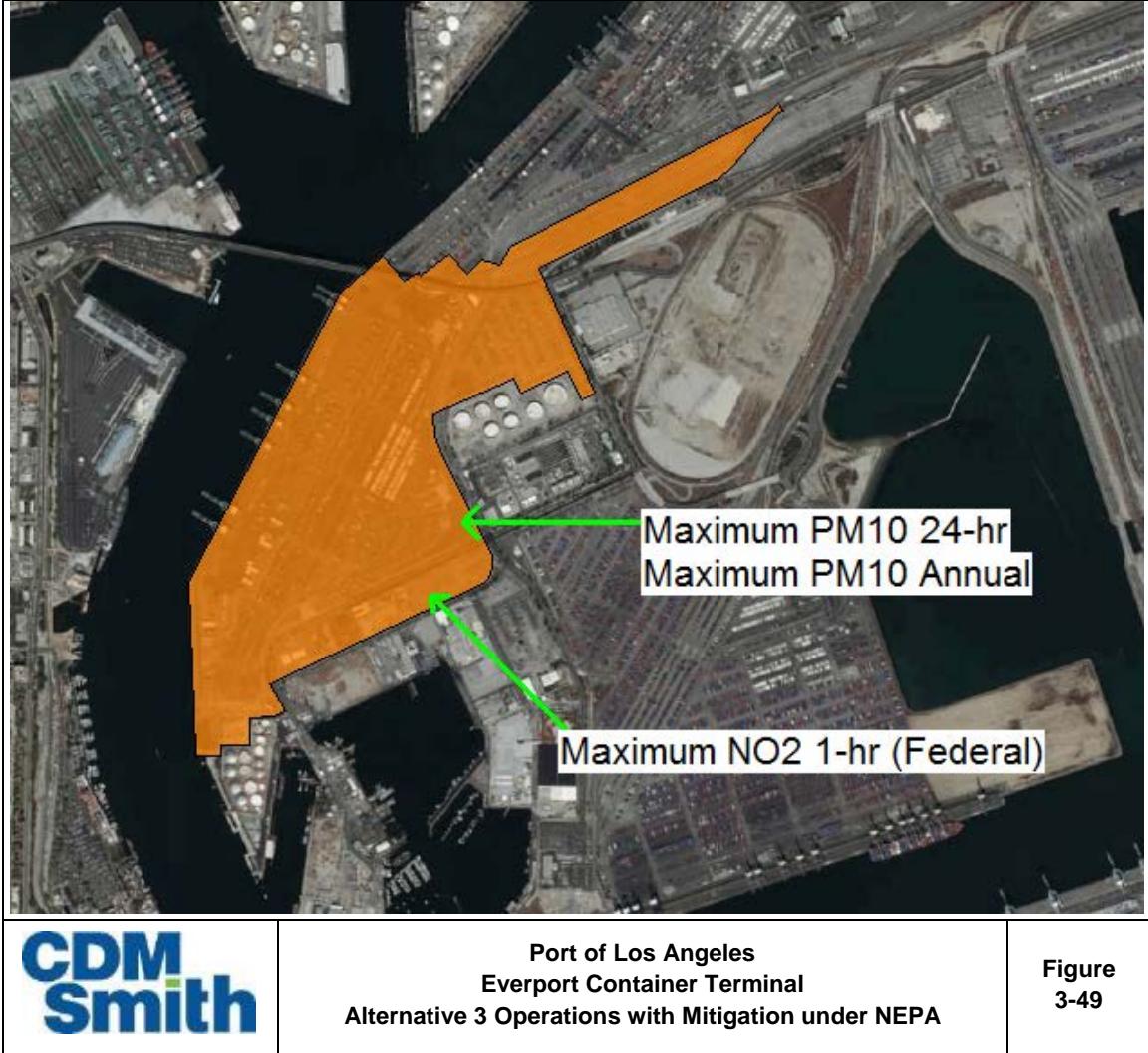


Figure 3-49. Maximum Air Quality Impact Locations – Alternative 3 Operations with Mitigation under NEPA



3.3.2.5 Alternative 4

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 4 operational emissions under CEQA & NEPA. NO₂, SO₂, and CO concentrations due to operation were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 4 relative to both the CEQA & NEPA baselines and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-86. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.001	0.089	0.100	No
	State 1-hour	0.11	0.00	0.11	0.18	No
	Federal annual	0.017	0.003	0.020	0.053	No
	State annual	0.017	0.003	0.020	0.030	No
SO ₂	Federal 1-hour	0.038	-0.0001	0.038	0.075	No
	State 1-hour	0.05	-0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-87. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	15.0	8.2	6.8	2.5	Yes
	Annual	7.3	3.8	3.5	1.0	Yes
PM _{2.5}	24-hour	4.6	4.0	0.8	2.5	No

Table 3-88. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	15.0	8.2	6.8	2.5	Yes
	Annual	7.3	3.8	3.5	1.0	Yes

Table 3-89. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.026	0.114	0.100	Yes
	State 1-hour	0.11	0.03	0.14	0.18	No
	Federal annual	0.017	0.017	0.035	0.053	No
	State annual	0.017	0.017	0.035	0.030	Yes
SO ₂	Federal 1-hour	0.038	0.0003	0.038	0.075	No
	State 1-hour	0.05	0.0003	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-90. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	15.0	25.2	5.8	2.5	Yes
	Annual	7.3	15.0	3.3	1.0	Yes
PM _{2.5}	24-hour	4.6	6.8	1.3	2.5	No

Table 3-91. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 4 Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.025	0.113	0.100	Yes
	State annual	0.017	0.017	0.035	0.030	Yes

Table 3-92. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 4 Operation with Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	15.0	25.2	5.8	2.5	Yes
	Annual	7.3	15.0	3.3	1.0	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 4 pollutant concentrations under CEQA & NEPA.

Figure 3-50. Maximum Air Quality Impact Locations – Alternative 4 Operations without Mitigation under CEQA



Figure 3-51. Maximum Air Quality Impact Locations – Alternative 4 Operations with Mitigation under CEQA

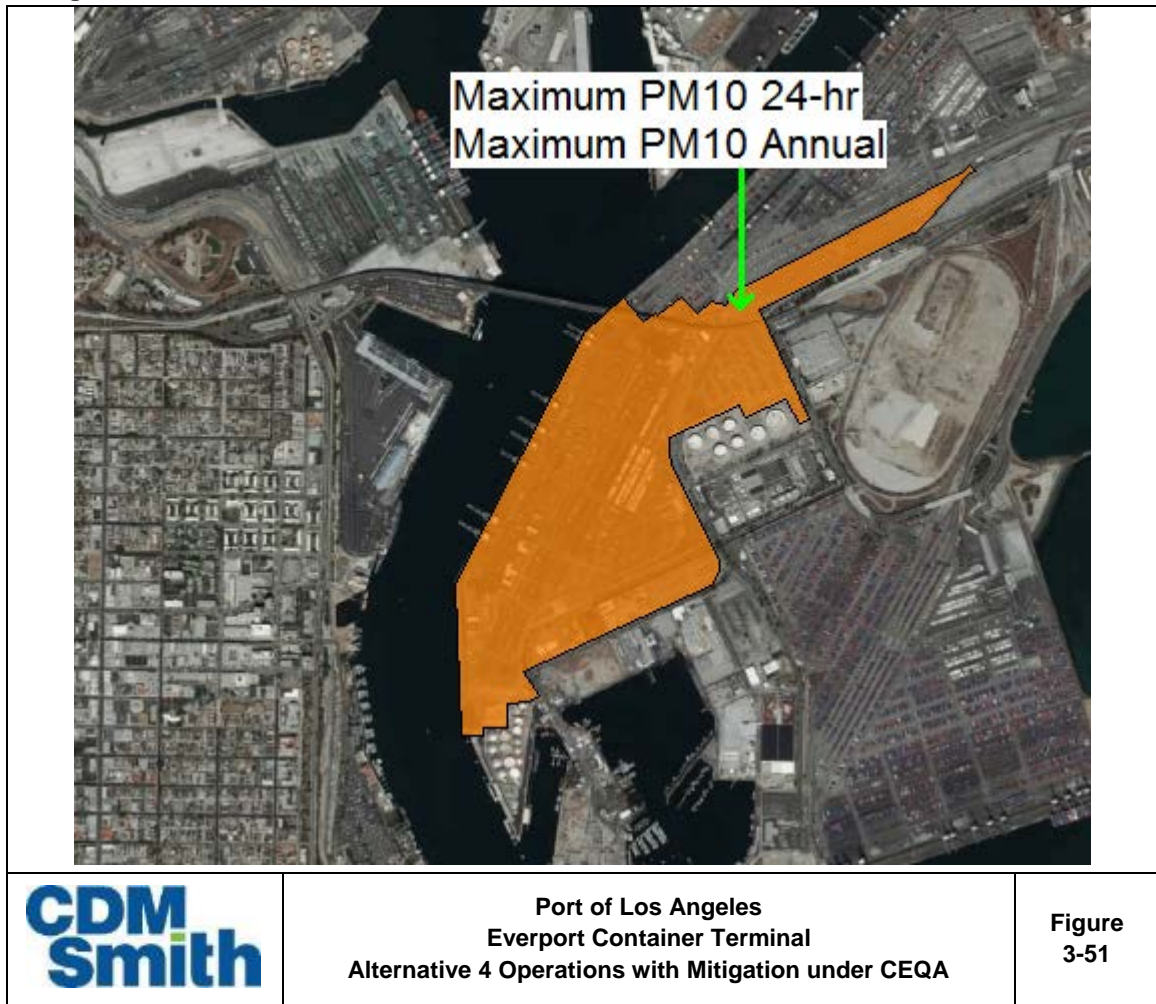


Figure 3-52. Maximum Air Quality Impact Locations – Alternative 4 Operations without Mitigation under NEPA

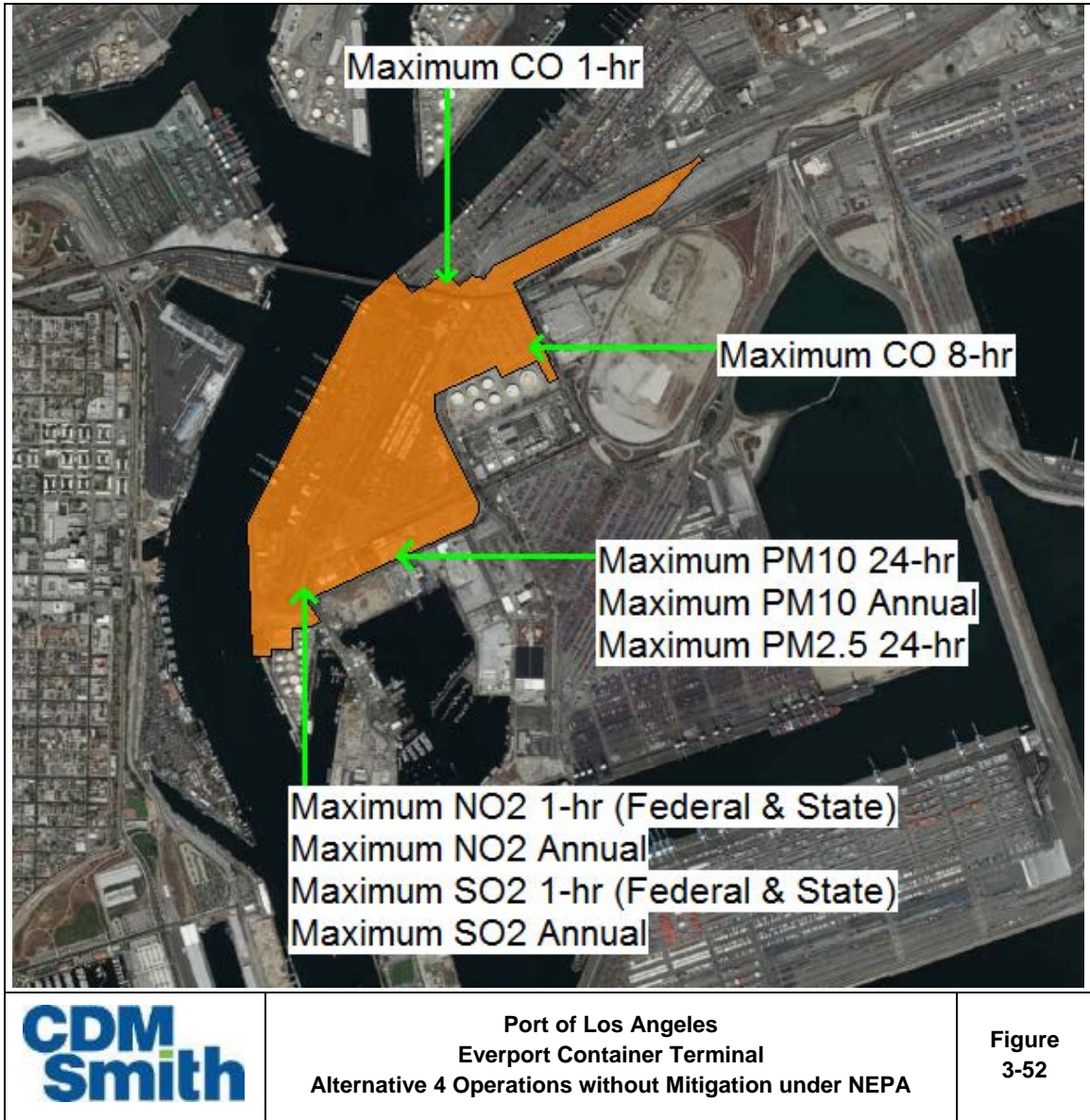
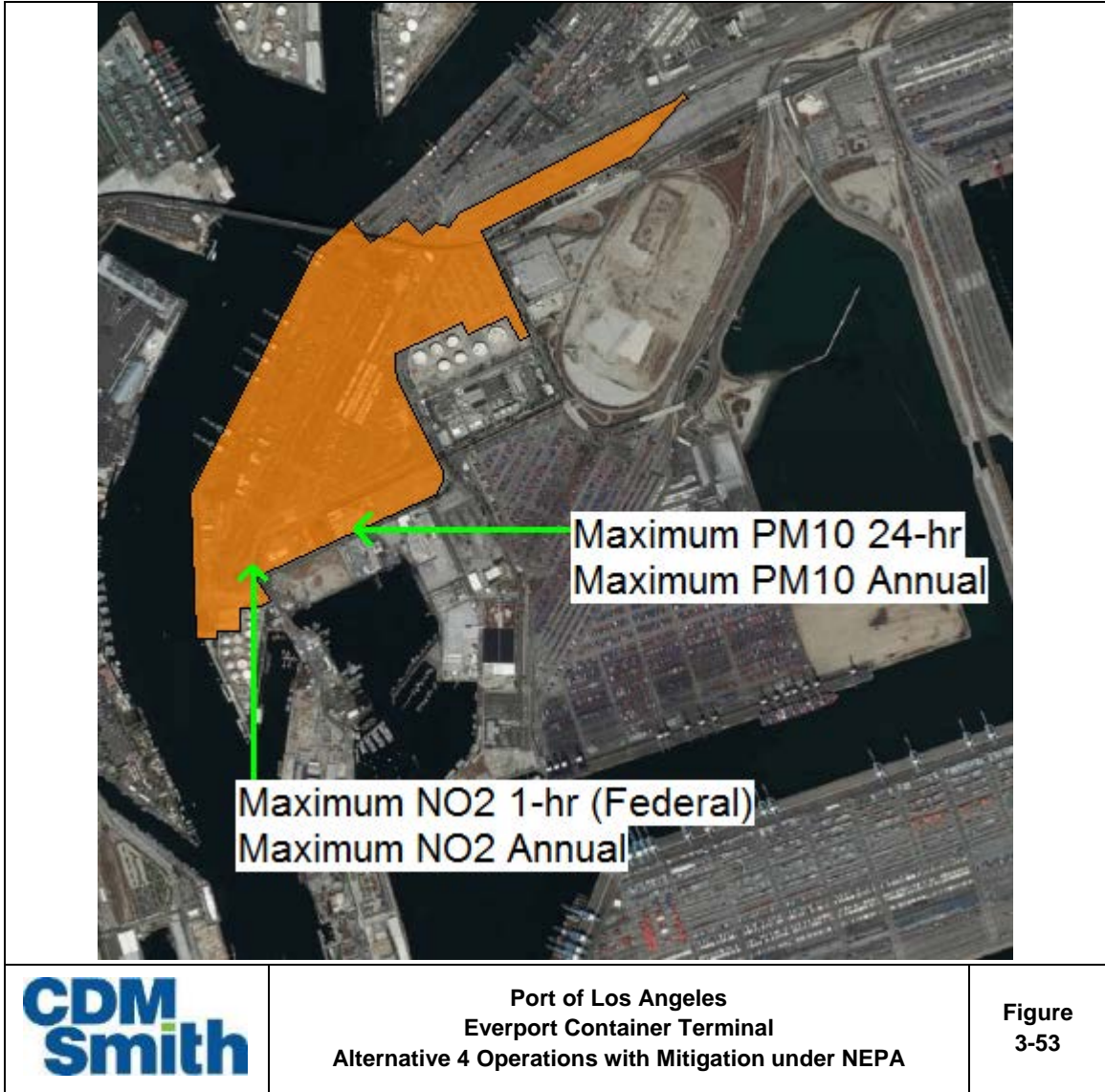


Figure 3-53. Maximum Air Quality Impact Locations – Alternative 4 Operations with Mitigation under NEPA



3.3.2.6 Alternative 5

The following tables summarize the AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 5 operational emissions under CEQA & NEPA. NO₂, SO₂, and CO concentrations due to operation were added to background concentrations and compared to the SCAQMD thresholds. The AERMOD modeling results for PM₁₀ and PM_{2.5} represent the incremental increases due to Alternative 5 relative to both the CEQA & NEPA baselines and were compared directly to the SCAQMD thresholds without adding a background concentration.

