NOTICE OF EXEMPTION

APPENDIX E

To: Los Angeles County Registrar
-Recorder/County Clerk
12400 Imperial Highway, RM 1201
Norwalk, CA 90650

From (Public Agency): City of Gardena
1700 West 162nd Street
Gardena CA, 90247

Project Title:	2545 Marine Avenue Residential Project
Project Location - Specific:	2545 Marine Avenue, Gardena, CA 90247
Project Location - City:	City of Gardena
Project Location - County:	County of Los Angeles
Description of Nature, Purpose, and Beneficiaries of Project:	
Nature:	The Project proposes a residential townhome development; see attached CEQA Compliance Technical Memorandum.
Purpose:	The Project proposes a residential development with 22 dwelling units (DU) (2 affordable and 20 market rate DU) to provide housing for the community.
Beneficiaries:	Individuals looking for housing in the Project area.
Name of Public Agency Approving Project:	City of Gardena
Name of Person or Agency Carrying Out Project:	G3 Urban
Exempt Status (check one):	*Pursuant to California Environmental Quality Act (CEQA) Statute and Guidelines*
☐	Ministerial (Sec. 21080(b)(1); 15268);
☐	Declared Emergency (Sec. 21080(b)(3); 152269(a));
☐	Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
☒	Categorical Exemption. Type and Section: Class 32: Sec. 15332, *Infill Development*
☐	Statutory Exemption. Code Number:

Reasons Why Project is Exempt: The proposed facility improvements have been determined not to have a significant effect on the environment and, therefore, are found to be exempt from CEQA under Class 32; see attached CEQA Compliance Technical Memorandum. The proposed residential development is consistent with the General Plan and Municipal Code. The Project would occur within City limits on no more than 5.0 acres substantially surrounded by urban uses. The Project site is vacant and has no value as habitat to rare, endangered, or threatened species. Project approval would not result in any significant effects relating to traffic, noise, air quality, or water quality. All required utilities and public services can adequately serve the site. Finally, the Project does not meet the conditions outlined in State CEQA Guidelines Section 15300.2.

Lead Agency **Contact Person:** Amanda Acuna	**Telephone** **& Extension:** (310) 217-9524
If Filed by Applicant:	
1. Attach certified document of exemption finding. 2. Has a Notice of Exemption been filed by the public agency approving the project?	☐ Yes ☐ No
Signature: Amanda Acuña	**Title:** City of Gardena Senior Planner — **Date:**

☒ Signed by Lead Agency ☐ Signed by Applicant	Date received for filing at OPR:

TECHNICAL MEMORANDUM

To: Amanda Acuna, City of Gardena Senior Planner
Lisa Kranitz, City of Gardena Assistant City Attorney

From: Rita Garcia, Project Manager

Date: April 11, 2022

Subject: 2545 Marine Avenue Project - CEQA Compliance Review

1.0 INTRODUCTION & PURPOSE

Kimley-Horn and Associates, Inc. has been retained to evaluate the proposed 2545 Marine Avenue Project (the "Project") concerning California Environmental Quality Act (CEQA) compliance. This Technical Memorandum (TM) was prepared to present the findings of the CEQA compliance review, as described below. This TM was also prepared to present the recommendations concerning the appropriate CEQA compliance documentation.

The Project's CEQA compliance review relied on the following documentation:

- Conceptual Site Plan; see **Appendix 1: Conceptual Site Plan**.
- Kimley-Horn. (March 2022). *2545 Marine Avenue Residential Project Trip Generation and Vehicle Miles Traveled Technical Memorandum.* Orange, CA; see **Appendix 2: Trip Generation and Vehicle Miles Traveled Assessment.**
- Kimley-Horn. (March 2022). *2545 Marine Avenue Residential Project – Noise and Vibration Analysis.* Orange CA; see **Appendix 3: Noise and Vibration Analysis**.
- Kimley-Horn. (March 2022). *2545 Marine Avenue Residential Project – Air Quality Analysis.* Orange, CA; see **Appendix 4: Air Quality Analysis**.
- Stantec Consulting Services Inc. (March 2022). Additional Phase II Environmental Site Assessment 2545 Marine Avenue Gardena, California; see **Appendix 5: Phase II Environmental Site Assessment**.

2.0 STATUTORY AUTHORITY & REQUIREMENTS

State CEQA Guidelines §15061 – Review for Exemption

Once it has determined that an activity is a project subject to CEQA, it is then determined whether the project is exempt from CEQA. Pursuant to State CEQA Guidelines §15061, a project is exempt from CEQA if:

1) The project is exempt by statute; see State CEQA Guidelines Article 18, commencing with §15260.

2) The project is exempt pursuant to a Categorical Exemption (CE) (see State CEQA Guidelines Article 19, commencing with §15300) and the application of that CE is not barred by one of the exceptions set forth in State CEQA Guidelines §15300.2.

3) The activity is covered by the commonsense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

4) The project will be rejected or disapproved by a public agency.

5) The project is exempt pursuant to the provisions of Article 12.5 - Exemptions for Agricultural Housing, Affordable Housing, and Residential Infill Projects.

State CEQA Guidelines Article 19 - Categorical Exemptions

State CEQA Guidelines Article 19 includes a list of classes of projects, which have been determined not to have a significant effect on the environment and, therefore, are exempt from CEQA. The class of projects that is relevant to the proposed Project is presented below.

State CEQA Guidelines §15332 – Infill Development. Class 32 consists of projects characterized as in-fill development meeting the conditions described below.

1) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.

2) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.

3) The project site has no value as habitat for endangered, rare, or threatened species.

4) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.

5) The site can be adequately served by all required utilities and public services.

State CEQA Guidelines §15300.2 - Exceptions. The following conditions are exceptions that bar the application of a CE:

a) *Location*. Classes 3, 4, 5, 6, and 11 are qualified by consideration of where the project is to be located -- a project that is ordinarily insignificant in its impact on the environment may in a particularly sensitive environment be significant.

b) *Cumulative Impact*. All exemptions for these classes are inapplicable when the cumulative impact of successive projects of the same type in the same place, over time is significant.

c) *Significant Effect*. A CE shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances.

d) *Scenic Highways*. A CE shall not be used for a project which may result in damage to scenic resources, including but not limited to, trees, historic buildings, rock outcroppings, or similar resources, within a highway officially designated as a state scenic highway. This does not apply to improvements which are required as mitigation by an adopted negative declaration or certified EIR.

e) *Hazardous Waste Sites*. A CE shall not be used for a project located on a site which is included on any list compiled pursuant to Government Code §65962.5.

f) *Historical Resources*. A CE shall not be used for a project which may cause a substantial adverse change in the significance of a historical resource.

3.0 PROJECT DESCRIPTION

The Project is proposing a residential townhome development on an approximately 0.72-acre property that consists of one parcel (APN 4064-023-018) situated northeast of the Marine Avenue at Dublin Avenue intersection, at 2545 Marine Avenue. The parcel is currently a fenced, vacant site. The Project proposes a 22-dwelling-unit (DU), including two affordable and 20 market rate DU. All proposed dwellings would be all-electric, solar-powered- no natural gas would be provided. The Project proposes a vapor barrier membrane as a Project design feature. A total of 52 onsite parking spaces are proposed, including 41 spaces within garages and 11 guest spaces, for an average of 2.4 parking spaces per DU; see **Appendix 1**.

The surrounding land uses include multi-family residential to the north, single-family residential to the south and west, and commercial uses to the east.

4.0 FINDINGS CONCERNING CEQA COMPLIANCE

Kimley-Horn has completed the Project's CEQA compliance review and summarized the findings below.

Exemption Justification Under Class 32 – Infill Development

Land Use Consistency. GGP Figure LU-2, 2021 General Plan Land Use Policy Map, depicts the City's land use designations and indicates the Project site is designated General Commercial with a Mixed Use Overlay (MUO).[1] The MUO designation permits residential development on selected areas designated for commercial and industrial land uses. The MUO designation's purpose is to allow greater flexibility of development alternatives, especially attractive higher density residential development in appropriate areas that are experiencing both physical and economic blight. The

[1] City of Gardena. (2021). *Figure LU-2: 2021 General Plan Land Use Policy Map*. Gardena, CA: City of Gardena.

Project proposes a residential development comprised of 22 DU: 2 affordable DU; and 20 market-rate townhome DU. The Project proposes land uses consistent with the primary intended uses for the General Commercial and MUO designations. Therefore, the Project would not conflict with the GGP or cause a significant environmental impact due to a conflict.

The City of Gardena Zoning Map depicts the City's zones and indicates the Project site is zoned C-3 Zone and MUO Zone. The C-3 Zone is intended for general commercial use. The MUO Zone is intended to allow greater flexibility of development alternatives to provide a blend of residential and non-residential uses that enhance and build upon the City's commercial base; see GMC Chapter 18.19, MUO Zone. The GMC Chapter 18.19 regulations are in addition to those set forth in the underlying zone (C-3 Zone). In the event of a conflict between the MUO Zone and C-3 Zone provisions, the MUO Zone provisions prevail when a mixed-use project is being developed. Within the MUO Zone, if a property is developed solely for residential purposes, then development is subject to GMC §18.19.030: Uses Permitted, and GMC §18.19.060: Property Development Standards. **Table 1: Project Consistency with Development Standards**, summarizes the relevant MUO development standards and indicates the Project is consistent with each standard, except concerning open space and rear setback, for which the Project would require a Variance. Therefore, the Project would not conflict with the GMC or cause a significant environmental impact due to a conflict.

Table 1: Project Consistency with Development Standards

MUO Zone Development Standards		Project	Consistent?
Front Setback	12 feet from face of curb	20 feet	Yes
Rear Setback	15 feet[2]	8 feet	No
Side Setback (Northside)	15 feet	17 feet	Yes
Side Setback (Street Side)	10 feet	12 feet	Yes
Building Separation	10 feet	10 feet	Yes
Density	30 DU/acre[3] (25 DU/acre no Density Bonus)	30 DU/acre	Yes
Structure Height	45 feet maximum with architectural projections	36 feet	Yes
Open Space	150 SF/DU = 3,300 SF[4]	2,526 SF	No

Notes:

1. GMC §18.19.060,: Property Development Standards
2. The Project site is adjacent to a R-1 Zone (to the north/rear) and proposes a building height of over 35 feet, thus, the minimum rear setbacks shall be 15 feet.

Table 1: Project Consistency with Development Standards		
MUO Zone Development Standards	**Project**	**Consistent?**
3. An applicant is entitled to a 20% density bonus if at least 10% of the proposed DU are lower income or if at least 5% are very low income (GMC §18.43.040, Density Bonus). The Project proposes 22 DU: 2 affordable DU (9 percent; and 20 market rate DU. Therefore, the Project qualifies for a 20% density bonus. The density bonus increases the 0.72-acre Project site's maximum density allowable from 25 DU/acre to 30 DU/acre. 4. SF = square feet		

Location and Size. The Project site totals approximately 0.73 acres and is located entirely within Gardena City limits. Land uses surrounding the Project site includes include multi-family residential to the north, single-family residential to the south and west, and commercial uses to the east. Therefore, the proposed Project would occur entirely within City limits on a site that is no more than 5.0 acres and substantially surrounded by urban uses.

Biological Resources. The Project site consists mostly of a vacant lot with heavily disturbed, non-native vegetation. Additionally, the Project site does not include any critical habitat, biological resource area, or riparian corridor according to the USFWS Critical Habitat for Threatened and Endangered Species Mapper[2] and the National Wetlands Inventory[3]. The Project site receives frequent disturbance from humans, as the site is surrounded by urban uses and a bus stop is adjacent to the Project site's southwest corner at the Marine Avenue at Dublin Avenue intersection. Therefore, the Project site does not contain suitable habitat for any special-status plant or wildlife species. The Project would be required to comply with the requirements of the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (Sections 3503, 3503.5, 3511, and 3513) to protect migratory bird species should construction occur during the nesting bird season (February 1 to August 31). This would be imposed as a condition of Project approval (COA).

Traffic. **Appendix 2** includes the Project's Trip Generation and Vehicle Miles Traveled Technical Memorandum (VMT TM). Under the *City of Gardena SBC 743 Implementation Transportation Analysis Updates (*City VMT Guidelines*),* projects may be screened from further VMT analysis if they meet certain criteria. Specifically, projects located in proximity to high quality transit are presumed to have a less than significant transportation impact under CEQA and may be screened from further analysis. As concluded in the VMT TM, the Project is in near three high-quality transit corridors (i.e., Metro Bus Line 210 and Torrance Lines 2 and 10), , thus, the Project meets the Transit Proximity Screening criteria and may be screened from further VMT analysis. The Project is

[2] United States Fish and Wildlife Service. Critical Habitat for Threatened and Endangered Species Mapper. Available at https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77. Accessed on March 16, 2022.

[3] National Wetlands Inventory. Surface Waters and Wetlands. Available at https://www.fws.gov/wetlands/data/mapper.html. Accessed on March 16, 2022.

presumed to have a less than significant transportation impact concerning VMT. Therefore, the Project's approval would not result in any significant effects relating to traffic.

Noise and Vibration. As concluded in the Project's Noise and Vibration Analysis (see **Appendix 3**), the Project's construction and operational noise and vibration levels would not exceed any City or Federal Transit Administration standards. The Project would result in less than significant construction and operational noise and vibration impacts and no mitigation is required. Therefore, the Project's approval would not result in any significant effects relating to noise and vibration.

Air Quality. As concluded in the Project's Air Quality Analysis (see **Appendix 4**), the Project's construction and operational emissions would not exceed any South Coast Air Quality Management District (AQMD) standards, California Ambient Air Quality Standards, or National Ambient Air Quality Standards. The Project would result in less than significant construction and operational air quality impacts and no mitigation is required. Notwithstanding, the Project would be subject to compliance with South Coast AQMD Rules 402, 403, and 1113, which prohibit nuisances, require dust control measures, and limit Volatile Organic Compounds (VOCs) (a content in paints), respectively. Compliance with South Coast AQMD rules would further minimize the Project's construction-related emissions. Therefore, the Project's approval would not result in any significant effects relating to air quality.

Water Quality. The Project's construction-related activities would include excavation, grading, and trenching, which would displace soils and temporarily increase the potential for soils to be subject to wind and water erosion. Construction-related erosion effects would be addressed through compliance with the National Pollutant Discharge Elimination System (NPDES) program's Construction General Permit. The Construction General Permit requires development and implementation of a Stormwater Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion-control and sediment-control BMPs that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. The Project would also be subject to compliance with GMC Chapter 8.70, Stormwater and Runoff Pollution Control, requirements. GMC § 8.70.110 – Pollutant source reduction, requires project's that disturb one or more acres of soil by grading, clearing, and/or excavating or other activities are required to obtain a general construction activity stormwater permit (GCASWP) from the State Water Resources Control Board. Projects that disturb less than one acre of soil are required to comply with minimum best management practices (BMPs) to reduce the discharge of construction-related pollutants to the municipal separate storm sewer system (MS4). Following compliance with NPDES and City requirements, the Project's construction-related activities would not violate any water quality standards or otherwise substantially degrade surface or groundwater quality.

The Project site would be graded to collect runoff to three low points located along the center of the main drive aisle to control the amount of imported fill required and match existing grade from the adjacent parking lot. Stormwater runoff would flow to Marine Avenue and ultimately a City-

owned catch basin. The proposed Project would utilize three grate inlet catch basins, a drywell infiltration system, and a detention vault system to capture and treat stormwater. Stormwater up to the design capture volume would be infiltrated by the proposed drywell system. The proposed system would be connected to a fourth grate inlet catch basin that is connected to a parkway culvert in Dublin Avenue for overflow of storm events larger than the water quality storm event. Further, the Project would be subject to compliance with GMC § 8.70.110, which would require the implementation of appropriate post-construction BMPs to prevent pollutants from contacting storm water or remove pollutants from storm water runoff to the maximum extent practicable. Following compliance with NPDES and City requirements, Project operations would not violate any water quality standards or otherwise substantially degrade surface or groundwater quality.

Therefore, the Project's approval would not result in any significant effects relating to water quality.

Utilities and Public Services. The Project is an infill development proposed entirely within Gardena, an existing urbanized area. Utilities exist in the area surrounding the Project site such that the proposed Project could be adequately served. Additionally, the proposed Project is consistent with the sites land use designations, which would have taken into consideration future site development. As an infill development, the Project area is currently served by public services (i.e., police and fire protection, schools, etc.). Therefore, the proposed Project can be adequately served by all required utilities and public services.

Exceptions to Categorical Exemptions

As previously noted, a project is exempt from CEQA pursuant to a CE provided the application of that CE is not barred by one of the exceptions set forth in State CEQA Guidelines §15300.2. The following demonstrates the Project does not meet any of the exceptions that would bar a CE.

Exception A, Location. The Project would qualify for a CE under Class 32; therefore, because this exception pertains to Classes 3, 4, 5, 6, and 11, it is not applicable to the proposed Project.

Exception B, Cumulative Impact. Other proposed projects within the Project area would be required to demonstrate consistency with GGP policies and GMC regulations. There are no successive projects similar to the Project proposed on the Project site. Additionally, as concluded above, the Project would result in no environmental impact or less than significant impacts. Therefore, no significant cumulative impact would occur.

Exception C, Significant Effect. The proposed Project is not expected to have a significant effect on the environment due to unusual circumstances; see *Exemption Justification* above for biological resources, traffic, noise and vibration, air quality, and water quality.

Exception D, Scenic Highways. There are no State- or County-designated scenic highways in the Project site vicinity.[4] Moreover, there are no scenic resources present on the Project site. Therefore, the Project would not damage scenic resources within a State scenic highway.

Exception E, Hazardous Waste Sites. Government Code §65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List, maintained by the Department of Toxic Substances Control. The Project site is not included on the Cortese List.[5]

The Phase II Environmental Site Assessment (ESA) prepared for the Project site (see **Appendix 5**) identified the presence of chlorinated solvent, tetrachloroethylene (PCE) in soil vapor samples but concluded that "vapor intrusion is not currently considered to be a significant concern and vapor mitigation is not required based on the current concentrations."[6] All soil vapor samples were below the current residential modified indoor air screening level (MIASL) of 460 ug/m3 (based on 0.001 attenuation factor (AF)). However, given the presence of a known source of contamination at the adjacent property, and since the soil vapor samples exceeded the residential Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3 0.03 AF MIASL of 15.3 ug/m3, the Applicant proposes a vapor barrier membrane as a pre-emptive Project design feature to avoid potential vapor intrusion migration from the adjacent property, should conditions change and concentrations increase over time.[7]

Exception D, Historical Resources. The Project site is vacant. As such, there are no historical resources on the Project site or in its immediate vicinity. Therefore, the Project would not cause a substantial adverse change in the significance of a historical resource.

5.0 CONCLUSION

As is evidenced by the discussions presented above, the proposed Project qualifies as being exempt from CEQA under a Class 32 CE. Moreover, it has been determined that the Project is not barred from the application of a CE, pursuant to State CEQA Guidelines §15300.2. Therefore, it has been determined that the proposed Project would not have a significant effect on the environment and a CE is the appropriate CEQA documentation.

[4] California Department of Transportation. (2017). *California Scenic Highways*. Retrieved from https://services1.arcgis.com/0MSEUqKaxRlEPj5g/arcgis/rest/services/CA_Scenic_Hwys/FeatureServer

[5] Department of Toxic Substance Control. (2021). EnviroStor. Retrieved from https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=1300+E+Highland+Ave+%2CSan%20Bernardino%2C+CA

[6] Stantec Consulting Services Inc. (March 2022). Additional Phase II Environmental Site Assessment 2545 Marine Avenue Gardena, California, page 1.3. San Bernardino, CA: Debbie Hernandez.

[7] Ibid.

APPENDIX TABLE OF CONTENTS

Appendix 1: Conceptual Site Plan

Appendix 2: Trip Generation and Vehicle Miles Traveled Assessment

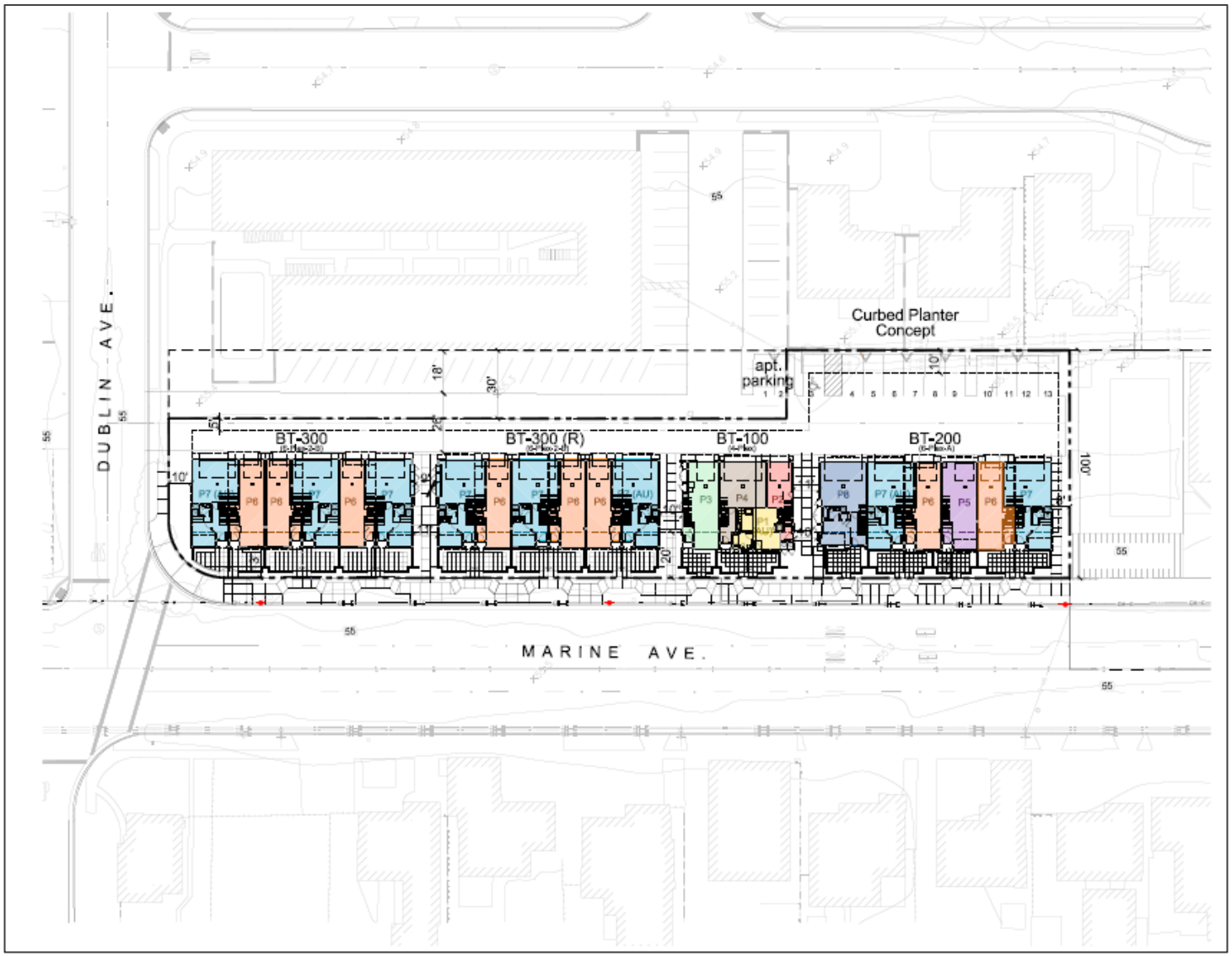
Appendix 3: Noise and Vibration Analysis

Appendix 4: Air Quality Analysis

Appendix 5: Phase II Environmental Site Assessment

APPENDIX 1

Conceptual Site Plan



Source: KTGY, 2022

Kimley»Horn

APPENDIX 2

Trip Generation And Vehicle Miles Traveled Assessment

TECHNICAL MEMORANDUM

To:	Amanda Acuna, Senior Planner City of Gardena
From:	Rita Garcia, Project Manager, and Pranesh Tarikere, P.E. (TR 2728), Transportation Project Manager
Date:	March 21, 2022
Subject:	2545 Marine Avenue Residential Project Trip Generation and Vehicle Miles Traveled Memorandum

PURPOSE

The purpose of this technical memorandum (TM) is to identify the trip generation and vehicle miles traveled (VMT) associated with the proposed 2545 Marine Avenue Residential Project (the "Project"), located at 2545 Marine Avenue in the City of Gardena, California. This TM has been prepared to support an exemption from the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The approximately 0.72-acre Project site consists of one parcel (APN 4064-023-018) situated northeast of the Marine Avenue at Dublin Avenue intersection, at 2545 Marine Avenue. The Project location is shown in its regional setting on **Attachment A**. The property is currently a fenced, vacant site. The surrounding land uses include multi-family residential to the north, single-family residential to the south and west, and commercial uses to the east. The Project site is designated General Commercial and Mixed Use Overlay and zoned General Commercial Zone (C-3) and Mixed Use Overlay Zone (MUO).

The Project proposes a 22-dwelling-unit (DU) residential townhome development, including two affordable and 20 market rate DU. All proposed dwellings would be all-electric, solar-powered- no natural gas would be provided. A total of 52 onsite parking spaces are proposed, including 41 spaces within garages and 11 guest spaces, for an average of 2.4 parking spaces per DU. The conceptual Project site plan is shown on **Attachment B.**

PROJECT TRAFFC

A trip generation analysis has been conducted to determine the traffic volume that would be generated by the proposed Project.

The Project's forecast trip generation was estimated using the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition) trip rates for Single-Family Attached Housing (ITE Land Use 215).

The trip rates and estimated project trip generation are shown on **Attachment C**. As indicated on **Attachment C**, the Project is estimated to generate approximately 158 daily trips, 10 trips in the AM peak hour, and 12 trips in the PM peak hour.

VEHICLE MILES TRAVELED ASSESSMENT

Senate Bill 743 (SB 743) was approved by the California legislature in September 2013. SB 743 requires changes to California Environmental Quality Act (CEQA), specifically directing the Governor's Office of Planning and Research (OPR) to develop alternative metrics to the use of vehicular "level of service" (LOS) for evaluating transportation projects. OPR has prepared a technical advisory ("OPR Technical Advisory") for evaluating transportation impacts in CEQA and has recommended that VMT replace LOS as the primary measure of transportation impacts. The Natural Resources Agency has adopted updates to State CEQA Guidelines to incorporate SB 743 that requires use of VMT for purposes of determining a significant transportation impact under CEQA. As of July 1, 2020, a VMT-based metric is used to evaluate transportation impacts under CEQA.
OPR Technical Advisory suggests that a City may screen out VMT impacts using project size, maps, transit availability, and provision of affordable housing to quickly identify when a project would be expected to cause a less than significant impact without conducting a detailed study. The City of Gardena *SBC 743 Implementation Transportation Analysis Updates (June 2020)* (City VMT Guidelines) provides guidance on appropriate screening thresholds that can be used to identify when a proposed land use project is anticipated to result in a less than significant impact without conducting a more detailed level analysis.

Screening thresholds are broken into the following three steps:

1. Project Type Screening;
2. Low VMT Area Screening; and
3. Transit Proximity Screening.

A land use project is required to meet only one of the above screening thresholds to be presumed to result in a less than significant impact under CEQA pursuant to SB 743.

Project Type Screening

Operational emissions are typically associated with mobile sources (i.e., motor vehicle use) and area sources (i.e., landscape maintenance equipment, hearths, consumer products, and architectural coatings). Energy source emissions would be generated from electricity and natural gas (non-hearth) usage. **Table 3: Operational Emissions** provides the Project's estimated operational criteria pollutant emissions and indicates these would remain below South Coast AQMD thresholds. Therefore, the Project's operational-related impacts would be less than significant and no mitigation is required.

Low VMT Area Screening

As described in the City VMT Guidelines, residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary.

Low VMT areas for residential projects are defined as (traffic analysis zones) TAZs that generate VMT on a per capita basis that is at least 15 percent lower than the regional average. **Attachment D** illustrates the City's low VMT areas and indicates the Project is not located in a TAZ that has VMT at least 15 percent lower than the regional average. Therefore, the Project does not meet the Low VMT Area Screening criteria.