Table 3-93. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes
	State 1-hour	0.11	0.04	0.16	0.18	No
	Federal annual	0.017	0.010	0.028	0.053	No
	State annual	0.017	0.010	0.028	0.030	No
SO ₂	Federal 1-hour	0.038	0.0001	0.038	0.075	No
	State 1-hour	0.05	0.0001	0.05	0.25	No
	24-hour	0.01	0.0000	0.01	0.04	No
CO	1-hour	7	0.2	7	20 / 35	No
	8-hour	1.8	0.1	1.9	9.0	No

Table 3-94. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Operation without Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	33.1	8.2	26.6	2.5	Yes
	Annual	18.5	3.8	16.1	1.0	Yes
PM _{2.5}	24-hour	8.8	4.0	5.9	2.5	Yes

Table 3-95. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.031	0.119	0.100	Yes

Table 3-96. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Operation with Mitigation under CEQA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of CEQA Baseline (µg/m ³)	Maximum Modeled CEQA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	CEQA Increment above Threshold?
PM ₁₀	24-hour	33.1	8.2	26.6	2.5	Yes
	Annual	18.5	3.8	16.1	1.0	Yes
PM _{2.5}	24-hour	8.8	4.0	5.9	2.5	Yes

Table 3-97. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.015	0.103	0.100	Yes
	State 1-hour	0.11	0.02	0.13	0.18	No
	Federal annual	0.017	0.004	0.022	0.053	No
	State annual	0.017	0.004	0.022	0.030	No
SO ₂	Federal 1-hour	0.038	0.0002	0.038	0.075	No
	State 1-hour	0.05	0.0002	0.05	0.25	No
	24-hour	0.01	0.0001	0.02	0.04	No
CO	1-hour	7	0.1	7	20 / 35	No
	8-hour	1.8	0.0	1.9	9.0	No

Table 3-98. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Operation without Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	33.1	25.2	7.9	2.5	Yes
	Annual	18.5	15.0	4.7	1.0	Yes
PM _{2.5}	24-hour	8.8	6.8	2.0	2.5	No

Table 3-99. Maximum Offsite Ambient NO₂, SO₂, and CO Concentrations—Alternative 5 Operation with Mitigation under NEPA

Pollutant	Averaging Time	Background Concentration (ppm)	Maximum Modeled Project Concentration Increment (ppm)	Total Ground-Level Concentration (ppm)	SCAQMD Threshold (ppm)	Total Concentration above Threshold?
NO ₂	Federal 1-hour	0.088	0.011	0.099	0.100	No

Table 3-100. Maximum Offsite Ambient PM₁₀ and PM_{2.5} Concentrations—Alternative 5 Operation with Mitigation under NEPA

Pollutant	Averaging Time	Maximum Modeled Concentration of Proposed Project (µg/m ³)	Maximum Modeled Concentration of NEPA Baseline (µg/m ³)	Maximum Modeled NEPA Increment (µg/m ³)	SCAQMD Threshold (µg/m ³)	NEPA Increment above Threshold?
PM ₁₀	24-hour	33.1	25.2	7.9	2.5	Yes
	Annual	18.5	15.0	4.7	1.0	Yes

The following diagrams display the locations of the peak AERMOD dispersion modeling results of both mitigated and unmitigated Alternative 5 pollutant concentrations under CEQA & NEPA.

Figure 3-54. Maximum Air Quality Impact Locations – Alternative 5 Operations without Mitigation under CEQA

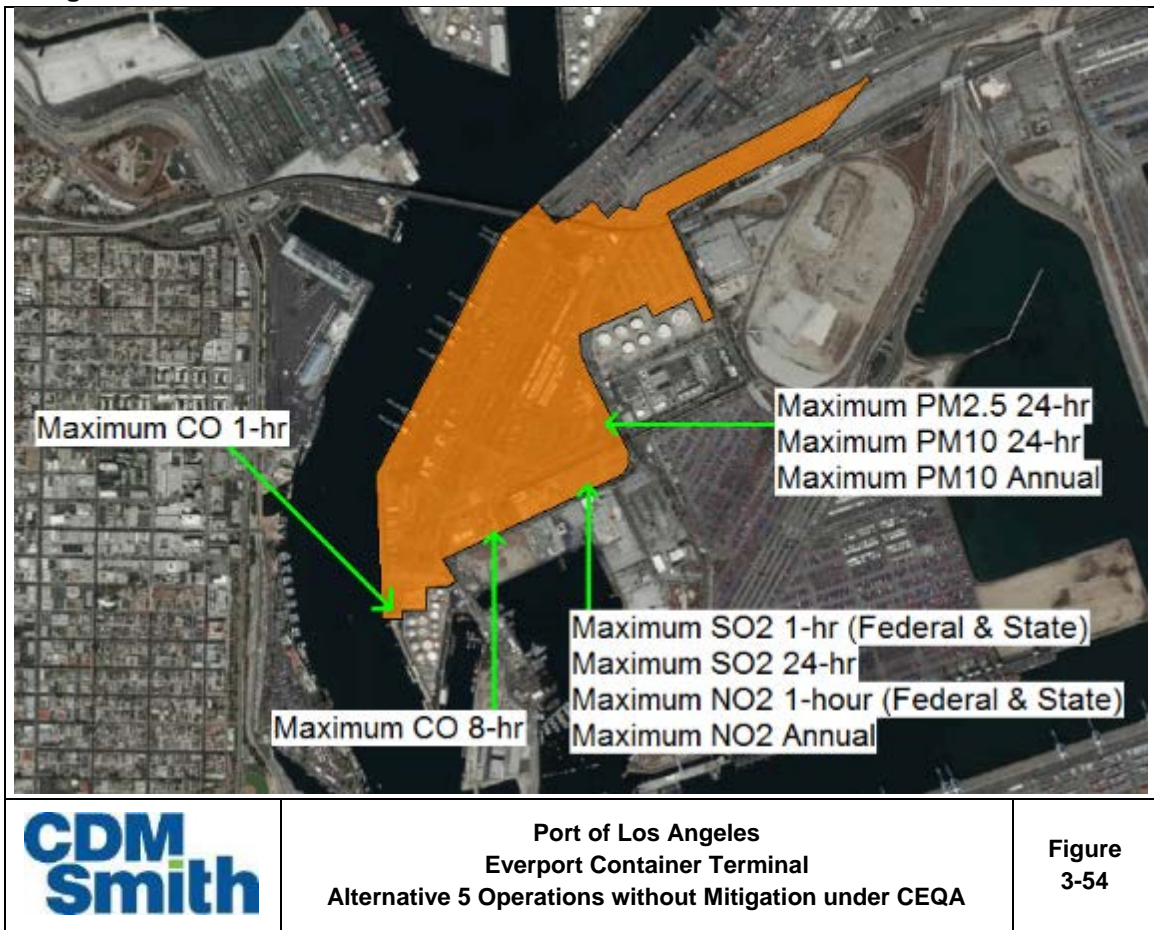


Figure 3-55. Maximum Air Quality Impact Locations – Alternative 5 Operations with Mitigation under CEQA

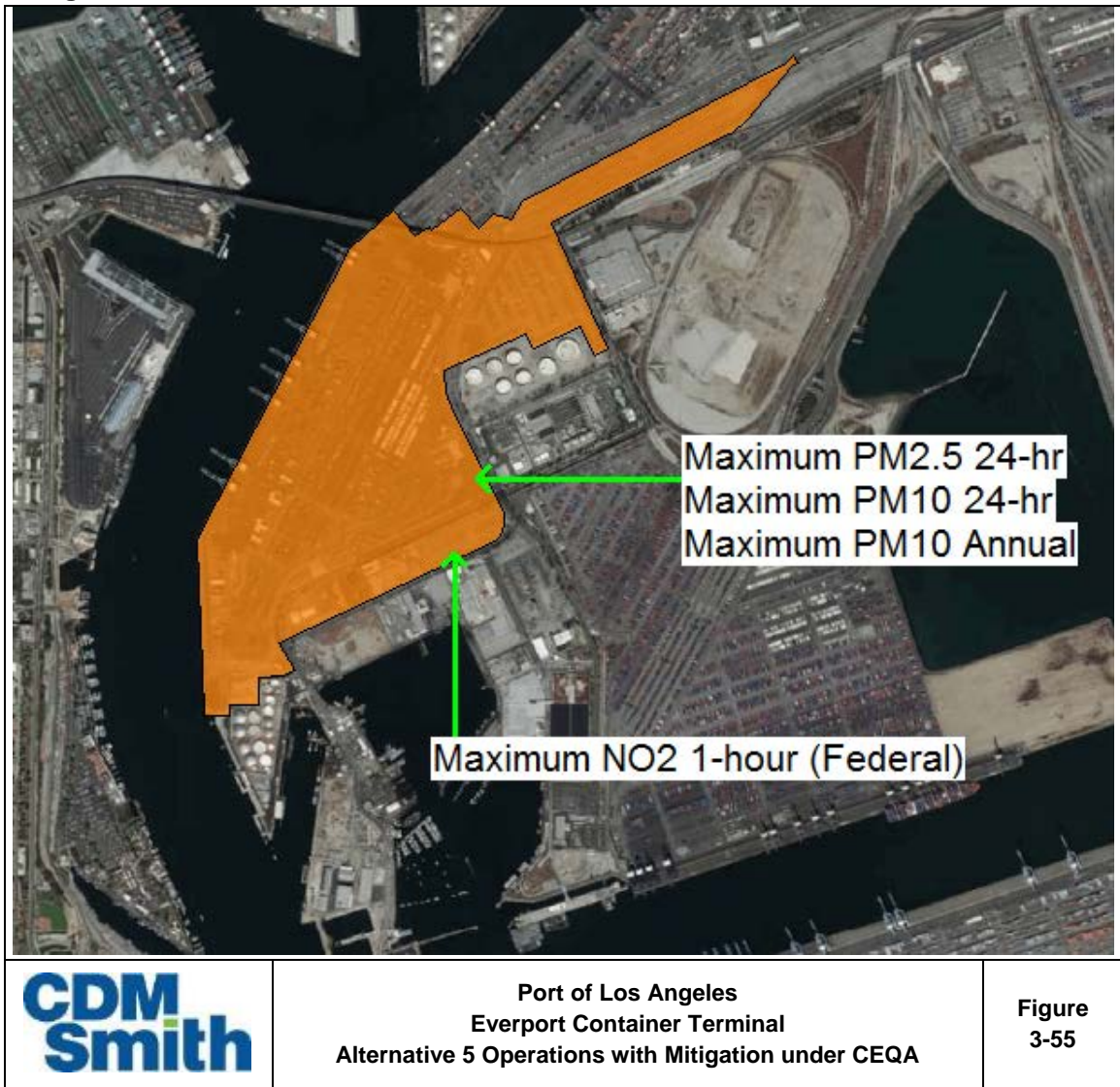
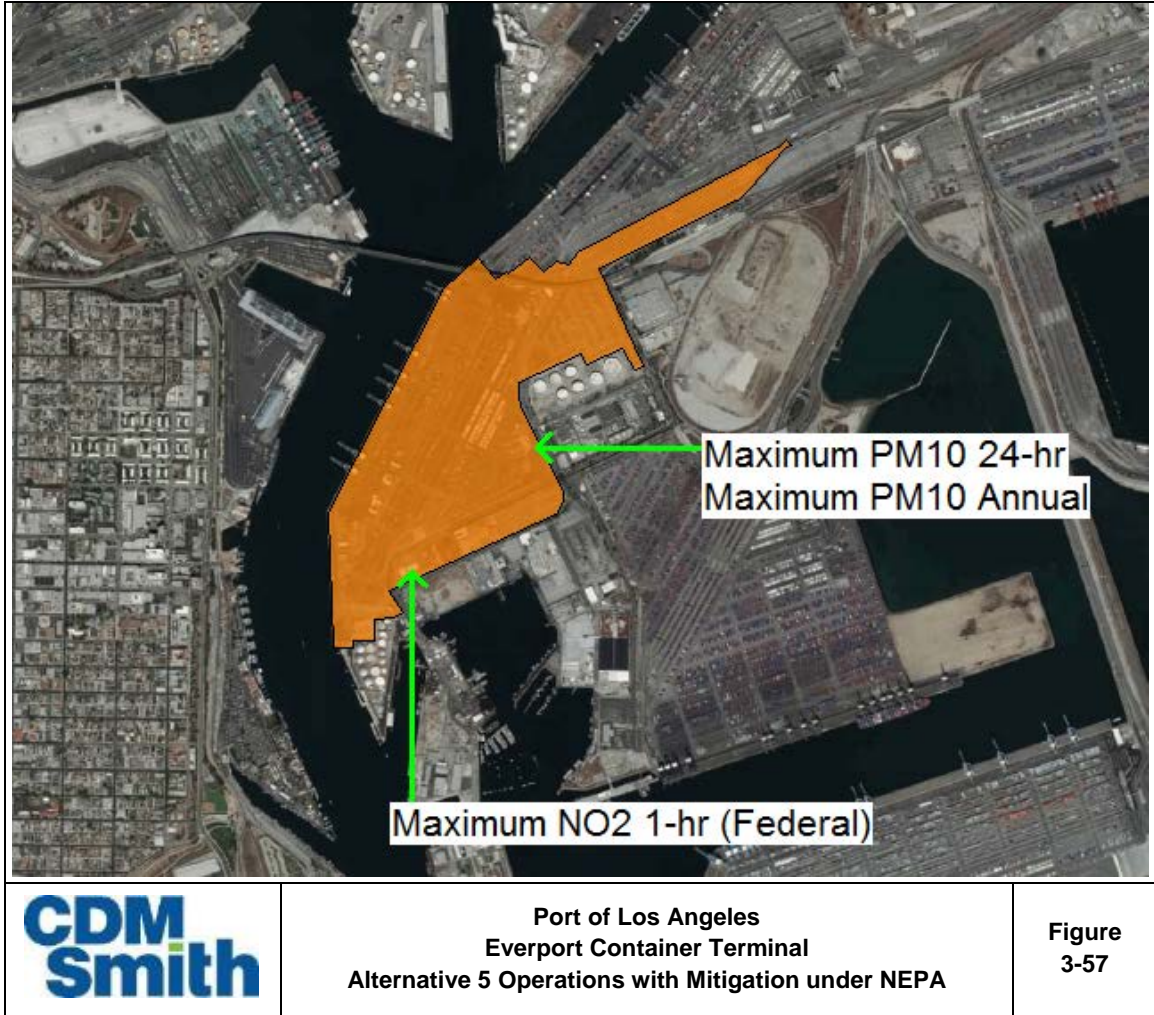


Figure 3-56. Maximum Air Quality Impact Locations – Alternative 5 Operations without Mitigation under NEPA



Figure 3-57. Maximum Air Quality Impact Locations – Alternative 5 Operations with Mitigation under NEPA



4.0 PM_{2.5} Mortality-Morbidity

Mortality and morbidity calculations are required for all areas (with residential populations) where PM_{2.5} concentrations exceed the SCAQMD threshold of 2.5 ug/m³. The impact region over the 2.5 ug/m³ threshold is limited to a corner of the terminal, and no 2.5 ug/m³ contour extends beyond Terminal Island. Given that the residential population is zero for this impact region, analyses of PM_{2.5} morbidity and mortality were not conducted. Contours for all alternatives and years are provided in Attachment B2.1 and the 2.5 ug/m³ contour is confined to Terminal Island.

5.0 CO Hot Spots Analysis

The level of detail for dispersion modeling was based on traffic demand modeling and adequately analyzes CO impacts. For Alternatives, such that modeled CO impacts would be much less than CAAQS and NAAQS thresholds, CO Hot Spots were determined less than significant without additional modeling. It is anticipated that intersection concentrations would not exceed any CO thresholds and therefore Hot Spots were not analyzed.

6.0 References

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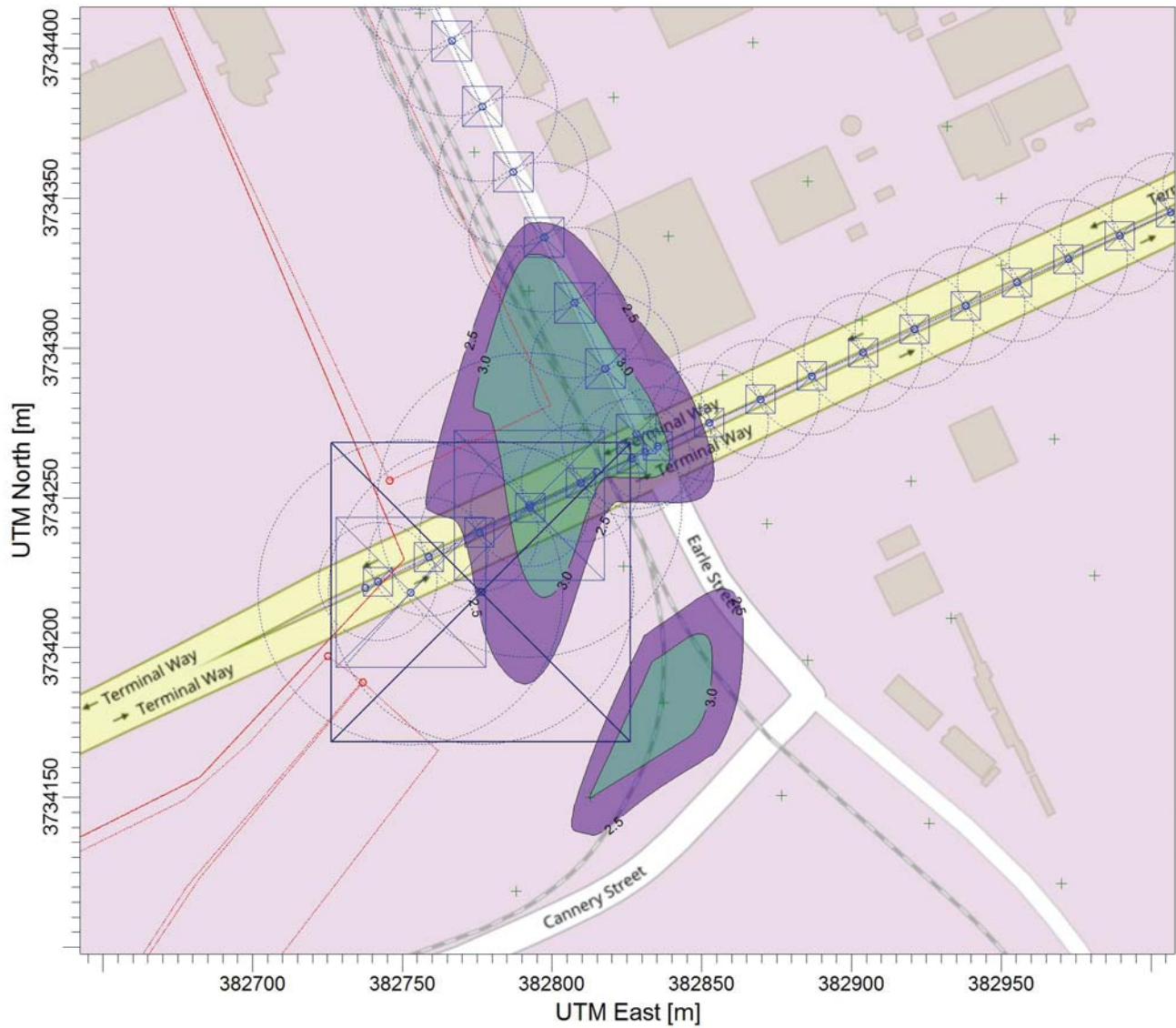
USEPA 2017. United States Environmental Protection agency. Pollutant Designations. Available online at: <https://www.epa.gov/criteria-air-pollutants>. Last accessed January 2017.

Attachment B2.1

PM_{2.5} Isopleths

PROJECT TITLE:

**Alternative 1 2019 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

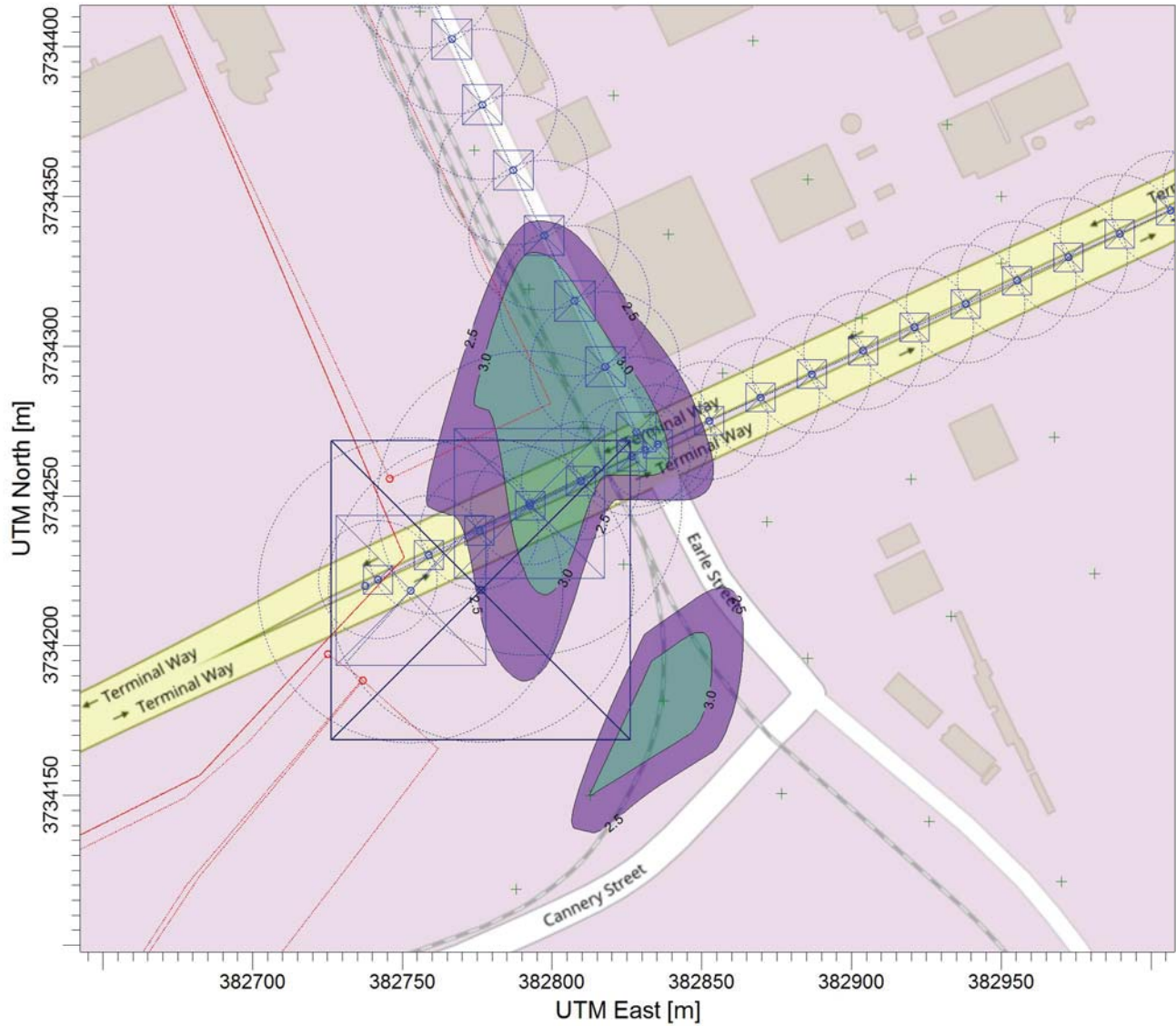
Max: 4.0 [ug/m³] at (382810.44, 3734272.83)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>		
	<p>MAX:</p> <p>4.0 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 1 2019 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

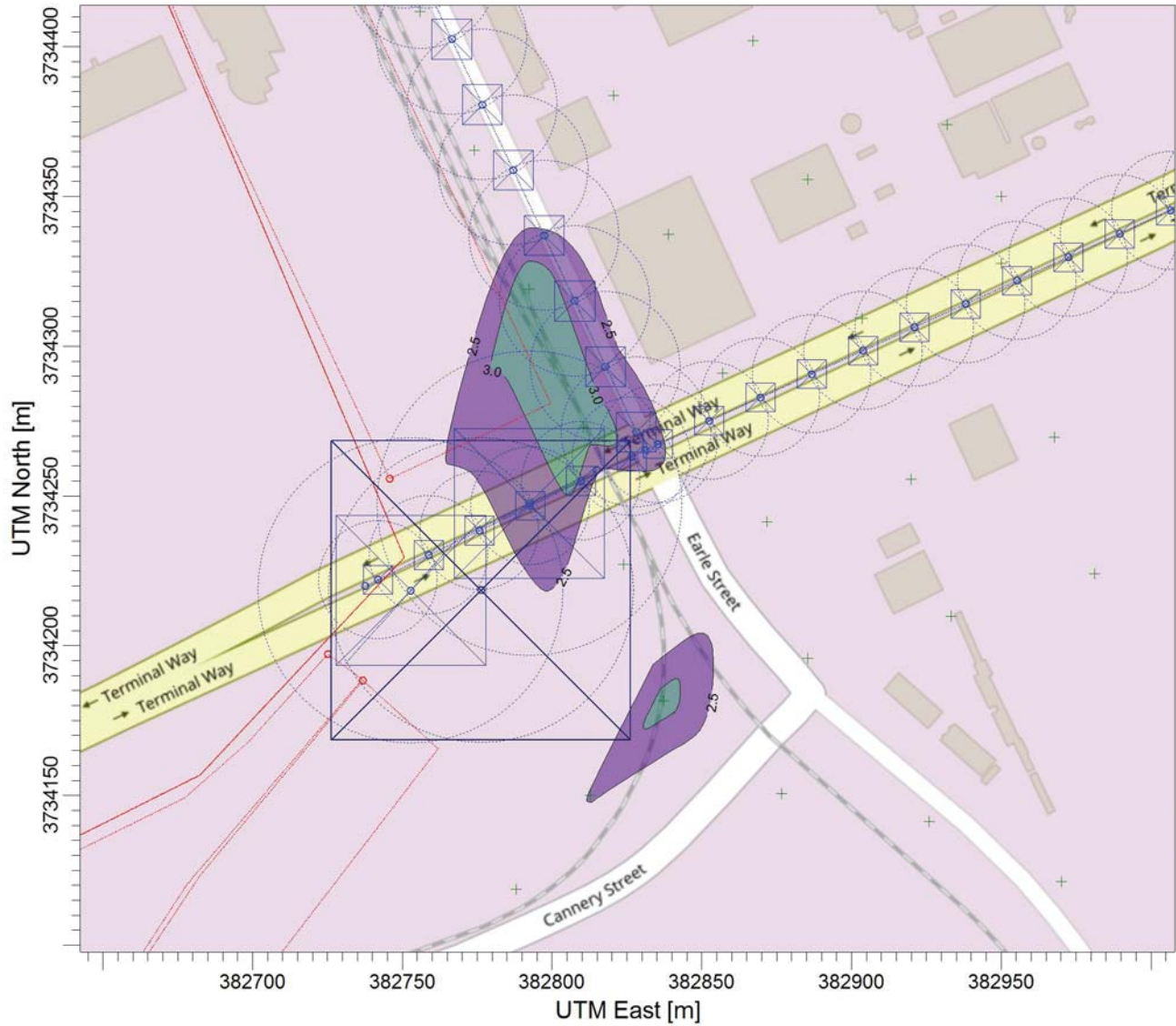
Max: 4.0 [ug/m³] at (382810.44, 3734272.83)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>		
	<p>MAX:</p> <p>4.0 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Alternative 1 2026 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

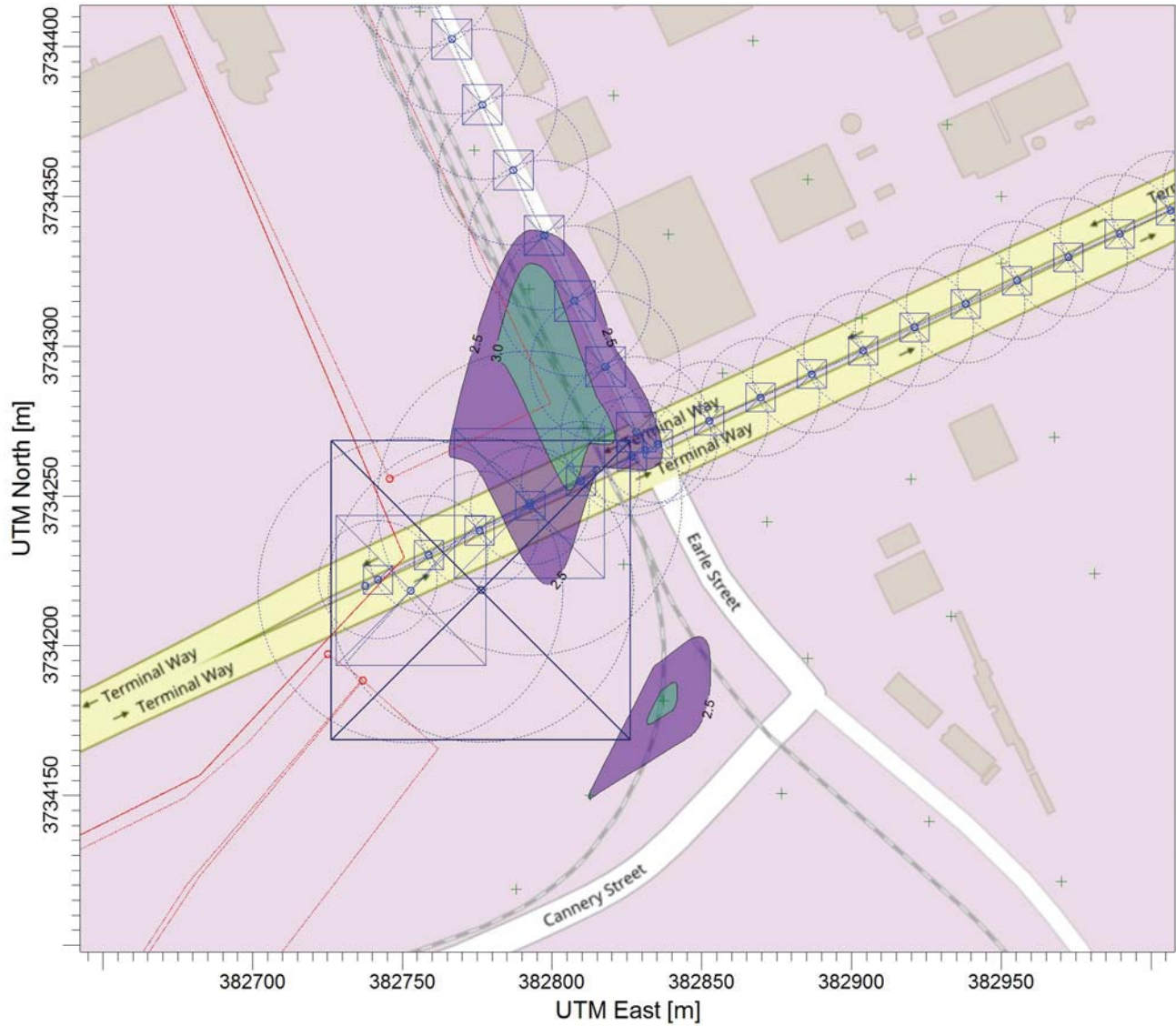
Max: 3.4 [ug/m³] at (382792.24, 3734319.15)



COMMENTS: Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR	SOURCES: 668	COMPANY NAME: CDM Smith	
	RECEPTORS: 1300		
	OUTPUT TYPE: Concentration		
	MAX: 3.4 ug/m³	SCALE: 1:2,300 	PROJECT NO.:

PROJECT TITLE:



**Alternative 1 2026 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

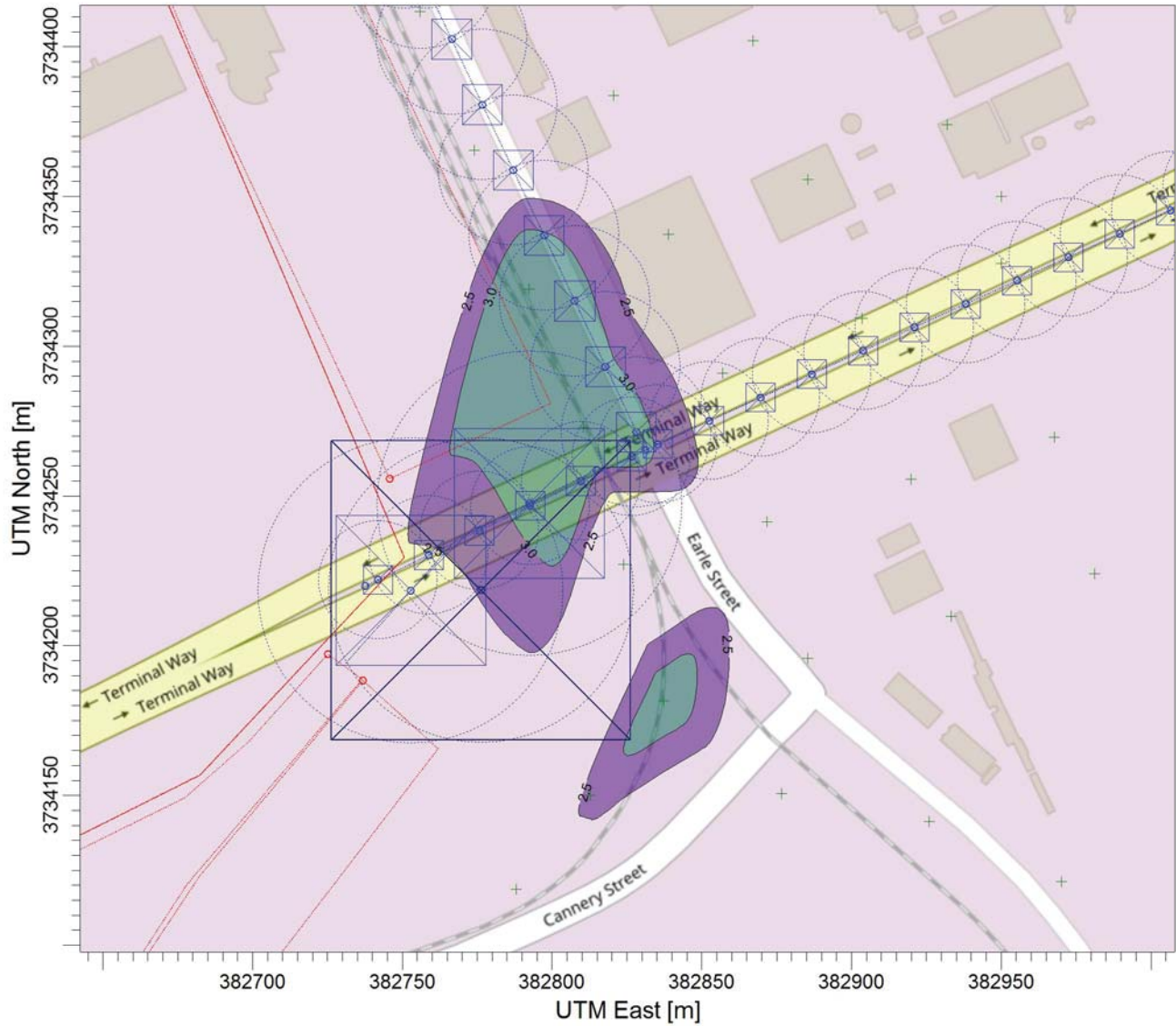
Max: 3.4 [ug/m³] at (382792.24, 3734319.15)



COMMENTS: Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR	SOURCES: 668	COMPANY NAME: CDM Smith	
	RECEPTORS: 1300		
	OUTPUT TYPE: Concentration		
	MAX: 3.4 ug/m³	SCALE: 1:2,300 	PROJECT NO.:

PROJECT TITLE:

**Alternative 1 2033 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

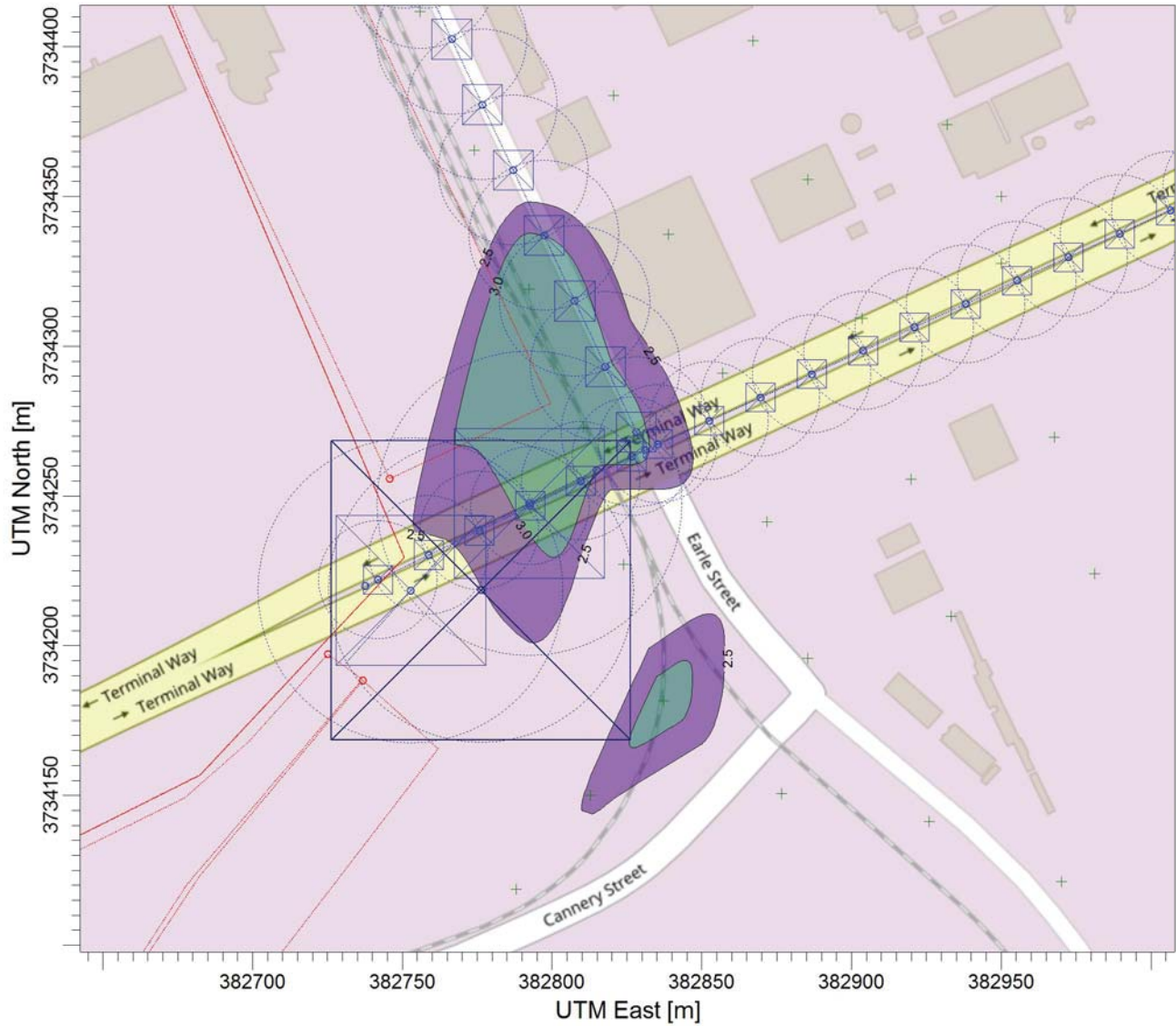
Max: 3.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE: 1:2,300</p>	
	<p>MAX:</p> <p>3.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 1 2033 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