Transit Proximity Screening

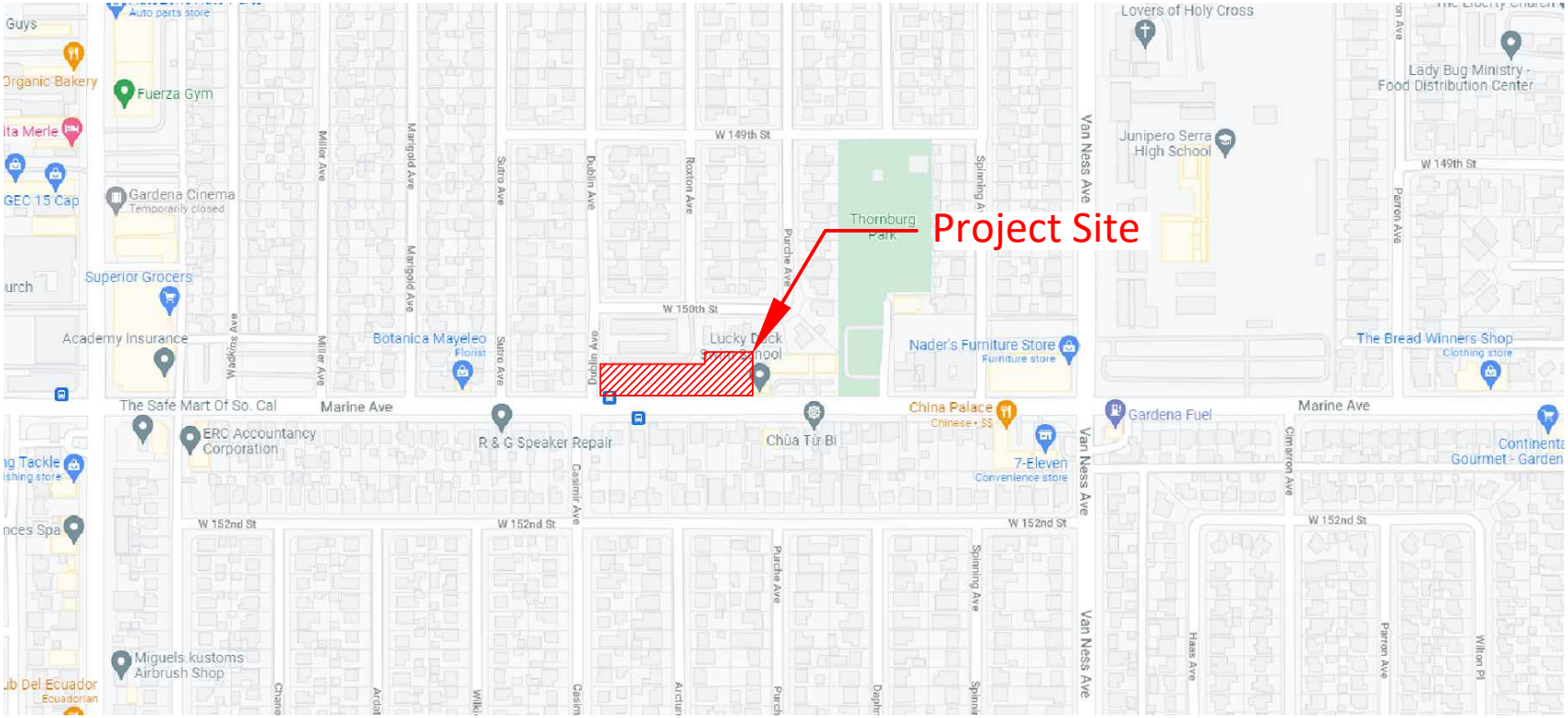
Projects located in proximity to high quality transit may also be exempt from VMT analysis. High-quality transit areas are defined as a 0.5 mile radius around an existing or planned major transit stop or station, or an existing stop along a high-quality transit corridor, which has fixed route bus service with service intervals no longer than 15 minutes during peak commute hours. Metro Bus Line 210 has a stop located at the southeast corner of Crenshaw Boulevard and Marine Avenue, approximately 0.3 miles from the Project site, and operates with a 10-minute headway during peak commute hours.[1] Additionally, Torrance Lines 2 and 10 service the same bus stop with an hour headway. Therefore, the Project meets the Transit Proximity Screening criteria. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any intersections near the Project site, as the Project would generate only 158 daily vehicle trips. Therefore, the Project would result in a less than significant impact concerning a CO hot spot and no mitigation is required.

[1] L. Kranitz, personal communication, March 9, 2022.

CONCLUSION

Based on the City's VMT Guidelines, the Project meets the Transit Proximity Screening criteria. Therefore, the Project screens out and no further VMT analysis is required. The Project is presumed to have a less than significant transportation impact concerning VMT.

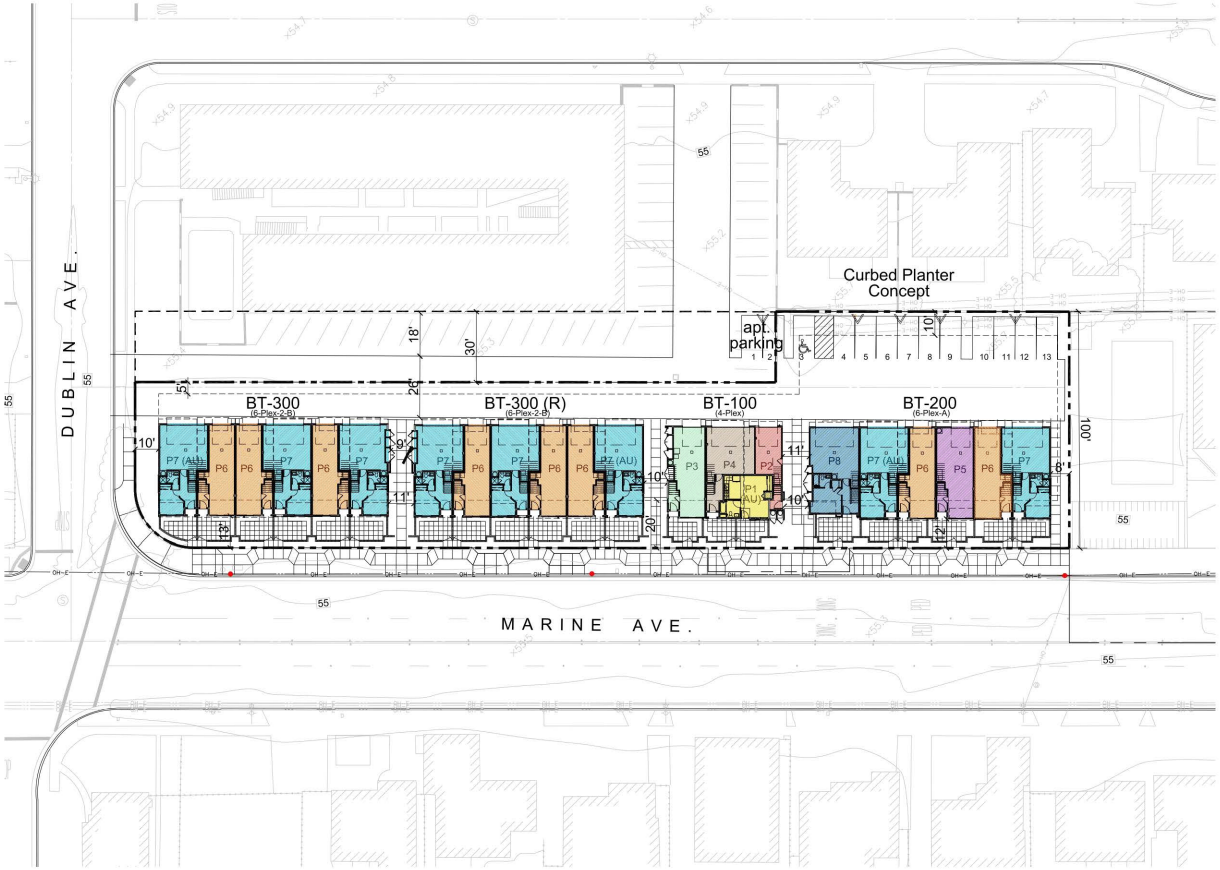
NOT TO SCALE



ATTACHMENT A
VICINITY MAP

Kimley»Horn

NOT TO SCALE



ATTACHMENT B
PROJECT SITE PLAN

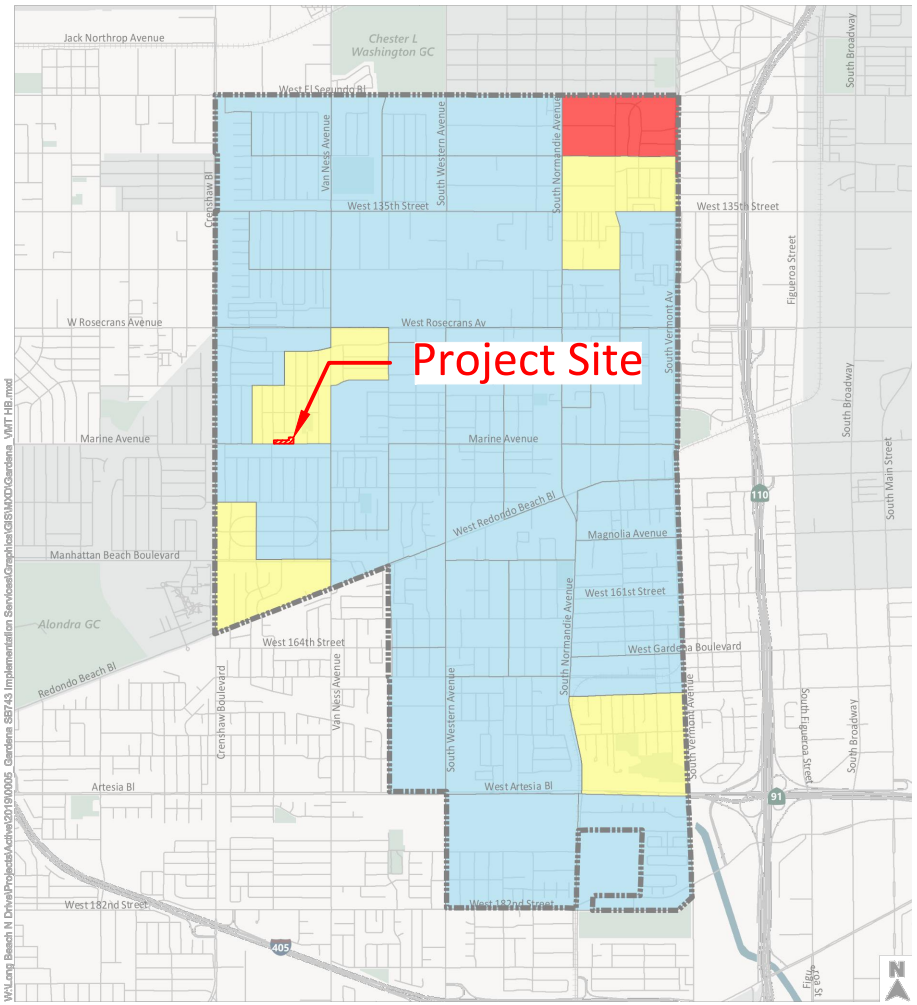
Kimley»Horn

ATTACHMENT C
SUMMARY OF PROJECT TRIP GENERATION
2545 MARINE AVENUE RESIDENTIAL

Land Use	ITE Code	Unit	Trip Generation Rates [1]						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	215	DU	7.200	0.149	0.331	0.48	0.325	0.245	0.57

Land Use	Quantity	Unit	Trip Generation Estimates						
			Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Single-Family Attached Housing	22	DU	158	3	7	10	7	5	12
Total Project Trips			**158**	**3**	**7**	**10**	**7**	**5**	**12**

[1] ***Source:*** Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition



NOT TO SCALE

ATTACHMENT D
SCAG MODEL (2012)
DAILY RESIDENTIAL HOME BASED VMT PER CAPITA

SOURCE: CITY OF GARDENA SB 743 IMPLEMENTATION TRANSPORTATION ANALYSIS UPDATE (JUNE 2020), FIGURE 1

Kimley»Horn

Kimley»Horn

APPENDIX 3

Noise and Vibration Analysis

TECHNICAL MEMORANDUM

To: Amanda Acuna, Senior Planner
City of Gardena

From: Rita Garcia, Project Manager, and Ryan Chiene, Technical Manager

Date: March 21, 2022

Subject: 2545 Marine Avenue Residential Project –Noise and Vibration Analysis

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PURPOSE

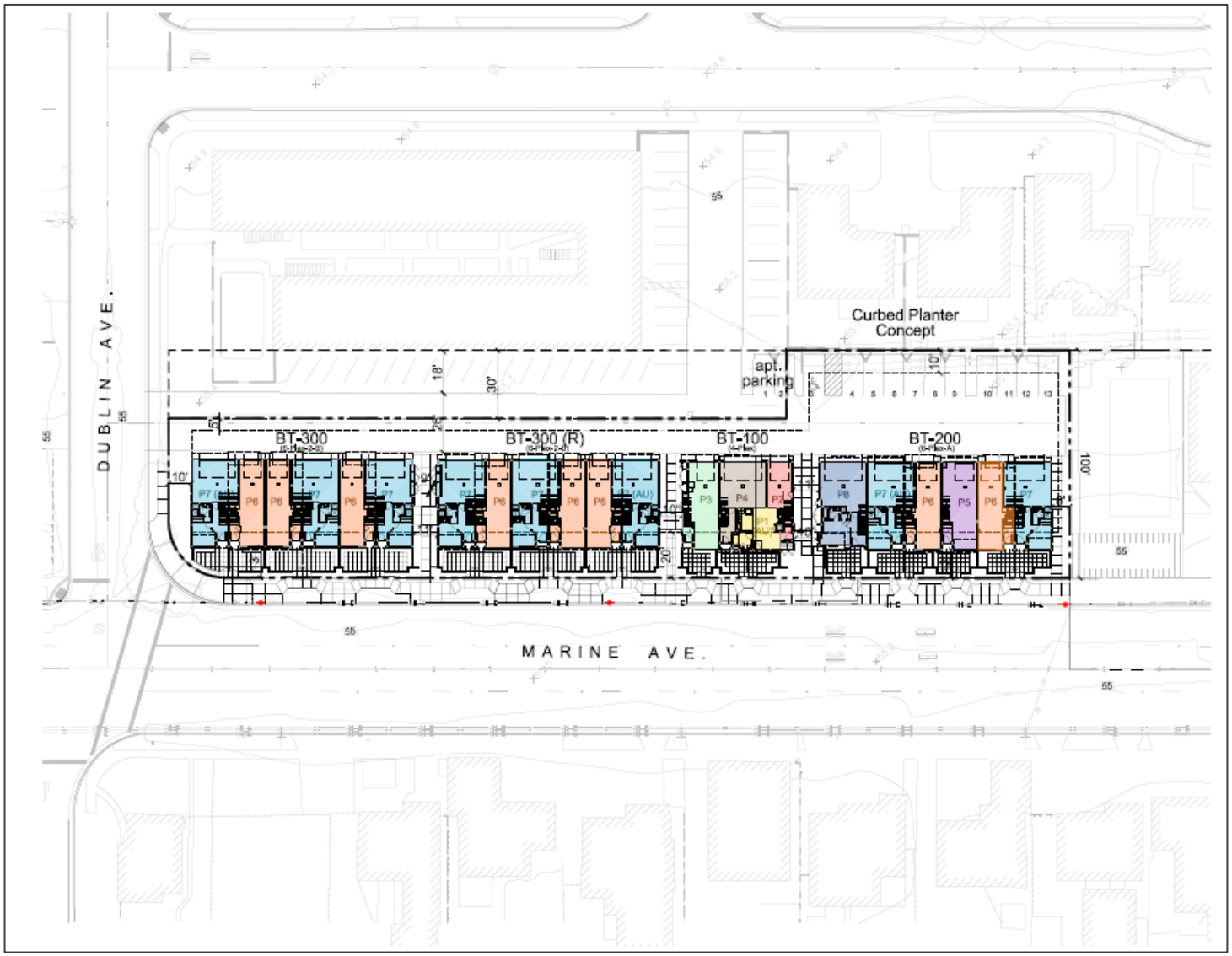
The purpose of this Technical Memorandum (TM) is to evaluate the noise and vibration associated with construction and operations of the proposed 2545 Marine Avenue Residential Project (Project), located at 2545 Marine Avenue in the City of Gardena (City), California. This TM has been undertaken as supporting documentation to substantiate the appropriateness of a Class 32 Categorical Exemption (CE) under the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The approximately 0.72-acre Project site consists of one parcel (APN: 4064-023-018) situated northeast of the Marine Avenue at Dublin Avenue intersection, at 2545 Marine Avenue. The property is currently a fenced, vacant site. The Project proposes a 22-dwelling-unit (DU) residential townhome development, including two affordable and 20 market rate DU. All proposed dwellings would be all-electric, solar-powered- no natural gas would be provided; see **Exhibit 1: Conceptual Site Plan**. A total of 52 onsite parking spaces are proposed, including 41 spaces within garages and 11 guest spaces.

The Project site is designated General Commercial and Mixed Use Overlay and zoned General Commercial Zone (C-3) and Mixed Use Overlay Zone (MUO). The surrounding land uses include multi-family residential to the north, single-family residential to the south and west, and commercial uses to the east. The noise-sensitive receptors nearest the Project site are the single-family residential uses located adjacent/immediately to the north.

Exhibit 1: Conceptual Site Plan



Source: KTGY, 2022

NOISE BACKGROUND

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of various distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from traffic on a major highway.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise as well as the time of day when the noise occurs. For example, the equivalent continuous sound level (L_{eq}) is the average acoustic energy content of noise for a stated period of time; thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. The Day-Night Sound level (L_{dn}) is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. and an additional 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. to account for noise sensitivity in the evening and nighttime.

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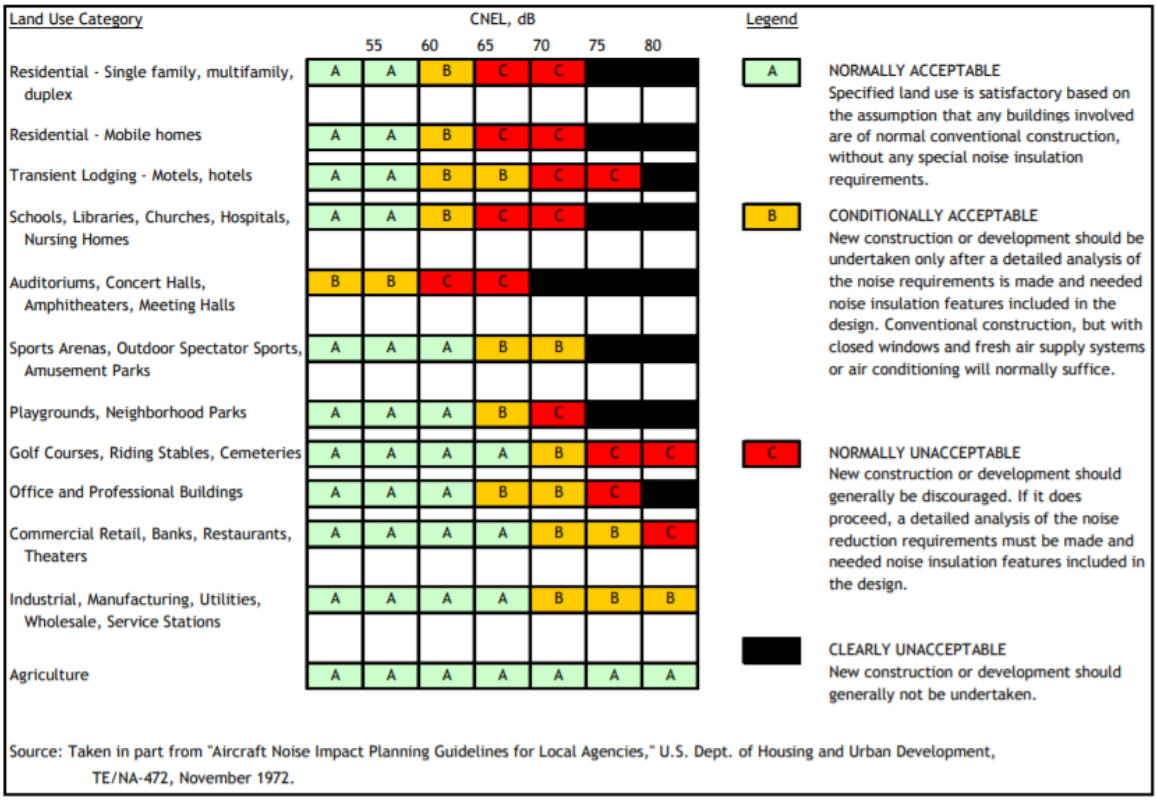
REGULATORY SETTING

City of Gardena General Plan

The *City of Gardena General Plan 2006* Noise Plan (Noise Element) identifies noise-sensitive receptors and noise sources, defines areas of noise impact, and contains policies and programs to achieve and maintain noise levels compatible with various types of land uses. The element addresses noise which affects the community at large, rather than noise associated with site-specific conditions.

The Noise Element identifies land use guidelines to protect residential neighborhoods and noise-sensitive receptors such as schools and hospitals from potentially harmful noise sources. The noise and land use compatibly criteria are shown in **Exhibit 2: Land Use Compatibility for Community Noise Exposure**.

Exhibit 2: Land Use Compatibility for Community Noise Exposure.



Source: City of Gardena. (2006). City of Gardena General Plan - Noise Plan, Figure N-1: Noise and Land Use Compatibility. Gardena, CA: City of Gardena.

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City of Gardena Municipal Code

The following Gardena Municipal Code (GMC) sections are applicable to the proposed Project.

GMC §8.36.040, Exterior Noise Standards.

Stationary noise sources shall comply with the exterior noise limits provided in **Table 1: Exterior Noise Limits**.

Table 1: Exterior Noise Limits				
Type of Land Use	**15-Minute Average Noise Level (L_{eq})**		**Maximum Noise Level (L_{max})**	
	7 a.m. to 10 p.m.	**10 p.m. to 7 a.m.**	**7 a.m. to 10 p.m.**	**10 p.m. to 7 a.m.**
Residential	55 dB(A)	50 dB(A)	75 dB(A)	70 dB(A)
Residential portions of mixed-use	60 dB(A)	50 dB(A)	80 dB(A)	70 dB(A)
Commercial	65 dB(A)	60 dB(A)	85 dB(A)	80 dB(A)
Industrial or manufacturing	70 dB(A)	70 dB(A)	90 dB(A)	90 dB(A)
Source: City of Gardena.(2021).*Gardena Municipal Code §8.36.040: Exterior Noise Standards*.Gardena, CA: City of Gardena.				

GMC §8.36.050 Interior Noise Limits

Stationary noise sources will comply with the following interior noise limits provided in **Table 2: Interior Noise Limits**.

Table 2: Interior Noise Limits				
Type of Land Use	**15-Minute Average Noise Level (L_{eq})**		**Maximum Noise Level (L_{max})**	
	7 a.m. to 10 p.m.	**10 p.m. to 7 a.m.**	**7 a.m. to 10 p.m.**	**10 p.m. to 7 a.m.**
Residential	45 dB(A)	40 dB(A)	65 dB(A)	60 dB(A)
Residential portions of mixed-use	45 dB(A)	40 dB(A)	70 dB(A)	60 dB(A)
Source: City of Gardena. (2021). *Gardena Municipal Code §8.36.050: Interior Noise Standards*. Gardena, CA: City of Gardena.				

It is noted that GMC §8.36.040 and §8.36.050 state that should the measured ambient noise level exceed the **Table 1** and **Table 2** standards, the allowable noise exposure standard shall be the ambient noise level. Further, GMC §8.36.080 establishes limited hours of construction activities. GMC §8.36.080 states that the aforementioned noise restrictions do not apply to noise associated with construction, repair, remodeling, grading or demolition of any real property, provided said activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, between the hours of 6:00 p.m. and 9:00 a.m. on Saturdays, or any time on Sunday or a Federal holiday.

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EXISTING ENVIRONMENTAL SETTING

Mobile noise sources, especially cars and trucks, are the City's most common and significant noise sources. Other noise sources are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise. The existing mobile noise sources in the Project site's immediate vicinity include motor vehicles traveling on Marine Avenue and Dublin Avenue. The primary existing stationary noise sources in the Project site's vicinity are those associated with the surrounding residential and commercial uses. Such stationary noise sources include mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] equipment), idling vehicles, music playing, dogs barking, and people talking. The noise associated with these stationary sources may represent a single-event noise occurrence or short-term noise.

CONSTRUCTION NOISE

Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators can reach high levels. During construction, exterior noise levels could affect the noise-sensitive receptors near the construction site.

Construction activities would include site preparation, grading, building construction, paving, and architectural coating. Such activities may require graders, dozers, and tractors during site preparation and grading; cranes, forklifts, generators, tractors, and welders during building construction; pavers, rollers, mixers, tractors, and paving equipment during paving; and air compressors during architectural coating. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical noise levels associated with individual construction equipment are listed in **Table 3: Typical Construction Noise Levels.**

GMC §8.36.080(G) indicates that noise associated with construction activity is considered exempt from noise regulations provided a permit has been obtained from the City as required, and that construction activities do not take place between the hours of 6:00 p.m. and 7:00 a.m. on weekdays, between the hours of 6:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday. The City does not administer noise level standards for construction activities. However, this analysis conservatively uses the Federal Transit Administration (FTA)'s threshold of 80 dBA (8-hour

L_{eq}) for residential uses and 85 dBA (8-hour L_{eq}) for commercial uses to evaluate construction noise impacts.[1]

Table 3: Typical Construction Noise Levels

Equipment	Typical Noise Level (dBA) at 50 feet from Source	Typical Noise Level (dBA) at 100 feet from Source[1]
Air Compressor	80	74
Backhoe	80	74
Compactor	82	76
Concrete Mixer	85	79
Concrete Pump	82	76
Concrete Vibrator	76	70
Crane, Mobile	83	77
Dozer	85	79
Generator	82	76
Grader	85	79
Jack Hammer	88	82
Loader	80	74
Paver	85	79
Pneumatic Tool	85	79
Pump	77	71
Roller	85	79
Saw	76	70
Shovel	82	76
Truck	84	78

Note:
1. Calculated using the inverse square law formula for sound attenuation: $dBA_2 = dBA_1+20Log(d_1/d_2)$
   Where: dBA_2 = estimated noise level at receptor; dBA_1 = reference noise level; d_1 = reference distance; d_2 = receptor location distance.

Source: Federal Transit Administration (Septemner 2018). *Transit Noise and Vibration Impact Assessment Manual.*

Following FTA's methodology for quantitative construction noise assessments, Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM) was used to predict construction noise at the nearest noise-sensitive receptors (i.e., the multi-family residential uses to the north, single-family resdential to the south and west), and commercial uses to the north) consistent with the methodologies in the FTA *Transit Noise and Vibration Impact Assessment Manual* (September 2018) (FTA Noise and Vibration Manual). **Table 4: Project Construction Noise Levels** indicates the estimated exterior construction noise levels at the nearest receptors to the Project site. Following FTA methodology, when calculating construction noise, all equipment is assumed to operate at the center of the Project site because equipment would operate throughout the Project site and not at a fixed location for extended periods of time. Therefore, the distances used in the RCNM model were 70 feet for the nearest residential receptors to the north, 120 feet for the nearest

[1] Federal Transit Administration. (September 2018). *Transit Noise and Vibration Impact Assessment Manual*, Table 7-2, Page 179.

residential receptors to the south, 195 feet for the nearest commercial receptors to the east, and 280 feet for the nearest residential receptors to the west.