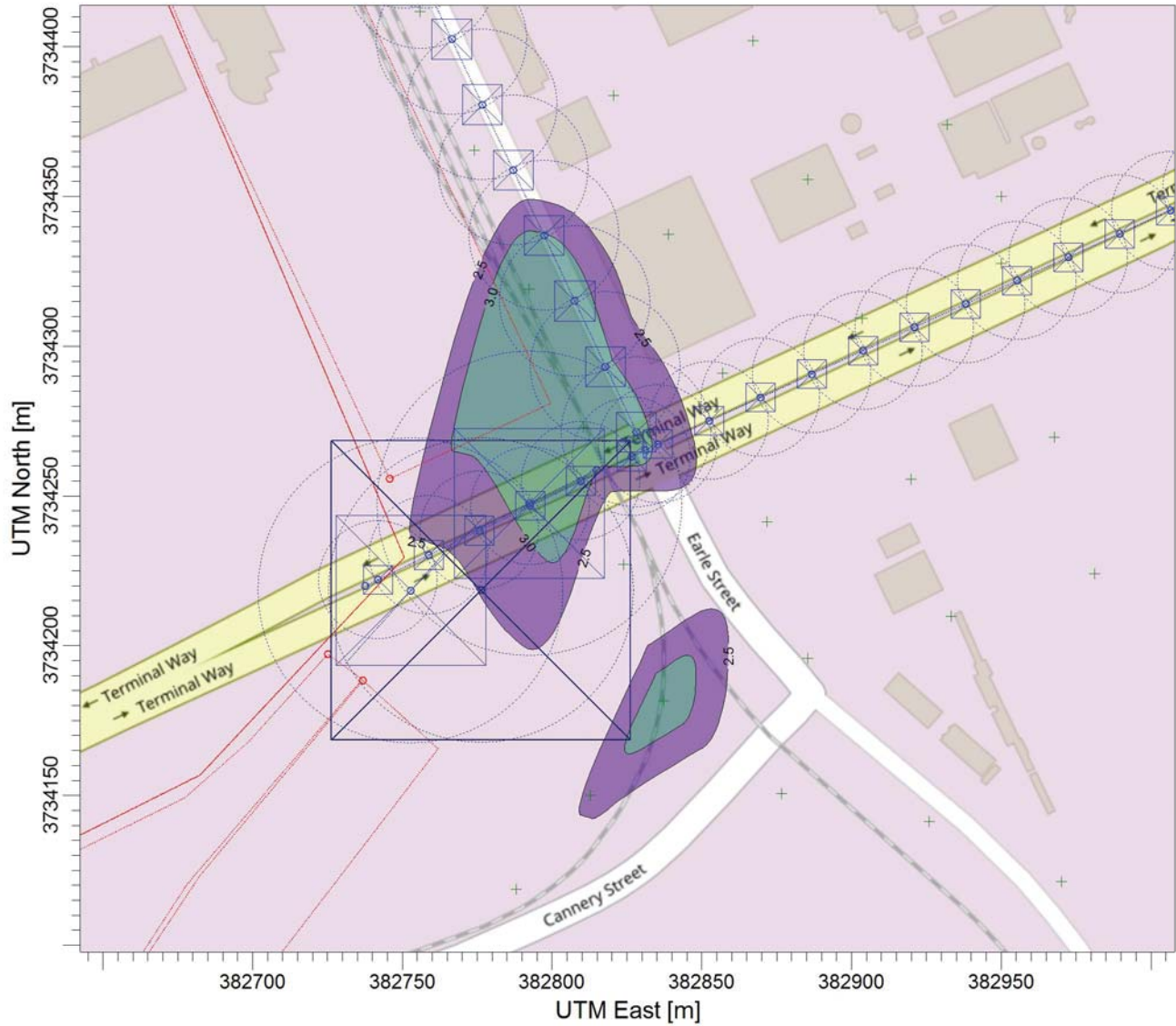
Max: 3.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0 0.05 km</p>	
	<p>MAX:</p> <p>3.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Alternative 1 2038 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

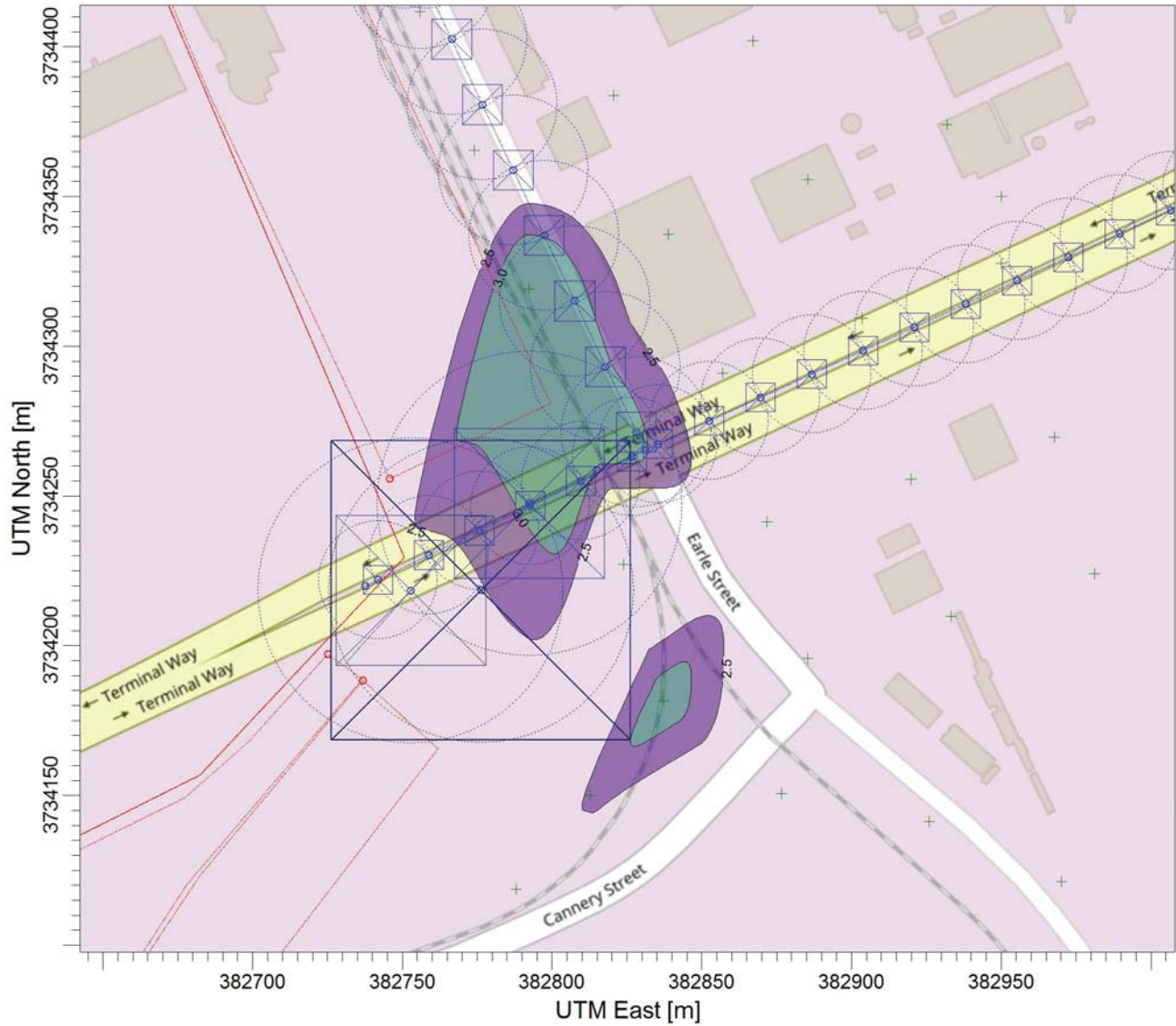
Max: 3.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>3.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 1 2038 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

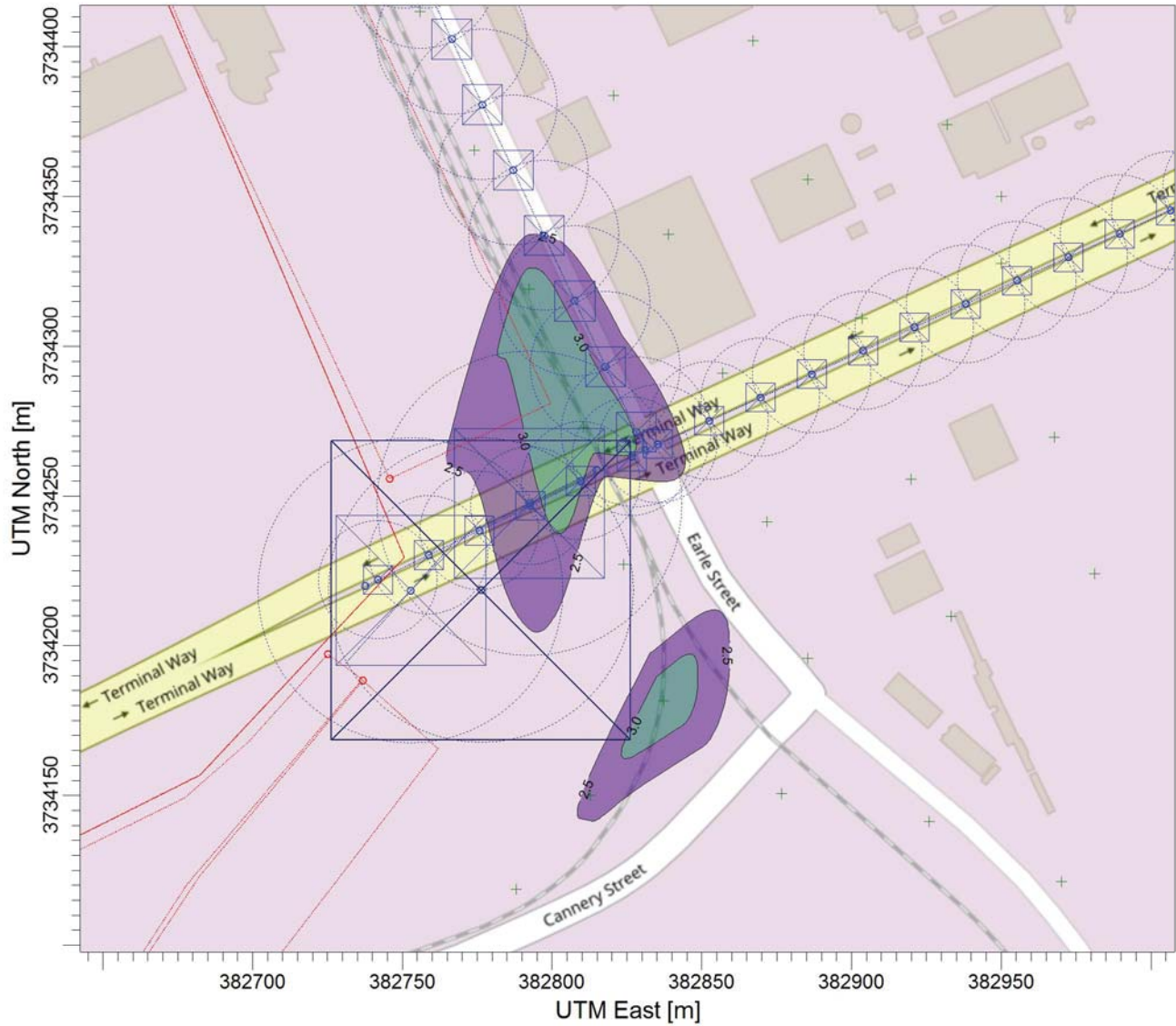
Max: 3.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE: 1:2,300</p>	
	<p>MAX:</p> <p>3.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 3 2019 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

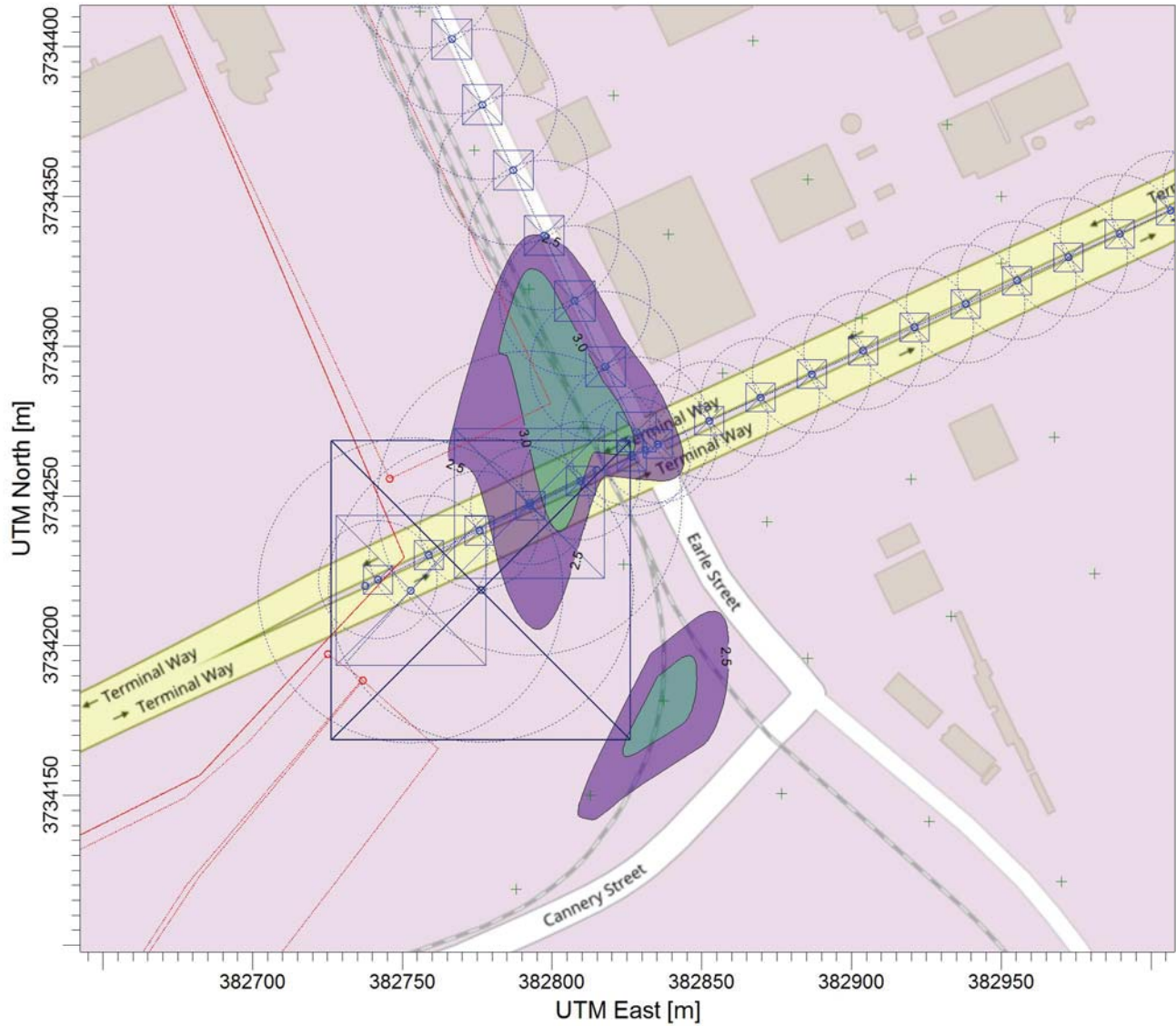
Max: 3.5 [ug/m³] at (382810.44, 3734272.83)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>		
	<p>RECEPTORS:</p> <p>1300</p>			
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE:</p> <p>1:2,300</p> <p>0 0.05 km</p>		
	<p>MAX:</p> <p>3.5 ug/m³</p>	<p>PROJECT NO.:</p>		

PROJECT TITLE:



**Alternative 3 2019 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

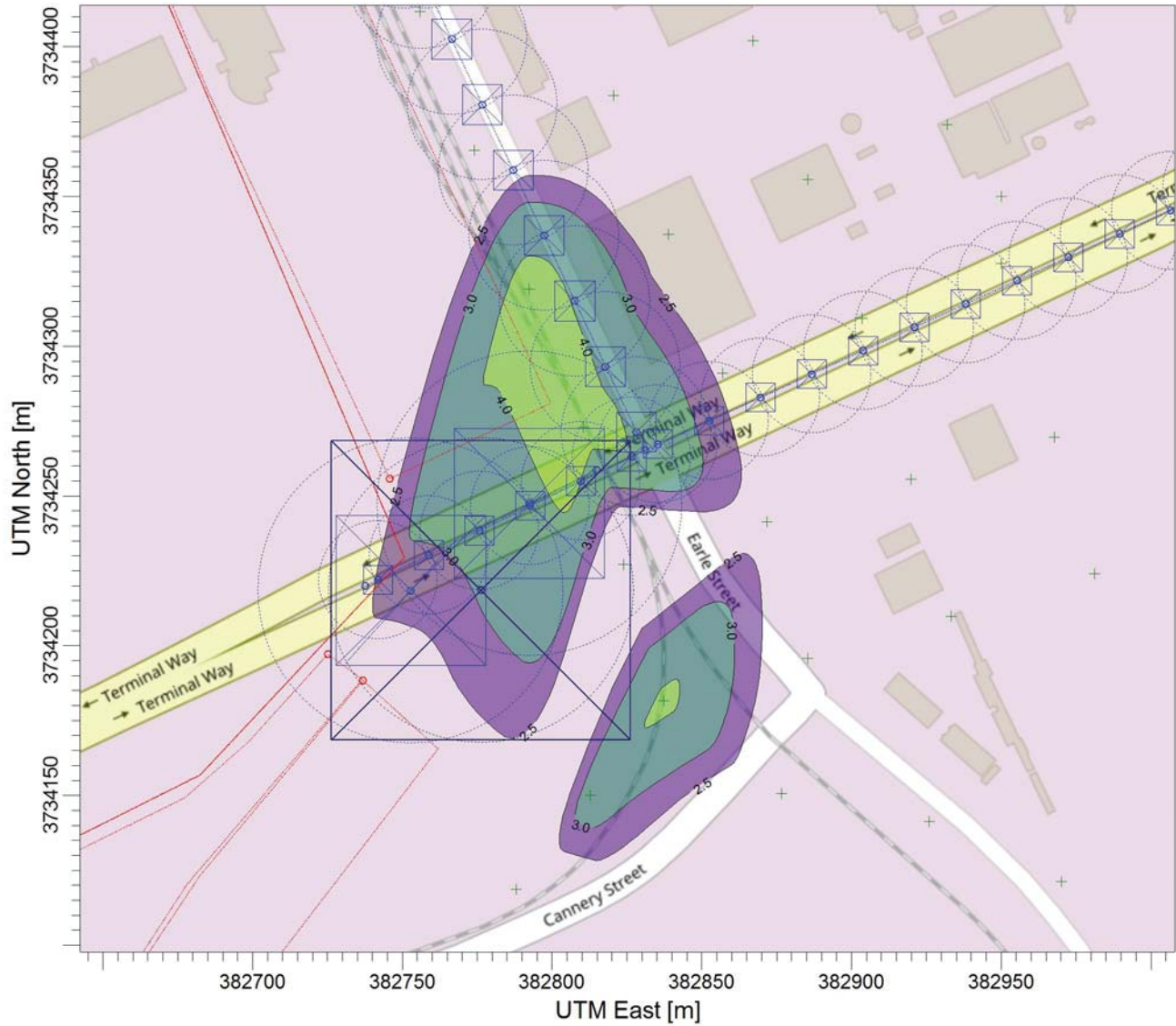
Max: 3.5 [ug/m³] at (382810.44, 3734272.83)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>3.5 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 3 2026 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

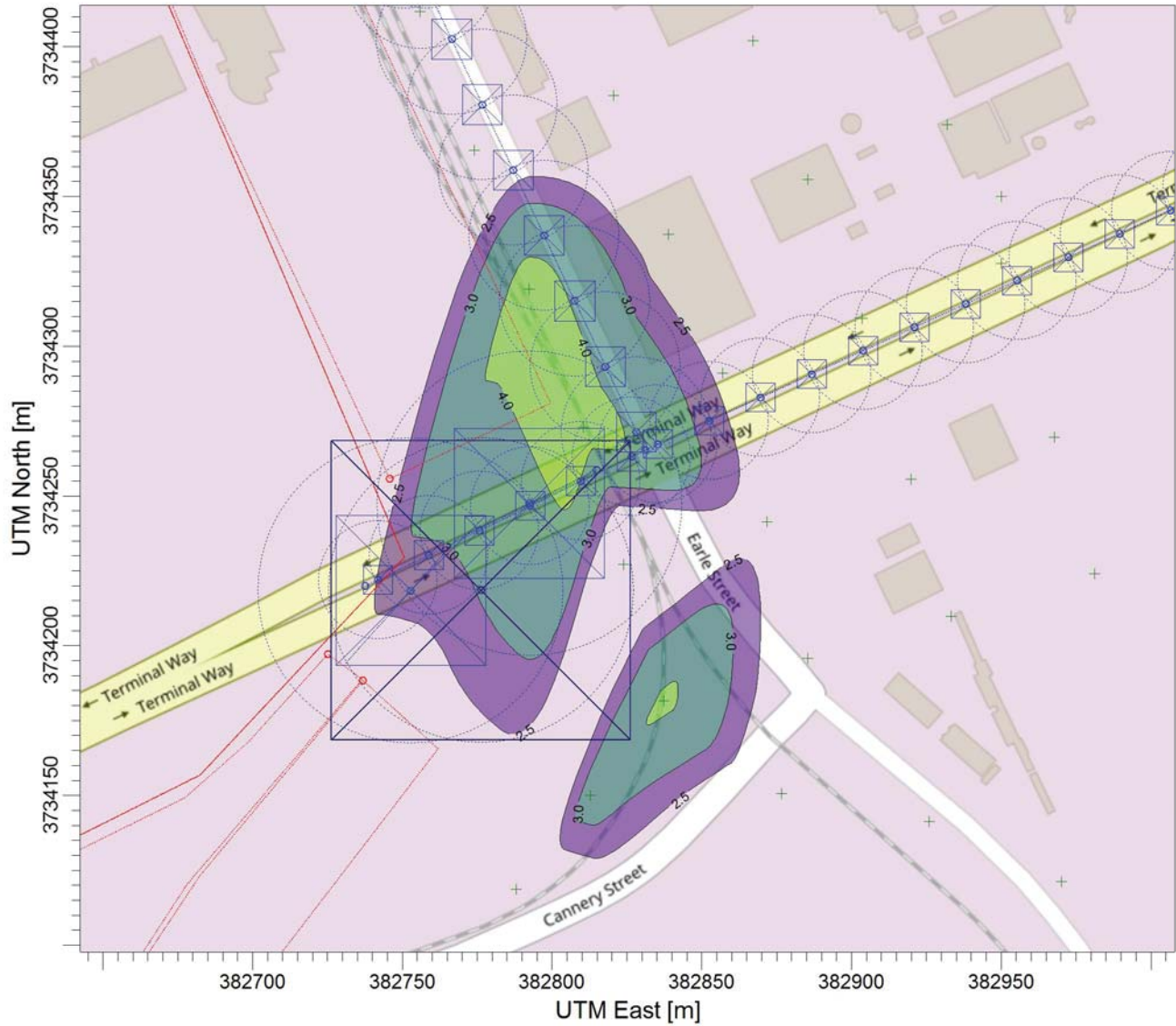
Max: 4.6 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0 0.05 km</p>	
	<p>MAX:</p> <p>4.6 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 3 2026 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

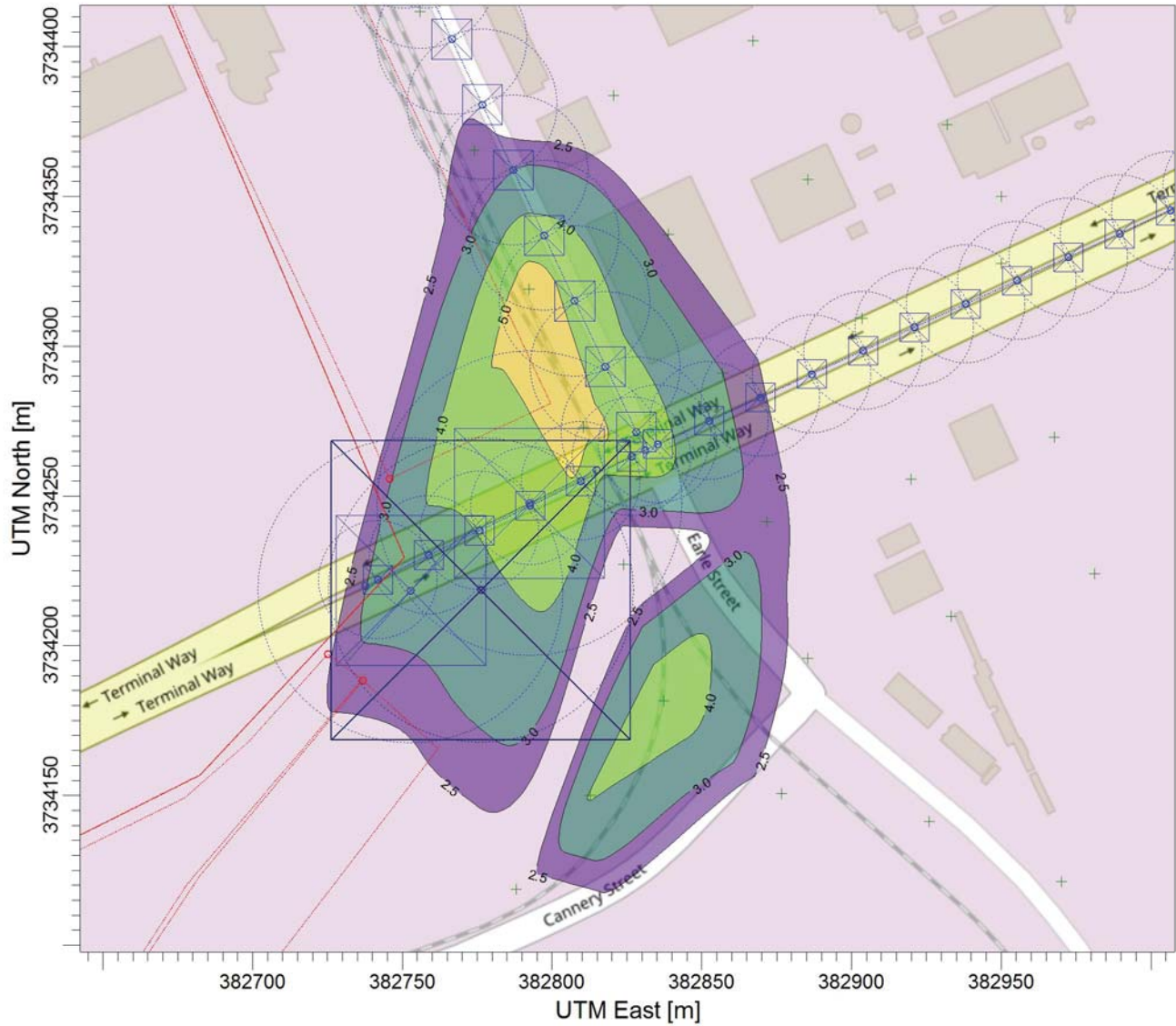
Max: 4.6 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE: 1:2,300</p> <p>0 0.05 km</p>	
	<p>MAX:</p> <p>4.6 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 3 2033 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

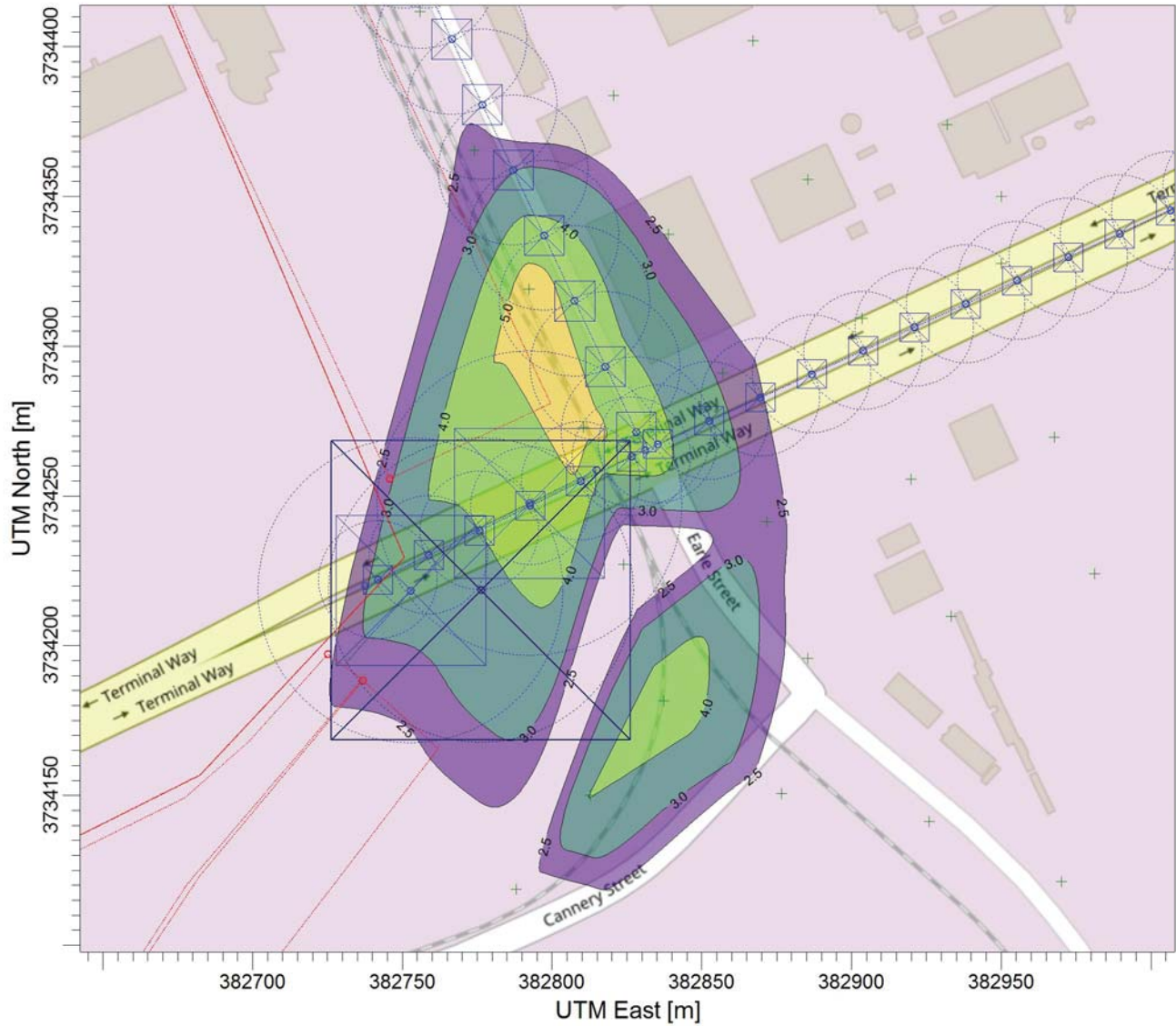
Max: 5.6 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE: 1:2,300</p>	
	<p>MAX:</p> <p>5.6 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Alternative 3 2033 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

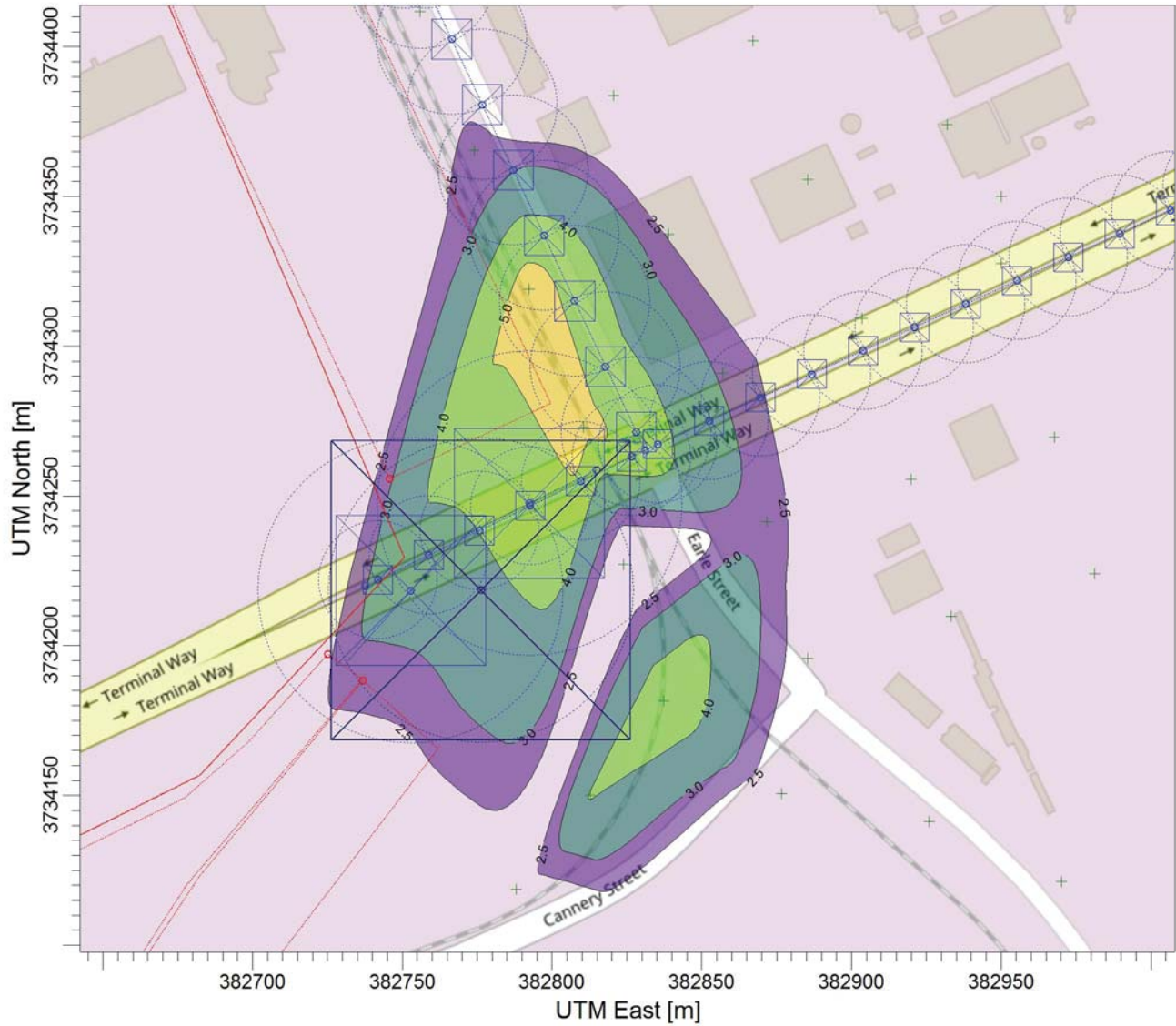
Max: 5.5 [ug/m³] at (382792.24, 3734319.15)



COMMENTS: Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR	SOURCES: 668	COMPANY NAME: CDM Smith	
	RECEPTORS: 1300		
	OUTPUT TYPE: Concentration		
	MAX: 5.5 ug/m³	SCALE: 1:2,300 	PROJECT NO.:

PROJECT TITLE:

**Alternative 3 2038 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

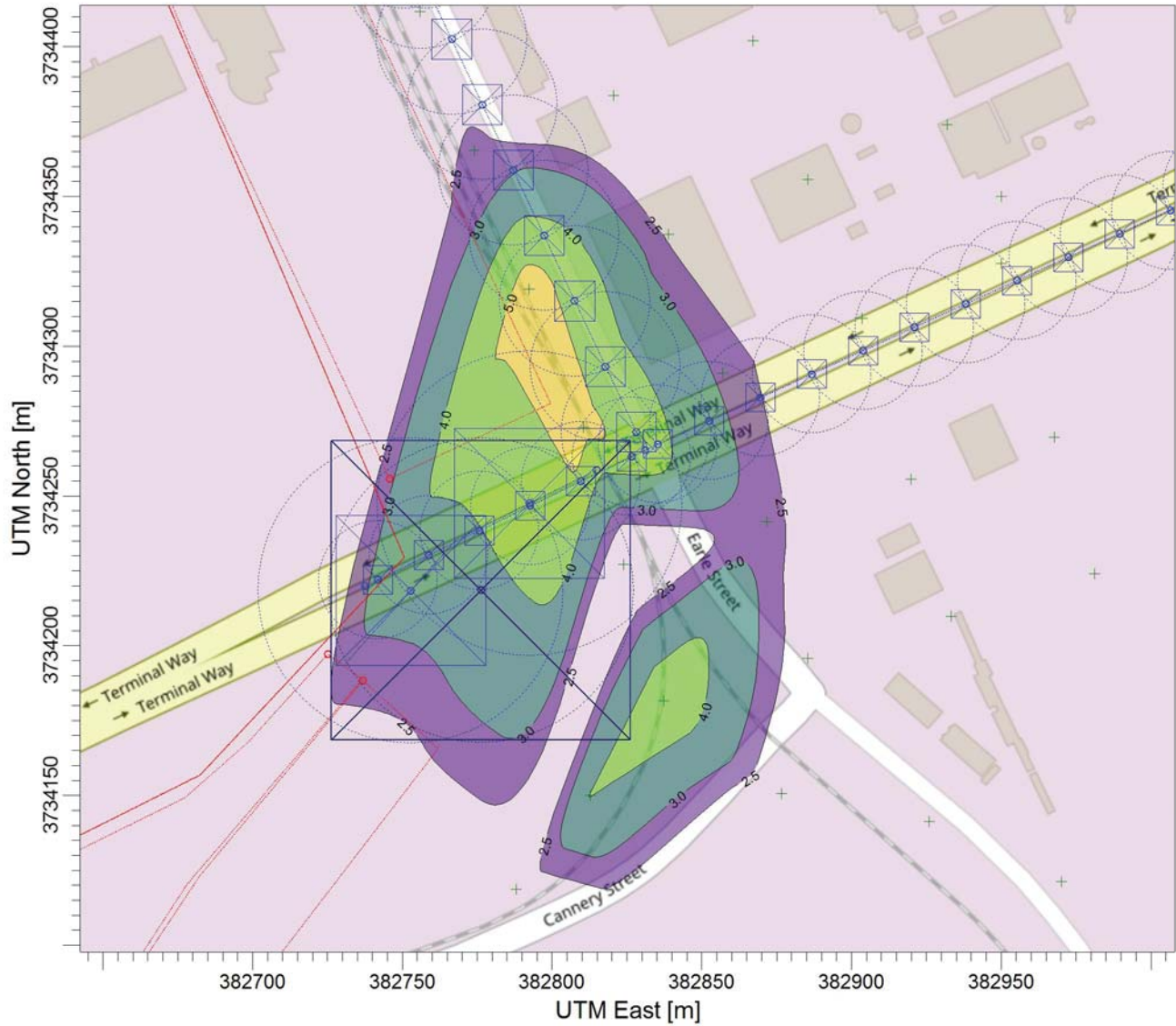
Max: 5.5 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE: 1:2,300</p> <p>0 0.05 km</p>	
	<p>MAX:</p> <p>5.5 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Alternative 3 2038 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

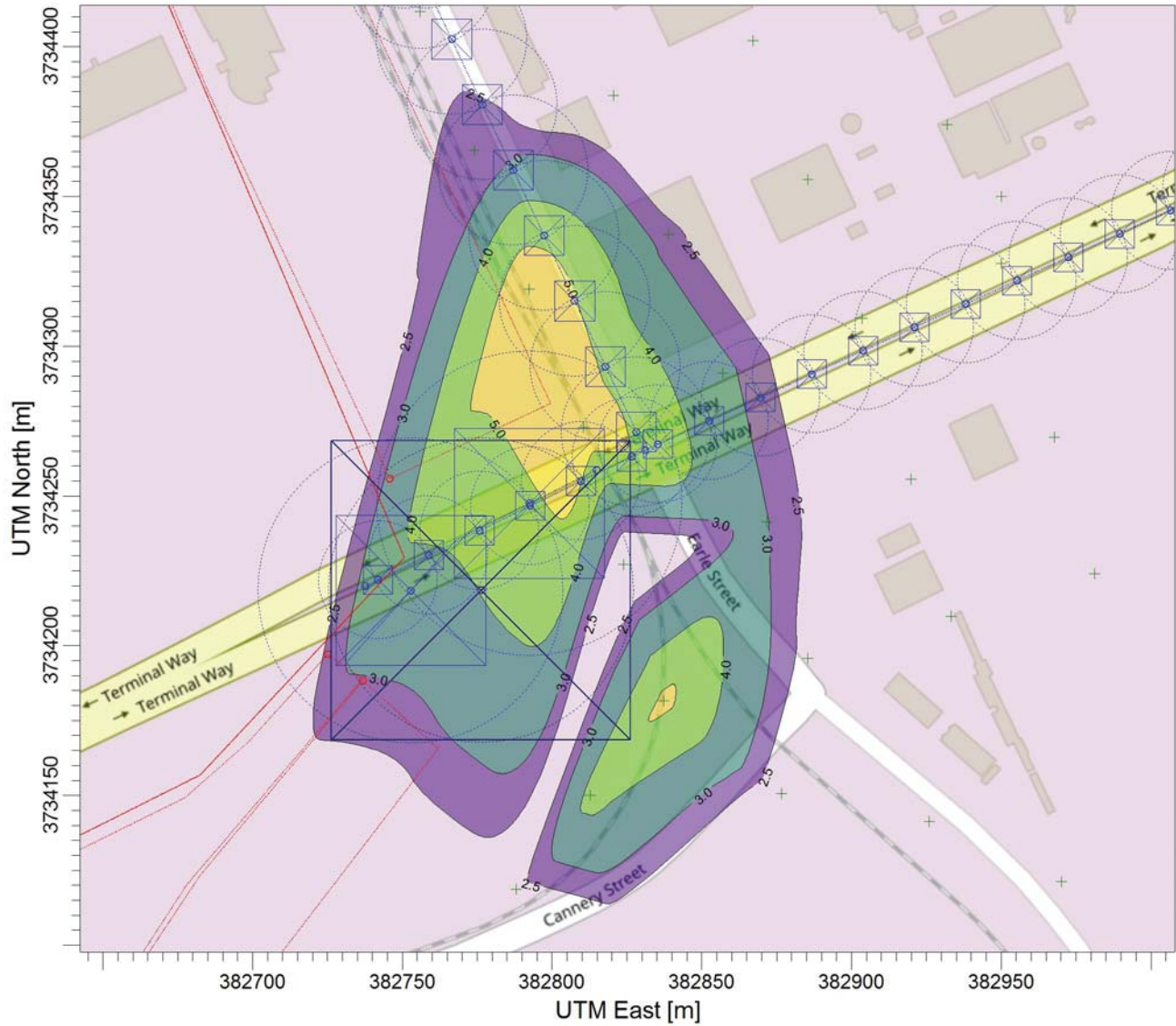
Max: 5.5 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>5.5 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Alternative 5 2033 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

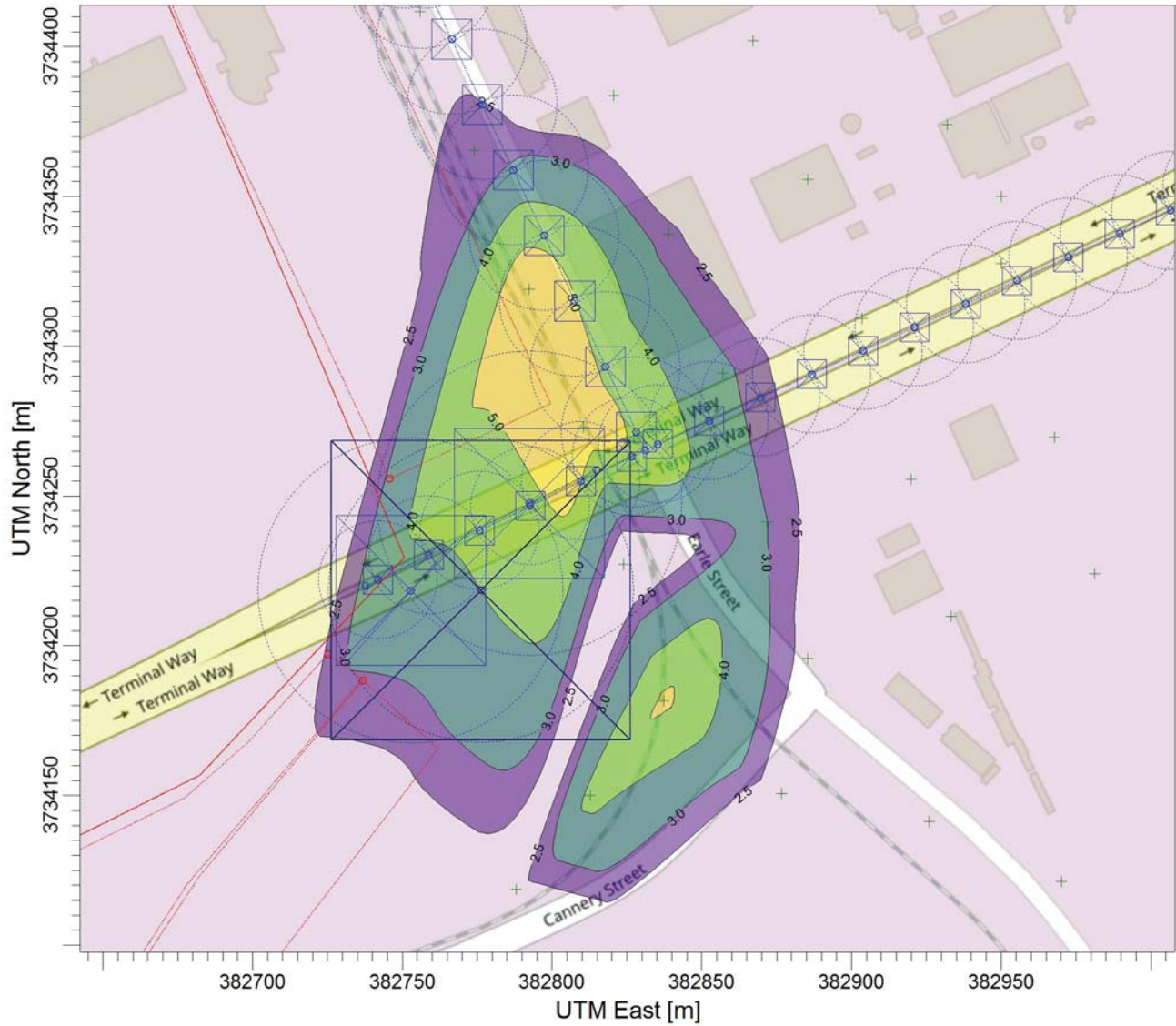
Max: 5.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>		
	<p>RECEPTORS:</p> <p>1300</p>			
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE:</p> <p>1:2,300</p> <p>0 0.05 km</p>		
	<p>MAX:</p> <p>5.9 ug/m³</p>	<p>PROJECT NO.:</p>		

PROJECT TITLE:



**Alternative 5 2033 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

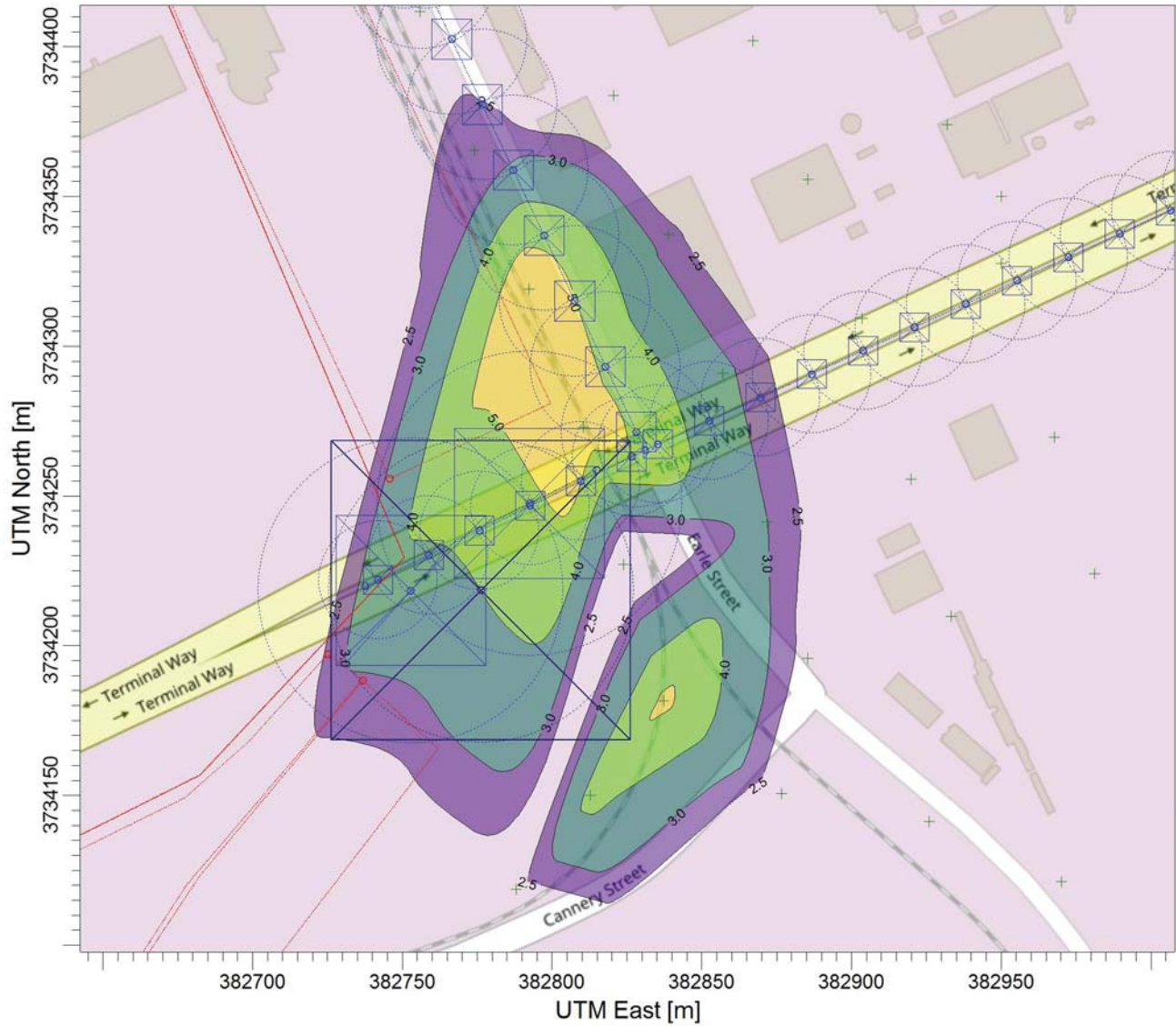
Max: 5.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>		
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE: 1:2,300</p> <p>0  0.05 km</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>PROJECT NO.:</p>		
	<p>MAX:</p> <p>5.9 ug/m³</p>			

PROJECT TITLE:



**Alternative 5 2038 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

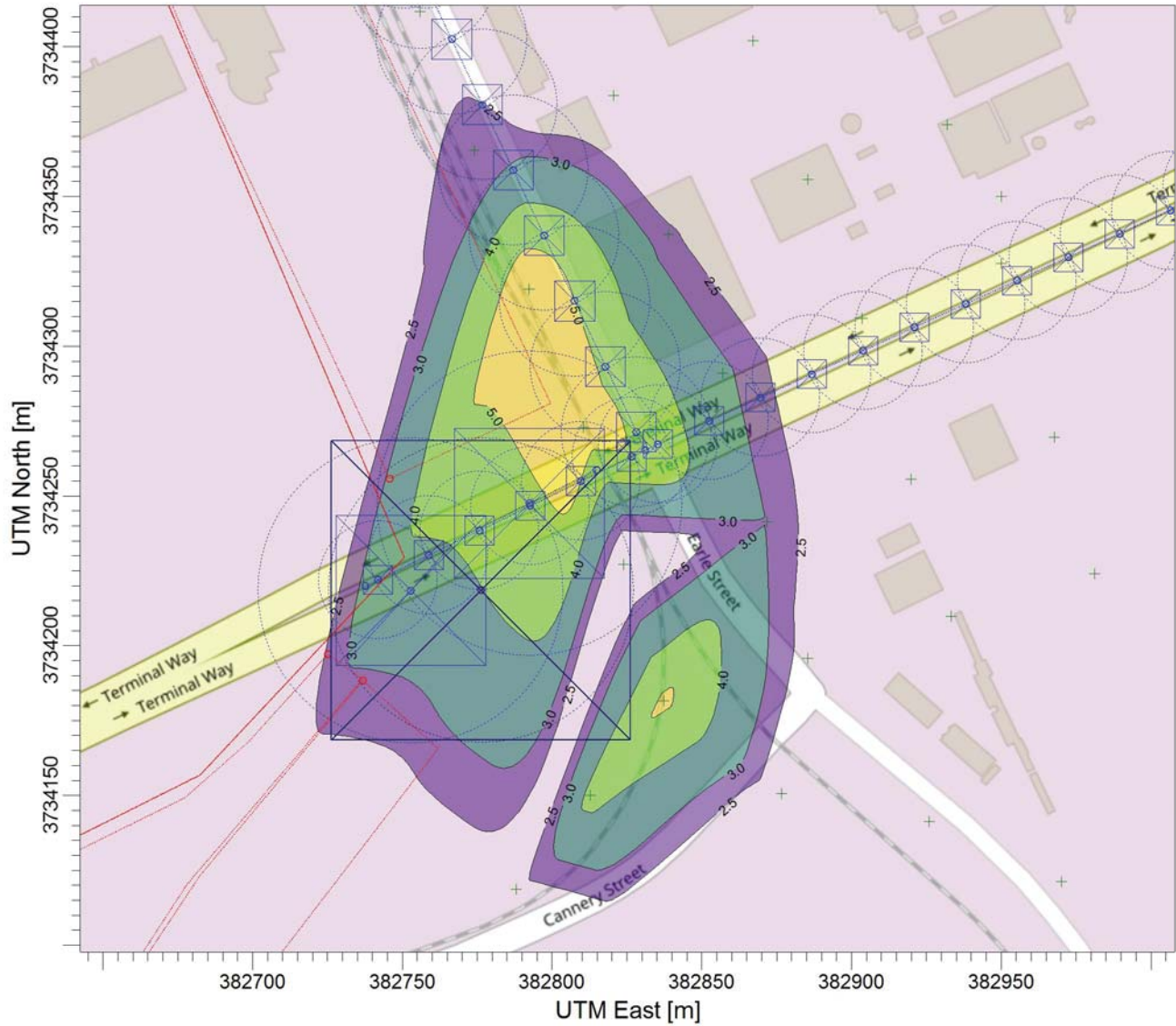
Max: 5.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>5.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Alternative 5 2038 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