Table 4: Project Construction Noise Levels

Construction Phase	Receptor Location			Worst Case Modeled Exterior Noise Level (dBA L_{eq})[2]	Noise Threshold (dBA L_{eq})[3]	Exceeded?
	Land Use	Direction	Distance (feet)[1]			
Site Preparation	Residential	North	70	79.1	80	No
	Residential	West	280	67.1	80	No
	Residential	South	120	74.4	80	No
	Commercial	East	195	70.2	85	No
Grading	Residential	North	70	79.5	80	No
	Residential	West	280	67.4	80	No
	Residential	South	120	74.8	80	No
	Commercial	East	195	70.6	85	No
Building Construction	Residential	North	70	77.8	80	No
	Residential	West	280	65.8	80	No
	Residential	South	120	73.1	80	No
	Commercial	East	195	68.9	85	No
Paving	Residential	North	70	73.7	80	No
	Residential	West	280	61.7	80	No
	Residential	South	120	69.1	80	No
	Commercial	East	195	64.8	85	No
Architectural Coating	Residential	North	70	70.8	80	No
	Residential	West	280	58.7	80	No
	Residential	South	120	66.1	80	No
	Commercial	East	195	61.9	85	No

Notes:
1. Per the methodology described in the FTA Noise and Vibration Manual (September 2018), distances are measured from the nearest building of the nearest receptors to the center of the Project construction site.
2. The City does not have a quantitative noise threshold for construction. Therefore, the FTA Noise and Vibration Manual (September 2018) construction noise thresholds are conservatively used for this analysis.
3. Refer to **Appendix A: RCNM Modeling Results** for noise modeling results.

Source: Federal Highway Administration. (2006). *Roadway Construction Noise Model*.

As indicated in **Table 4**, Project construction noise would be below the FTA noise thresholds for residential and commercial land uses. It is noted the RCNM modeling conducted for the Project is conservative because it assumes simultaneous, constant operation of construction equipment, when, in reality, equipment would operate throughout the day (i.e., not in a constant state), at various locations. Also, due to the nature of the Project and minimal grading required, the use of heavy equipment would be very minimal and short-term. The majority of construction would be standard

construction practices for a small residential development like the proposed Project (e.g., concrete pour, wood framing, woodwork, etc.). In addition, although construction noise levels may exceed the existing ambient levels in the area (see **Table 1**), construction would be temporary and would not result in a permanent increase in ambient noise levels in the area. Project construction would also be prohibited between 6:00 p.m. and 7:00 a.m. on weekdays, between the hours of 6:00 p.m. and 9:00 a.m. on Saturdays, or at any time on Sunday or a federal holiday in compliance with GMC §8.36.080(G). Therefore, construction noise impacts would be less than significant.

OPERATIONAL NOISE

Project implementation would create new sources of noise in the Project vicinity. The primary noise sources associated with the Project that could potentially impact nearby noise-sensitive receptors include mechanical equipment (e.g., air conditioners, etc.), parking areas (i.e., car door slamming, car radios, people talking, engine start-up, and car pass-by), typical stationary noise from residential uses (e.g., dogs barking, use of landscape equipment, people talking, etc.), and off-site traffic noise.

Mechanical Equipment. Potential stationary noise sources related to long-term Project operations include mechanical equipment (i.e., HVAC equipment). Mechanical equipment typically generates noise levels of approximately 52 dBA at 50 feet from the source.[2] Noise has a decay rate due to distance attenuation, which is calculated based on the Inverse Square Law of sound propagation. Based upon the Inverse Square Law, sound levels decrease by 6 dBA for each doubling of distance from the noise source. The nearest noise-sensitive receptors (i.e., residential uses) are located approximately 85 feet north of the nearest mechanical equipment location on the Project site. At this distance, mechanical equipment noise would attenuate to approximately 47.4 dBA and would not exceed the City's most stringent exterior standard of 50 dBA L_{eq} at the nearest residential uses. Therefore, the proposed Project would result in a less than significant impact concerning mechanical equipment noise levels.

Onsite Parking. The Project would include a total of 52 onsite parking spaces, including 41 spaces within garages and 11 guest spaces. Traffic and stationary noise levels associated with parking lots (e.g., engine starting up and idling, car door slamming, etc.) are typically not of sufficient volume to exceed community noise standards due to the instantaneous nature and infrequent activity in parking lots. The maximum sound levels generated by a car door slamming, engine starting up, and car pass-bys range from 53 to 61 dBA[3] at 50 feet from the source and may be an annoyance to adjacent noise-sensitive receptors. Based on the inverse square law of sound propagation, parking lot noise levels would range from approximately 59.0 dBA to 67.0 dBA at the nearest noise-sensitive residential receptors north of the Project site. However, it is noted that parking lot noise are instantaneous noise levels compared to noise standards in the DNL scale, which are average over time. As such, actual noise levels over time resulting from parking lot activities would be far lower, and noise levels from

[2] E.H. Berger, R. Neitzel, C.A. Kladden. (June 2015). *Noise Navigator Sound Level Database with Over 1700 Measurement Values.*

[3] H. G. Kariel. (December 1991). *Noise in Rural Recreational Environments.* Canadian Acoustics 19(5), 3-10.

parking lot activities would not likely exceed the City's most stringent exterior standard of 50 dBA L_{eq}[4] for residential uses. It is also be noted that parking lot noise already occurs at the adjacent properties surrounding the Project site under existing conditions. Noise from the Project's surface parking lot would be minimal. Therefore, the Project would result in a less than significant impact concerning parking lot noise levels.

Residential Noise. The Project would also result in stationary noise that is typical of residential uses/neighborhoods, including the use of landscaping equipment, dogs barking, music playing, people talking, etc. These noise sources can generate noise levels up to 65 dBA at 50 feet from the source.[5] However, noise events from these stationary sources are generally sporadic and short in duration. In addition, stationary noise is generated by residences to the north, south, and west under existing conditions. Therefore, residential noise levels from the Project would not result in a noticeable increase in ambient noise levels and would comply with the GMC Chapter 8.36 noise standards. A less than significant impact would occur in this regard.

Mobile Traffic Noise. The Project is anticipated to generate 158 daily trips, with up to 10 trips during the a.m. peak-hour and up to 12 trips during the p.m. peak-hour.[6] In general, a 3-dBA increase in traffic noise is barely perceptible to people, while a 5-dBA increase is readily noticeable. Traffic volumes on Project area roadways would have to approximately double for the resulting traffic noise levels to generate a barely perceptible 3-dBA increase.[7] The daily traffic volume along Marine Avenue (the nearest Major Collector roadway to the Project site) is approximately 17,300 ADT.[8] As noted above, the proposed Project would result in approximately 158 daily trips, which is not enough to double the existing traffic volume on Marine Avenue. Further, Project trip generation would mostly occur along Marine Avenue rather than Dublin Avenue, a smaller local street; therefore, trips generated along Dublin Avenue are not anticipated to double the existing traffic volume. The proposed Project would not generate enough traffic to result in a noticeable 3-dBA increase in ambient noise levels. Therefore, the Project would result in a less than significant impact concerning mobile traffic noise levels.

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4 Assuming an exterior-to-interior noise reduction of 25 dBA (HUD *Noise Guidebook,* 2009).

5 E.H. Berger, R. Neitzel, C.A. Kladden. (June 2015). *Noise Navigator Sound Level Database with Over 1700 Measurement Values*.

6 Kimley-Horn.(March 2022). *2545 Marine Avenue Residential Project Trip Generation and VMT Memorandum*.

7 According to the California Department of Transportation. (September 2013). *Technical Noise Supplement to Traffic Noise Analysis Protocol*, it takes a doubling of traffic to create a noticeable (i.e., 3 dBA) noise increase.

8 City of Gardena. (2021). *Traffic Counts.* Gardena,CA: City of Gardena.

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VIBRATION

Increases in ground-borne vibration levels attributable to the proposed Project would be primarily associated with short-term construction-related activities. Project construction could result in varying degrees of temporary ground-borne vibration, depending on the specific construction equipment used and the operations involved.

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. For example, for a building that is constructed with reinforced concrete with no plaster, the FTA guidelines indicate that a vibration level of up to 0.20 in/sec is considered safe and would not result in any construction vibration damage. This analysis uses the FTA architectural damage criterion for continuous vibrations at non-engineered timber and masonry buildings of 0.2 inch-per-second peak particle velocity (PPV) and human annoyance criterion of 0.4 inch-per-second PPV in accordance with Caltrans guidance[9] to evaluate potential construction vibration impacts.

Groundborne vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. **Table 5: Typical Construction Equipment Vibration Levels** lists vibration levels at 25 feet for typical construction equipment. Although the nearest off-site building (a single-family residence) is located approximately 15 feet to the north of the Project site, construction activities would occur throughout the Project site and would not be concentrated at the point closest to the nearest off-site structures for an extended period of time. Rather, the concentration of construction is estimated to occur approximately 25 feet from the nearest residence to the north.[10]

Table 5: Typical Construction Equipment Vibration Levels

Equipment	Peak Particle Velocity at 25 Feet (in/sec)
Large Bulldozer	0.089
Loaded Trucks	0.076

[9] California Department of Transportation. (September 2013)., *Transportation and Construction Vibration Guidance Manual, Table 20*.

[10] It is noted that due to potential structural damage from heavy construction equipment, construction vibration distances are measured from the nearest point of concentrated construction activity to the closest off-site buildings/structures. This differs from the construction noise methodology above, which analyzes construction noise impacts using distances from the center of the Project site to the nearest receiving land use in compliance with FTA methodology.

Rock Breaker	0.059
Jackhammer	0.035
Small Bulldozer/Tractors	0.003
Source: Federal Transit Administration. (2018). *Transit Noise and Vibration Impact Assessment Manual*.	

As indicated in **Table 4,** the estimated vibration velocities at 25 feet from construction equipment would be 0.089 in/sec PPV, which would be below the FTA's 0.20 in/sec PPV threshold for building damage and Caltrans' 0.4 in/sec PPV threshold for human annoyance. Further, once operational, the proposed Project would not include vibration-generating uses or operations. Therefore, the Project would result in a less than significant impact concerning construction vibration levels.

CONCLUSION

The Project's construction and operational noise and vibration levels would not exceed any City or FTA standards. The Project would result in less than significant construction and operational noise and vibration impacts and no mitigation is required. Therefore, the Project's approval would not result in any significant effects relating to noise and vibration pursuant to State CEQA Guidelines Section 15332(d).

Appendix A

RCNM Modeling Results

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/31/2022
Case Description: Site Prep

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential - N	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	70.0	0.0
Tractor	No	40	84.0		70.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night	Day	Calculated (dBA) Evening	Night	Day Evening	Night

Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Dozer	78.7	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	81.1	77.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	81.1	79.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residential - W	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	280.0	0.0
Tractor	No	40	84.0		280.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	66.7	62.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	69.0	65.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	69.0	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Residential - S	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	120.0	0.0
Tractor	No	40	84.0		120.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Dozer	74.1	70.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	76.4	72.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	76.4	74.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #4 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Commercial - E	Commercial	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Dozer	No	40		81.7	195.0	0.0
Tractor	No	40	84.0		195.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq

Dozer		69.8	65.9	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Tractor		72.2	68.2	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			
	Total	72.2	70.2	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/20/2022
Case Description: Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Church - NW	Commercial	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		530.0	0.0
Dozer	No	40		81.7	530.0	0.0
Tractor	No	40	84.0		530.0	0.0
Backhoe	No	40		77.6	530.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)					Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Grader	64.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	61.2	57.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	63.5	59.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	64.5	64.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Single-Family Homes - NE	Residential	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	40	85.0		2900.0	5.0
Dozer	No	40		81.7	2900.0	5.0
Tractor	No	40	84.0		2900.0	5.0
Backhoe	No	40		77.6	2900.0	5.0

Results

Noise Limit Exceedance (dBA)

Noise Limits (dBA)

Night	Day	Calculated (dBA) Evening	Night	Day	Evening	Night
Equipment	Lmax Leq	Lmax Leq	Lmax Leq	Lmax	Leq	Lmax Leq
Grader	44.7 40.8	N/A N/A	N/A N/A	N/A	N/A	N/A N/A
Dozer	41.4 37.4	N/A N/A	N/A N/A	N/A	N/A	N/A N/A
Tractor	43.7 39.8	N/A N/A	N/A N/A	N/A	N/A	N/A N/A
Backhoe	37.3 33.3	N/A N/A	N/A N/A	N/A	N/A	N/A N/A
Total	44.7 44.6	N/A N/A	N/A N/A	N/A	N/A	N/A N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/20/2022
Case Description: Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Church - NW	Commercial	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	530.0	0.0
Generator	No	50		80.6	530.0	0.0
Backhoe	No	40		77.6	530.0	0.0
Tractor	No	40	84.0		530.0	0.0
Welder / Torch	No	40		74.0	530.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Man Lift	54.2	47.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	60.1	57.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	63.5	59.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	53.5	49.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.5	62.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A N/A N/A N/A N/A N/A N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Single-Family Homes - SE	Residential	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Man Lift	No	20		74.7	2900.0	0.0
Generator	No	50		80.6	2900.0	0.0
Backhoe	No	40		77.6	2900.0	0.0
Tractor	No	40	84.0		2900.0	0.0
Welder / Torch	No	40		74.0	2900.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)

Equipment	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Man Lift	39.4	32.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	45.4	42.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	48.7	44.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	38.7	34.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	48.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/20/2022
Case Description: Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Church - NW	Commercial	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	530.0	0.0
Paver	No	50		77.2	530.0	0.0
Roller	No	20		80.0	530.0	0.0
Tractor	No	40	84.0		530.0	0.0
Backhoe	No	40		77.6	530.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Mixer Truck	58.3	54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	56.7	53.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	59.5	52.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	63.5	59.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	57.1	53.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.5	62.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

N/A N/A N/A N/A N/A N/A N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Single-Family Homes - SE	Commercial	1.0	1.0	1.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	2900.0	0.0
Paver	No	50		77.2	2900.0	0.0
Roller	No	20		80.0	2900.0	0.0
Tractor	No	40	84.0		2900.0	0.0
Backhoe	No	40		77.6	2900.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Mixer Truck	43.5	39.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	42.0	38.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	44.7	37.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	48.7	44.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	42.3	38.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	48.7	47.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 01/20/2022
Case Description: Arch Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Church - NW	Commercial	1.0	1.0	1.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	530.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Compressor (air)	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	57.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Single-Family Homes - SE	Commercial	1.0	1.0	1.0

Equipment

Spec Lmax	Actual Lmax	Receptor Distance	Estimated Shielding
(dBA)	(dBA)	(feet)	(dBA)

Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Compressor (air)	No	40		77.7	2900.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Compressor (air)	42.4	38.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	42.4	38.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Kimley»Horn

APPENDIX 4

Air Quality Analysis

TECHNICAL MEMORANDUM

To: Amanda Acuna, Senior Planner
City of Gardena

From: Rita Garcia, Project Manager, and Ryan Chiene, Technical Manager

Date: March 21, 2022

Subject: 2545 Marine Avenue Residential Project – Air Quality Analysis

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PURPOSE

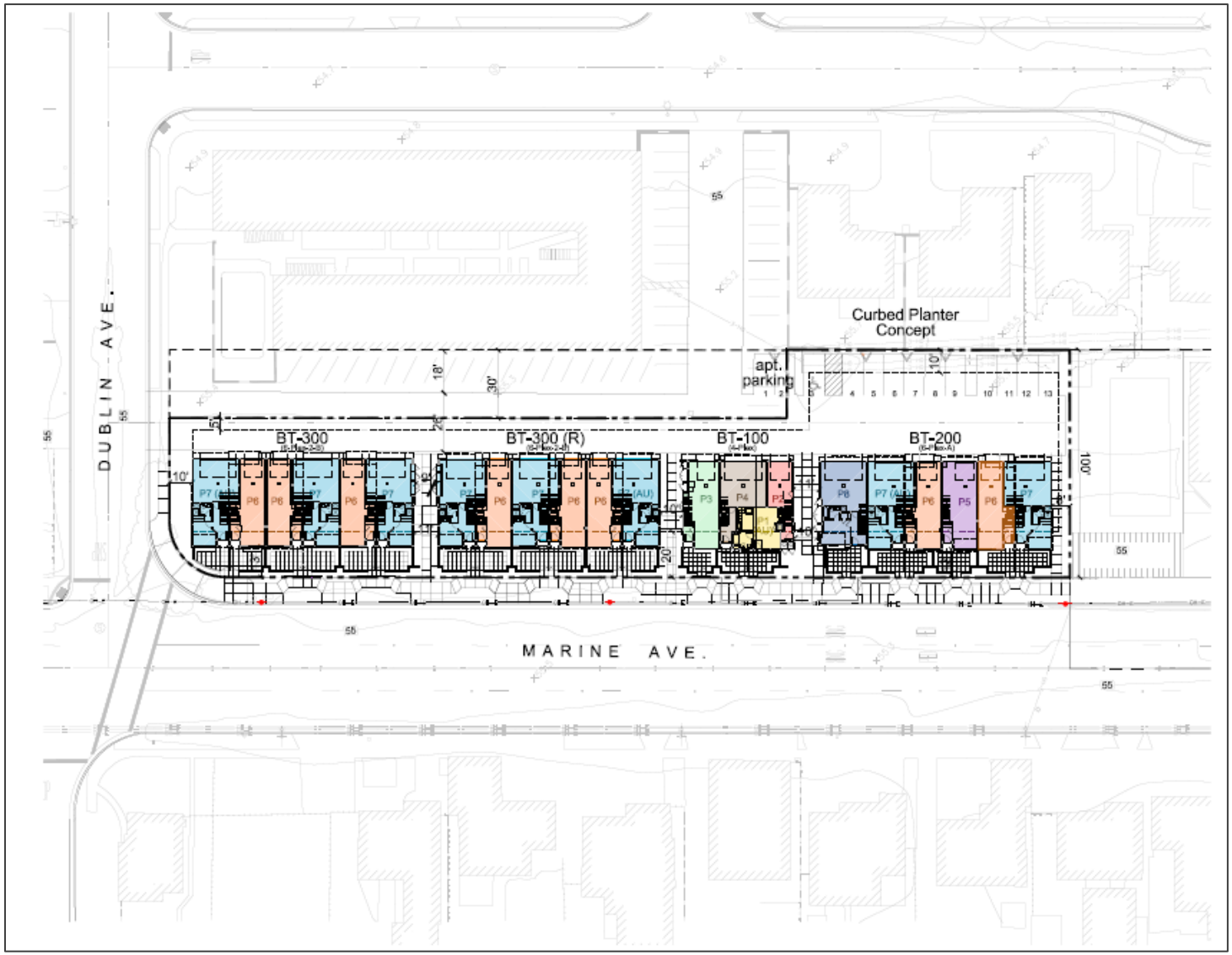
The purpose of this Technical Memorandum (TM) is to evaluate the air quality emissions associated with construction and operation of the proposed 2545 Marine Avenue Residential Project (Project), located at 2545 Marine Avenue in the City of Gardena (City), California. This TM has been undertaken as supporting documentation to substantiate the appropriateness of a Class 32 Categorical Exemption (CE) under the California Environmental Quality Act (CEQA).

PROJECT DESCRIPTION

The approximately 0.72-acre Project site consists of one parcel (APN 4064-023-018) situated northeast of the Marine Avenue at Dublin Avenue intersection, at 2545 Marine Avenue. The property is currently a fenced, vacant site. The Project proposes a 22-dwelling-unit (DU) residential townhome development, at a density of 25 DU/acre, and including two affordable and 20 market rate DU. All proposed dwellings would be all-electric, solar-powered- no natural gas would be provided; see **Exhibit 1: Conceptual Site Plan**. A total of 52 onsite parking spaces are proposed, including 41 spaces within garages and 11 guest spaces.

The Project site is designated General Commercial and Mixed Use Overlay and zoned General Commercial Zone (C-3) and Mixed Use Overlay Zone (MUO). The surrounding land uses include multi-family residential to the north, single-family residential to the south and west, and commercial uses to the east. The air quality-sensitive receptors nearest the Project site are the single-family residential uses located adjacent/immediately to the north.

Exhibit 1: Conceptual Site Plan



Source: KTGY, 2022

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

The South Coast Air Quality Management District (South Coast AQMD) CEQA Air Quality Handbook provides significance thresholds for volatile organic compounds (VOC) (also referred to as reactive organic gases [ROG]), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur oxides (SO_X), particulate matter 10 microns or less in diameter (PM_{10}), and particulate matter 2.5 microns or less in diameter ($PM_{2.5}$). The thresholds apply to both Project construction and operations within the South Coast AQMD jurisdictional boundaries. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds outlined in **Table 1: South Coast Air Quality Management District Significance Thresholds**, a significant air quality impact could occur and additional analysis is warranted to fully assess the significance of impacts.

Table 1: South Coast Air Quality Management District Significance Thresholds

Pollutant	Mass Daily Thresholds (pounds per day)	
	Construction	Operations
Nitrogen Oxides (NO_X)	100	55
Volatile Organic Compounds (VOC)[1]	75	55
Particulate Matter up to 10 Microns (PM_{10})	150	150
Particulate Matter up to 2.5 Microns ($PM_{2.5}$)	55	55
Sulphur Oxides (SO_X)	150	150
Carbon Monoxide (CO)	550	550

Notes:

1. VOCs and reactive organic gases (ROGs) are subsets of organic gases that are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Although they represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis.

Source: South Coast Air Quality Management District, *South Coast AQMD Air Quality Significance Thresholds*, April 2019.

CONSTRUCTION EMISSIONS

Project construction activities would generate short-term emissions of criteria air pollutants. The criteria pollutants of primary concern within the Project area are ozone-precursor pollutants (i.e., ROG and NO_X), PM_{10}, and $PM_{2.5}$. Construction emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the criteria pollutant emissions exceed the South Coast AQMD's thresholds of significance. Construction results in the temporary generation of emissions resulting from site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities, as well as weather conditions and the appropriate application of water.

Project construction is estimated to be begin in September 2022 and end in June 2024. The Project's construction-generated emissions were calculated using CARB-approved California Emissions Estimator Model (CalEEMod) version 2020.4.0, which models emissions for land use development

projects, based on typical construction requirements. See **Appendix A: Air Quality Emissions Data** for more information regarding the construction assumptions used in this analysis.

Table 2: Project Construction Emissions provides the Project's estimated maximum daily construction-related criteria pollutant emissions and indicates these would remain below South Coast AQMD thresholds. Therefore, the Project's construction-related air emissions would be less than significant and no mitigation is required. Notwithstanding, the proposed Project would be subject to compliance with South Coast AQMD Rules 402, 403, and 1113, which prohibit nuisances, require dust control measures, and limit VOC content in paints, respectively. Compliance with South Coast AQMD rules would further minimize the Project's construction-related emissions.

Table 2: Project Construction Emissions

Construction Year	Emissions (pounds per day)[1]					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2022	1.12	12.25	6.30	0.02	2.90	1.60
2023	1.41	12.27	15.80	0.03	2.80	1.51
2024	4.42	12.77	17.65	0.03	1.15	0.70
Total	**6.95**	**37.29**	**39.75**	**0.08**	**6.85**	**3.81**
South Coast AQMD Threshold	75	100	550	150	150	55
South Coast AQMD Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
1. Emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0, as recommended by the South Coast AQMD. Worst-case seasonal maximum daily emissions are reported.

OPERATIONAL EMISSIONS

Operational emissions are typically associated with mobile sources (i.e., motor vehicle use) and area sources (i.e., landscape maintenance equipment, hearths, consumer products, and architectural coatings). Energy source emissions would be generated from electricity and natural gas (non-hearth) usage. **Table 3: Operational Emissions** provides the Project's estimated operational criteria pollutant emissions and indicates these would remain below South Coast AQMD thresholds. Therefore, the Project's operational-related impacts would be less than significant and no mitigation is required.

Table 3: Operational Emissions						
Source	**Emissions (pounds per day)[1]**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	0.87	0.42	7.34	0.02	0.91	0.91
Energy	0.01	0.09	0.04	<1	<1	<1
Mobile	0.54	0.59	5.54	0.01	1.30	0.35
Total	**1.42**	**1.10**	**12.92**	**0.03**	**2.21**	**1.26**
South Coast AQMD Threshold	55	55	550	150	150	55
South Coast AQMD Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
1. Emissions were calculated using the California Emissions Estimator Model (CalEEMod) version 2020.4.0, as recommended by the South Coast AQMD. Worst-case seasonal maximum daily emissions are reported.

CONSTRUCTION LOCALIZED EMISSIONS

The sensitive receptors nearest the Project site are single-family residential uses located adjacent/immediately to the north. To determine potential impacts to sensitive receptors, the South Coast AQMD recommends addressing Localized Significance Thresholds (LSTs) for construction. LSTs were developed in response to South Coast AQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The South Coast AQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level analyses.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, **Table 4: Equipment-Specific Grading Rates** is used to determine the maximum daily disturbed acreage for comparison to LSTs.

Table 4: Equipment-Specific Grading Rates					
Construction Phase	**Equipment Type**	**Equipment Quantity**	**Acres Graded per 8-Hour Day**	**Operating Hours per Day**	**Acres Graded per Day**
Grading	Crawler Tractor	1	0.5	8	0.5
	Graders	1	0.5	8	0.5
	Rubber-Tired Dozers	1	0.5	8	0.5
	Scrapers	0	0	0	0
				Total Acres Graded per Day	**1.5**
Source: CalEEMod version 2020.4.0					

For the proposed Project, the appropriate source receptor area (SRA) for the localized significance thresholds is the Southwest Los Angeles County Coastal (SRA 3) area, since this area includes the Project site. LSTs apply to NO_X, CO, PM_{10}, and $PM_{2.5}$. The South Coast AQMD produced look-up tables

for projects that disturb areas less than or equal to 5.0 acres. Based on the daily equipment modeled in CalEEMod, Project construction is anticipated to disturb approximately 1.5 acres in a single day.

The South Coast AQMD's methodology indicates that "off-site mobile emissions from the Project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "on-site" emissions outputs were considered. The sensitive receptors nearest the Project site are the single-family residential uses located adjacent/immediately to the north. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

Table 5: Localized Significance of Emissions, provides the Project's estimated construction-related localized emissions on the peak day of construction and indicates emissions concentrations at nearby sensitive receptors would remain below South Coast AQMD thresholds. Therefore, the Project would result in a less than significant impact concerning LSTs during construction and no mitigation is required.

Table 5: Localized Significance of Emissions				
Source/Activity	**Emissions (pounds per day)[1]**			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Construction Emissions				
Site Preparation 2022	6.93	3.96	0.48	0.26
Grading 2022	12.00	5.94	2.79	1.57
Grading 2023	10.18	5.55	2.69	1.48
Building Construction 2023	6.42	7.10	0.32	0.29
Building Construction 2024	5.97	7.07	0.28	0.26
Paving 2023	5.50	7.02	0.26	0.25
Paving 2024	5.23	7.03	0.24	0.23
Architectural Coating 2024	1.22	1.81	0.06	0.06
Maximum Daily Emissions	*12.00*	*7.10*	*2.79*	*1.57*
South Coast AQMD Localized Screening Threshold (1.5 acre of disturbance at 25 meters)	111	816	7	4
Exceed South Coast AQMD Threshold?	**No**	**No**	**No**	**No**
Operational Emissions				
On-Site Emissions (Area + Energy Sources)	0.51	7.38	0.92	0.92
South Coast AQMD Localized Screening Threshold (1 acres at 25 meters)	91	664	1	1
Exceed South Coast AQMD Threshold?	**No**	**No**	**No**	**No**
Source: CalEEMod version 2020.4.0. Refer to **Appendix A: Air Quality Emissions Data** for model data outputs.				

OPERATIONAL LOCALIZED EMISSIONS

According to the South Coast AQMD localized significance threshold methodology, operational LSTs apply to on-site sources. LSTs for SRA 3 receptors located at 25 meters were utilized in this analysis. The 1.0-acre LST threshold was used for the 0.72-acre Project site. The operational emissions provided in **Table 5** include all on-site Project-related stationary sources (i.e., area and energy sources). **Table 5** indicates the Project's maximum daily operational pollutant emissions at nearby sensitive receptors would remain below South Coast AQMD thresholds. Therefore, the Project would result in a less than significant impact concerning LSTs during operations and no mitigation is required.

CARBON MONOXIDE HOTSPOTS

An analysis of CO "hot spots" is needed to determine whether a project's change in the level of service (LOS) at an intersection could result in exceedances of the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS). It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. An analysis prepared for CO attainment in the South Coast Air Basin by the South Coast AQMD can assist in evaluating the potential for CO exceedances. CO attainment was thoroughly analyzed as part of the South Coast AQMD's 2003 Air Quality Management Plan (AQMP). The Basin was re-designated as attainment in 2007 and is no longer addressed in the South Coast AQMD's AQMP.

The 2003 AQMP is the most recent version that addresses CO concentrations. As part of the South Coast AQMD *CO Hotspot Analysis*, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 parts per million (ppm), which is well below the 35 ppm NAAQS. The Project is anticipated to generate 158 daily vehicle trips,[1] thus, would not produce the volume of traffic required to generate a CO hot spot in the context of South Coast AQMD's *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any intersections near the Project site, as the Project would

[1] Kimley-Horn. (March 2022). *2545 Marine Avenue Residential Project Trip Generation and Vehicle Miles Traveled Technical Memorandum* .

generate only 158 daily vehicle trips. Therefore, the Project would result in a less than significant impact concerning a CO hot spot and no mitigation is required.

CONCLUSION

The Project's construction and operational emissions would not exceed any South Coast AQMD thresholds, CAAQS, or NAAQS. The Project would result in less than significant construction and operational air quality impacts and no mitigation is required. Therefore, the Project's approval would not result in any significant effects relating to air quality pursuant to State CEQA Guidelines Section 15332(d).

Appendix A

Air Quality Emissions Data

2545 Marine Avenue - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2545 Marine Avenue

Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	41.00	Space	0.37	16,400.00	0
Parking Lot	11.00	Space	0.10	4,400.00	0
City Park	0.06	Acre	0.06	2,526.48	0
Condo/Townhouse	22.00	Dwelling Unit	0.19	8,276.40	63

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage revised per the Site Plan

Construction Phase - Construction dates revised per client's instruction (Sep 2022 thru 2nd Quarter 2024); no demo

Grading - Material export assumes 6 inches of soil from the top of the site is going to be exported, based on the total SF of the site

Demolition -

Off-road Equipment - No demo

Vehicle Trips - Trip rate revised per the Trip Gen Memo

Woodstoves - no wood burning fireplaces per SCAQMD regulations

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - SCAQMD Rule Compliance

Water Mitigation - Required by Title 24 and CalGreen

Waste Mitigation - Required by CA AB939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	60.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	100.00	340.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblFireplaces	NumberWood	1.10	0.00
tblGrading	MaterialExported	0.00	600.00
tblLandUse	LandUseSquareFeet	2,613.60	2,526.48
tblLandUse	LandUseSquareFeet	22,000.00	8,276.40
tblLandUse	LotAcreage	1.38	0.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	7.20

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

Date: 2/10/2022 9:53 AM

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0330	0.3738	0.2092	5.2000e-004	0.1039	0.0147	0.1186	0.0387	0.0136	0.0522	0.0000	45.7486	45.7486	0.0138	2.3000e-004	46.1625
2023	0.1540	1.3924	1.6434	3.0300e-003	0.1531	0.0655	0.2187	0.0582	0.0606	0.1188	0.0000	265.6375	265.6375	0.0675	3.0100e-003	268.2225
2024	0.1075	0.6751	0.9156	1.6300e-003	0.0303	0.0310	0.0613	8.1000e-003	0.0288	0.0369	0.0000	142.5036	142.5036	0.0352	1.4200e-003	143.8067
Maximum	**0.1540**	**1.3924**	**1.6434**	**3.0300e-003**	**0.1531**	**0.0655**	**0.2187**	**0.0582**	**0.0606**	**0.1188**	**0.0000**	**265.6375**	**265.6375**	**0.0675**	**3.0100e-003**	**268.2225**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0330	0.3738	0.2092	5.2000e-004	0.0460	0.0147	0.0608	0.0170	0.0136	0.0305	0.0000	45.7486	45.7486	0.0138	2.3000e-004	46.1624
2023	0.1540	1.3924	1.6434	3.0300e-003	0.0940	0.0655	0.1595	0.0326	0.0606	0.0931	0.0000	265.6372	265.6372	0.0675	3.0100e-003	268.2222
2024	0.1075	0.6751	0.9156	1.6300e-003	0.0288	0.0310	0.0598	7.7200e-003	0.0288	0.0365	0.0000	142.5035	142.5035	0.0352	1.4200e-003	143.8066
Maximum	**0.1540**	**1.3924**	**1.6434**	**3.0300e-003**	**0.0940**	**0.0655**	**0.1595**	**0.0326**	**0.0606**	**0.0931**	**0.0000**	**265.6372**	**265.6372**	**0.0675**	**3.0100e-003**	**268.2222**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

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Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**41.26**	**0.00**	**29.74**	**45.45**	**0.00**	**22.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2022	11-30-2022	0.2597	0.2597
2	12-1-2022	2-28-2023	0.3687	0.3687
3	3-1-2023	5-31-2023	0.2822	0.2822
4	6-1-2023	8-31-2023	0.4487	0.4487
5	9-1-2023	11-30-2023	0.4445	0.4445
6	12-1-2023	2-29-2024	0.4277	0.4277
7	3-1-2024	5-31-2024	0.4490	0.4490
8	6-1-2024	8-31-2024	0.0526	0.0526
		Highest	0.4490	0.4490

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0489	7.6000e-003	0.2965	2.6000e-004		0.0126	0.0126		0.0126	0.0126	1.4723	4.8625	6.3348	7.3300e-003	8.0000e-005	6.5425
Energy	1.9600e-003	0.0167	7.1200e-003	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	53.7738	53.7738	3.2700e-003	7.1000e-004	54.0664
Mobile	0.0842	0.0969	0.8798	1.9200e-003	0.2035	1.4100e-003	0.2049	0.0543	1.3100e-003	0.0556	0.0000	180.7569	180.7569	0.0122	7.7100e-003	183.3578
Waste						0.0000	0.0000		0.0000	0.0000	2.0563	0.0000	2.0563	0.1215	0.0000	5.0944
Water						0.0000	0.0000		0.0000	0.0000	0.4548	5.2313	5.6861	0.0472	1.1600e-003	7.2094
Total	**0.1350**	**0.1212**	**1.1834**	**2.2900e-003**	**0.2035**	**0.0153**	**0.2188**	**0.0543**	**0.0152**	**0.0695**	**3.9834**	**244.6245**	**248.6079**	**0.1915**	**9.6600e-003**	**256.2705**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0489	7.6000e-003	0.2965	2.6000e-004		0.0126	0.0126		0.0126	0.0126	1.4723	4.8625	6.3348	7.3300e-003	8.0000e-005	6.5425
Energy	1.9600e-003	0.0167	7.1200e-003	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	53.7738	53.7738	3.2700e-003	7.1000e-004	54.0664
Mobile	0.0842	0.0969	0.8798	1.9200e-003	0.2035	1.4100e-003	0.2049	0.0543	1.3100e-003	0.0556	0.0000	180.7569	180.7569	0.0122	7.7100e-003	183.3578
Waste						0.0000	0.0000		0.0000	0.0000	1.0282	0.0000	1.0282	0.0608	0.0000	2.5472
Water						0.0000	0.0000		0.0000	0.0000	0.3638	4.4521	4.8159	0.0377	9.3000e-004	6.0360
Total	**0.1350**	**0.1212**	**1.1834**	**2.2900e-003**	**0.2035**	**0.0153**	**0.2188**	**0.0543**	**0.0152**	**0.0695**	**2.8643**	**243.8453**	**246.7096**	**0.1213**	**9.4300e-003**	**252.5499**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**28.09**	**0.32**	**0.76**	**36.65**	**2.38**	**1.45**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	8/31/2022	5	0	

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2	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
3	Grading	Grading	11/24/2022	2/15/2023	5	60	
4	Building Construction	Building Construction	2/16/2023	6/5/2024	5	340	
5	Paving	Paving	5/15/2023	6/11/2024	5	20	
6	Architectural Coating	Architectural Coating	5/15/2024	6/11/2024	5	20	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 45

Acres of Paving: 0.47

Residential Indoor: 16,760; Residential Outdoor: 5,587; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,248 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	75.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	26.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0159	0.0000	0.0159	1.7200e-003	0.0000	1.7200e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0174	0.2080	0.1188	2.9000e-004		7.7200e-003	7.7200e-003		7.1000e-003	7.1000e-003	0.0000	25.6511	25.6511	8.3000e-003	0.0000	25.8585

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Total	**0.0174**	**0.2080**	**0.1188**	**2.9000e-004**	**0.0159**	**7.7200e-003**	**0.0236**	**1.7200e-003**	**7.1000e-003**	**8.8200e-003**	**0.0000**	**25.6511**	**25.6511**	**8.3000e-003**	**0.0000**	**25.8585**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	4.3000e-004	5.5700e-003	1.0000e-005	1.6400e-003	1.0000e-005	1.6500e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3606	1.3606	4.0000e-005	4.0000e-005	1.3726
Total	**5.1000e-004**	**4.3000e-004**	**5.5700e-003**	**1.0000e-005**	**1.6400e-003**	**1.0000e-005**	**1.6500e-003**	**4.4000e-004**	**1.0000e-005**	**4.5000e-004**	**0.0000**	**1.3606**	**1.3606**	**4.0000e-005**	**4.0000e-005**	**1.3726**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.8000e-003	0.0000	6.8000e-003	7.3000e-004	0.0000	7.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0174	0.2080	0.1188	2.9000e-004		7.7200e-003	7.7200e-003		7.1000e-003	7.1000e-003	0.0000	25.6511	25.6511	8.3000e-003	0.0000	25.8585

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Total	**0.0174**	**0.2080**	**0.1188**	**2.9000e-004**	**6.8000e-003**	**7.7200e-003**	**0.0145**	**7.3000e-004**	**7.1000e-003**	**7.8300e-003**	**0.0000**	**25.6511**	**25.6511**	**8.3000e-003**	**0.0000**	**25.8585**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.1000e-004	4.3000e-004	5.5700e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3606	1.3606	4.0000e-005	4.0000e-005	1.3726
Total	**5.1000e-004**	**4.3000e-004**	**5.5700e-003**	**1.0000e-005**	**1.5600e-003**	**1.0000e-005**	**1.5700e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3606**	**1.3606**	**4.0000e-005**	**4.0000e-005**	**1.3726**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0849	0.0000	0.0849	0.0361	0.0000	0.0361	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1621	0.0801	1.9000e-004		6.9800e-003	6.9800e-003		6.4200e-003	6.4200e-003	0.0000	16.7149	16.7149	5.4100e-003	0.0000	16.8501

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.0146**	**0.1621**	**0.0801**	**1.9000e-004**	**0.0849**	**6.9800e-003**	**0.0919**	**0.0361**	**6.4200e-003**	**0.0425**	**0.0000**	**16.7149**	**16.7149**	**5.4100e-003**	**0.0000**	**16.8501**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.9800e-003	6.7000e-004	1.0000e-005	2.9000e-004	2.0000e-005	3.1000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0423	1.0423	6.0000e-005	1.7000e-004	1.0930
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	3.1000e-004	4.0100e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9796	0.9796	3.0000e-005	3.0000e-005	0.9883
Total	**4.5000e-004**	**3.2900e-003**	**4.6800e-003**	**2.0000e-005**	**1.4700e-003**	**3.0000e-005**	**1.5000e-003**	**3.9000e-004**	**3.0000e-005**	**4.2000e-004**	**0.0000**	**2.0220**	**2.0220**	**9.0000e-005**	**2.0000e-004**	**2.0812**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0363	0.0000	0.0363	0.0154	0.0000	0.0154	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0146	0.1621	0.0801	1.9000e-004		6.9800e-003	6.9800e-003		6.4200e-003	6.4200e-003	0.0000	16.7149	16.7149	5.4100e-003	0.0000	16.8501

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.0146**	**0.1621**	**0.0801**	**1.9000e-004**	**0.0363**	**6.9800e-003**	**0.0433**	**0.0154**	**6.4200e-003**	**0.0219**	**0.0000**	**16.7149**	**16.7149**	**5.4100e-003**	**0.0000**	**16.8501**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	8.0000e-005	2.9800e-003	6.7000e-004	1.0000e-005	2.8000e-004	2.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0423	1.0423	6.0000e-005	1.7000e-004	1.0930
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	3.1000e-004	4.0100e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	0.9796	0.9796	3.0000e-005	3.0000e-005	0.9883
Total	**4.5000e-004**	**3.2900e-003**	**4.6800e-003**	**2.0000e-005**	**1.4000e-003**	**3.0000e-005**	**1.4300e-003**	**3.8000e-004**	**3.0000e-005**	**4.1000e-004**	**0.0000**	**2.0220**	**2.0220**	**9.0000e-005**	**2.0000e-004**	**2.0812**

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0984	0.0000	0.0984	0.0436	0.0000	0.0436	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.1680	0.0916	2.3000e-004		6.9300e-003	6.9300e-003		6.3800e-003	6.3800e-003	0.0000	20.4287	20.4287	6.6100e-003	0.0000	20.5938

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.0154**	**0.1680**	**0.0916**	**2.3000e-004**	**0.0984**	**6.9300e-003**	**0.1054**	**0.0436**	**6.3800e-003**	**0.0499**	**0.0000**	**20.4287**	**20.4287**	**6.6100e-003**	**0.0000**	**20.5938**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.8400e-003	7.2000e-004	1.0000e-005	3.5000e-004	2.0000e-005	3.7000e-004	1.0000e-004	2.0000e-005	1.1000e-004	0.0000	1.2030	1.2030	7.0000e-005	1.9000e-004	1.2616
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	3.3000e-004	4.5100e-003	1.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1658	1.1658	3.0000e-005	3.0000e-005	1.1755
Total	**4.6000e-004**	**3.1700e-003**	**5.2300e-003**	**2.0000e-005**	**1.8000e-003**	**3.0000e-005**	**1.8300e-003**	**4.8000e-004**	**3.0000e-005**	**5.0000e-004**	**0.0000**	**2.3688**	**2.3688**	**1.0000e-004**	**2.2000e-004**	**2.4371**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0421	0.0000	0.0421	0.0186	0.0000	0.0186	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0154	0.1680	0.0916	2.3000e-004		6.9300e-003	6.9300e-003		6.3800e-003	6.3800e-003	0.0000	20.4286	20.4286	6.6100e-003	0.0000	20.5938

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**0.0154**	**0.1680**	**0.0916**	**2.3000e-004**	**0.0421**	**6.9300e-003**	**0.0490**	**0.0186**	**6.3800e-003**	**0.0250**	**0.0000**	**20.4286**	**20.4286**	**6.6100e-003**	**0.0000**	**20.5938**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	2.8400e-003	7.2000e-004	1.0000e-005	3.4000e-004	2.0000e-005	3.6000e-004	9.0000e-005	2.0000e-005	1.1000e-004	0.0000	1.2030	1.2030	7.0000e-005	1.9000e-004	1.2616
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e-004	3.3000e-004	4.5100e-003	1.0000e-005	1.3700e-003	1.0000e-005	1.3800e-003	3.7000e-004	1.0000e-005	3.7000e-004	0.0000	1.1658	1.1658	3.0000e-005	3.0000e-005	1.1755
Total	**4.6000e-004**	**3.1700e-003**	**5.2300e-003**	**2.0000e-005**	**1.7100e-003**	**3.0000e-005**	**1.7400e-003**	**4.6000e-004**	**3.0000e-005**	**4.8000e-004**	**0.0000**	**2.3688**	**2.3688**	**1.0000e-004**	**2.2000e-004**	**2.4371**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0718	0.7285	0.8055	1.2900e-003		0.0364	0.0364		0.0334	0.0334	0.0000	113.7366	113.7366	0.0368	0.0000	114.6562
Total	**0.0718**	**0.7285**	**0.8055**	**1.2900e-003**		**0.0364**	**0.0364**		**0.0334**	**0.0334**	**0.0000**	**113.7366**	**113.7366**	**0.0368**	**0.0000**	**114.6562**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7000e-004	0.0274	0.0103	1.3000e-004	4.2900e-003	1.3000e-004	4.4200e-003	1.2400e-003	1.3000e-004	1.3600e-003	0.0000	12.3821	12.3821	4.1000e-004	1.7800e-003	12.9235
Worker	9.3700e-003	7.4400e-003	0.1008	2.8000e-004	0.0323	2.0000e-004	0.0325	8.5900e-003	1.8000e-004	8.7700e-003	0.0000	26.0625	26.0625	6.8000e-004	6.7000e-004	26.2793
Total	**0.0101**	**0.0349**	**0.1111**	**4.1000e-004**	**0.0366**	**3.3000e-004**	**0.0370**	**9.8300e-003**	**3.1000e-004**	**0.0101**	**0.0000**	**38.4446**	**38.4446**	**1.0900e-003**	**2.4500e-003**	**39.2028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0718	0.7285	0.8055	1.2900e-003		0.0364	0.0364		0.0334	0.0334	0.0000	113.7364	113.7364	0.0368	0.0000	114.6561
Total	**0.0718**	**0.7285**	**0.8055**	**1.2900e-003**		**0.0364**	**0.0364**		**0.0334**	**0.0334**	**0.0000**	**113.7364**	**113.7364**	**0.0368**	**0.0000**	**114.6561**

2545 Marine Avenue - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.7000e-004	0.0274	0.0103	1.3000e-004	4.1100e-003	1.3000e-004	4.2400e-003	1.1900e-003	1.3000e-004	1.3200e-003	0.0000	12.3821	12.3821	4.1000e-004	1.7800e-003	12.9235
Worker	9.3700e-003	7.4400e-003	0.1008	2.8000e-004	0.0307	2.0000e-004	0.0309	8.1800e-003	1.8000e-004	8.3600e-003	0.0000	26.0625	26.0625	6.8000e-004	6.7000e-004	26.2793
Total	**0.0101**	**0.0349**	**0.1111**	**4.1000e-004**	**0.0348**	**3.3000e-004**	**0.0351**	**9.3700e-003**	**3.1000e-004**	**9.6800e-003**	**0.0000**	**38.4446**	**38.4446**	**1.0900e-003**	**2.4500e-003**	**39.2028**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0336	0.3375	0.3993	6.4000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	56.6370	56.6370	0.0183	0.0000	57.0949
Total	**0.0336**	**0.3375**	**0.3993**	**6.4000e-004**		**0.0160**	**0.0160**		**0.0147**	**0.0147**	**0.0000**	**56.6370**	**56.6370**	**0.0183**	**0.0000**	**57.0949**

Unmitigated Construction Off-Site

Date: 2/10/2022 9:53 AM

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7000e-004	0.0137	5.0100e-003	6.0000e-005	2.1400e-003	7.0000e-005	2.2000e-003	6.2000e-004	6.0000e-005	6.8000e-004	0.0000	6.0713	6.0713	2.1000e-004	8.7000e-004	6.3371
Worker	4.3500e-003	3.3100e-003	0.0467	1.4000e-004	0.0161	1.0000e-004	0.0162	4.2800e-003	9.0000e-005	4.3600e-003	0.0000	12.7073	12.7073	3.1000e-004	3.1000e-004	12.8074
Total	**4.7200e-003**	**0.0170**	**0.0518**	**2.0000e-004**	**0.0182**	**1.7000e-004**	**0.0184**	**4.9000e-003**	**1.5000e-004**	**5.0400e-003**	**0.0000**	**18.7786**	**18.7786**	**5.2000e-004**	**1.1800e-003**	**19.1445**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0336	0.3375	0.3993	6.4000e-004		0.0160	0.0160		0.0147	0.0147	0.0000	56.6369	56.6369	0.0183	0.0000	57.0948
Total	**0.0336**	**0.3375**	**0.3993**	**6.4000e-004**		**0.0160**	**0.0160**		**0.0147**	**0.0147**	**0.0000**	**56.6369**	**56.6369**	**0.0183**	**0.0000**	**57.0948**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.7000e-004	0.0137	5.0100e-003	6.0000e-005	2.0500e-003	7.0000e-005	2.1100e-003	5.9000e-004	6.0000e-005	6.6000e-004	0.0000	6.0713	6.0713	2.1000e-004	8.7000e-004	6.3371
Worker	4.3500e-003	3.3100e-003	0.0467	1.4000e-004	0.0153	1.0000e-004	0.0154	4.0700e-003	9.0000e-005	4.1600e-003	0.0000	12.7073	12.7073	3.1000e-004	3.1000e-004	12.8074
Total	**4.7200e-003**	**0.0170**	**0.0518**	**2.0000e-004**	**0.0173**	**1.7000e-004**	**0.0175**	**4.6600e-003**	**1.5000e-004**	**4.8200e-003**	**0.0000**	**18.7786**	**18.7786**	**5.2000e-004**	**1.1800e-003**	**19.1445**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0504	0.4541	0.5792	9.3000e-004		0.0218	0.0218		0.0203	0.0203	0.0000	77.5437	77.5437	0.0226	0.0000	78.1084
Paving	1.0800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0515**	**0.4541**	**0.5792**	**9.3000e-004**		**0.0218**	**0.0218**		**0.0203**	**0.0203**	**0.0000**	**77.5437**	**77.5437**	**0.0226**	**0.0000**	**78.1084**

Unmitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7100e-003	3.7400e-003	0.0507	1.4000e-004	0.0163	1.0000e-004	0.0164	4.3200e-003	9.0000e-005	4.4100e-003	0.0000	13.1152	13.1152	3.4000e-004	3.4000e-004	13.2243
Total	**4.7100e-003**	**3.7400e-003**	**0.0507**	**1.4000e-004**	**0.0163**	**1.0000e-004**	**0.0164**	**4.3200e-003**	**9.0000e-005**	**4.4100e-003**	**0.0000**	**13.1152**	**13.1152**	**3.4000e-004**	**3.4000e-004**	**13.2243**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0504	0.4541	0.5792	9.3000e-004		0.0218	0.0218		0.0203	0.0203	0.0000	77.5436	77.5436	0.0226	0.0000	78.1083
Paving	1.0800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0515**	**0.4541**	**0.5792**	**9.3000e-004**		**0.0218**	**0.0218**		**0.0203**	**0.0203**	**0.0000**	**77.5436**	**77.5436**	**0.0226**	**0.0000**	**78.1083**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7100e-003	3.7400e-003	0.0507	1.4000e-004	0.0154	1.0000e-004	0.0155	4.1100e-003	9.0000e-005	4.2100e-003	0.0000	13.1152	13.1152	3.4000e-004	3.4000e-004	13.2243
Total	**4.7100e-003**	**3.7400e-003**	**0.0507**	**1.4000e-004**	**0.0154**	**1.0000e-004**	**0.0155**	**4.1100e-003**	**9.0000e-005**	**4.2100e-003**	**0.0000**	**13.1152**	**13.1152**	**3.4000e-004**	**3.4000e-004**	**13.2243**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0345	0.3059	0.4113	6.6000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	54.9935	54.9935	0.0160	0.0000	55.3940
Paving	7.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0353**	**0.3059**	**0.4113**	**6.6000e-004**		**0.0142**	**0.0142**		**0.0133**	**0.0133**	**0.0000**	**54.9935**	**54.9935**	**0.0160**	**0.0000**	**55.3940**

Unmitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e-003	2.3700e-003	0.0335	1.0000e-004	0.0115	7.0000e-005	0.0116	3.0600e-003	6.0000e-005	3.1300e-003	0.0000	9.1088	9.1088	2.2000e-004	2.2000e-004	9.1805
Total	**3.1200e-003**	**2.3700e-003**	**0.0335**	**1.0000e-004**	**0.0115**	**7.0000e-005**	**0.0116**	**3.0600e-003**	**6.0000e-005**	**3.1300e-003**	**0.0000**	**9.1088**	**9.1088**	**2.2000e-004**	**2.2000e-004**	**9.1805**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0345	0.3059	0.4113	6.6000e-004		0.0142	0.0142		0.0133	0.0133	0.0000	54.9935	54.9935	0.0160	0.0000	55.3940
Paving	7.7000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0353**	**0.3059**	**0.4113**	**6.6000e-004**		**0.0142**	**0.0142**		**0.0133**	**0.0133**	**0.0000**	**54.9935**	**54.9935**	**0.0160**	**0.0000**	**55.3940**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1200e-003	2.3700e-003	0.0335	1.0000e-004	0.0109	7.0000e-005	0.0110	2.9200e-003	6.0000e-005	2.9800e-003	0.0000	9.1088	9.1088	2.2000e-004	2.2000e-004	9.1805
Total	**3.1200e-003**	**2.3700e-003**	**0.0335**	**1.0000e-004**	**0.0109**	**7.0000e-005**	**0.0110**	**2.9200e-003**	**6.0000e-005**	**2.9800e-003**	**0.0000**	**9.1088**	**9.1088**	**2.2000e-004**	**2.2000e-004**	**9.1805**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0288					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5569
Total	**0.0306**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5569**

Unmitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.5900e-003	0.0000	5.5000e-004	0.0000	5.5000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.4325	0.4325	1.0000e-005	1.0000e-005	0.4359
Total	**1.5000e-004**	**1.1000e-004**	**1.5900e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.5000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.4325**	**0.4325**	**1.0000e-005**	**1.0000e-005**	**0.4359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0288					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8100e-003	0.0122	0.0181	3.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	2.5533	2.5533	1.4000e-004	0.0000	2.5568
Total	**0.0306**	**0.0122**	**0.0181**	**3.0000e-005**		**6.1000e-004**	**6.1000e-004**		**6.1000e-004**	**6.1000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.4000e-004**	**0.0000**	**2.5568**

Mitigated Construction Off-Site

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e-004	1.1000e-004	1.5900e-003	0.0000	5.2000e-004	0.0000	5.2000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4325	0.4325	1.0000e-005	1.0000e-005	0.4359
Total	**1.5000e-004**	**1.1000e-004**	**1.5900e-003**	**0.0000**	**5.2000e-004**	**0.0000**	**5.2000e-004**	**1.4000e-004**	**0.0000**	**1.4000e-004**	**0.0000**	**0.4325**	**0.4325**	**1.0000e-005**	**1.0000e-005**	**0.4359**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0842	0.0969	0.8798	1.9200e-003	0.2035	1.4100e-003	0.2049	0.0543	1.3100e-003	0.0556	0.0000	180.7569	180.7569	0.0122	7.7100e-003	183.3578
Unmitigated	0.0842	0.0969	0.8798	1.9200e-003	0.2035	1.4100e-003	0.2049	0.0543	1.3100e-003	0.0556	0.0000	180.7569	180.7569	0.0122	7.7100e-003	183.3578

4.2 Trip Summary Information

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.12	0.13	102	102
Condo/Townhouse	158.40	179.08	138.16	541,492	541,492
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	158.40	179.20	138.29	541,594	541,594

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003
Condo/Townhouse	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003
Enclosed Parking Structure	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.003

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	34.3964	34.3964	2.9000e-003	3.5000e-004	34.5738
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	34.3964	34.3964	2.9000e-003	3.5000e-004	34.5738
NaturalGas Mitigated	1.9600e-003	0.0167	7.1200e-003	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	19.3775	19.3775	3.7000e-004	3.6000e-004	19.4926
NaturalGas Unmitigated	1.9600e-003	0.0167	7.1200e-003	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	19.3775	19.3775	3.7000e-004	3.6000e-004	19.4926

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	363120	1.9600e-003	0.0167	7.1200e-003	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	19.3775	19.3775	3.7000e-004	3.6000e-004	19.4926
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.9600e-003**	**0.0167**	**7.1200e-003**	**1.1000e-004**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**19.3775**	**19.3775**	**3.7000e-004**	**3.6000e-004**	**19.4926**

Mitigated

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	363120	1.9600e-003	0.0167	7.1200e-003	1.1000e-004		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	19.3775	19.3775	3.7000e-004	3.6000e-004	19.4926
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.9600e-003**	**0.0167**	**7.1200e-003**	**1.1000e-004**		**1.3500e-003**	**1.3500e-003**		**1.3500e-003**	**1.3500e-003**	**0.0000**	**19.3775**	**19.3775**	**3.7000e-004**	**3.6000e-004**	**19.4926**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	106311	18.8538	1.5900e-003	1.9000e-004	18.9511
Enclosed Parking Structure	86100	15.2695	1.2900e-003	1.6000e-004	15.3482
Parking Lot	1540	0.2731	2.0000e-005	0.0000	0.2745
Total		**34.3964**	**2.9000e-003**	**3.5000e-004**	**34.5738**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	106311	18.8538	1.5900e-003	1.9000e-004	18.9511
Enclosed Parking Structure	86100	15.2695	1.2900e-003	1.6000e-004	15.3482
Parking Lot	1540	0.2731	2.0000e-005	0.0000	0.2745
Total		**34.3964**	**2.9000e-003**	**3.5000e-004**	**34.5738**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated	0.0489	7.6000e-003	0.2965	2.6000e-004		0.0126	0.0126		0.0126	0.0126	1.4723	4.8625	6.3348	7.3300e-003	8.0000e-005	6.5425
Unmitigated	0.0489	7.6000e-003	0.2965	2.6000e-004		0.0126	0.0126		0.0126	0.0126	1.4723	4.8625	6.3348	7.3300e-003	8.0000e-005	6.5425

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0313					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.8800e-003	4.9800e-003	0.0691	2.4000e-004		0.0113	0.0113		0.0113	0.0113	1.4723	4.4906	5.9629	6.9700e-003	8.0000e-005	6.1616
Landscaping	6.8800e-003	2.6200e-003	0.2275	1.0000e-005		1.2600e-003	1.2600e-003		1.2600e-003	1.2600e-003	0.0000	0.3719	0.3719	3.6000e-004	0.0000	0.3809
Total	**0.0489**	**7.6000e-003**	**0.2965**	**2.5000e-004**		**0.0126**	**0.0126**		**0.0126**	**0.0126**	**1.4723**	**4.8625**	**6.3348**	**7.3300e-003**	**8.0000e-005**	**6.5425**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	2.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0313					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	7.8800e-003	4.9800e-003	0.0691	2.4000e-004		0.0113	0.0113		0.0113	0.0113	1.4723	4.4906	5.9629	6.9700e-003	8.0000e-005	6.1616
Landscaping	6.8800e-003	2.6200e-003	0.2275	1.0000e-005		1.2600e-003	1.2600e-003		1.2600e-003	1.2600e-003	0.0000	0.3719	0.3719	3.6000e-004	0.0000	0.3809
Total	**0.0489**	**7.6000e-003**	**0.2965**	**2.5000e-004**		**0.0126**	**0.0126**		**0.0126**	**0.0126**	**1.4723**	**4.8625**	**6.3348**	**7.3300e-003**	**8.0000e-005**	**6.5425**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.8159	0.0377	9.3000e-004	6.0360
Unmitigated	5.6861	0.0472	1.1600e-003	7.2094

2545 Marine Avenue - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.0714889	0.1409	1.0000e-005	0.0000	0.1416
Condo/Townhouse	1.43339 / 0.903658	5.5452	0.0471	1.1500e-003	7.0678
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**5.6861**	**0.0472**	**1.1500e-003**	**7.2094**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.0671281	0.1323	1.0000e-005	0.0000	0.1330
Condo/Townhouse	1.14671 / 0.848535	4.6837	0.0377	9.3000e-004	5.9030
Enclosed Parking Structure	0 / 0	0.0000	0.0000	0.0000	0.0000

2545 Marine Avenue - Los Angeles-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.8159**	**0.0377**	**9.3000e-004**	**6.0360**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1.0282	0.0608	0.0000	2.5472
Unmitigated	2.0563	0.1215	0.0000	5.0944

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

City Park	0.01	2.0300e-003	1.2000e-004	0.0000	5.0300e-003
Condo/Townhouse	10.12	2.0543	0.1214	0.0000	5.0894
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**2.0563**	**0.1215**	**0.0000**	**5.0944**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.005	1.0100e-003	6.0000e-005	0.0000	2.5100e-003
Condo/Townhouse	5.06	1.0271	0.0607	0.0000	2.5447
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**1.0281**	**0.0608**	**0.0000**	**2.5472**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2545 Marine Avenue

Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	41.00	Space	0.37	16,400.00	0
Parking Lot	11.00	Space	0.10	4,400.00	0
City Park	0.06	Acre	0.06	2,526.48	0
Condo/Townhouse	22.00	Dwelling Unit	0.19	8,276.40	63

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage revised per the Site Plan

Construction Phase - Construction dates revised per client's instruction (Sep 2022 thru 2nd Quarter 2024); no demo

Grading - Material export assumes 6 inches of soil from the top of the site is going to be exported, based on the total SF of the site

Demolition -

Off-road Equipment - No demo

Vehicle Trips - Trip rate revised per the Trip Gen Memo

Woodstoves - no wood burning fireplaces per SCAQMD regulations

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - SCAQMD Rule Compliance

Water Mitigation - Required by Title 24 and CalGreen

Waste Mitigation - Required by CA AB939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	60.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	100.00	340.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblFireplaces	NumberWood	1.10	0.00
tblGrading	MaterialExported	0.00	600.00
tblLandUse	LandUseSquareFeet	2,613.60	2,526.48
tblLandUse	LandUseSquareFeet	22,000.00	8,276.40
tblLandUse	LotAcreage	1.38	0.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	7.20

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.1167	12.2348	6.3003	0.0157	5.4244	0.5194	5.9438	2.5984	0.4779	3.0764	0.0000	1,533.1269	1,533.1269	0.4482	0.0155	1,548.9515
2023	1.4043	12.2517	15.8016	0.0282	5.4244	0.5887	5.8460	2.5984	0.5450	2.9864	0.0000	2,706.4157	2,706.4157	0.6742	0.0274	2,731.4451
2024	4.4109	12.7509	17.6491	0.0315	0.5861	0.5905	1.1766	0.1563	0.5516	0.7079	0.0000	3,026.9876	3,026.9876	0.6903	0.0276	3,052.4558
Maximum	**4.4109**	**12.7509**	**17.6491**	**0.0315**	**5.4244**	**0.5905**	**5.9438**	**2.5984**	**0.5516**	**3.0764**	**0.0000**	**3,026.9876**	**3,026.9876**	**0.6903**	**0.0276**	**3,052.4558**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.1167	12.2348	6.3003	0.0157	2.3770	0.5194	2.8964	1.1265	0.4779	1.6044	0.0000	1,533.1269	1,533.1269	0.4482	0.0155	1,548.9515
2023	1.4043	12.2517	15.8016	0.0282	2.3770	0.5887	2.7987	1.1265	0.5450	1.5144	0.0000	2,706.4157	2,706.4157	0.6742	0.0274	2,731.4451
2024	4.4109	12.7509	17.6491	0.0315	0.5559	0.5905	1.1464	0.1489	0.5516	0.7005	0.0000	3,026.9876	3,026.9876	0.6903	0.0276	3,052.4558
Maximum	**4.4109**	**12.7509**	**17.6491**	**0.0315**	**2.3770**	**0.5905**	**2.8964**	**1.1265**	**0.5516**	**1.6044**	**0.0000**	**3,026.9876**	**3,026.9876**	**0.6903**	**0.0276**	**3,052.4558**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**53.56**	**0.00**	**47.24**	**55.13**	**0.00**	**43.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219
Energy	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Mobile	0.5410	0.5494	5.5404	0.0123	1.2892	8.7700e-003	1.2979	0.3434	8.1400e-003	0.3515		1,279.0335	1,279.0335	0.0816	0.0502	1,296.0428
Total	**1.4239**	**1.0602**	**12.9232**	**0.0326**	**1.2892**	**0.9310**	**2.2201**	**0.3434**	**0.9304**	**1.2738**	**129.8360**	**1,795.3541**	**1,925.1901**	**0.7015**	**0.0596**	**1,960.5011**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219
Energy	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Mobile	0.5410	0.5494	5.5404	0.0123	1.2892	8.7700e-003	1.2979	0.3434	8.1400e-003	0.3515		1,279.0335	1,279.0335	0.0816	0.0502	1,296.0428

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	**1.4239**	**1.0602**	**12.9232**	**0.0326**	**1.2892**	**0.9310**	**2.2201**	**0.3434**	**0.9304**	**1.2738**	**129.8360**	**1,795.3541**	**1,925.1901**	**0.7015**	**0.0596**	**1,960.5011**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	8/31/2022	5	0	
2	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
3	Grading	Grading	11/24/2022	2/15/2023	5	60	
4	Building Construction	Building Construction	2/16/2023	6/5/2024	5	340	
5	Paving	Paving	5/15/2023	6/11/2024	5	20	
6	Architectural Coating	Architectural Coating	5/15/2024	6/11/2024	5	20	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 45

Acres of Paving: 0.47

Residential Indoor: 16,760; Residential Outdoor: 5,587; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,248 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	75.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	26.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Date: 2/10/2022 9:54 AM

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0173	0.0126	0.1971	5.1000e-004	0.0559	3.6000e-004	0.0563	0.0148	3.3000e-004	0.0152		52.0064	52.0064	1.4100e-003	1.2500e-003	52.4144
Total	**0.0173**	**0.0126**	**0.1971**	**5.1000e-004**	**0.0559**	**3.6000e-004**	**0.0563**	**0.0148**	**3.3000e-004**	**0.0152**		**52.0064**	**52.0064**	**1.4100e-003**	**1.2500e-003**	**52.4144**

Date: 2/10/2022 9:54 AM

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2267**	**0.2573**	**0.4840**	**0.0245**	**0.2367**	**0.2612**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0173	0.0126	0.1971	5.1000e-004	0.0530	3.6000e-004	0.0533	0.0141	3.3000e-004	0.0144		52.0064	52.0064	1.4100e-003	1.2500e-003	52.4144
Total	**0.0173**	**0.0126**	**0.1971**	**5.1000e-004**	**0.0530**	**3.6000e-004**	**0.0533**	**0.0141**	**3.3000e-004**	**0.0144**		**52.0064**	**52.0064**	**1.4100e-003**	**1.2500e-003**	**52.4144**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3131	0.0000	5.3131	2.5687	0.0000	2.5687			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3131**	**0.5173**	**5.8304**	**2.5687**	**0.4759**	**3.0446**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8200e-003	0.2099	0.0490	7.8000e-004	0.0219	1.5600e-003	0.0234	6.0000e-003	1.4900e-003	7.4900e-003		85.0970	85.0970	4.5200e-003	0.0135	89.2335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0202	0.3153	8.2000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		83.2102	83.2102	2.2500e-003	2.0000e-003	83.8630
Total	**0.0335**	**0.2302**	**0.3643**	**1.6000e-003**	**0.1113**	**2.1300e-003**	**0.1134**	**0.0297**	**2.0200e-003**	**0.0317**		**168.3071**	**168.3071**	**6.7700e-003**	**0.0155**	**173.0965**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2713	0.0000	2.2713	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.2713**	**0.5173**	**2.7886**	**1.0981**	**0.4759**	**1.5740**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.8200e-003	0.2099	0.0490	7.8000e-004	0.0209	1.5600e-003	0.0225	5.7600e-003	1.4900e-003	7.2500e-003		85.0970	85.0970	4.5200e-003	0.0135	89.2335
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0277	0.0202	0.3153	8.2000e-004	0.0848	5.7000e-004	0.0853	0.0226	5.3000e-004	0.0231		83.2102	83.2102	2.2500e-003	2.0000e-003	83.8630
Total	**0.0335**	**0.2302**	**0.3643**	**1.6000e-003**	**0.1057**	**2.1300e-003**	**0.1078**	**0.0283**	**2.0200e-003**	**0.0304**		**168.3071**	**168.3071**	**6.7700e-003**	**0.0155**	**173.0965**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3131	0.0000	5.3131	2.5687	0.0000	2.5687			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3131**	**0.4201**	**5.7332**	**2.5687**	**0.3865**	**2.9552**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.7100e-003	0.1631	0.0435	7.3000e-004	0.0219	1.0300e-003	0.0229	6.0000e-003	9.8000e-004	6.9800e-003		80.3325	80.3325	4.4300e-003	0.0128	84.2447
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0256	0.0179	0.2899	7.9000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		81.0090	81.0090	2.0200e-003	1.8500e-003	81.6097
Total	**0.0283**	**0.1810**	**0.3334**	**1.5200e-003**	**0.1113**	**1.5700e-003**	**0.1129**	**0.0297**	**1.4800e-003**	**0.0312**		**161.3415**	**161.3415**	**6.4500e-003**	**0.0146**	**165.8544**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2713	0.0000	2.2713	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**2.2713**	**0.4201**	**2.6914**	**1.0981**	**0.3865**	**1.4846**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.7100e-003	0.1631	0.0435	7.3000e-004	0.0209	1.0300e-003	0.0219	5.7600e-003	9.8000e-004	6.7400e-003		80.3325	80.3325	4.4300e-003	0.0128	84.2447
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0256	0.0179	0.2899	7.9000e-004	0.0848	5.4000e-004	0.0853	0.0226	5.0000e-004	0.0231		81.0090	81.0090	2.0200e-003	1.8500e-003	81.6097
Total	**0.0283**	**0.1810**	**0.3334**	**1.5200e-003**	**0.1057**	**1.5700e-003**	**0.1072**	**0.0283**	**1.4800e-003**	**0.0298**		**161.3415**	**161.3415**	**6.4500e-003**	**0.0146**	**165.8544**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9100e-003	0.2303	0.0892	1.1200e-003	0.0384	1.1600e-003	0.0396	0.0111	1.1100e-003	0.0122		120.1695	120.1695	4.0300e-003	0.0173	125.4187
Worker	0.0833	0.0581	0.9422	2.5700e-003	0.2906	1.7500e-003	0.2924	0.0771	1.6100e-003	0.0787		263.2793	263.2793	6.5600e-003	6.0000e-003	265.2314
Total	**0.0902**	**0.2884**	**1.0314**	**3.6900e-003**	**0.3291**	**2.9100e-003**	**0.3320**	**0.0881**	**2.7200e-003**	**0.0909**		**383.4488**	**383.4488**	**0.0106**	**0.0233**	**390.6501**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.9100e-003	0.2303	0.0892	1.1200e-003	0.0368	1.1600e-003	0.0380	0.0107	1.1100e-003	0.0118		120.1695	120.1695	4.0300e-003	0.0173	125.4187
Worker	0.0833	0.0581	0.9422	2.5700e-003	0.2755	1.7500e-003	0.2772	0.0734	1.6100e-003	0.0750		263.2793	263.2793	6.5600e-003	6.0000e-003	265.2314
Total	**0.0902**	**0.2884**	**1.0314**	**3.6900e-003**	**0.3123**	**2.9100e-003**	**0.3152**	**0.0840**	**2.7200e-003**	**0.0867**		**383.4488**	**383.4488**	**0.0106**	**0.0233**	**390.6501**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**		**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7000e-003	0.2308	0.0873	1.1000e-003	0.0384	1.1700e-003	0.0396	0.0111	1.1100e-003	0.0122		118.3648	118.3648	4.0400e-003	0.0170	123.5424
Worker	0.0776	0.0518	0.8770	2.5000e-003	0.2906	1.6800e-003	0.2923	0.0771	1.5500e-003	0.0786		257.8521	257.8521	5.9300e-003	5.5800e-003	259.6634
Total	**0.0843**	**0.2826**	**0.9643**	**3.6000e-003**	**0.3291**	**2.8500e-003**	**0.3319**	**0.0881**	**2.6600e-003**	**0.0908**		**376.2169**	**376.2169**	**9.9700e-003**	**0.0226**	**383.2058**

Mitigated Construction On-Site

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**	**0.0000**	**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.7000e-003	0.2308	0.0873	1.1000e-003	0.0368	1.1700e-003	0.0380	0.0107	1.1100e-003	0.0118		118.3648	118.3648	4.0400e-003	0.0170	123.5424
Worker	0.0776	0.0518	0.8770	2.5000e-003	0.2755	1.6800e-003	0.2771	0.0734	1.5500e-003	0.0749		257.8521	257.8521	5.9300e-003	5.5800e-003	259.6634
Total	**0.0843**	**0.2826**	**0.9643**	**3.6000e-003**	**0.3123**	**2.8500e-003**	**0.3151**	**0.0840**	**2.6600e-003**	**0.0867**		**376.2169**	**376.2169**	**9.9700e-003**	**0.0226**	**383.2058**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6243**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0576	0.0402	0.6523	1.7800e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1200e-003	0.0545		182.2703	182.2703	4.5400e-003	4.1500e-003	183.6218
Total	**0.0576**	**0.0402**	**0.6523**	**1.7800e-003**	**0.2012**	**1.2100e-003**	**0.2024**	**0.0534**	**1.1200e-003**	**0.0545**		**182.2703**	**182.2703**	**4.5400e-003**	**4.1500e-003**	**183.6218**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6243**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0576	0.0402	0.6523	1.7800e-003	0.1907	1.2100e-003	0.1919	0.0508	1.1200e-003	0.0519		182.2703	182.2703	4.5400e-003	4.1500e-003	183.6218
Total	**0.0576**	**0.0402**	**0.6523**	**1.7800e-003**	**0.1907**	**1.2100e-003**	**0.1919**	**0.0508**	**1.1200e-003**	**0.0519**		**182.2703**	**182.2703**	**4.5400e-003**	**4.1500e-003**	**183.6218**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6035**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0537	0.0359	0.6071	1.7300e-003	0.2012	1.1600e-003	0.2024	0.0534	1.0700e-003	0.0544		178.5130	178.5130	4.1100e-003	3.8600e-003	179.7670
Total	**0.0537**	**0.0359**	**0.6071**	**1.7300e-003**	**0.2012**	**1.1600e-003**	**0.2024**	**0.0534**	**1.0700e-003**	**0.0544**		**178.5130**	**178.5130**	**4.1100e-003**	**3.8600e-003**	**179.7670**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6035**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0537	0.0359	0.6071	1.7300e-003	0.1907	1.1600e-003	0.1919	0.0508	1.0700e-003	0.0519		178.5130	178.5130	4.1100e-003	3.8600e-003	179.7670
Total	**0.0537**	**0.0359**	**0.6071**	**1.7300e-003**	**0.1907**	**1.1600e-003**	**0.1919**	**0.0508**	**1.0700e-003**	**0.0519**		**178.5130**	**178.5130**	**4.1100e-003**	**3.8600e-003**	**179.7670**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	2.8787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**3.0594**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0149	9.9700e-003	0.1687	4.8000e-004	0.0559	3.2000e-004	0.0562	0.0148	3.0000e-004	0.0151		49.5870	49.5870	1.1400e-003	1.0700e-003	49.9353
Total	**0.0149**	**9.9700e-003**	**0.1687**	**4.8000e-004**	**0.0559**	**3.2000e-004**	**0.0562**	**0.0148**	**3.0000e-004**	**0.0151**		**49.5870**	**49.5870**	**1.1400e-003**	**1.0700e-003**	**49.9353**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	2.8787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**3.0594**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0149	9.9700e-003	0.1687	4.8000e-004	0.0530	3.2000e-004	0.0533	0.0141	3.0000e-004	0.0144		49.5870	49.5870	1.1400e-003	1.0700e-003	49.9353
Total	**0.0149**	**9.9700e-003**	**0.1687**	**4.8000e-004**	**0.0530**	**3.2000e-004**	**0.0533**	**0.0141**	**3.0000e-004**	**0.0144**		**49.5870**	**49.5870**	**1.1400e-003**	**1.0700e-003**	**49.9353**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5410	0.5494	5.5404	0.0123	1.2892	8.7700e-003	1.2979	0.3434	8.1400e-003	0.3515		1,279.0335	1,279.0335	0.0816	0.0502	1,296.0428
Unmitigated	0.5410	0.5494	5.5404	0.0123	1.2892	8.7700e-003	1.2979	0.3434	8.1400e-003	0.3515		1,279.0335	1,279.0335	0.0816	0.0502	1,296.0428

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.12	0.13	102	102
Condo/Townhouse	158.40	179.08	138.16	541,492	541,492
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	158.40	179.20	138.29	541,594	541,594

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00
Condo/Townhouse	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Enclosed Parking Structure	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
NaturalGas Unmitigated	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Condo/Townhouse	994.848	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0107**	**0.0917**	**0.0390**	**5.9000e-004**		**7.4100e-003**	**7.4100e-003**		**7.4100e-003**	**7.4100e-003**		**117.0410**	**117.0410**	**2.2400e-003**	**2.1500e-003**	**117.7365**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	0.994848	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0107**	**0.0917**	**0.0390**	**5.9000e-004**		**7.4100e-003**	**7.4100e-003**		**7.4100e-003**	**7.4100e-003**		**117.0410**	**117.0410**	**2.2400e-003**	**2.1500e-003**	**117.7365**

6.0 Area Detail

6.1 Mitigation Measures Area

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219
Unmitigated	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.6301	0.3982	5.5242	0.0196		0.9047	0.9047		0.9047	0.9047	129.8360	396.0000	525.8360	0.6146	7.2600e-003	543.3632
Landscaping	0.0550	0.0210	1.8196	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.2795	3.2795	3.1700e-003		3.3587
Total	**0.8722**	**0.4191**	**7.3438**	**0.0197**		**0.9148**	**0.9148**		**0.9148**	**0.9148**	**129.8360**	**399.2795**	**529.1156**	**0.6177**	**7.2600e-003**	**546.7219**

2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.6301	0.3982	5.5242	0.0196		0.9047	0.9047		0.9047	0.9047	129.8360	396.0000	525.8360	0.6146	7.2600e-003	543.3632
Landscaping	0.0550	0.0210	1.8196	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.2795	3.2795	3.1700e-003		3.3587
Total	**0.8722**	**0.4191**	**7.3438**	**0.0197**		**0.9148**	**0.9148**		**0.9148**	**0.9148**	**129.8360**	**399.2795**	**529.1156**	**0.6177**	**7.2600e-003**	**546.7219**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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2545 Marine Avenue - Los Angeles-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2545 Marine Avenue

Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	41.00	Space	0.37	16,400.00	0
Parking Lot	11.00	Space	0.10	4,400.00	0
City Park	0.06	Acre	0.06	2,526.48	0
Condo/Townhouse	22.00	Dwelling Unit	0.19	8,276.40	63

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	33
Climate Zone	8			**Operational Year**	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Acreage revised per the Site Plan

Construction Phase - Construction dates revised per client's instruction (Sep 2022 thru 2nd Quarter 2024); no demo

Grading - Material export assumes 6 inches of soil from the top of the site is going to be exported, based on the total SF of the site

Demolition -

Off-road Equipment - No demo

Vehicle Trips - Trip rate revised per the Trip Gen Memo

Woodstoves - no wood burning fireplaces per SCAQMD regulations

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation - SCAQMD Rule Compliance

Water Mitigation - Required by Title 24 and CalGreen

Waste Mitigation - Required by CA AB939

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	60.00
tblConstructionPhase	NumDays	2.00	60.00
tblConstructionPhase	NumDays	100.00	340.00
tblConstructionPhase	NumDays	5.00	20.00
tblConstructionPhase	NumDays	5.00	20.00
tblFireplaces	NumberWood	1.10	0.00
tblGrading	MaterialExported	0.00	600.00
tblLandUse	LandUseSquareFeet	2,613.60	2,526.48
tblLandUse	LandUseSquareFeet	22,000.00	8,276.40
tblLandUse	LotAcreage	1.38	0.19
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	7.32	7.20

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

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2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.1185	12.2454	6.2753	0.0156	5.4244	0.5194	5.9438	2.5984	0.4779	3.0764	0.0000	1,528.7524	1,528.7524	0.4482	0.0157	1,544.6197
2023	1.4145	12.2728	15.6756	0.0279	5.4244	0.5887	5.8460	2.5984	0.5450	2.9864	0.0000	2,683.1286	2,683.1286	0.6743	0.0282	2,708.3813
2024	4.4220	12.7719	17.5196	0.0312	0.5861	0.5905	1.1766	0.1563	0.5516	0.7079	0.0000	3,001.6138	3,001.6138	0.6905	0.0283	3,027.3115
Maximum	**4.4220**	**12.7719**	**17.5196**	**0.0312**	**5.4244**	**0.5905**	**5.9438**	**2.5984**	**0.5516**	**3.0764**	**0.0000**	**3,001.6138**	**3,001.6138**	**0.6905**	**0.0283**	**3,027.3115**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.1185	12.2454	6.2753	0.0156	2.3770	0.5194	2.8964	1.1265	0.4779	1.6044	0.0000	1,528.7524	1,528.7524	0.4482	0.0157	1,544.6197
2023	1.4145	12.2728	15.6756	0.0279	2.3770	0.5887	2.7987	1.1265	0.5450	1.5144	0.0000	2,683.1286	2,683.1286	0.6743	0.0282	2,708.3813
2024	4.4220	12.7719	17.5196	0.0312	0.5559	0.5905	1.1464	0.1489	0.5516	0.7005	0.0000	3,001.6138	3,001.6138	0.6905	0.0283	3,027.3115
Maximum	**4.4220**	**12.7719**	**17.5196**	**0.0312**	**2.3770**	**0.5905**	**2.8964**	**1.1265**	**0.5516**	**1.6044**	**0.0000**	**3,001.6138**	**3,001.6138**	**0.6905**	**0.0283**	**3,027.3115**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**53.56**	**0.00**	**47.24**	**55.13**	**0.00**	**43.59**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219
Energy	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Mobile	0.5316	0.5932	5.4157	0.0118	1.2892	8.7800e-003	1.2979	0.3434	8.1500e-003	0.3515		1,224.6576	1,224.6576	0.0838	0.0524	1,242.3812
Total	**1.4145**	**1.1040**	**12.7985**	**0.0321**	**1.2892**	**0.9310**	**2.2201**	**0.3434**	**0.9304**	**1.2738**	**129.8360**	**1,740.9781**	**1,870.8141**	**0.7038**	**0.0619**	**1,906.8396**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219
Energy	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Mobile	0.5316	0.5932	5.4157	0.0118	1.2892	8.7800e-003	1.2979	0.3434	8.1500e-003	0.3515		1,224.6576	1,224.6576	0.0838	0.0524	1,242.3812

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Total	1.4145	1.1040	12.7985	0.0321	1.2892	0.9310	2.2201	0.3434	0.9304	1.2738	129.8360	1,740.9781	1,870.8141	0.7038	0.0619	1,906.8396

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	8/31/2022	5	0	
2	Site Preparation	Site Preparation	9/1/2022	11/23/2022	5	60	
3	Grading	Grading	11/24/2022	2/15/2023	5	60	
4	Building Construction	Building Construction	2/16/2023	6/5/2024	5	340	
5	Paving	Paving	5/15/2023	6/11/2024	5	20	
6	Architectural Coating	Architectural Coating	5/15/2024	6/11/2024	5	20	

Acres of Grading (Site Preparation Phase): 30

Acres of Grading (Grading Phase): 45

Acres of Paving: 0.47

Residential Indoor: 16,760; Residential Outdoor: 5,587; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,248 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	75.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	26.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367		942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.5303**	**0.2573**	**0.7876**	**0.0573**	**0.2367**	**0.2940**		**942.5179**	**942.5179**	**0.3048**		**950.1386**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0185	0.0140	0.1809	4.8000e-004	0.0559	3.6000e-004	0.0563	0.0148	3.3000e-004	0.0152		49.2567	49.2567	1.4200e-003	1.3400e-003	49.6907
Total	**0.0185**	**0.0140**	**0.1809**	**4.8000e-004**	**0.0559**	**3.6000e-004**	**0.0563**	**0.0148**	**3.3000e-004**	**0.0152**		**49.2567**	**49.2567**	**1.4200e-003**	**1.3400e-003**	**49.6907**

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2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.5797	6.9332	3.9597	9.7300e-003		0.2573	0.2573		0.2367	0.2367	0.0000	942.5179	942.5179	0.3048		950.1386
Total	**0.5797**	**6.9332**	**3.9597**	**9.7300e-003**	**0.2267**	**0.2573**	**0.4840**	**0.0245**	**0.2367**	**0.2612**	**0.0000**	**942.5179**	**942.5179**	**0.3048**		**950.1386**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0185	0.0140	0.1809	4.8000e-004	0.0530	3.6000e-004	0.0533	0.0141	3.3000e-004	0.0144		49.2567	49.2567	1.4200e-003	1.3400e-003	49.6907
Total	**0.0185**	**0.0140**	**0.1809**	**4.8000e-004**	**0.0530**	**3.6000e-004**	**0.0533**	**0.0141**	**3.3000e-004**	**0.0144**		**49.2567**	**49.2567**	**1.4200e-003**	**1.3400e-003**	**49.6907**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3131	0.0000	5.3131	2.5687	0.0000	2.5687			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759		1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**5.3131**	**0.5173**	**5.8304**	**2.5687**	**0.4759**	**3.0446**		**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6800e-003	0.2185	0.0498	7.8000e-004	0.0219	1.5600e-003	0.0234	6.0000e-003	1.5000e-003	7.4900e-003		85.1219	85.1219	4.5100e-003	0.0135	89.2595
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0223	0.2895	7.7000e-004	0.0894	5.7000e-004	0.0900	0.0237	5.3000e-004	0.0242		78.8107	78.8107	2.2800e-003	2.1400e-003	79.5051
Total	**0.0353**	**0.2408**	**0.3393**	**1.5500e-003**	**0.1113**	**2.1300e-003**	**0.1134**	**0.0297**	**2.0300e-003**	**0.0317**		**163.9326**	**163.9326**	**6.7900e-003**	**0.0157**	**168.7646**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2713	0.0000	2.2713	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	1.0832	12.0046	5.9360	0.0141		0.5173	0.5173		0.4759	0.4759	0.0000	1,364.8198	1,364.8198	0.4414		1,375.8551
Total	**1.0832**	**12.0046**	**5.9360**	**0.0141**	**2.2713**	**0.5173**	**2.7886**	**1.0981**	**0.4759**	**1.5740**	**0.0000**	**1,364.8198**	**1,364.8198**	**0.4414**		**1,375.8551**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.6800e-003	0.2185	0.0498	7.8000e-004	0.0209	1.5600e-003	0.0225	5.7600e-003	1.5000e-003	7.2500e-003		85.1219	85.1219	4.5100e-003	0.0135	89.2595
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0296	0.0223	0.2895	7.7000e-004	0.0848	5.7000e-004	0.0853	0.0226	5.3000e-004	0.0231		78.8107	78.8107	2.2800e-003	2.1400e-003	79.5051
Total	**0.0353**	**0.2408**	**0.3393**	**1.5500e-003**	**0.1057**	**2.1300e-003**	**0.1078**	**0.0283**	**2.0300e-003**	**0.0304**		**163.9326**	**163.9326**	**6.7900e-003**	**0.0157**	**168.7646**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3131	0.0000	5.3131	2.5687	0.0000	2.5687			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865		1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**5.3131**	**0.4201**	**5.7332**	**2.5687**	**0.3865**	**2.9552**		**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5400e-003	0.1703	0.0441	7.3000e-004	0.0219	1.0300e-003	0.0229	6.0000e-003	9.9000e-004	6.9900e-003		80.4172	80.4172	4.4200e-003	0.0128	84.3332
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0275	0.0197	0.2665	7.5000e-004	0.0894	5.4000e-004	0.0900	0.0237	5.0000e-004	0.0242		76.7381	76.7381	2.0500e-003	1.9700e-003	77.3770
Total	**0.0301**	**0.1900**	**0.3106**	**1.4800e-003**	**0.1113**	**1.5700e-003**	**0.1129**	**0.0297**	**1.4900e-003**	**0.0312**		**157.1553**	**157.1553**	**6.4700e-003**	**0.0147**	**161.7102**

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2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2713	0.0000	2.2713	1.0981	0.0000	1.0981			0.0000			0.0000
Off-Road	0.9335	10.1789	5.5516	0.0141		0.4201	0.4201		0.3865	0.3865	0.0000	1,364.7713	1,364.7713	0.4414		1,375.8062
Total	**0.9335**	**10.1789**	**5.5516**	**0.0141**	**2.2713**	**0.4201**	**2.6914**	**1.0981**	**0.3865**	**1.4846**	**0.0000**	**1,364.7713**	**1,364.7713**	**0.4414**		**1,375.8062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	2.5400e-003	0.1703	0.0441	7.3000e-004	0.0209	1.0300e-003	0.0219	5.7600e-003	9.9000e-004	6.7400e-003		80.4172	80.4172	4.4200e-003	0.0128	84.3332
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0275	0.0197	0.2665	7.5000e-004	0.0848	5.4000e-004	0.0853	0.0226	5.0000e-004	0.0231		76.7381	76.7381	2.0500e-003	1.9700e-003	77.3770
Total	**0.0301**	**0.1900**	**0.3106**	**1.4800e-003**	**0.1057**	**1.5700e-003**	**0.1072**	**0.0283**	**1.4900e-003**	**0.0298**		**157.1553**	**157.1553**	**6.4700e-003**	**0.0147**	**161.7102**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946		1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**		**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6700e-003	0.2411	0.0920	1.1200e-003	0.0384	1.1600e-003	0.0396	0.0111	1.1100e-003	0.0122		120.3722	120.3722	4.0100e-003	0.0173	125.6347
Worker	0.0895	0.0641	0.8660	2.4400e-003	0.2906	1.7500e-003	0.2924	0.0771	1.6100e-003	0.0787		249.3990	249.3990	6.6500e-003	6.4100e-003	251.4752
Total	**0.0961**	**0.3052**	**0.9580**	**3.5600e-003**	**0.3291**	**2.9100e-003**	**0.3320**	**0.0881**	**2.7200e-003**	**0.0909**		**369.7711**	**369.7711**	**0.0107**	**0.0237**	**377.1098**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6322	6.4186	7.0970	0.0114		0.3203	0.3203		0.2946	0.2946	0.0000	1,104.6089	1,104.6089	0.3573		1,113.5402
Total	**0.6322**	**6.4186**	**7.0970**	**0.0114**		**0.3203**	**0.3203**		**0.2946**	**0.2946**	**0.0000**	**1,104.6089**	**1,104.6089**	**0.3573**		**1,113.5402**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.6700e-003	0.2411	0.0920	1.1200e-003	0.0368	1.1600e-003	0.0380	0.0107	1.1100e-003	0.0118		120.3722	120.3722	4.0100e-003	0.0173	125.6347
Worker	0.0895	0.0641	0.8660	2.4400e-003	0.2755	1.7500e-003	0.2772	0.0734	1.6100e-003	0.0750		249.3990	249.3990	6.6500e-003	6.4100e-003	251.4752
Total	**0.0961**	**0.3052**	**0.9580**	**3.5600e-003**	**0.3123**	**2.9100e-003**	**0.3152**	**0.0840**	**2.7200e-003**	**0.0868**		**369.7711**	**369.7711**	**0.0107**	**0.0237**	**377.1098**

3.5 Building Construction - 2024

Unmitigated Construction On-Site

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**		**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4500e-003	0.2416	0.0901	1.1000e-003	0.0384	1.1700e-003	0.0396	0.0111	1.1200e-003	0.0122		118.5686	118.5686	4.0200e-003	0.0171	123.7591
Worker	0.0837	0.0572	0.8068	2.3700e-003	0.2906	1.6800e-003	0.2923	0.0771	1.5500e-003	0.0786		244.2804	244.2804	6.0200e-003	5.9600e-003	246.2065
Total	**0.0901**	**0.2989**	**0.8969**	**3.4700e-003**	**0.3291**	**2.8500e-003**	**0.3319**	**0.0881**	**2.6700e-003**	**0.0908**		**362.8490**	**362.8490**	**0.0100**	**0.0230**	**369.9657**

Mitigated Construction On-Site

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	**0.5950**	**5.9739**	**7.0675**	**0.0114**		**0.2824**	**0.2824**		**0.2598**	**0.2598**	**0.0000**	**1,104.9834**	**1,104.9834**	**0.3574**		**1,113.9177**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.4500e-003	0.2416	0.0901	1.1000e-003	0.0368	1.1700e-003	0.0380	0.0107	1.1200e-003	0.0118		118.5686	118.5686	4.0200e-003	0.0171	123.7591
Worker	0.0837	0.0572	0.8068	2.3700e-003	0.2755	1.6800e-003	0.2771	0.0734	1.5500e-003	0.0749		244.2804	244.2804	6.0200e-003	5.9600e-003	246.2065
Total	**0.0901**	**0.2989**	**0.8969**	**3.4700e-003**	**0.3123**	**2.8500e-003**	**0.3151**	**0.0840**	**2.6700e-003**	**0.0867**		**362.8490**	**362.8490**	**0.0100**	**0.0230**	**369.9657**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466		1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6243**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**		**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0619	0.0444	0.5996	1.6900e-003	0.2012	1.2100e-003	0.2024	0.0534	1.1200e-003	0.0545		172.6608	172.6608	4.6000e-003	4.4400e-003	174.0982
Total	**0.0619**	**0.0444**	**0.5996**	**1.6900e-003**	**0.2012**	**1.2100e-003**	**0.2024**	**0.0534**	**1.1200e-003**	**0.0545**		**172.6608**	**172.6608**	**4.6000e-003**	**4.4400e-003**	**174.0982**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.6112	5.5046	7.0209	0.0113		0.2643	0.2643		0.2466	0.2466	0.0000	1,036.0878	1,036.0878	0.3018		1,043.6331
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6243**	**5.5046**	**7.0209**	**0.0113**		**0.2643**	**0.2643**		**0.2466**	**0.2466**	**0.0000**	**1,036.0878**	**1,036.0878**	**0.3018**		**1,043.6331**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0619	0.0444	0.5996	1.6900e-003	0.1907	1.2100e-003	0.1919	0.0508	1.1200e-003	0.0519		172.6608	172.6608	4.6000e-003	4.4400e-003	174.0982
Total	**0.0619**	**0.0444**	**0.5996**	**1.6900e-003**	**0.1907**	**1.2100e-003**	**0.1919**	**0.0508**	**1.1200e-003**	**0.0519**		**172.6608**	**172.6608**	**4.6000e-003**	**4.4400e-003**	**174.0982**

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6035**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**		**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0579	0.0396	0.5586	1.6400e-003	0.2012	1.1600e-003	0.2024	0.0534	1.0700e-003	0.0544		169.1172	169.1172	4.1700e-003	4.1300e-003	170.4507
Total	**0.0579**	**0.0396**	**0.5586**	**1.6400e-003**	**0.2012**	**1.1600e-003**	**0.2024**	**0.0534**	**1.0700e-003**	**0.0544**		**169.1172**	**169.1172**	**4.1700e-003**	**4.1300e-003**	**170.4507**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0131					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6035**	**5.2297**	**7.0314**	**0.0113**		**0.2429**	**0.2429**		**0.2269**	**0.2269**	**0.0000**	**1,036.2393**	**1,036.2393**	**0.3019**		**1,043.7858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0579	0.0396	0.5586	1.6400e-003	0.1907	1.1600e-003	0.1919	0.0508	1.0700e-003	0.0519		169.1172	169.1172	4.1700e-003	4.1300e-003	170.4507
Total	**0.0579**	**0.0396**	**0.5586**	**1.6400e-003**	**0.1907**	**1.1600e-003**	**0.1919**	**0.0508**	**1.0700e-003**	**0.0519**		**169.1172**	**169.1172**	**4.1700e-003**	**4.1300e-003**	**170.4507**

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	2.8787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	**3.0594**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**		**281.4481**	**281.4481**	**0.0159**		**281.8443**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	0.0110	0.1552	4.6000e-004	0.0559	3.2000e-004	0.0562	0.0148	3.0000e-004	0.0151		46.9770	46.9770	1.1600e-003	1.1500e-003	47.3474
Total	**0.0161**	**0.0110**	**0.1552**	**4.6000e-004**	**0.0559**	**3.2000e-004**	**0.0562**	**0.0148**	**3.0000e-004**	**0.0151**		**46.9770**	**46.9770**	**1.1600e-003**	**1.1500e-003**	**47.3474**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category	lb/day										lb/day					
Archit. Coating	2.8787					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	**3.0594**	**1.2188**	**1.8101**	**2.9700e-003**		**0.0609**	**0.0609**		**0.0609**	**0.0609**	**0.0000**	**281.4481**	**281.4481**	**0.0159**		**281.8443**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0161	0.0110	0.1552	4.6000e-004	0.0530	3.2000e-004	0.0533	0.0141	3.0000e-004	0.0144		46.9770	46.9770	1.1600e-003	1.1500e-003	47.3474
Total	**0.0161**	**0.0110**	**0.1552**	**4.6000e-004**	**0.0530**	**3.2000e-004**	**0.0533**	**0.0141**	**3.0000e-004**	**0.0144**		**46.9770**	**46.9770**	**1.1600e-003**	**1.1500e-003**	**47.3474**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.5316	0.5932	5.4157	0.0118	1.2892	8.7800e-003	1.2979	0.3434	8.1500e-003	0.3515		1,224.6576	1,224.6576	0.0838	0.0524	1,242.3812
Unmitigated	0.5316	0.5932	5.4157	0.0118	1.2892	8.7800e-003	1.2979	0.3434	8.1500e-003	0.3515		1,224.6576	1,224.6576	0.0838	0.0524	1,242.3812

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.12	0.13	102	102
Condo/Townhouse	158.40	179.08	138.16	541,492	541,492
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	158.40	179.20	138.29	541,594	541,594

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Enclosed Parking Structure	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00
Condo/Townhouse	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Enclosed Parking Structure	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00
Parking Lot	0.542464	0.063735	0.188241	0.126899	0.023249	0.006239	0.010717	0.008079	0.000923	0.000604	0.024795	0.000702	0.00

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
NaturalGas Unmitigated	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Condo/Townhouse	994.848	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0107**	**0.0917**	**0.0390**	**5.9000e-004**		**7.4100e-003**	**7.4100e-003**		**7.4100e-003**	**7.4100e-003**		**117.0410**	**117.0410**	**2.2400e-003**	**2.1500e-003**	**117.7365**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Condo/Townhouse	0.994848	0.0107	0.0917	0.0390	5.9000e-004		7.4100e-003	7.4100e-003		7.4100e-003	7.4100e-003		117.0410	117.0410	2.2400e-003	2.1500e-003	117.7365
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0107**	**0.0917**	**0.0390**	**5.9000e-004**		**7.4100e-003**	**7.4100e-003**		**7.4100e-003**	**7.4100e-003**		**117.0410**	**117.0410**	**2.2400e-003**	**2.1500e-003**	**117.7365**

6.0 Area Detail

6.1 Mitigation Measures Area

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219
Unmitigated	0.8723	0.4191	7.3438	0.0197		0.9148	0.9148		0.9148	0.9148	129.8360	399.2795	529.1156	0.6177	7.2600e-003	546.7219

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.6301	0.3982	5.5242	0.0196		0.9047	0.9047		0.9047	0.9047	129.8360	396.0000	525.8360	0.6146	7.2600e-003	543.3632
Landscaping	0.0550	0.0210	1.8196	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.2795	3.2795	3.1700e-003		3.3587
Total	**0.8722**	**0.4191**	**7.3438**	**0.0197**		**0.9148**	**0.9148**		**0.9148**	**0.9148**	**129.8360**	**399.2795**	**529.1156**	**0.6177**	**7.2600e-003**	**546.7219**

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.6301	0.3982	5.5242	0.0196		0.9047	0.9047		0.9047	0.9047	129.8360	396.0000	525.8360	0.6146	7.2600e-003	543.3632
Landscaping	0.0550	0.0210	1.8196	1.0000e-004		0.0101	0.0101		0.0101	0.0101		3.2795	3.2795	3.1700e-003		3.3587
Total	**0.8722**	**0.4191**	**7.3438**	**0.0197**		**0.9148**	**0.9148**		**0.9148**	**0.9148**	**129.8360**	**399.2795**	**529.1156**	**0.6177**	**7.2600e-003**	**546.7219**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

2545 Marine Avenue - Los Angeles-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX 5

Phase II Environmental Site Assessment

Additional Phase II Environmental Site Assessment
2545 Marine Avenue
Gardena, California

March 14, 2022

Prepared for:

G3 Urban
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Pasadena, California 91105

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Project No.: 185804236

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All information, conclusions, and recommendations provided by Stantec in this document regarding the Phase II ESA have been prepared under the supervision of and reviewed by the professionals whose signatures appear below.

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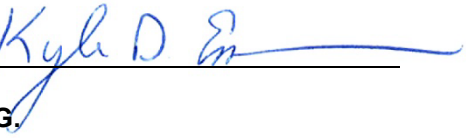
Brian Viggiano, PG
Principal Geologist

Independent Reviewer: 

Kyle Emerson, C.E.G., P.G.
Managing Principal Geologist

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1.0 EXECUTIVE SUMMARY

Stantec Consulting Services Inc. (Stantec) has prepared this Additional Phase II Environmental Site Assessment (ESA) report for the property located at 1030 West Foothill Boulevard, in the City of Gardena, County of Los Angeles, California (the "Property", **Figure 1**), on behalf of G3 Urban (the "Client"). The work performed herein was done in conformance the Professional Services Agreement (PSA) between The G3 and Stantec (the "MSA"), based on the scope of work set forth in Stantec's *Phase II Environmental Site Assessment Proposal* dated October 7, 2021.

The subject property consists of approximately 0.72 acres of vacant land located in the northeast corner of Dublin Avenue and Marine Avenue and identified as 2545 Marine Avenue in Gardena, California (the "Property"). The Assessor's Parcel Number (APN) for the Property is listed as 4064-023-018. Surrounding properties are a mix of residential and service/retail/commercial properties. A Property location map is illustrated on Figure 1. A Property map illustrating the main features of the Property is provided as Figure 2.

Previous Environmental Investigations

Stantec previously prepared a Phase I ESA for the Property and other adjoining properties located to the east (2315, 2403, 2415, and 2421 Marine Avenue) in August 2018. The Subject Property was historically used for light agricultural purposes until circa 1947, when it was developed with a hotel. The Property was occupied by the hotel structures until circa 2000, when the structures were demolished and removed from the Property. Historically, agricultural land use involved the use of herbicides and pesticides. Therefore, based on this historical land usage, Stantec was retained to conduct a subsurface assessment to determine whether the former agricultural use of the Subject Property was considered a recognized environmental condition (REC).

To evaluate whether pesticide or herbicide residues impacts were present in shallow soils, Stantec conducted a Phase II ESA on the Property on August 9, 2018, which included the advancement of six (6) soil borings (HA-1 through HA-6) to 1-foot below ground surface (bgs) to collect soil samples for laboratory analysis to evaluate the possible presence of metals (arsenic and lead) associated with herbicides and for pesticides in shallow soils. The one-foot soil samples collected from borings HA-1 to HA-6 were analyzed for arsenic and lead by United States Environmental Protection Agency (EPA) Method 6010B and organochlorine pesticides (OCPs) by EPA Method 8081. Boring locations are depicted in **Figure 3.**

The results of the investigation identified minor detections of OCPs at concentrations above laboratory reporting limits in two (2) of the six (6) soil samples collected at 0.5 to 1.0 feet bgs. The pesticides detected during this assessment included: Chlordane (up to 0.076 milligrams per kilogram [mg/kg]), alpha-chlordane (up to 0.0076 mg/kg) of, gamma-chlordane (up to 0.0075 mg/kg), of 4,4'-dichlorodiphenyldichloroethylene ([DDE], up to 0.0037 mg/kg) and 4,4'-dichlorodiphenyltrichloroethane ([DDT] up to 0.0061 mg/kg. All reported OCP concentrations detected during this assessment were below corresponding Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3 residential screening levels (SLs).

Lead was detected in all six (6) soil samples at concentrations ranging from 3.3 to 12 mg/kg. The detected lead concentrations were below the DTSC HERO Note 3 SL of 80 mg/kg.

Arsenic was detected in two (2) of the soil samples at concentrations of 1.2 and 1.5 mg/kg. The reported arsenic concentrations are consistent with the southern California upper-bound background concentration of 12 mg/kg (DTSC HERO Note 11). Given that arsenic was detected below the expected background concentration of 12 mg/kg used by regulatory agencies as a cleanup level, no further action was deemed necessary.

Based on shallow soil sampling conducted at the Property, no detected arsenic, lead, or organochlorine pesticide concentrations were measured above residential SLs or, in the case of arsenic, background concentrations. As a result, no additional investigation related to these constituents was recommended.

The referenced Phase II ESA also assessed the adjacent Rocket cleaners/ Tidy cleaners located at 2403 West Marine Avenue / 2403 West Compton Boulevard. Significant impact in soil and soil vapor were detected at the dry cleaners due to historical release(s) of dry-cleaning solvents at that location. The chlorinated solvent, tetrachloroethylene (PCE), was detected in soil vapor up to 1,100,000 micrograms per cubic meter (ug/m³). The current residential modified indoor air screening level (MIASL) based on an attenuation factor (AF) of 0.03 is 15 ug/m³. The lateral assessment conducted determined that the soil vapor impacts decreased laterally in all directions to 130,000 ug/m³ within 70 feet of the subject Property, still well above the residential screening level noted above. The results of this previously conducted investigation indicated the potential for soil vapor impacts on the subject Property, where no historical investigations had been conducted.

Based on the potential that historical releases at the adjacent dry cleaner release could have migrated onto the subject Property in soil vapor at concentrations above the residential SLs, Stantec recommended additional Phase II investigations at the Subject Property.

Stantec was subsequently retained to perform additional investigation of soil vapor at the Property to evaluate if soil vapor impacts identified on the adjacent property have migrated on the subject Property at concentrations of concern to the residential development. The results of this investigation are described below.

Soil Vapor Investigations

On March 3, 2021, Stantec oversaw the advancement of five (5) soil borings (SV-1 through SV-5) at the approximate locations depicted on **Figure 2**. Soil borings were drilled to approximately 15 feet below ground surface (bgs) and converted to multi-depth soil vapor monitoring points with probes set at depths of approximately five and 15 feet bgs.

On March 8, 2022, soil vapor samples were collected in accordance with the DTSC Advisory for Active Soil Gas Investigations, dated July 2015. Collected soil vapor samples were analyzed in an on-Site mobile laboratory for VOCs following EP method 8260B. Soil vapor sample results were then compared to residential United States EPA Region 9 Regional Screening Levels (RSL, November, 2021), DTSC HERO Note 3 MIASLs (June, 2020) and/ or San Francisco Bay Regional Water Quality Board Environmental Screening Levels (ESLs), as appropriate.

A total of eleven soil vapor samples, including one duplicate sample, were collected during this investigation and submitted under chain-of-custody to A&R Laboratories (ARL) for analysis of VOCs by EPA test method 8260B in an on-Site mobile laboratory. ARL is certified to perform hazardous waste testing by the State of California Department of Health Services, Environmental Laboratory Accreditation Program (ELAP). Analytical laboratory results, including QA/QC and chain-of-custody documentation are attached as **Appendix A** and summarized in **Table 1**.

Six (6) of the eleven (11) soil vapor samples reported PCE at concentrations ranging from 10 to 260 µg/m3, with the highest concentration reported in sample SV-2-5. Five (5) soil vapor samples exceeded the residential DTSC HERO Note 3 0.03AF MIASL of 15.3 ug/m3, but all reported concentrations are below the 0.001AF MIASL of 460 ug/m3.

There were no detections of other volatile organic compounds (VOCs) in any of the soil vapor samples collected and submitted for laboratory analysis from SV-1 through SV-5 (i.e., the results were “non-detect”).

Conclusions and Recommendations

The investigation has identified the presence of PCE in soil vapor at low concentrations at the Property. The detected concentrations are generally low and are likely associated with, and migrated from, the reported dry-cleaning release(s) at the adjacent Rocket cleaners/ Tidy cleaners located at 2403 West Marine Avenue / 2403 West Compton Boulevard. No potential on-site sources of PCE have been identified through historic document review. The concentrations of PCE do exceed the 0.03 AF MIASL of 15.3 µg/m^3 but are all below the official DTSC 2011 AF of 0.001, which is used for risk screening purposes. At these levels, vapor intrusion is not currently considered to be a significant concern and vapor mitigation is not required based on the current concentrations. Given the presence of a known source of contamination at the adjacent property, the Client may consider pre-emptive mitigation measures should structures be constructed in the future to mitigate against potential vapor intrusion migration from the adjacent property should conditions change, and concentrations increase over time.

The preceding summary is intended for information purposes; reading the body of the report is recommended.

2.0 INTRODUCTION

Stantec Consulting Services Inc. (Stantec) has prepared this Phase II Environmental Site Assessment (ESA) report for the property located at 2545 Marine Avenue city of Gardena, County of Los Angeles, California (the "Property", **Figure 1**), on behalf of G3 Urban (the "Client"). The work performed herein was done in conformance the scope of work in the in accordance with Stantec's *Phase II Environmental Site Assessment Proposal*, dated October 7, 2021.

2.1 PROPERTY DESCRIPTION AND OPERATIONS

The subject property consists of approximately 0.72 acres of vacant land located in the northeast corner of Dublin Avenue and Marine Avenue and identified as 2545 Marine Avenue in Gardena, California (the "Property"). The Assessor's Parcel Numbers (APNs) for the Property is listed as 4064-023-018. Surrounding properties are a mix of residential and service/retail/commercial properties. A Property location map is illustrated on **Figure 1**. A Property map illustrating the main features of the Property is provided as **Figure 2**.

2.2 PROPERTY GEOLOGY AND HYDROGEOLOGY

The Property is located in the Los Angeles basin within the Peninsular Ranges Geomorphic Province of southern California, which includes northwest-southeast trending series of mountainous ridges and peaks that have been developed by the San Andreas Fault System (California Division of Mines and Geology [CDMG], 1969). The stratigraphy underlying the Property consists primarily of recent-age marine and non-marine clastic rock units interbedded with alluvium sediments (CDMG, 1969).

According to data obtained from groundwater monitoring reports from a gasoline station located approximately 2,500 feet to the southwest, the stratigraphy underlying the Property vicinity consists of silty fine sand, clayey sand, and silty clay to approximately 50 feet below ground surface (bgs) underlain by poorly graded sand from 50 to 60 feet bgs; and clayey silt and silt from 60 to approximately 68 feet bgs.

Part of the central sub-basin of the coastal plain, the regional geology is shaped by local geological fault systems creating associated folded rocks and uplifts. One major active fault is the Newport-Inglewood-Rose Canyon fault located approximately 3 miles northeast (United States Geological Survey [USGS], 2018). According to official maps of California, the Property is not located within an Alquist-Priolo Earthquake Fault Zone boundary nor within a liquefaction zone (California Department of Conservation, Division of Oil, Gas, and Geothermal Resources [DOGGR], 2018).

The Property is located within the West Coast sub-basin of the Coastal Plain of Los Angeles Basin, which underlies most of the area between the Dominguez gap of the Los Angeles River to the Alamitos gap of the San Gabriel River to the San Pedro Bay. The basin is constrained by the Ballona Escarpment to the north, Newport-Inglewood fault zone to the east, and the Pacific Ocean and consolidated rocks on the south and west (Department of Water Resources [DWR], 2004). The basin consists of alluvial sediments and marine water-bearing sediments (DWR, 2004).

According to information provided on the Geotracker website from groundwater monitoring reports from a gasoline station located approximately 2,500 feet to the southwest, depth to groundwater was measured between 46.34 and 49.27 feet below top of casing with a groundwater flow direction to the north-northwest in September 2017.

3.0 BACKGROUND

Stantec previously prepared a Phase I ESA for the Property and other adjoining properties located to the east (2315, 2403, 2415, and 2421 Marine Avenue) in August 2018. The Subject Property was historically used for light agricultural purposes until circa 1947, when it was developed with a hotel. The Property was occupied by the hotel structures until circa 2000, when the structures were demolished and removed from the Property. Historically, agricultural land use involved the use of herbicides and pesticides. Therefore, based on this historical land usage, Stantec was retained to conduct a subsurface assessment to determine whether the former agricultural use of the Subject Property was considered a recognized environmental condition (REC).

To evaluate whether pesticide or herbicide residues impacts were present in shallow soils, Stantec conducted a Phase II ESA on the Property on August 9, 2018, which included the advancement of six (6) soil borings (HA-1 through HA-6) to 1-foot below ground surface (bgs) to collect soil samples for laboratory analysis to evaluate the possible presence of metals (arsenic and lead) associated with herbicides and for pesticides in shallow soils. The one-foot soil samples collected from borings HA-1 to HA-6 were analyzed for arsenic and lead by United States Environmental Protection Agency (EPA) Method 6010B and organochlorine pesticides (OCPs) by EPA Method 8081. Boring locations are depicted in **Figure 3**.

The results of the investigation identified minor detections of OCPs at concentrations above laboratory reporting limits in two (2) of the six (6) soil samples collected at 0.5 to 1.0 feet bgs. The pesticides detected during this assessment included: Chlordane (up to 0.076 milligrams per kilogram [mg/kg]), alpha-chlordane (up to 0.0076 mg/kg) of, gamma-chlordane (up to 0.0075 mg/kg), of 4,4'-dichlorodiphenyldichloroethylene ([DDE], up to 0.0037 mg/kg) and 4,4'-dichlorodiphenyltrichloroethane ([DDT] up to 0.0061 mg/kg. All reported OCP concentrations detected during this assessment were below corresponding Department of Toxic Substances Control (DTSC) Human and Ecological Risk Office (HERO) Note 3 residential screening levels (SLs).

Lead was detected in all six (6) soil samples at concentrations ranging from 3.3 to 12 mg/kg. The detected lead concentrations were below the DTSC HERO Note 3 SL of 80 mg/kg.

Arsenic was detected in two (2) of the soil samples at concentrations of 1.2 and 1.5 mg/kg. The reported arsenic concentrations are consistent with the southern California upper-bound background concentration of 12 mg/kg (DTSC HERO Note 11). Given that arsenic was detected below the expected background concentration of 12 mg/kg used by regulatory agencies as a cleanup level, no further action was deemed necessary.

Based on shallow soil sampling conducted at the Property, no detected arsenic, lead, or organochlorine pesticide concentrations were measured above residential SLs or, in the case of arsenic, background concentrations. As a result, no additional investigation related to these constituents was recommended.

The referenced Phase II ESA also assessed the adjacent Rocket cleaners/ Tidy cleaners located at 2403 West Marine Avenue / 2403 West Compton Boulevard. Significant impact in soil and soil vapor were detected at the dry cleaners due to historical release(s) of dry-cleaning solvents at that location. The

chlorinated solvent, tetrachloroethylene (PCE), was detected in soil vapor up to 1,100,000 micrograms per cubic meter (ug/m³). The current residential modified indoor air screening level (MIASL) based on an attenuation factor (AF) of 0.03 is 15 ug/m³. The lateral assessment conducted determined that the soil vapor impacts decreased laterally in all directions to 130,000 ug/m³ within 70 feet of the subject Property, still well above the residential screening level noted above. The results of this previously conducted investigation indicated the potential for soil vapor impacts on the subject Property, where no historical investigations had been conducted.

Based on the potential that historical releases at the adjacent dry cleaner release could have migrated onto the subject Property in soil vapor at concentrations above the residential SLs, Stantec recommended additional Phase II investigations at the Subject Property.

Stantec was subsequently retained to perform additional investigation of soil vapor at the Property to evaluate if soil vapor impacts identified on the adjacent property have migrated on the subject Property at concentrations of concern to the residential development. The results of this investigation are described below.

4.0 FIELD INVESTIGATION

Prior to the commencement of fieldwork activities, Stantec made the following preparations:

4.1 PRE-DRILLING ACTIVITIES

- Stantec visited the Property to mark the proposed boring locations. Subsequent to the marking, Stantec notified Underground Service Alert (USA) of Southern California at least 48-hours prior to the commencement of drilling activities; and,
- In accordance with federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR, Section 1910.120), Stantec developed a site-specific Health and Safety Plan (HASP) for the Property. All Stantec personnel and subcontractors associated with the project were required to be familiar with and comply with all provisions of the HASP.

4.2 INVESTIGATION

On March 3, 2022, Stantec oversaw the advancement of five (10) soil borings (SV-1 through SV-5) on the Property. Soil vapor probes were installed at approximately 5-feet and 15-feet bgs. All soil borings advanced during this investigation are depicted on **Figure 2**.

4.2.1 Soil Boring Procedures

A hand auger was used for utility clearance purposes to a depth of 5-feet bgs at all borings. Once the 5-foot depth was achieved, a direct push rig was used to a total depth of 15.5-feet bgs. The soils from each of the direct push borings were visually examined by Stantec field personnel who classified the soils in accordance with the Unified Soil Classification System (USCS) and screened with a photoionization device (PID) for VOCs at approximate five-foot intervals. Boring logs depicting the encountered lithology and PID readings are included as **Appendix B**.

4.3 SOIL VAPOR PROBE INSTALLATION

At the completion of drilling to target depth, soil vapor points were installed at SV-1 through SV-5 at the 5- and 15-foot interval at each boring. Subsurface soil vapor probe installation was performed in accordance with the July 2015 DTSC “Advisory - Active Soil Gas Investigations” (DTSC Advisory).

Each sample probe was constructed with a 1-inch-long Airstone sampling screen set at the prescribed sampling intervals. Each of the sampling screens was constructed with a permeable Airstone vapor tip connected to ¼-inch outer diameter Nylaflow tubing that was lowered to the bottom of the borehole and backfilled with filter sand, until approximately 12-inches of filter pack was placed. A transition seal consisting of approximately 12-inches of dry bentonite was then placed above the filter pack, followed by an annular seal consisting of hydrated bentonite until the next sampling interval was reached. The sequence was then repeated to install the second monitoring point, and/ or completely backfill the borehole.

At the surface, the exposed nylon tubing was capped with tight fitting plastic endcaps and labeled to indicate sampling depth and covered with plastic sheeting to protect against rainfall events.

4.4 SOIL VAPOR SAMPLING

Soil vapor samples were collected on March 8, 2022, in accordance with the methods and procedures outlined by the DTSC Advisory, a minimum of 48-hours after installation in order to allow for equilibration.

Prior to sampling, a shut-in test was conducted on the sampling train to ensure all connections and fittings were airtight. The shut-in test was performed on the sampling train by applying a vacuum of 100 inches of water to the sampling train and monitoring magnehelic gauges for a pressure drop for one minute. If loss of vacuum was observed, the fittings were adjusted as needed until no vacuum loss was observed during subsequent shut-in tests.

After the sampling equipment passed the shut-in test, the probes were purged using an air pump outfitted with a low-flow module to remove internal air from the sample train (calculated from the internal volume of the tubing and probe tip); the void space of the sand pack around the probe tip; and the void space of the dry bentonite (in the annular space). Three internal volumes were purged from each sampling location at a rate less than 200 milliliters per minute (ml/min).

Immediately following purging the internal volumes, the soil vapor samples were collected into foil-wrapped glass bulbs at a flow rate not exceeding 200 ml/min and delivered to an on-site mobile laboratory for analyses. A tracer compound of Isopropanol (IPA) was placed above the surface seal and along the sampling train to evaluate the integrity of the seal. No tracer compounds were detected in the soil vapor samples collected during this investigation.

4.4.1 Field Equipment Cleaning Procedures

To maintain quality control during drilling operations, all drill rods and reusable soil sampling equipment was decontaminated using a triple bucket rinse. Prior to drilling at a given location or sampling interval, all equipment coming in direct contact with soil samples was scrubbed with an Alconox scrub solution followed by a clean tap water rinse and then a final distilled water rinse. The disposable acetate soil sample liners were used for one sampling interval and then discarded.

4.5 LABORATORY TESTING PROGRAM

A total of eleven soil vapor samples, including a duplicate sample, were collected during this investigation, and submitted under chain-of-custody to A&R Laboratories (ARL) for analysis of the volatile organic compounds (VOCs) by USEPA test method 8260B. ARL is certified to perform hazardous waste testing by the State of California Department of Health Services, ELAP. Analytical laboratory results are attached as **Appendix A** and summarized in **Table 1**.

5.0 INVESTIGATION RESULTS

5.1 FIELD OBSERVATIONS

On March 3, 2022, Stantec personnel oversaw the advancement of five soil borings (SV-1 through SV-5) at the Property. Soils encountered during the investigation consisted largely of poorly graded sand with silt and clay. Groundwater was not encountered in any boreholes during this investigation. No staining or hydrocarbon odors were observed in any of the boreholes.

5.2 ANALYTICAL RESULTS

Six (6) of the eleven (11) soil vapor samples reported PCE at concentrations ranging from 10 to 260 µg/m3, with the highest concentration reported in sample SV-2-5. Five (5) soil vapor samples exceeded the residential DTSC HERO Note 3 0.03AF MIASL of 15.3 ug/m3, but all reported concentrations are below the 0.001AF MIASL of 460 ug/m3.

There were no detections of other volatile organic compounds (VOCs) in any of the soil vapor samples collected and submitted for laboratory analysis from SV-1 through SV-5 (i.e., the results were “non-detect”).

6.0 CONCLUSIONS AND RECOMMENDATIONS

The investigation has identified the presence of PCE in soil vapor at low concentrations at the Property. The detected concentrations are generally low and are likely associated with, and migrated from, the reported dry-cleaning release(s) at the adjacent Rocket cleaners/ Tidy cleaners located at 2403 West Marine Avenue / 2403 West Compton Boulevard. No potential on-site sources of PCE have been identified through historic document review. The concentrations of PCE do exceed the 0.03 AF MIASL of 15.3 µg/m^3 but are all below the official DTSC 2011 AF of 0.001, which is used for risk screening purposes. At these levels, vapor intrusion is not currently considered to be a significant concern and vapor mitigation is not required based on the current concentrations. Given the presence of a known source of contamination at the adjacent property, the Client may consider pre-emptive mitigation measures should structures be constructed in the future to mitigate against potential vapor intrusion migration from the adjacent property should conditions change, and concentrations increase over time.

The preceding summary is intended for information purposes; reading the body of the report is recommended.

7.0 LIMITATIONS

The conclusions presented in this report are professional opinions based on data described in this report. The opinions of this report have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location and are subject to the following inherent limitations. Stantec makes no other warranty, either expressed or implied, concerning the conclusions and professional advice that is contained within the body of this report.

Inherent in most projects performed in a heterogeneous subsurface environment, continuing excavation and assessments may reveal findings that are different than those presented herein. This facet of the environmental profession should be considered when formulating professional opinions on the limited data collected on these projects.

This report has been issued with the clear understanding that it is the responsibility of the owner, or their representative, to make appropriate notifications to regulatory agencies. It is specifically not the responsibility of Stantec to conduct appropriate notifications as specified by current County and State regulations.

The information presented in this report is valid as of the date our exploration was performed. Site conditions may degrade with time; consequently, the findings presented herein are subject to change. In the event of any conflict between the terms and conditions of this report and the terms and conditions of the PSA, the PSA shall control.

8.0 REFERENCES

California Division of Mines and Geology (CDMG), 1969, Geologic Map of California, Los Angeles Sheet, Scale 1:250,000.

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), 2018, website http://www.conservation.ca.gov/cgs/rghm/ap

Department of Toxic Substances and Control (DTSC), 2018, Human and Ecological Risk Office (HERO) Note 3, Release Date: November 2021.

Department of Water Resources Bulletin 118, 2017, website http://www.water.ca.gov/groundwater/bulletin118/basindescriptions/4-11.03.pdf

Stantec Consulting Services, Inc. (Stantec), 2018, Phase I Environmental Site Assessment for 2315, 2403, 2415, 2421, and 2545 Marine Avenue, Gardena, California, dated August 2.

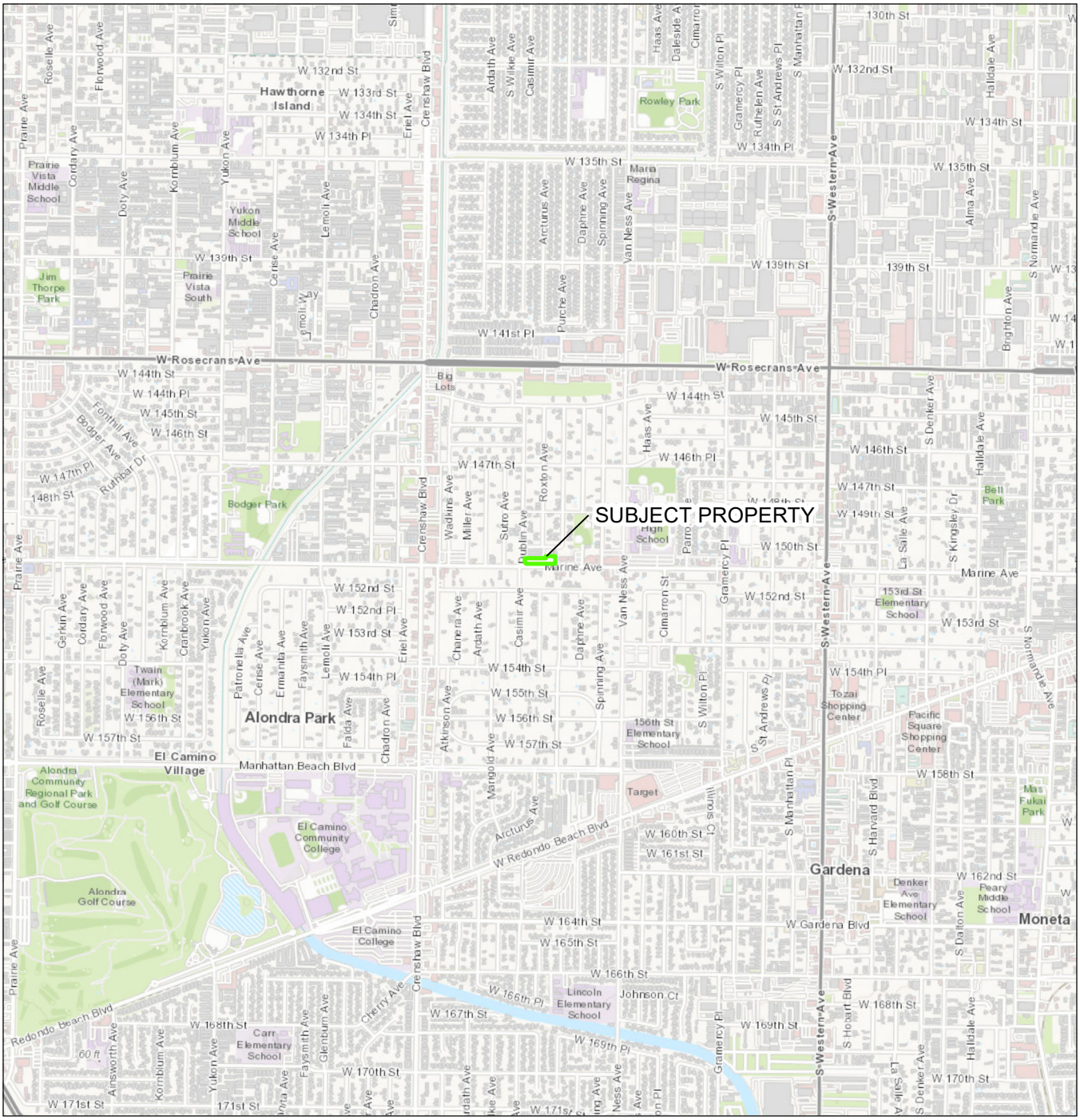
Stantec Consulting Services, Inc. (Stantec), 2018, Phase II Environmental Site Assessment for 2315, 2403, 2415, 2421, and 2545 Marine Avenue, Gardena, California, dated September 27.

Stantec Consulting Services, Inc. (Stantec), 2021, Phase I1 Environmental Site Assessment for 2545 Marine Avenue, Gardena, California, dated October 8.

United States Geological Survey (USGS), Earthquake Hazards Program, 2018, website: https://earthquake.usgs.gov/hazards/qfaults/

United States Environmental Protection Agency (EPA), 2018, Regional Screening Levels (RSLs) – Generic Tables, May 2018.

FIGURES



Property Boundary

0 1,200 2,400 Feet

(At original document size of 8.5x11)
1:24,000

N

Stantec

Notes

1. Coordinate System: NAD 1983 UTM Zone 11N
2. Data Sources: Stantec, 2021
3. Background: Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Project Location
2545 Marine Avenue
Gardena, CA 90249

Client/Project
G3 Urban
185804236
Phase II Environmental Site Assessment

Figure No.
1

Title
Property Location Map

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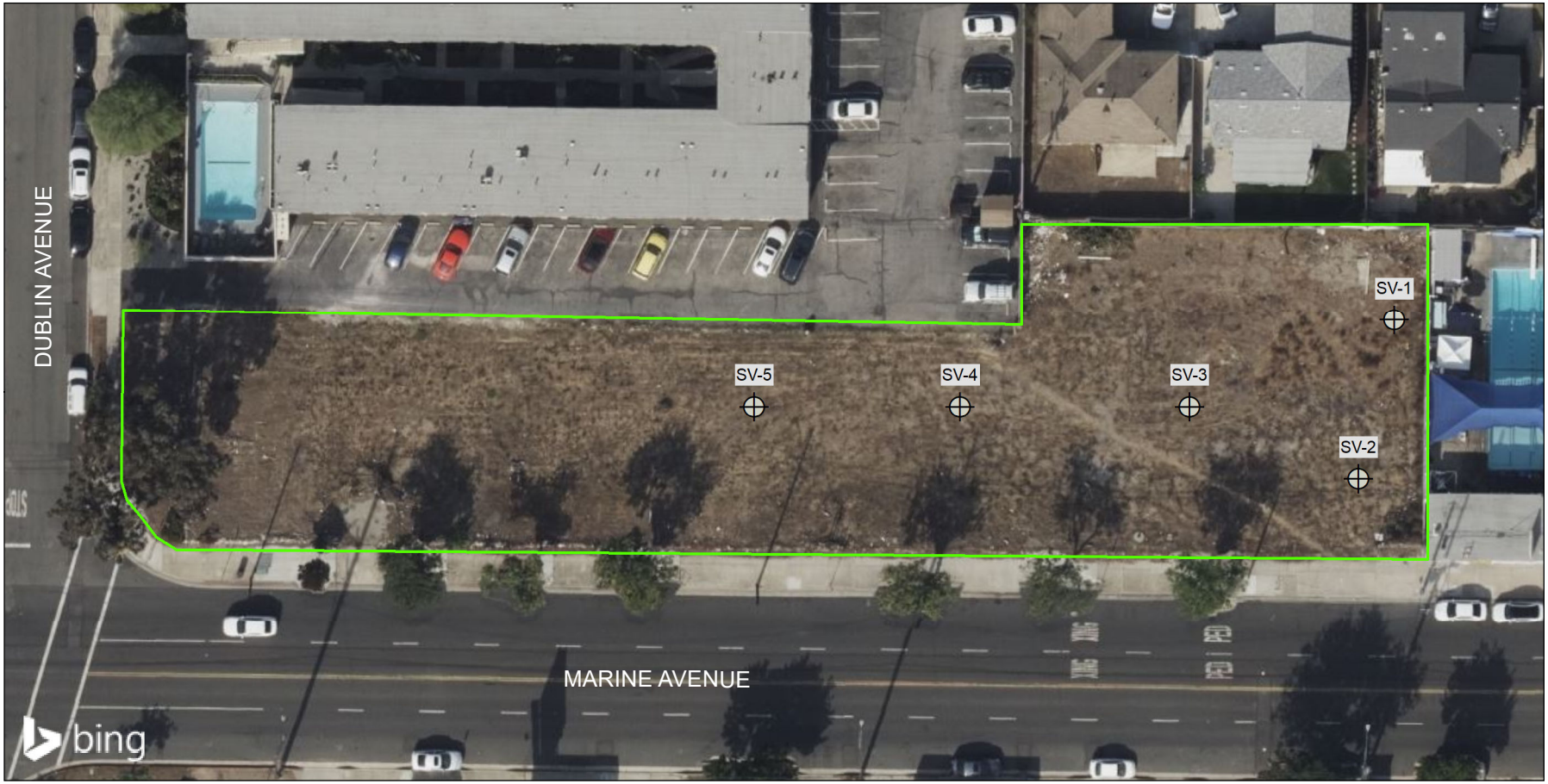

Property Boundary

Sample Locations

0 30 60 Feet

(At original document size of 8.5x11)
1:600

N

Notes
1. Coordinate System: NAD 1983 UTM Zone 11N
2. Data Sources: Stantec, 2021
3. Background: © 2022 Microsoft Corporation © 2022 Maxar ©CNES (2022) Distribution Airbus DS

Stantec

Project Location
2545 Marine Avenue,
Gardena, CA 90249

Client/Project
G3 Urban
185804236
Phase II Environmental Site Assessment

Figure No.
2

Title
Boring Locations

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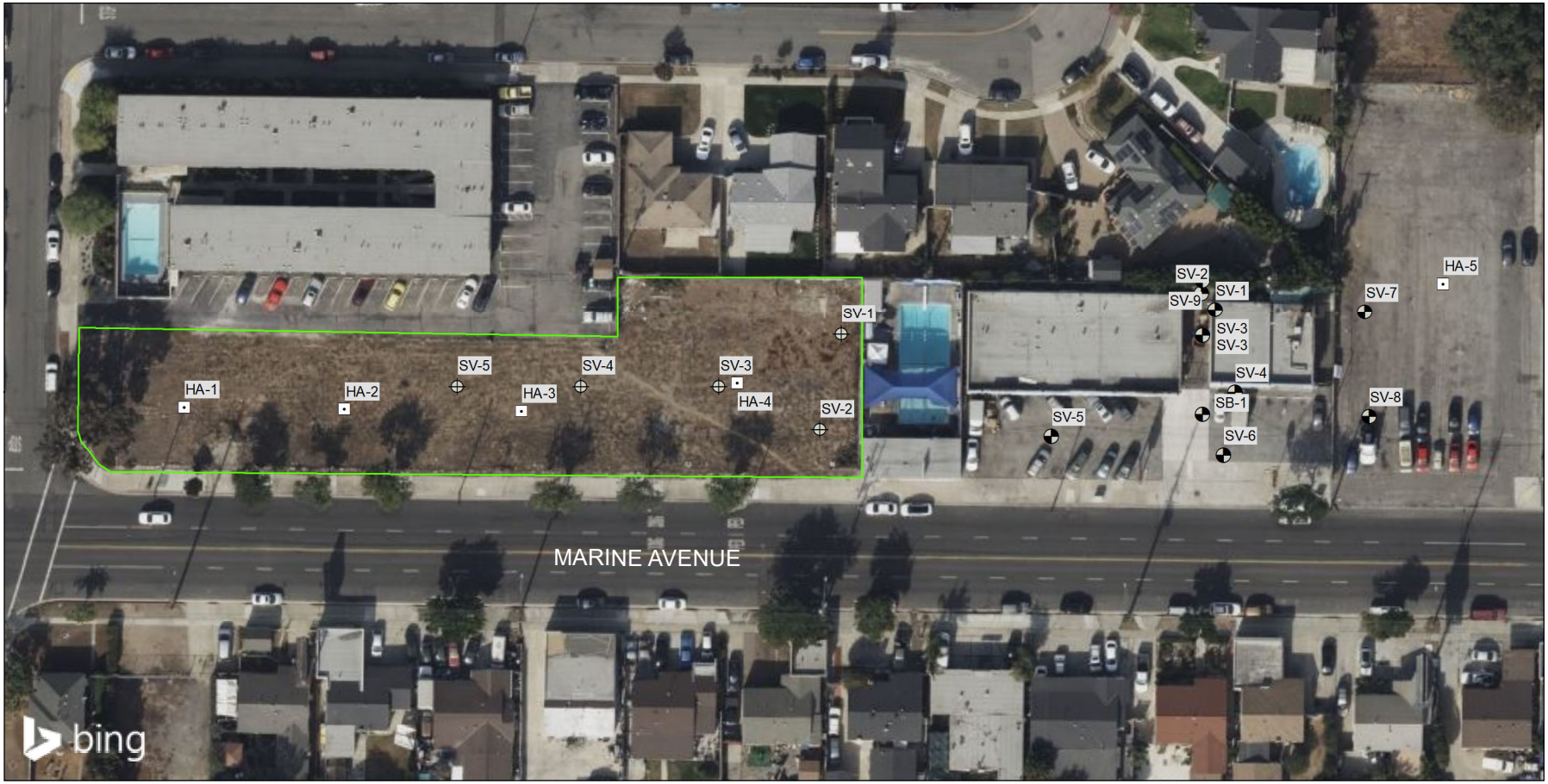

Property Boundary

Soil Vapor - Stantec 2022

Hand Auger - Stantec 2018

Soil Vapor - Stantec 2018

0 50 100 Feet

N

(At original document size of 8.5x11)
1:1,000

Notes

1. Coordinate System: NAD 1983 UTM Zone 11N
2. Data Sources: Stantec, 2021
3. Background: © 2022 Microsoft Corporation © 2022 Maxar ©CNES (2022) Distribution Airbus DS

Stantec

Project Location
2545 Marine Avenue,
Gardena, CA 90249

Client/Project
G3 Urban
185804236
Phase II Environmental Site Assessment

Figure No.
3

Title
PREVIOUS SAMPLE LOCATIONS

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TABLES

TABLE 1
SUMMARY OF SOIL VAPOR ANALYTICAL RESULTS
2545 Marine Avenue
Gardena, California

Boring Location	Sample ID	Sample Depth Below Original Grade (feet)	Sample Volume[1]	Sample Date	Leak Check Compounds (IPA)	Benzene	PCE	Toluene	m.p-Xylene	Other VOCs
Residential Screening Level for Soil Vapor using RSL or HERO NOTE 3 and Attenuation Factor of 0.03 [2] [3]					NA	***3.2***	***15***	***10,333***	***3,333***	***various***
Residential Screening Level for Soil Vapor using RSL or HERO NOTE 3 and Attenuation Factor of 0.001 [2] [3]					NA	***97***	***460***	***310,000***	***100,000***	***various***
Site Wide	SV-1-5	5	3	3/8/2022	<65.0	<3.1	**70**	<6.5	<13.0	<various
	SV-1-15	15	3	3/8/2022	<65.0	<3.1	<6.5	<6.5	<13.0	<various
	SV-2-5	5	3	3/8/2022	<65.0	<3.1	**260**	<6.5	<13.0	<various
	SV-2-15	15	3	3/8/2022	<65.0	<3.1	<6.5	<6.5	<13.0	<various
	SV-3-5	5	3	3/8/2022	<65.0	<3.1	<6.5	<6.5	<13.0	<various
	SV-3-15	15	3	3/8/2022	<65.0	<3.1	**90**	<6.5	<13.0	<various
	SV-4-5	5	3	3/8/2022	<65.0	<3.1	**20**	<6.5	<13.0	<various
	SV-4-15	15	3	3/8/2022	<65.0	<3.1	**20**	<6.5	<13.0	<various
	SV-5-5	5	3	3/8/2022	<65.0	<3.1	**10**	<6.5	<13.0	<various
	SV-5-15	5	3	3/8/2022	<65.0	<3.1	<6.5	<6.5	<13.0	<various
	SV-5-15DUP	15	3	3/8/2022	<65.0	<3.1	<6.5	<6.5	<13.0	<various

Notes:

All concentrations reprted in microgramper cubic meter (µg/m^3)

(1) - Sample analyzed by on-site lab.

(2) - More conservative screening level between USEPA Region 9 RSL (November, 2021) and DTSC HERO Note 3 (June, 2020); San Francisco Bay Regional Water Quality

(3) - Most conservative screening level between USEPA Region 9 RSL (November, 2021) and DTSC HERO Note 3 (June, 2020); San Francisco Bay Regional Water Quality

"<" - Results reported below Laboratory Reporting Limit.

CA EPA - California Environmental Protection Agency

DTSC - Department of Toxic Substance Control

EPA - United States Environmental Protection Agency

HERO - Human and Ecological Risk Office

LCC - Leak Check Compound (Isopropanol) or 1,1-difluoroethane

PCE - Tetrachloroethene

VOCs - Volatile Organic Compounds

Green shading indicates value above the RSLs or HERO Note 3 (0.03 attenuation factor) residential screening level.

Orange shading indicates value at or above the RSLs or HERO Note 3 (0.001 attenuation factor) residential screening level.

APPENDICES

Appendix A LABORATORY ANALYTICAL REPORT

A & R Laboratories, Inc.

1650 S. GROVE AVE., SUITE C
ONTARIO, CA 91761
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CASE NARRATIVE

Authorized Signature Name / Title (print)	Ken Zheng, President
Signature / Date	Ken Zheng, President 03/09/2022 15:52:51
Laboratory Job No. (Certificate of Analysis No.)	2203-00062
Project Name / No.	NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249 185804236
Dates Sampled (from/to)	03/08/22 To 03/08/22
Dates Received (from/to)	03/08/22 To 03/08/22
Dates Reported (from/to)	03/09/22 To 3/9/2022
Chains of Custody Received	Yes

Comments:

Subcontracting

Organic Analyses

No analyses sub-contracted

Other Analyses

No analyses sub-contracted

Sample Condition(s)

All samples intact

A & R Laboratories, Inc.

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 001 **SV-1-5** Date & Time Sampled: 03/08/22 @ 9:19
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 001 **SV-1-5** Date & Time Sampled: 03/08/22 @ 9:19
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	**0.070**	0.0065	0.013	µg/L	**70**	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 001 **SV-1-5** Date & Time Sampled: 03/08/22 @ 9:19
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	102		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	125		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	81		70-130	%REC							EPA 8260B	03/08/22	KZ

Sample: 002 **SV-1-15** Date & Time Sampled: 03/08/22 @ 9:50
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 002 **SV-1-15** Date & Time Sampled: 03/08/22 @ 9:50
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 002 **SV-1-15** Date & Time Sampled: 03/08/22 @ 9:50
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Sample: 002 **SV-1-15**									Date & Time Sampled:		03/08/22 @ 9:50		
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
.....continued													
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	90		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	117		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	84		70-130	%REC							EPA 8260B	03/08/22	KZ
Sample: 003 **SV-2-5**									Date & Time Sampled:		03/08/22 @ 10:25		
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 003 **SV-2-5** Date & Time Sampled: 03/08/22 @ 10:25
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 003 **SV-2-5** Date & Time Sampled: 03/08/22 @ 10:25
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	**0.26**	0.0065	0.013	µg/L	**260**	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	92		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	115		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	91		70-130	%REC							EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 004 **SV-2-15** Date & Time Sampled: 03/08/22 @ 10:50
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 004 **SV-2-15** Date & Time Sampled: 03/08/22 @ 10:50
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 004 **SV-2-15** Date & Time Sampled: 03/08/22 @ 10:50
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	92		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	120		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	86		70-130	%REC							EPA 8260B	03/08/22	KZ

Sample: 005 **SV-3-5** Date & Time Sampled: 03/08/22 @ 11:26
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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STANTEC CONSULTING SVCS., INC.
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Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 005 **SV-3-5** Date & Time Sampled: 03/08/22 @ 11:26
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 005 **SV-3-5** Date & Time Sampled: 03/08/22 @ 11:26
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Sample: 005 **SV-3-5**									Date & Time Sampled:		03/08/22 @ 11:26		
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
.....continued													
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	95		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	117		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	89		70-130	%REC							EPA 8260B	03/08/22	KZ
Sample: 006 **SV-3-15**									Date & Time Sampled:		03/08/22 @ 11:48		
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 006 **SV-3-15** Date & Time Sampled: 03/08/22 @ 11:48
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 006 **SV-3-15** Date & Time Sampled: 03/08/22 @ 11:48
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	**0.090**	0.0065	0.013	µg/L	**90**	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	99		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	116		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	87		70-130	%REC							EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 007 **SV-4-5** Date & Time Sampled: 03/08/22 @ 12:14
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 007 **SV-4-5** Date & Time Sampled: 03/08/22 @ 12:14
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	**0.020**	0.0065	0.013	µg/L	**20**	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 007 **SV-4-5** Date & Time Sampled: 03/08/22 @ 12:14
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	92		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	114		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	87		70-130	%REC							EPA 8260B	03/08/22	KZ

Sample: 008 **SV-4-15** Date & Time Sampled: 03/08/22 @ 12:42
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 008 **SV-4-15** Date & Time Sampled: 03/08/22 @ 12:42
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 008 **SV-4-15** Date & Time Sampled: 03/08/22 @ 12:42
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	**0.020**	0.0065	0.013	µg/L	**20**	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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Date Reported	03/09/22
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Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Sample: 008 **SV-4-15**									Date & Time Sampled:		03/08/22 @ 12:42		
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
.....continued													
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	87		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	116		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	81		70-130	%REC							EPA 8260B	03/08/22	KZ
Sample: 009 **SV-5-5**									Date & Time Sampled:		03/08/22 @ 13:05		
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 009 **SV-5-5** Date & Time Sampled: 03/08/22 @ 13:05
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 009 **SV-5-5** Date & Time Sampled: 03/08/22 @ 13:05
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	***0.010***	0.0065	0.013	µg/L	***10***	6.5	13	µg/m3	J	0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	101		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	116		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	88		70-130	%REC							EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 010 **SV-5-15** Date & Time Sampled: 03/08/22 @ 13:38
Sample Matrix: **Air**
Purge Volume Sampled: **3**

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 010 **SV-5-15** Date & Time Sampled: 03/08/22 @ 13:38
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 010 **SV-5-15** Date & Time Sampled: 03/08/22 @ 13:38
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	96		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	116		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	85		70-130	%REC							EPA 8260B	03/08/22	KZ

Sample: 011 **SV-5-15 DUP** Date & Time Sampled: 03/08/22 @ 13:38
Sample Matrix: **Air**
Purge Volume Sampled: **3**

[VOCs by GCMS]													
Acetone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
t-Amyl Methyl Ether (TAME)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Benzene	<0.0031	0.00312	0.013	µg/L	<3.1	3.1	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromodichloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromoform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Bromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 011 **SV-5-15 DUP** Date & Time Sampled: 03/08/22 @ 13:38
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
t-Butanol (TBA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Butanone (MEK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
sec-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
tert-Butylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Disulfide	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Carbon Tetrachloride	<0.0033	0.00325	0.0065	µg/L	<3.3	3.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloroform	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Chloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Chlorotoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromochloromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromoethane (EDB)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dibromo-3-Chloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dibromomethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,4-Dichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Dichlorodifluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
cis-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,2-Dichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2,2-Dichloropropane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Sample: 011 **SV-5-15 DUP** Date & Time Sampled: 03/08/22 @ 13:38
Sample Matrix: **Air**
Purge Volume Sampled: **3**
.....continued

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
cis-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
trans-1,3-Dichloropropene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Diisopropyl Ether (DiPE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Ethyl-t-Butyl Ether (EtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Hexachlorobutadiene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
2-Hexanone	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Isopropylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Isopropyltoluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methylene Chloride	<0.0065	0.0065	0.01	µg/L	<6.5	6.5	10	µg/m3		0.13	EPA 8260B	03/08/22	KZ
4-Methyl-2-Pentanone (MIBK)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Methyl-t-butyl Ether (MtBE)	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Naphthalene	<0.0027	0.00273	0.0065	µg/L	<2.7	2.7	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ
n-Propylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Styrene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2,2-Tetrachloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Tetrachloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Toluene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trichlorobenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,1-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,1,2-Trichloroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichloroethene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,3-Trichloropropane	<0.0026	0.0026	0.013	µg/L	<2.6	2.6	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorofluoromethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Trichlorotrifluoroethane	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,2,4-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
1,3,5-Trimethylbenzene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
Vinyl Chloride	<0.0003	0.000312	0.0065	µg/L	<0.3	0.3	7	µg/m3		0.13	EPA 8260B	03/08/22	KZ

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CERTIFICATE OF ANALYSIS

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

Date Reported	03/09/22
Date Received	03/08/22
Invoice No.	94340
Cust #	1003
Permit Number	
Customer P.O.	185804236

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Analysis	Result	MDL	RL	Units	Result	MDL	RL	Units	Qual	DF	Method	Date	Tech
Sample: 011 **SV-5-15 DUP**													
Sample Matrix: **Air**													
Purge Volume Sampled: **3**													
.....continued													
m,p-Xylenes	<0.0130	0.013	0.026	µg/L	<13.0	13.0	26	µg/m3		0.13	EPA 8260B	03/08/22	KZ
o-Xylene	<0.0065	0.0065	0.013	µg/L	<6.5	6.5	13	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Vapor Sampling Tracer]													
Isopropanol (IPA)	<0.0650	0.065	0.13	µg/L	<65.0	65.0	130	µg/m3		0.13	EPA 8260B	03/08/22	KZ
[VOC Surrogates]													
Dibromofluoromethane	93		70-130	%REC							EPA 8260B	03/08/22	KZ
Toluene-D8	117		70-130	%REC							EPA 8260B	03/08/22	KZ
Bromofluorobenzene	85		70-130	%REC							EPA 8260B	03/08/22	KZ

Respectfully Submitted: Ken Zheng

Ken Zheng - President

QUALIFIERS

B = Detected in the associated Method Blank at a concentration above the routine RL
B1= BOD blank is over specifications . The reported result may be biased high.
D = Surrogate recoveries are not calculated due to sample dilution
E = Estimated value
H = Analyte was prepared and/or analyzed outside of the analytical method holding time
I = Matrix Interference
J = Analyte concentration detected between RL and MDL

ABBREVIATIONS

DF = Dilution Factor
RL = Reporting Limit
MDL = Method Detection Limit
Qual = Qualifier
Tech = Technician

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QUALITY CONTROL DATA REPORT

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO
735 E. CARNEGIE DR., STE. 280
SAN BERNARDINO, CA 92408

2203-00062

Date Reported	**03/09/2022**
Date Received	**03/08/2022**
Date Sampled	**03/08/2022**
Invoice No.	**94340**
Customer #	**1003**
Customer P.O.	**185804236**

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Method # **EPA 8260B**
QC Reference # 101468 **Date Analyzed:** 3/8/2022 **Technician:** KZ
Samples 001 002 003 004 005 006 007 008 009 010 011

Results

	LCS %REC	LCS %DUP	LCS %RPD
1,1-Dichloroethene	74	74	0.7
Benzene	85	92	8.0
Chlorobenzene	71	78	9.3
Toluene	113	96	16.4
Trichloroethene	113	117	3.9

Control Ranges

LCS %REC	LCS %RPD
70 - 130	0 - 25
70 - 130	0 - 25
70 - 130	0 - 25
70 - 130	0 - 25
70 - 130	0 - 25

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QUALITY CONTROL DATA REPORT

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO

Date Reported 03/09/2022
Date Received 03/08/2022
Date Sampled 03/08/2022

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Method blank results

Ref	Test Name	Result	Qualif	Units	MDL	Ref	Test Name	Result	Qualif	Units	MDL
101468	Acetone	<0.0625		µg/L	0.0625		2-Hexanone	<0.0625		µg/L	0.0625
	t-Amyl Methyl Ether (TAME)	<0.0063		µg/L	0.0063		Isopropylbenzene	<0.0063		µg/L	0.0063
	Benzene	<0.0030		µg/L	0.0030		4-Isopropyltoluene	<0.0063		µg/L	0.0063
	Bromobenzene	<0.0063		µg/L	0.0063		Methylene Chloride	<0.0063		µg/L	0.0063
	Bromochloromethane	<0.0063		µg/L	0.0063		4-Methyl-2-Pentanone (MIBK)	<0.0625		µg/L	0.0625
	Bromodichloromethane	<0.0063		µg/L	0.0063		Methyl-t-butyl Ether (MtBE)	<0.0063		µg/L	0.0063
	Bromoform	<0.0063		µg/L	0.0063		Naphthalene	<0.0026		µg/L	0.0026
	Bromomethane	<0.0063		µg/L	0.0063		n-Propylbenzene	<0.0063		µg/L	0.0063
	t-Butanol (TBA)	<0.0625		µg/L	0.0625		Styrene	<0.0063		µg/L	0.0063
	2-Butanone (MEK)	<0.0625		µg/L	0.0625		1,1,1,2-Tetrachloroethane	<0.0063		µg/L	0.0063
	n-Butylbenzene	<0.0063		µg/L	0.0063		1,1,2,2-Tetrachloroethane	<0.0063		µg/L	0.0063
	sec-Butylbenzene	<0.0063		µg/L	0.0063		Tetrachloroethene	<0.0063		µg/L	0.0063
	tert-Butylbenzene	<0.0063		µg/L	0.0063		Toluene	<0.0063		µg/L	0.0063
	Carbon Disulfide	<0.0625		µg/L	0.0625		1,2,3-Trichlorobenzene	<0.0063		µg/L	0.0063
	Carbon Tetrachloride	<0.0031		µg/L	0.0031		1,2,4-Trichlorobenzene	<0.0063		µg/L	0.0063
	Chlorobenzene	<0.0063		µg/L	0.0063		1,1,1-Trichloroethane	<0.0063		µg/L	0.0063
	Chloroethane	<0.0063		µg/L	0.0063		1,1,2-Trichloroethane	<0.0063		µg/L	0.0063
	Chloroform	<0.0063		µg/L	0.0063		Trichloroethene	<0.0063		µg/L	0.0063
	Chloromethane	<0.0063		µg/L	0.0063		1,2,3-Trichloropropane	<0.0025		µg/L	0.0025
	2-Chlorotoluene	<0.0063		µg/L	0.0063		Trichlorofluoromethane	<0.0063		µg/L	0.0063
	4-Chlorotoluene	<0.0063		µg/L	0.0063		Trichlorotrifluoroethane	<0.0063		µg/L	0.0063
	Dibromochloromethane	<0.0063		µg/L	0.0063		1,2,4-Trimethylbenzene	<0.0063		µg/L	0.0063
	1,2-Dibromoethane (EDB)	<0.0063		µg/L	0.0063		1,3,5-Trimethylbenzene	<0.0063		µg/L	0.0063
	1,2-Dibromo-3-Chloropropane	<0.0063		µg/L	0.0063		Vinyl Chloride	<0.0003		µg/L	0.0003
	Dibromomethane	<0.0063		µg/L	0.0063		m,p-Xylenes	<0.0125		µg/L	0.0125
	1,2-Dichlorobenzene	<0.0063		µg/L	0.0063		o-Xylene	<0.0063		µg/L	0.0063
	1,3-Dichlorobenzene	<0.0063		µg/L	0.0063		Isopropanol (IPA)	<0.0625		µg/L	0.0625
	1,4-Dichlorobenzene	<0.0063		µg/L	0.0063						
	Dichlorodifluoromethane	<0.0063		µg/L	0.0063						
	1,1-Dichloroethane	<0.0063		µg/L	0.0063						
	1,2-Dichloroethane	<0.0063		µg/L	0.0063						
	1,1-Dichloroethene	<0.0063		µg/L	0.0063						
	cis-1,2-Dichloroethene	<0.0063		µg/L	0.0063						
	trans-1,2-Dichloroethene	<0.0063		µg/L	0.0063						
	1,2-Dichloropropane	<0.0063		µg/L	0.0063						
	1,3-Dichloropropane	<0.0063		µg/L	0.0063						
	2,2-Dichloropropane	<0.0063		µg/L	0.0063						
	1,1-Dichloropropene	<0.0063		µg/L	0.0063						
	cis-1,3-Dichloropropene	<0.0063		µg/L	0.0063						
	trans-1,3-Dichloropropene	<0.0063		µg/L	0.0063						
	Diisopropyl Ether (DiPE)	<0.0063		µg/L	0.0063						
	Ethylbenzene	<0.0063		µg/L	0.0063						
	Ethyl-t-Butyl Ether (EtBE)	<0.0063		µg/L	0.0063						
	Hexachlorobutadiene	<0.0063		µg/L	0.0063						

A & R Laboratories, Inc.

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ONTAIRO, CA 91761
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QUALITY CONTROL DATA REPORT

2203-00062

STANTEC CONSULTING SVCS., INC.
BRIAN VIGGIANO

Date Reported	**03/09/2022**
Date Received	**03/08/2022**
Date Sampled	**03/08/2022**

Project: NE Corner Dublin Ave. & Marine Ave., Gardena, CA 90249

Respectfully Submitted: Ken Zheng

Ken Zheng - President

ARL

A & R Laboratories
1650 S. Grove Ave., Ste C, Ontario, CA 91761
Tel: 951-779-0310 / 909-781-6335 Fax: 951-779-0344
E-mail: office@arlaboratories.com

CHAIN OF CUSTODY

185804236

A & R Work Order #: 2203-62

Page 1 of 1

Client Name: Stantec
E-mail: brian.viggiano@stantec.com
Address: 735 E. Carnegie Dr., Ste. 280, San Bernardino, CA 92408
Report Attention: Brian V. | Phone #: 909.226.7651 | Fax: #
Sampled By: KZ
☐ Chilled ☒ Intact ☐ Seal
Project No./ Name:
Project Site: NE Dublin Ave & Marine Ave, Gardena

Turn Around Time Requested: ☐ Rush 8 12 24 48 Hours ☐ Normal Mobile

Lab # (Lab use)	Client Sample ID	Sample Collection Date	Sample Collection Time	Matrix Type	Sample Preserve	No., type* & size of container	EPA8260B (VOCs & Oxygenates)	EPA8260B(BTEX & Oxygenates)	8260B / 8015 (Gasoline)	8015 (Diesel)	EPA8081A (Organochlorine Pesticides)	EPA 8082 (PCBs)	EPA 8015M (Carbon Chain C4-C40)	EPA 6010B/7000 (CAM 17 Metals)	Micro: Plate Cnt., Coliform, E-Coli	Remarks
-1	SV-1-5	3/8/22	9:19	Air		250 ml G	X									
-2	↓ -15		9:50													
-3	SV-2-5		10:25													
-4	↓ -15		10:50													
-5	SV-3-5		11:26													
-6	↓ -15		11:48													
-7	SV-4-5		12:14													
-8	↓ -15		12:42													
-9	SV-5-5		13:05													
-10	↓ -15		13:38													
-11	↓ -15 DUP	↓	13:38	↓		↓	↓									

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
[signature]	Stantec	3/8/22	14:36	[signature]	A&R	3/8/22	14:36
Relinquished By	Company	Date	Time	Received By	Company	Date	Time

Note: Samples are discarded 30 days after results are reported unless other arrangements are made.

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SD=Solid Waste, SL=Sludge, SS=Soil/Sediment, AR=Air, PP=Pure Product

Preservative Code: IC=Ice, HC=HCl, HN=HNO_3, SH=NaOH, ST=$Na_2S_2O_3$, HS=H_2SO_4

* Sample Container Types: T=Tedlar Air Bag, G=Glass Container, ST= Steel Tube, B= Brass Tube, P=Plastic Bottle, V=VOA Vial, E= EnCore

Appendix B BORING LOGS

PROJECT: **G3 Urban - Gardena**
LOCATION: **2545 Marine Ave. Gardena, CA**
PROJECT NUMBER: **185804236**

WELL / BOREHOLE NO: **SV-1** PAGE 1 OF 1

Stantec

DRILLING: STARTED **3/3/22** COMPLETED: **3/3/22**
INSTALLATION: STARTED **3/3/22** COMPLETED: **3/3/22**
DRILLING COMPANY: **Gregg Drilling**
DRILLING EQUIPMENT: **DPT 10**
DRILLING METHOD: **DPT**
SAMPLING EQUIPMENT: **Acetate**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **15.5**
STATIC DTW (ft): **NE** WELL DEPTH (ft): **---**
WELL CASING DIA (in): **---** BOREHOLE DIAMETER (in): **2.25**
LOGGED BY: **DH** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
		SP-SM	**POORLY GRADED SAND WITH SILT** ; SP-SM; 10YR 5/3 brown; Fine- to medium-grained sand; non plastic; moist; no odor; no staining; little to some silt		--			0.3		Hydrated Bentonite #8
			Increase in fines							Dry Bentonite
5		SM	**SILTY SAND** ; SM; 10YR 6/6 dark brown; Fine-grained; non plastic; moist; no odor; no staining; trace to few medium sand		--			0.4	5	#2/12 Sand Filter Pack Soil Vapor Point 1/4" Nylaflow Tubing
		ML	**SANDY SILT** ; ML; 10YR 4/2 dark grayish brown; Fine-grained; non plastic; moist; no odor; no staining							
10					--			0.5	10	Hydrated Bentonite #8
		CL	**CLAY** ; CL; 10YR 4/3 brown; Fine-grained; medium plastic; medium dense; moist; no odor; no staining							
					--			0.7		
		SM	**SILTY SAND** ; SM; 10YR 6/6 dark brown; Fine-grained; non plastic; moist; no odor; no staining; trace to few medium sand							
		CL	**CLAY** ; CL; 10YR 4/3 brown; Fine-grained; medium plastic; medium dense; moist; no odor; no staining							Dry Bentonite
15					--			0.2	15	#2/12 Sand Filter Pack Soil Vapor Point #2/12 Sand Filter Pack
			Hole terminated at 15.5 feet.							

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PROJECT: **G3 Urban - Gardena**
LOCATION: **2545 Marine Ave. Gardena, CA**
PROJECT NUMBER: **185804236**

WELL / BOREHOLE NO: **SV-2** PAGE 1 OF 1

Stantec

DRILLING: STARTED **3/3/22** COMPLETED: **3/3/22**
INSTALLATION: STARTED **3/3/22** COMPLETED: **3/3/22**
DRILLING COMPANY: **Gregg Drilling**
DRILLING EQUIPMENT: **DPT 10**
DRILLING METHOD: **DPT**
SAMPLING EQUIPMENT: **Acetate**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **15.5**
STATIC DTW (ft): **NE** WELL DEPTH (ft): **---**
WELL CASING DIA (in): **---** BOREHOLE DIAMETER (in): **2.25**
LOGGED BY: **DH** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
		SP	**POORLY GRADED SAND** ; SP; 10YR 5/3 dark brown; some fine to coarse gravel; little very fine to fine sand		--			0.3		Hydrated Bentonite #8
		SP-SM	**POORLY GRADED SAND WITH SILT** ; SP-SM; 10YR 3/3 dark brown; Fine- to medium-grained sand; non plastic; moist; no odor; no staining; little to some silt		--			0.4		Dry Bentonite
5									5	#2/12 Sand Filter Pack Soil Vapor Point 1/4" Nylaflow Tubing
		SM	**SILTY SAND** ; SM; 10YR 3/3 dark brown; Fine-grained; non plastic; moist; no odor; no staining; trace to few medium sand		--			0.1		
10					--			0.3	10	Hydrated Bentonite #8
		ML	**SANDY SILT** ; ML; 10YR 3/3 dark brown; Fine-grained; non plastic; moist; no odor; no staining							Dry Bentonite
15					--			0.1	15	#2/12 Sand Filter Pack Soil Vapor Point #2/12 Sand Filter Pack
			Hole terminated at 15.5 feet.							

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PROJECT: **G3 Urban - Gardena**
LOCATION: **2545 Marine Ave. Gardena, CA**
PROJECT NUMBER: **185804236**

WELL / BOREHOLE NO: **SV-3** PAGE 1 OF 1

Stantec

DRILLING: STARTED **3/3/22** COMPLETED: **3/3/22**
INSTALLATION: STARTED **3/3/22** COMPLETED: **3/3/22**
DRILLING COMPANY: **Gregg Drilling**
DRILLING EQUIPMENT: **DPT 10**
DRILLING METHOD: **DPT**
SAMPLING EQUIPMENT: **Acetate**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **15.5**
STATIC DTW (ft): **NE** WELL DEPTH (ft): **---**
WELL CASING DIA (in): **---** BOREHOLE DIAMETER (in): **2.25**
LOGGED BY: **DH** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
		SW-SM	**WELL GRADED SAND WITH SILT AND GRAVEL** ; SW-SM; 10YR 5/2 grayish brown; Medium- to fine-grained; dry; no odor; no staining		--			0.1		Hydrated Bentonite #8
			Medium-sized gravel							Dry Bentonite
5		SP-SM	**POORLY GRADED SAND WITH SILT** ; SP-SM; 10YR 4/2 dark brown; Fine- to medium-grained sand; non plastic; moist; no odor; no staining; little to some silt		--			0.0	5	#2/12 Sand Filter Pack Soil Vapor Point 1/4" Nylaflow Tubing
					--			0.0		
		CL	**CLAY** ; CL; 10YR 3/2 very dark brown; Fine-grained; medium plastic; medium dense; moist; no odor; no staining							
10		SP-SM	**POORLY GRADED SAND WITH SILT** ; SP-SM; 10YR 4/2 dark brown; Fine-grained; non plastic; moist; no odor; no staining; trace to few medium sand						10	Hydrated Bentonite #8
		ML	**SANDY SILT** ; ML; 10YR 4/2 dark brown; Fine-grained; non plastic; moist; no odor; no staining							
		CL	**CLAY** ; CL; 10YR 3/2 very dark brown; Fine-grained; medium plastic; medium dense; moist; no odor; no staining		--			0.0		
15					--			0.0	15	Dry Bentonite #2/12 Sand Filter Pack Soil Vapor Point #2/12 Sand Filter Pack
			Hole terminated at 15.5 feet.							

PROJECT: **G3 Urban - Gardena**
LOCATION: **2545 Marine Ave. Gardena, CA**
PROJECT NUMBER: **185804236**

WELL / BOREHOLE NO: **SV-4** PAGE 1 OF 1

Stantec

DRILLING: STARTED **3/3/22** COMPLETED: **3/3/22**
INSTALLATION: STARTED **3/3/22** COMPLETED: **3/3/22**
DRILLING COMPANY: **Gregg Drilling**
DRILLING EQUIPMENT: **DPT 10**
DRILLING METHOD: **DPT**
SAMPLING EQUIPMENT: **Acetate**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **15.5**
STATIC DTW (ft): **NE** WELL DEPTH (ft): **---**
WELL CASING DIA (in): **---** BOREHOLE DIAMETER (in): **2.25**
LOGGED BY: **DH** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
		SW-SM	**WELL GRADED SAND WITH SILT AND GRAVEL** ; SW-SM; 10YR 5/2 grayish brown; Medium- to fine-grained; dry; no odor; no staining		--			0.0		Hydrated Bentonite #8
		SP-SM	**POORLY GRADED SAND WITH SILT** ; SP-SM; 10YR 4/6 dark yellowish brown; Fine- to medium-grained sand; non plastic; moist; no odor; no staining; little to some silt Trace small gravel		--			0.0		Dry Bentonite #2/12 Sand Filter Pack Soil Vapor Point 1/4" Nylaflow Tubing
5		SM	**SILTY SAND** ; SM; 10YR 4/6 dark yellowish brown; Fine-grained; non plastic; moist; no odor; no staining; trace to few medium sand		--			0.1	5	
10		ML	**SANDY SILT** ; ML; 10YR 4/6 dark yellowish brown; Fine-grained; non plastic; moist; no odor; no staining		--			0.0	10	Hydrated Bentonite #8
		CL	**CLAY** ; CL; 10YR 4/6 dark yellowish brown; Fine-grained; medium plastic; medium dense; moist; no odor; no staining		--			0.0	15	Dry Bentonite #2/12 Sand Filter Pack Soil Vapor Point #2/12 Sand Filter Pack
15			Hole terminated at 15.5 feet.							

PROJECT: **G3 Urban - Gardena**
LOCATION: **2545 Marine Ave. Gardena, CA**
PROJECT NUMBER: **185804236**

WELL / BOREHOLE NO: **SV-5** PAGE 1 OF 1

Stantec

DRILLING: STARTED **3/3/22** COMPLETED: **3/3/22**
INSTALLATION: STARTED **3/3/22** COMPLETED: **3/3/22**
DRILLING COMPANY: **Gregg Drilling**
DRILLING EQUIPMENT: **DPT 10**
DRILLING METHOD: **DPT**
SAMPLING EQUIPMENT: **Acetate**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **15.5**
STATIC DTW (ft): **NE** WELL DEPTH (ft): **---**
WELL CASING DIA (in): **---** BOREHOLE DIAMETER (in): **2.25**
LOGGED BY: **DH** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
		SW-SM	**WELL GRADED SAND WITH SILT AND GRAVEL** ; SW-SM; 10YR 5/2 grayish brown; Medium- to fine-grained; dry; no odor; no staining		--			0.0		Hydrated Bentonite #8
		SP-SM	**POORLY GRADED SAND WITH SILT** ; SP-SM; 10YR 4/6 dark yellowish brown; Fine- to medium-grained sand; non plastic; moist; no odor; no staining; little to some silt Trace small gravel		--			0.0		Dry Bentonite #2/12 Sand Filter Pack Soil Vapor Point 1/4" Nylaflow Tubing
5		SM	**SILTY SAND** ; SM; 10YR 4/6 dark yellowish brown; Fine-grained; non plastic; moist; no odor; no staining; trace to few medium sand		--			0.0	5	
10		ML	**SANDY SILT** ; ML; 10YR 4/6 dark yellowish brown; Fine-grained; non plastic; moist; no odor; no staining		--			0.0	10	Hydrated Bentonite #8
		CL	**CLAY** ; CL; 10YR 4/6 dark yellowish brown; Fine-grained; medium plastic; medium dense; moist; no odor; no staining		--			0.0	15	Dry Bentonite #2/12 Sand Filter Pack Soil Vapor Point #2/12 Sand Filter Pack
15			Hole terminated at 15.5 feet.							

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