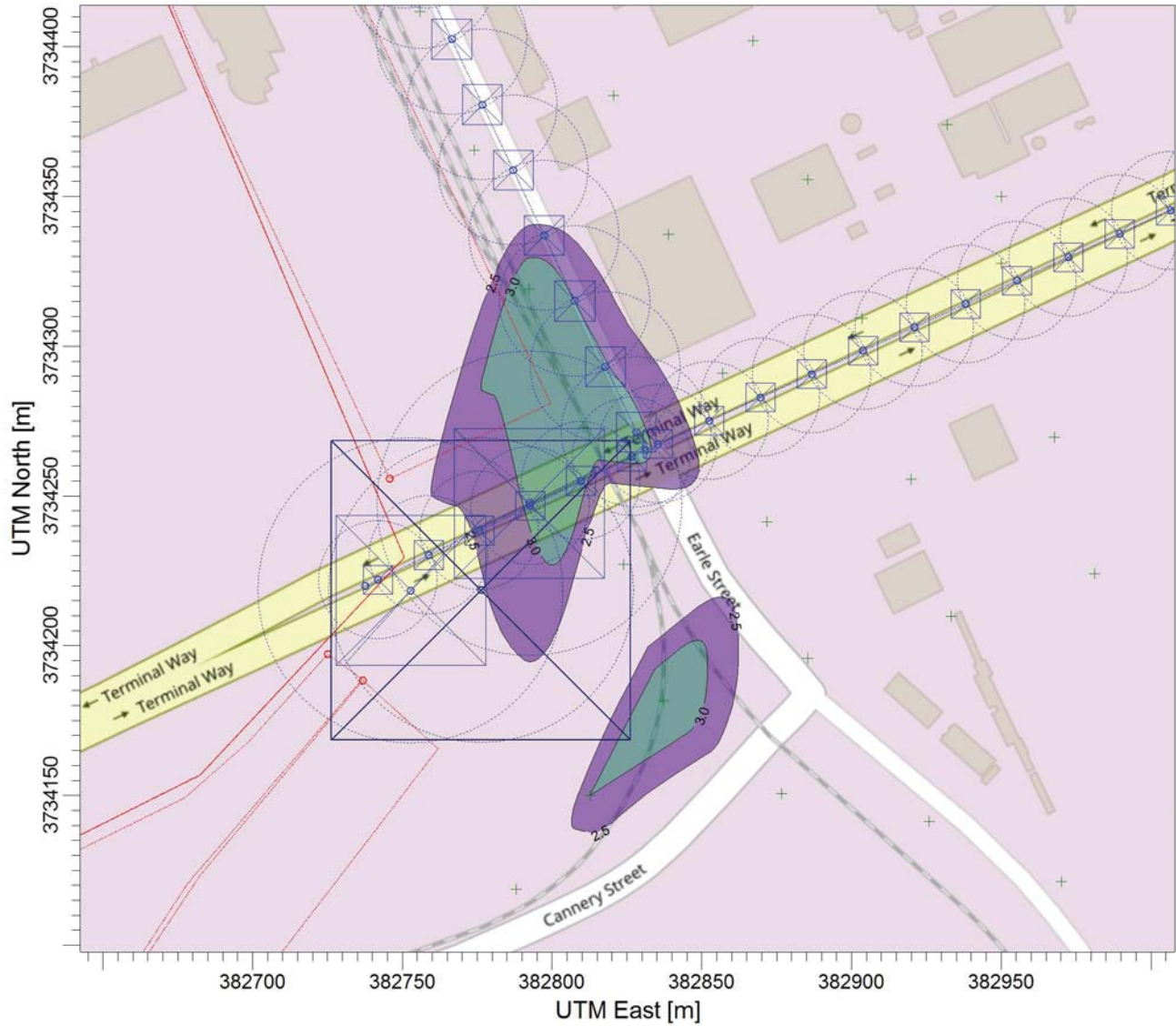
Max: 5.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>5.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Proposed Project/Alternative 5 2019 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

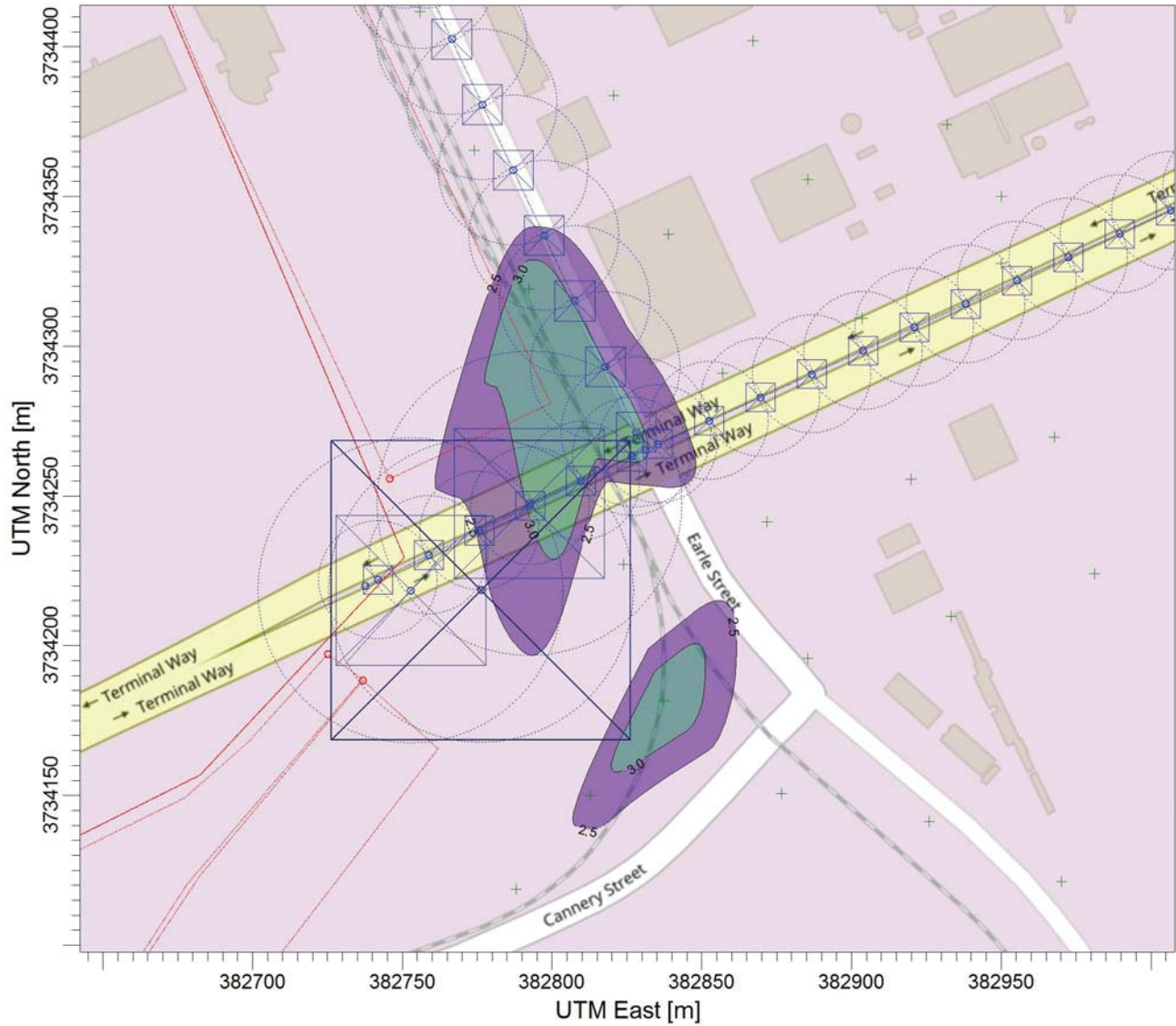
Max: 3.7 [ug/m³] at (382810.44, 3734272.83)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>3.7 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Proposed Project/Alternative 5 2019 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

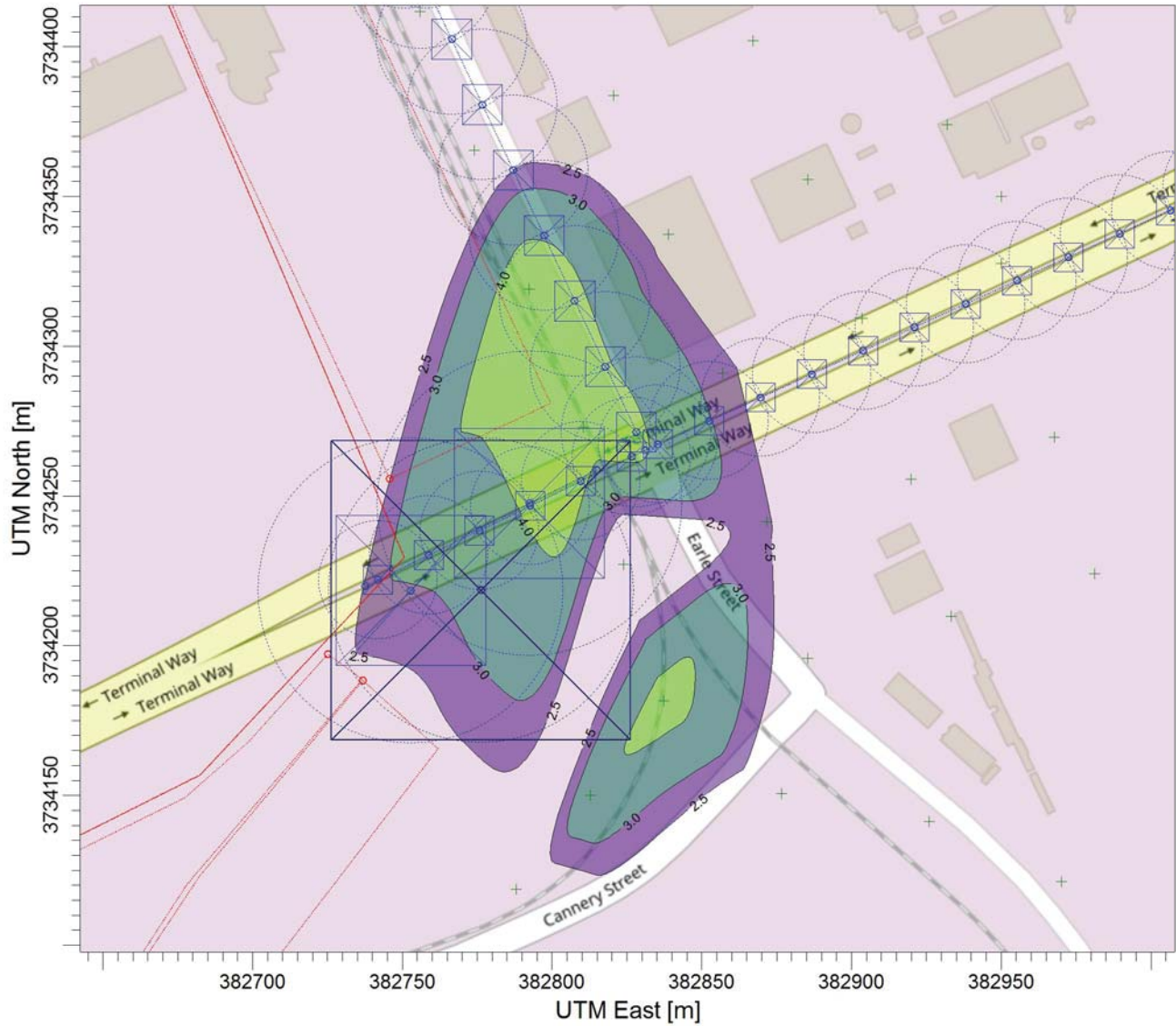
Max: 3.7 [ug/m³] at (382810.44, 3734272.83)



COMMENTS: Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR	SOURCES: 668	COMPANY NAME: CDM Smith	
	RECEPTORS: 1300		
	OUTPUT TYPE: Concentration		
	MAX: 3.7 ug/m³	SCALE: 1:2,300 	PROJECT NO.:

PROJECT TITLE:



**Proposed Project/Alternative 5 2026 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

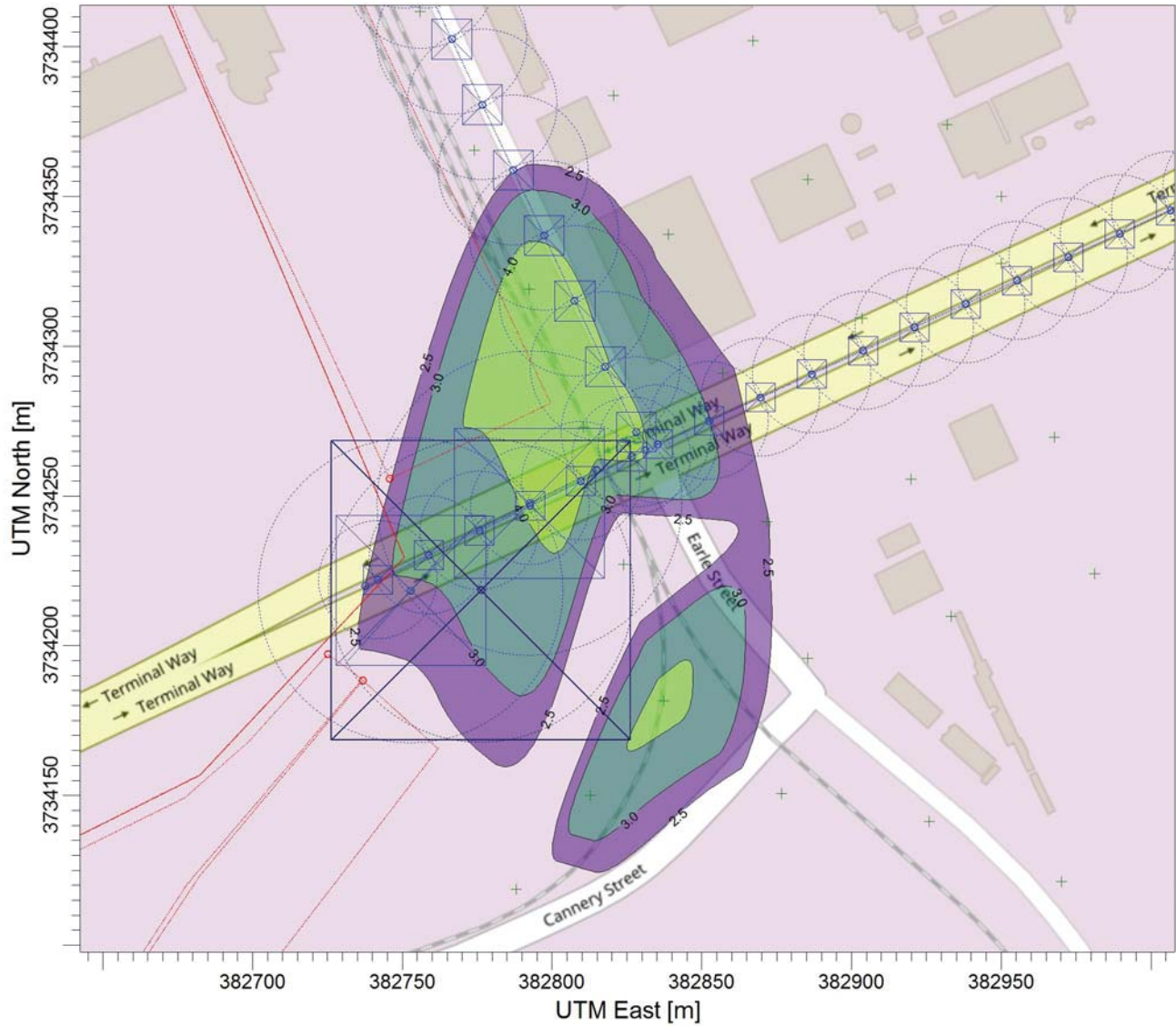
Max: 5.0 [ug/m³] at (382792.24, 3734319.15)



COMMENTS: Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR	SOURCES: 668	COMPANY NAME: CDM Smith	
	RECEPTORS: 1300		
	OUTPUT TYPE: Concentration		
	MAX: 5.0 ug/m³	SCALE: 1:2,300 	PROJECT NO.:

PROJECT TITLE:

**Proposed Project/Alternative 5 2026 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

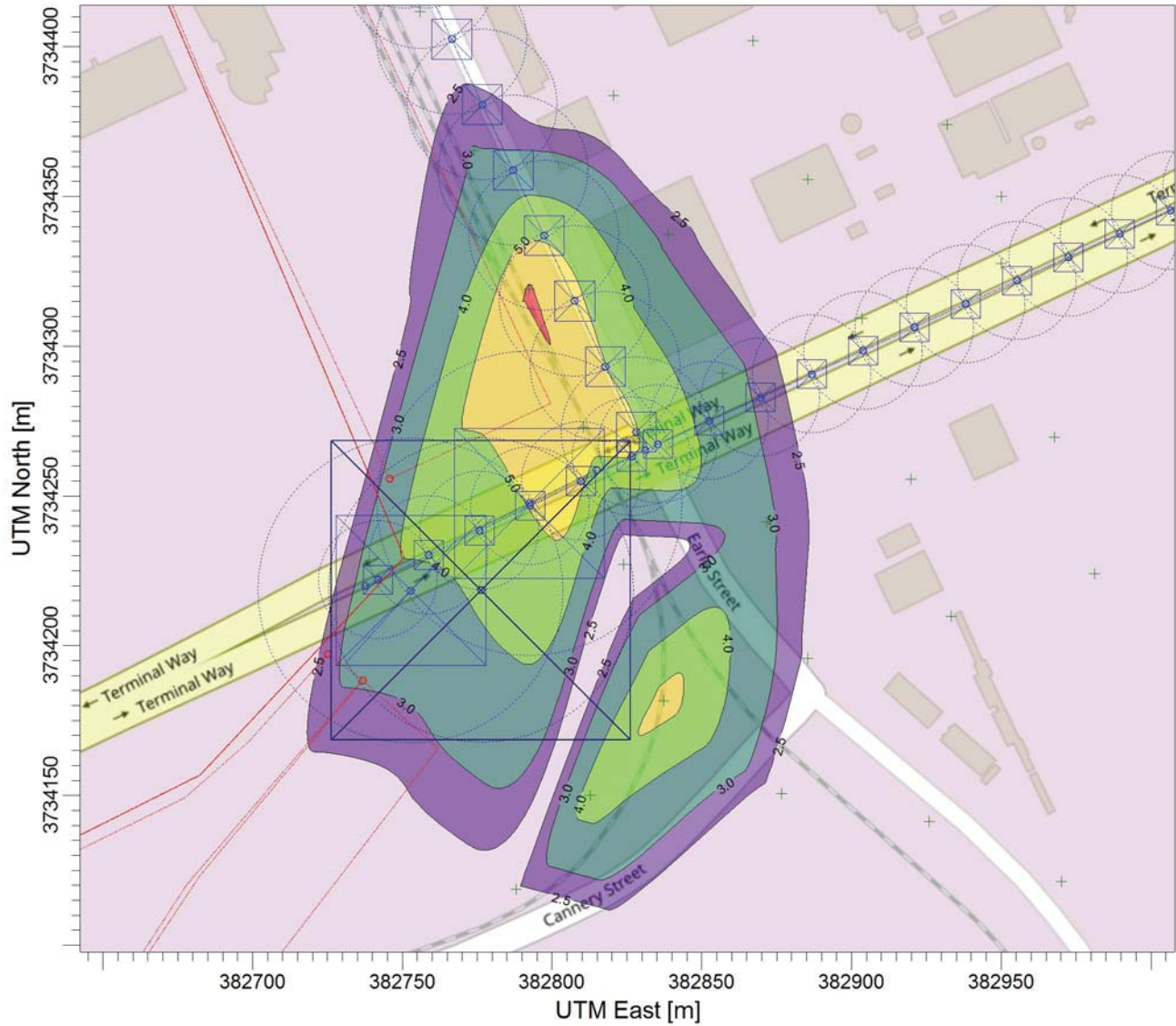
Max: 4.9 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>		
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>SCALE: 1:2,300</p>	
	<p>MAX:</p> <p>4.9 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:

**Proposed Project 2033 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



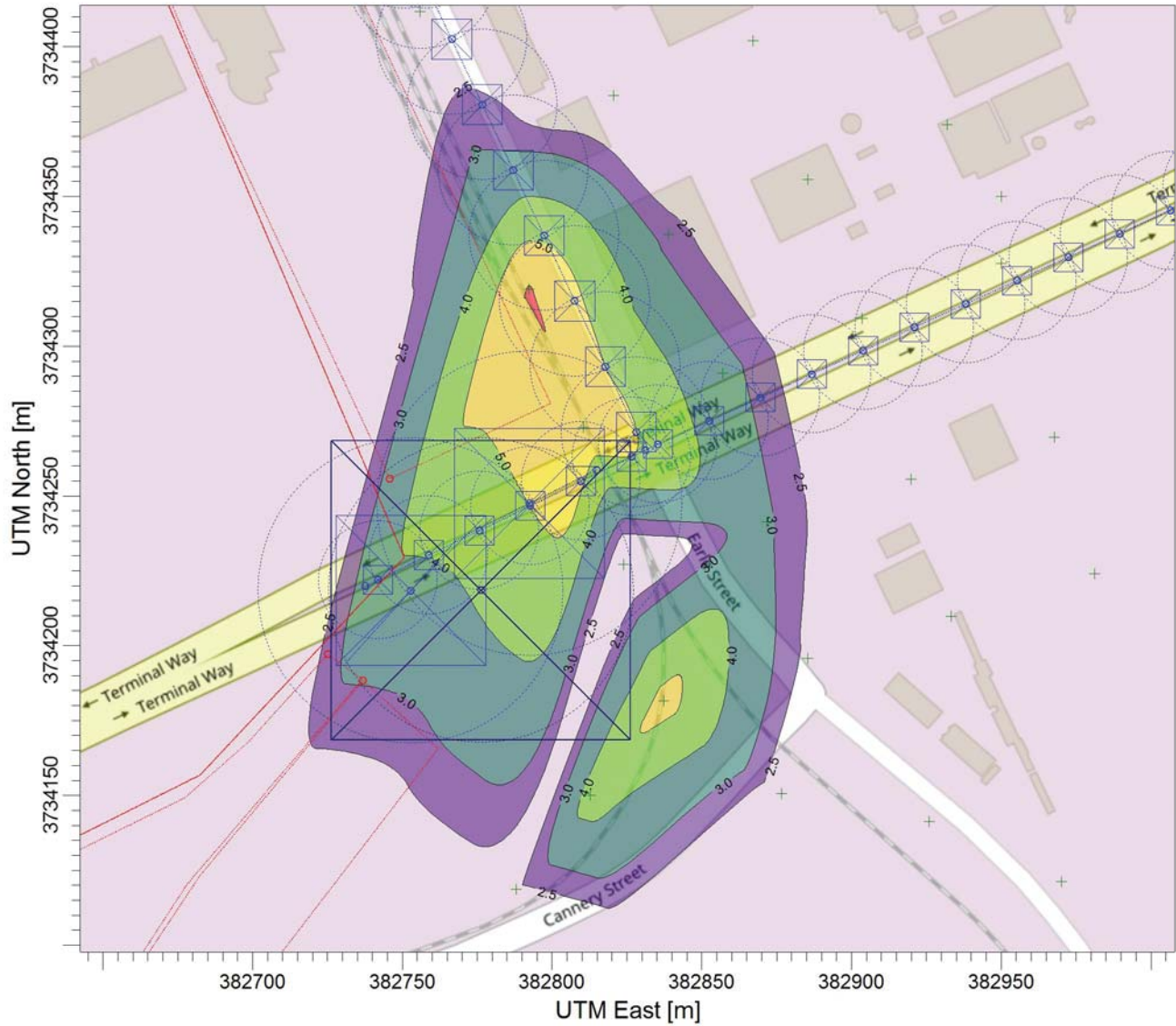
PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

Max: 6.1 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0 0.05 km</p>	
	<p>MAX:</p> <p>6.1 ug/m³</p>	<p>PROJECT NO.:</p>	



PROJECT TITLE:
Proposed Project 2033 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

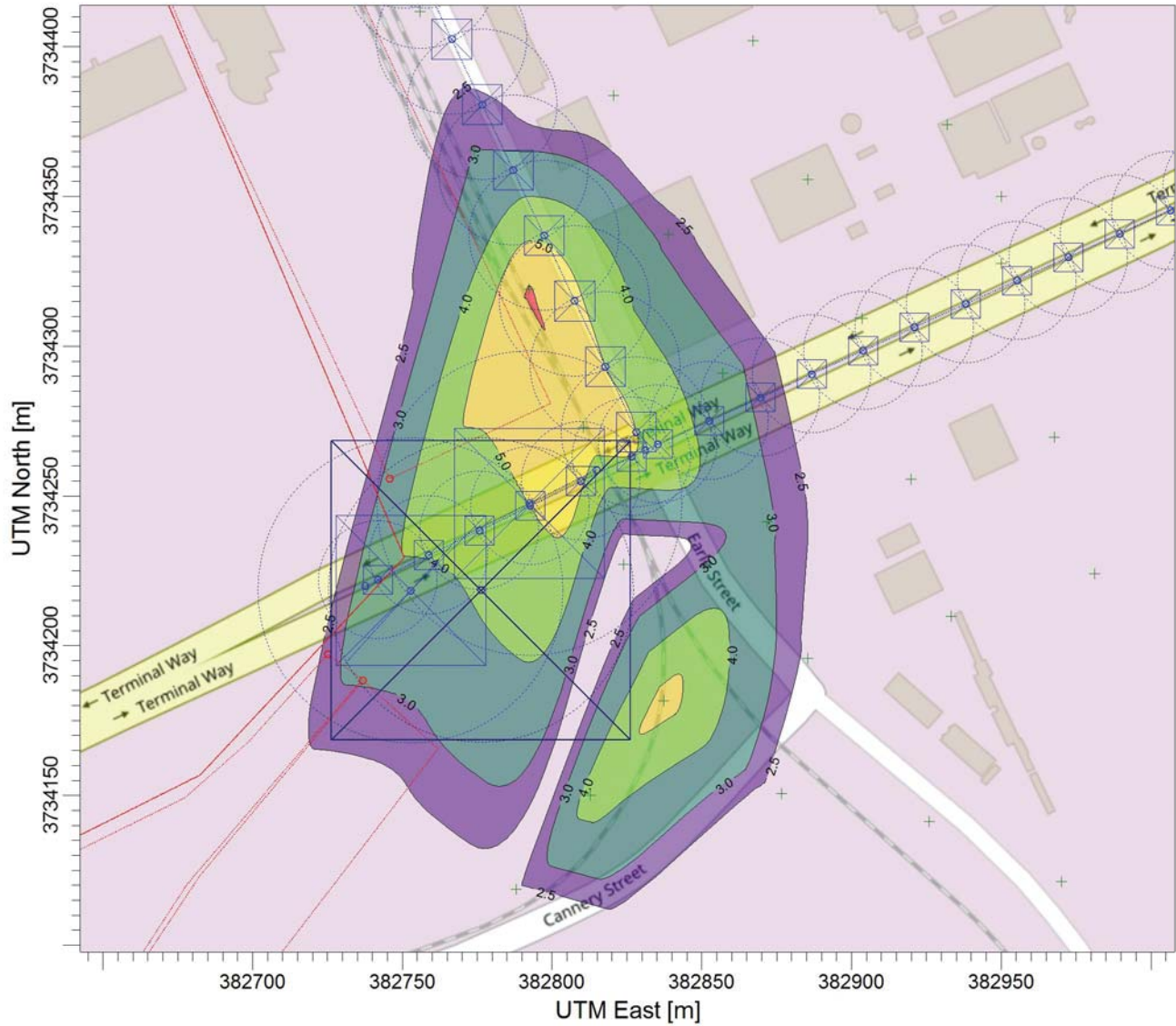
Max: 6.1 [ug/m³] at (382792.24, 3734319.15)



COMMENTS: Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR	SOURCES: 668	COMPANY NAME: CDM Smith	
	RECEPTORS: 1300	SCALE: 1:2,300	
	OUTPUT TYPE: Concentration		
	MAX: 6.1 ug/m³	PROJECT NO.:	

PROJECT TITLE:

**Proposed Project 2038 Unmitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

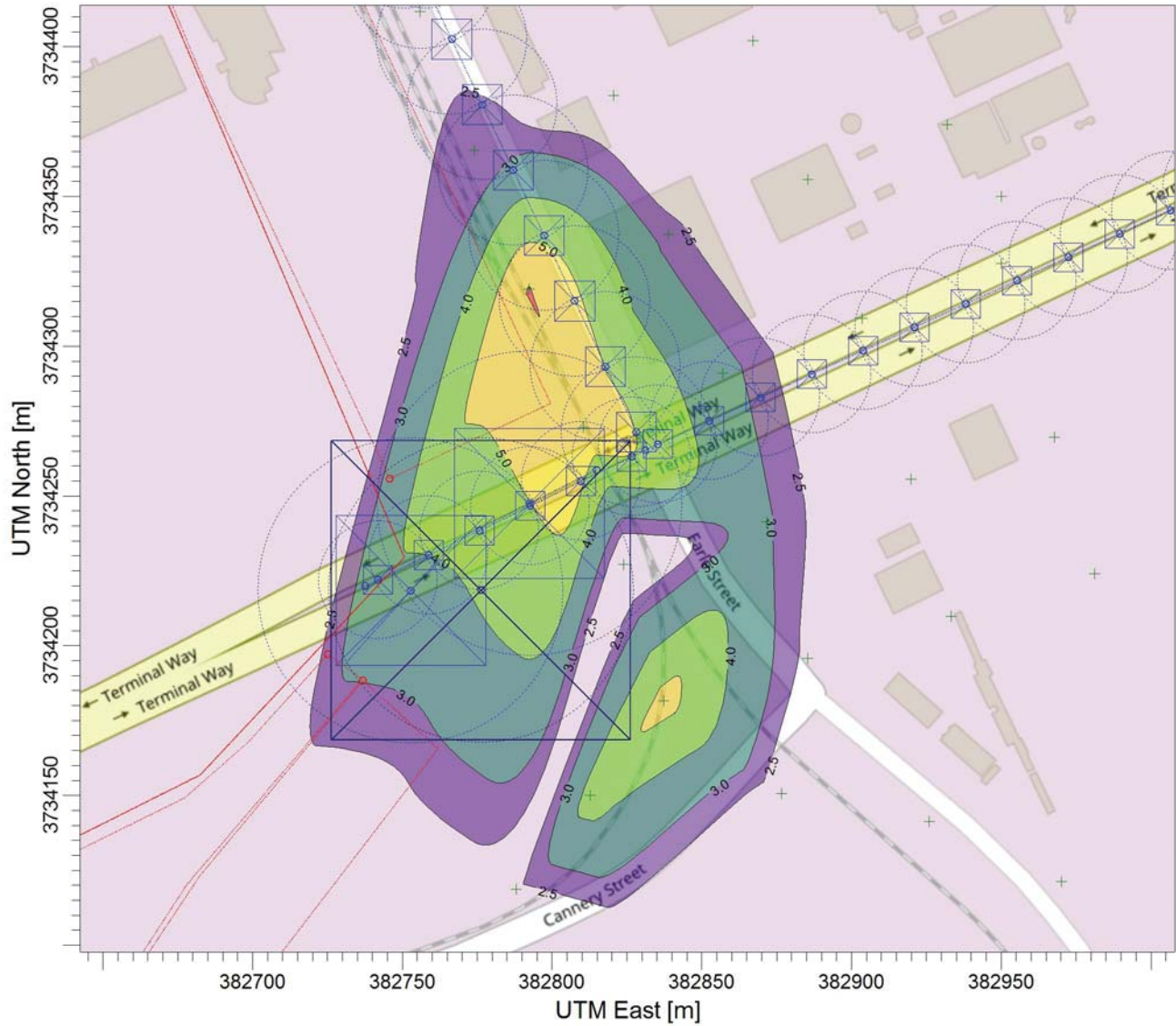
Max: 6.1 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0 0.05 km</p>	
	<p>MAX:</p> <p>6.1 ug/m³</p>	<p>PROJECT NO.:</p>	

PROJECT TITLE:



**Proposed Project 2038 Mitigated Operations
PM2.5, 24-Hour H1H CEQA Increment**



PLOT FILE OF 1ST-HIGHEST MAX DAILY 24-HR VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ug/m³

Max: 6.0 [ug/m³] at (382792.24, 3734319.15)



<p>COMMENTS:</p> <p>Port of Los Angeles Berths 226-236 (Everport) Container Terminal Improvements Project EIS/EIR</p>	<p>SOURCES:</p> <p>668</p>	<p>COMPANY NAME:</p> <p>CDM Smith</p>	
	<p>RECEPTORS:</p> <p>1300</p>	<p>SCALE:</p> <p>1:2,300</p>	
	<p>OUTPUT TYPE:</p> <p>Concentration</p>	<p>0  0.05 km</p>	
	<p>MAX:</p> <p>6.0 ug/m³</p>	<p>PROJECT NO.:</p>	

Attachment B2.2

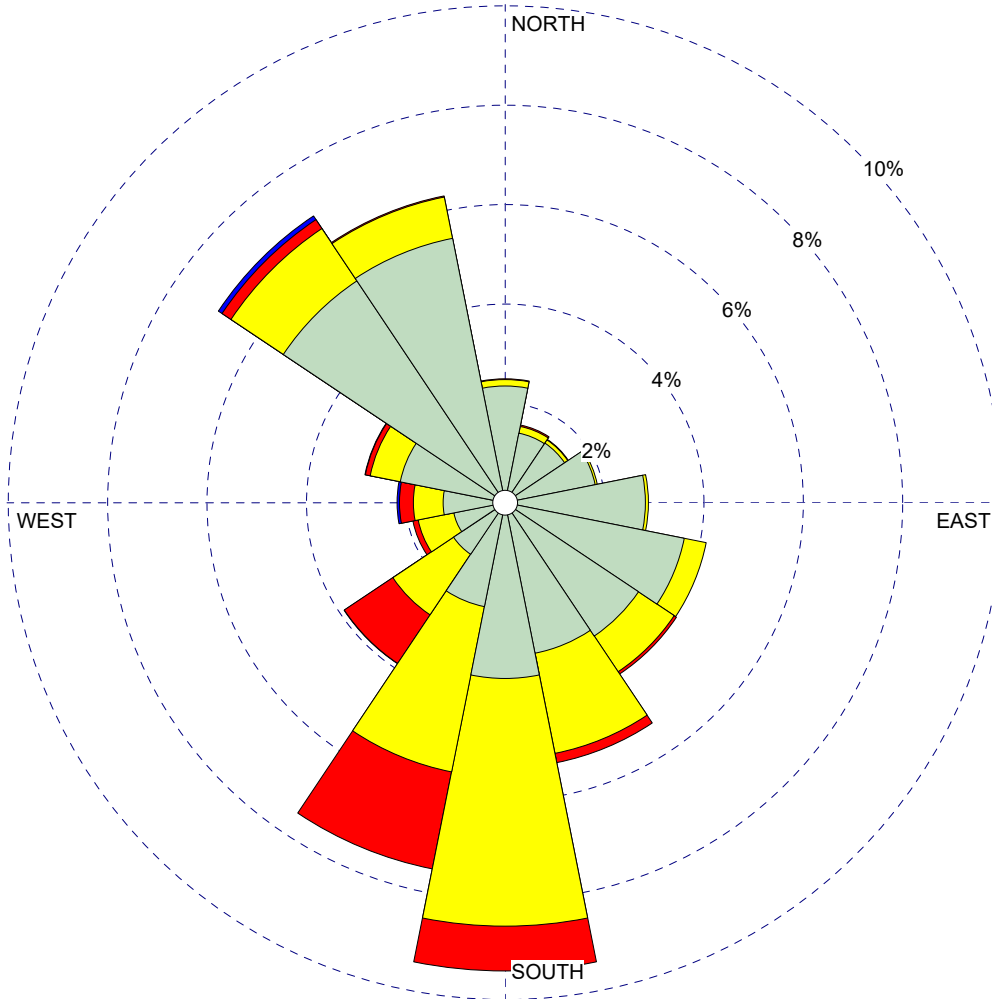
Wind Rose

WIND ROSE PLOT:

**Port of Los Angeles Wind Rose
Everport Terminal Modeling**

DISPLAY:

**Wind Speed
Direction (blowing from)**



WIND SPEED
(Knots)

- >= 21.58
- 17.11 - 21.58
- 11.08 - 17.11
- 7.00 - 11.08
- 4.08 - 7.00
- 0.97 - 4.08

Calms: 0.90%

COMMENTS:

DATA PERIOD:

**Start Date: 9/1/2006 - 00:00
End Date: 8/31/2007 - 23:59**

COMPANY NAME:

CDM Smith

CALM WINDS:

0.90%

TOTAL COUNT:

17283 hrs.

AVG. WIND SPEED:

3.53 Knots

PROJECT NO.:



