

September 2020 | Initial Study

19465 EAST WALNUT DRIVE ELECTRONIC BILLBOARD

For City of Industry

Prepared for:

Client

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Abbreviations and Acronyms

AAQS	ambient air quality standards
AB	Assembly Bill
AQMP	air quality management plan
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGS	California Geologic Survey
CMP	congestion management program
CNEL	community noise equivalent level
CO	carbon monoxide
CO _{2e}	carbon dioxide equivalent
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
EIR	environmental impact report
EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
GHG	greenhouse gases
GWP	global warming potential
IPCC	Intergovernmental Panel on Climate Change
LST	localized significance thresholds
NOX	nitrogen oxides
O ₃	ozone
PM	particulate matter
ppm	parts per million
PPV	peak particle velocity
RPS	renewable portfolio standard
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments

Abbreviations and Acronyms

South Coast AQMD	South Coast Air Quality Management District
SoCAB	South Coast Air Basin
SOX	sulfur oxides
SWRCB	State Water Resources Control Board
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
VOC	volatile organic compound

1. Introduction

The project applicant, POP! Outdoor Media, is seeking approval of the City of Industry (“City”) for the conversion of an existing double-sided billboard to a new double-sided electronic billboard on a 13.21-acre parcel located in the southern portion of the City.

The City serves as the Lead Agency for the proposed project in accordance with the California Environmental Quality Act (CEQA), Section 15051(c). This Initial Study is a preliminary evaluation of the potential environmental consequences associated with the proposed project. As part of the City’s approval process, the proposed project is required to undergo an environmental review pursuant to CEQA. The lead agency uses the initial study analysis to determine whether an environmental impact report (EIR) or a negative declaration (ND) is required. If the initial study concludes that the project may have a significant effect on the environment, an EIR must be prepared. Otherwise, a ND or mitigated negative declaration (MND) is prepared

1.1 PROJECT LOCATION

The proposed project site is located at 19465 East Walnut Drive North in the City of Industry, Los Angeles County, (APN: 8760-008-005) (*see Figure 1, Regional Location*). The closest major intersection is Fairway Drive and East Walnut Drive North, approximately 1,745 feet to the northeast. Regional access to the site is provided from State Route 60 (SR-60) via Fairway Drive to East Walnut Drive North. Direct access to the project site from East Walnut Street is provided via a driveway on the southern boundary of the project site (*see Figure 2, Local Vicinity*).

1.2 ENVIRONMENTAL SETTING

1.2.1 Existing Land Use

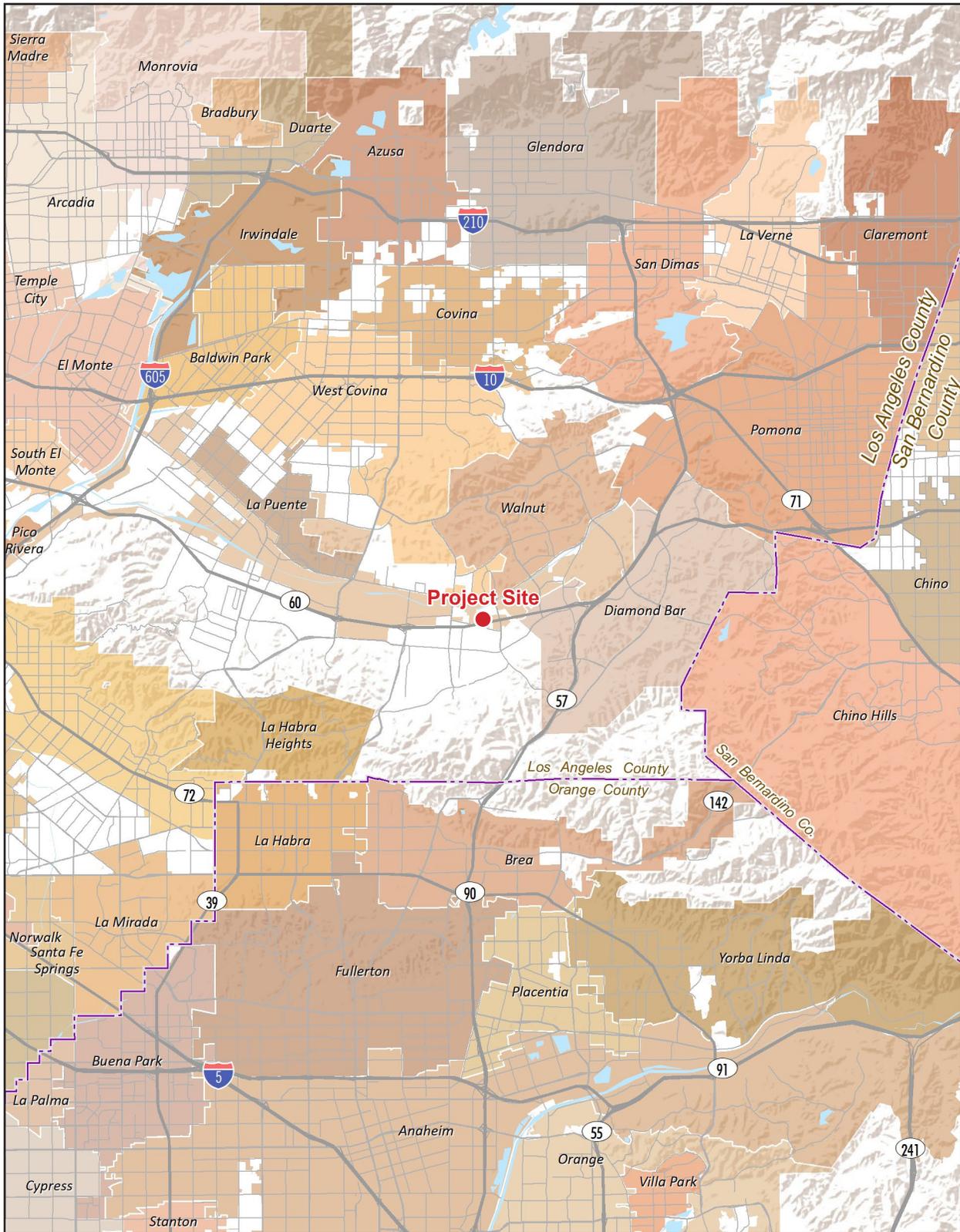
The project site is fully developed with two warehouse buildings, one on the southwestern portion of the project site and the other on the northern portion of the project site. A paved surface parking lot for passenger vehicles, as well as semi-trucks, occupies the southeastern portion of the project site. Light landscaping consisting of trees, shrubs, grass, and bushes are located along portions of the building and the southern boundary of the project site. An existing static dual-sided billboard sign is located along the southeastern perimeter of the proposed project site that is 67’-1.5” in height with 14-foot high by 48-foot wide sign faces, approximately 30 feet higher than the adjacent industrial buildings. The current billboard is located approximately 125 feet to the north of the westbound travel lanes of SR-60. Site lighting is limited to security lighting along the perimeter of the existing buildings and the up light of the billboard.

1. Introduction

1.2.2 Surrounding Land Use

The project area is largely characterized by industrial uses with some proximate commercial and residential uses. Industrial uses exist in the immediate vicinity of the project site to the west, north, and east. The Union Pacific railroad runs proximate to the northern boundary of the project site. Directly south of the project site is State Route 60 (SR-60) with auto-oriented commercial uses south of SR-60. Further south, approximately 750 feet, exists single family residential neighborhoods. The closest billboards within the vicinity of the proposed project site include a static billboard located approximately 700 feet to the east of the existing static billboard, and a static billboard located approximately 1,180 feet to the west of the proposed project site.

Figure 1 - Regional Location



Note: Unincorporated county areas are shown in white.

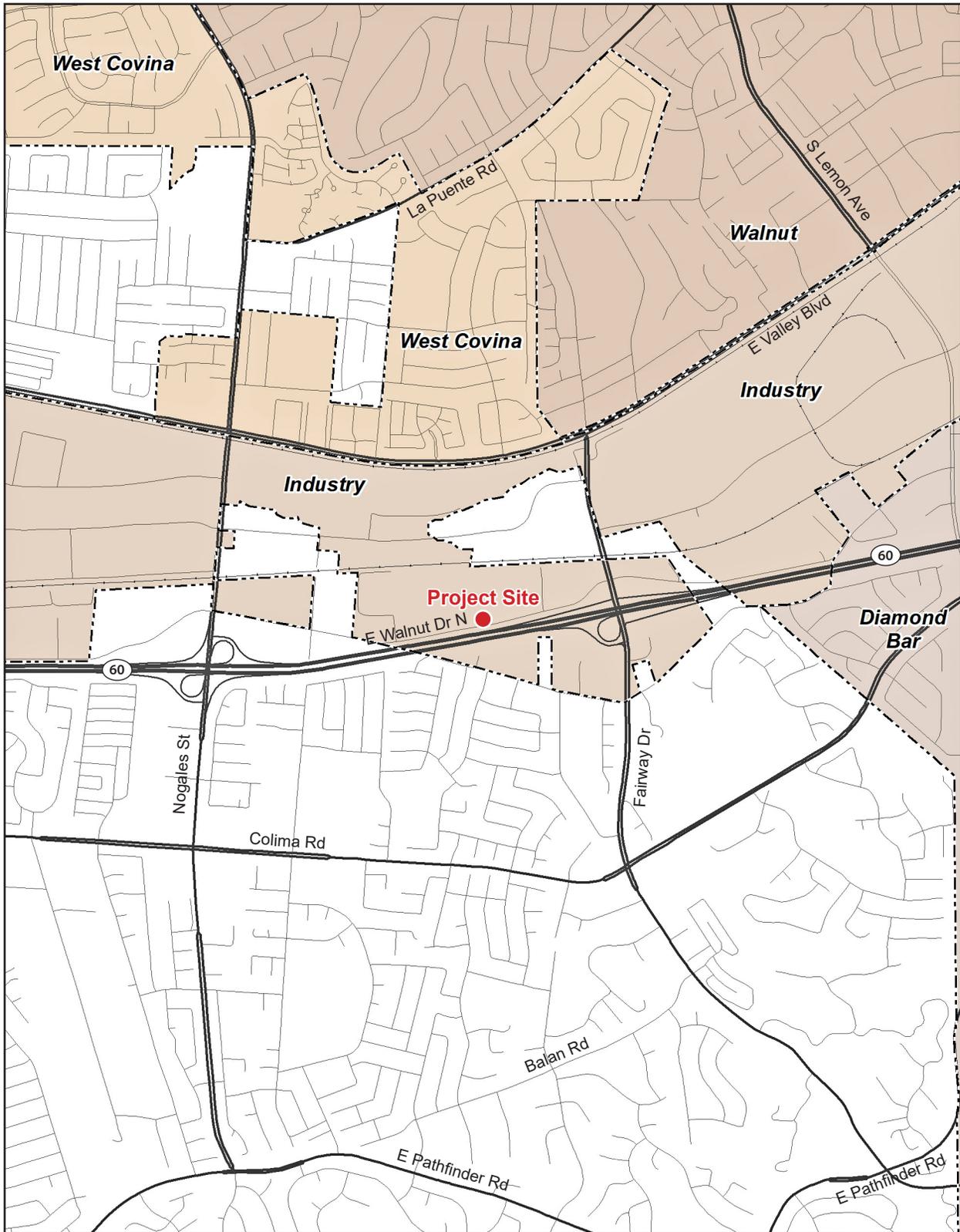


Source: ESRI, 2020

1. Introduction

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Figure 2 - Local Vicinity



--- City Boundary

Note: Unincorporated county areas are shown in white.

Source: ESRI, 2020

0 2,000
Scale (Miles)



1. Introduction

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1.3 PROJECT DESCRIPTION

1.3.1 Proposed Project

The proposed project involves the conversion of an existing double-sided billboard into a new double-sided electronic billboard. The new electronic billboard will be located at the southeastern corner of a 13.21-acre parcel in the City of Industry. The 13.21-acre parcel contains a warehouse on the southwest portion of the parcel, a warehouse on the northern part of the parcel, a paved parking lot in the central and southeast part of the parcel, and landscaping consisting of grass, trees, bushes, and shrubs running along portions of the warehouses and the southern boundary of the parcel. The new electronic billboard will be oriented for viewing from the westbound lanes of the SR-60 located approximately 125 feet south of the proposed billboard. Hours of operation for the new electronic billboard would be 24 hours a day, 7 days a week. The proposed project would conform with all of the provision of the City of Industry's Municipal Code (Code), Section 15.32.050.I regarding off-site signs. Per Section 15.32.050.I.4.c.v. the display would be visible for a minimum of 8-seconds before changing, and the image projected would appear static. Additionally, the applicant would be required to demonstrate that the lighting levels of the proposed billboard would not exceed 0.3 foot candles of the ambient light levels during daytime and evening hours (refer to Section 3.1 for an analysis of the proposed project's light level impacts).

Figure 3, *Billboard Site Plan*, shows the general layout of the proposed billboard, while *Figures 4 through 6* provide visual simulations of how the billboard would appear to motorists along SR-60. There are no electronic billboards within 0.25 miles of the project site along the westbound lanes of the SR-60.

The new electronic billboard will be 67'-1.5" in height (same as the existing billboard) with a double sided display face that would be 14-feet high by 48-feet wide, for an area of 672 square feet per display face — the exact same display face dimensions as the existing billboard. The new electronic billboard would consist of a 36-foot pipe column fixed to the ground, five feet north of the original footing – as allowed by Section 15.32050.I.4.c.vi. – and would run vertically toward a 30-foot horizontal pipe column supporting the east and west facing electronic signs. A center catwalk would run above the horizontal pipe column and between the two signs. Approximately half of the billboard will be suspended over the existing paved parking lot with the other portion suspended over landscaping.

Demolition and construction are anticipated to begin between Spring 2020 to Fall 2020 and be completed in one phase lasting 5 to 7 business days. Demolition of the current billboard would remove all existing features including the 39-foot pipe column supporting the sign, display lights, two catwalks, and signage. Approximately 14 cubic yards of soil would be exported during demolition and construction activities. No trees would be removed during construction.

1.4 EXISTING ZONING AND GENERAL PLAN

The project site is zoned as Industrial ("I") and designated as Employment in the General Plan.

1. Introduction

The proposed project's sign use is allowed under existing zoning and General Plan designations, pursuant to Section 15.32.050.I.4 of the City's Code. Additional approvals required from the City currently in process include:

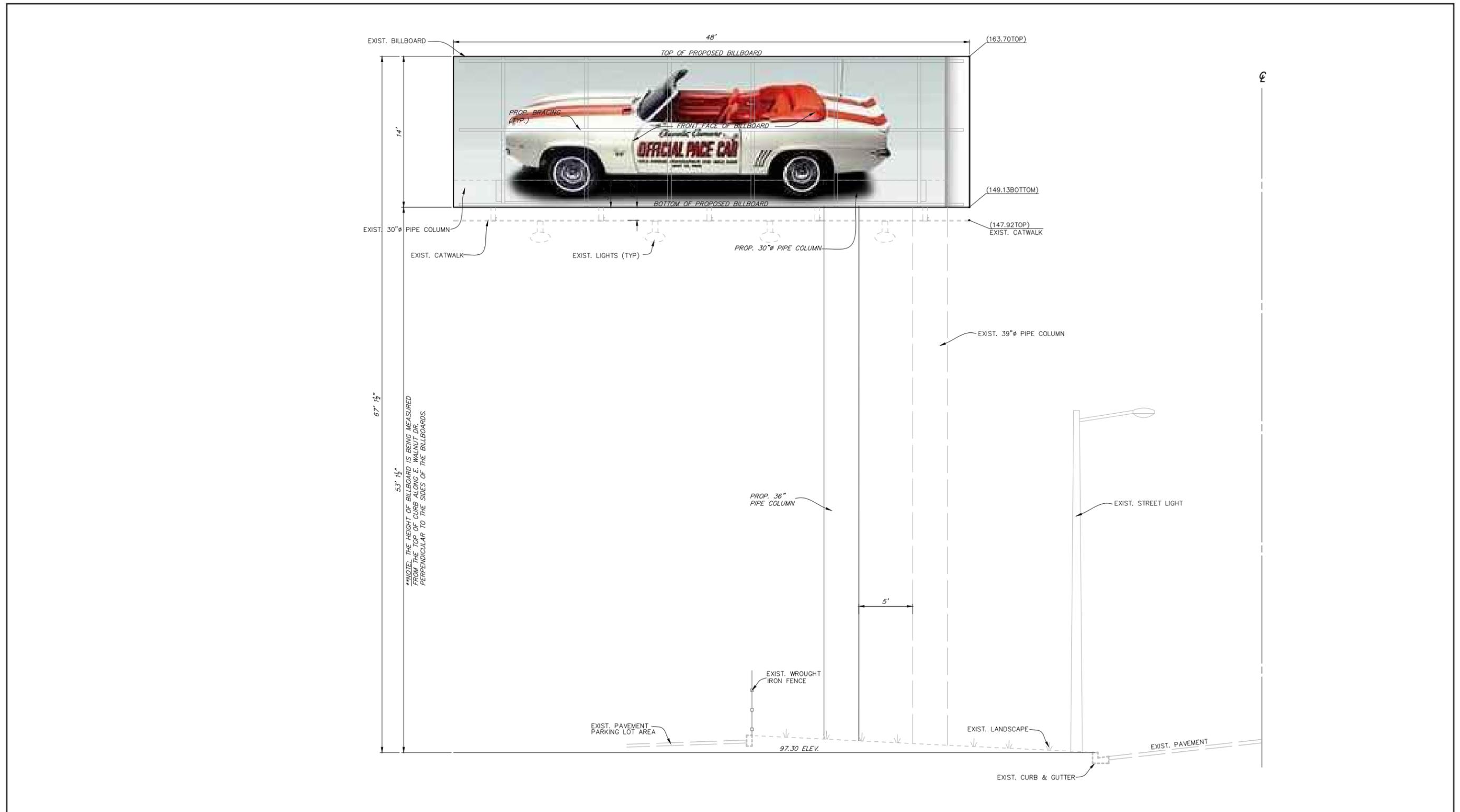
- Development Plan Application.

1.5 OTHER AGENCY ACTION REQUESTED

REGIONAL AGENCIES

- California Department of Transportation (Caltrans) for Outdoor Advertising Permit. – Caltrans provides specific requirements and restrictions concerning outdoor advertising displays and the conduct of outdoor advertising activities, including licensing and permitting requirements.

Figure 3 - Site Plan - Billboard



1. Introduction

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Figure 4 - Visual Simulation A.



View from State Route 60 looking west.

Source: Peter Raulli, Pop! Outdoor Media, 2019

1. Introduction

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Figure 5 - Visual Simulation B.



View from eastbound State Route 60 looking northeast.

Source: Peter Raulli, Pop! Outdoor Media, 2019

1. Introduction

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Figure 6 - Visual Simulation C.



View from E Walnut Dr looking north.

Source: Peter Raulli, Pop! Outdoor Media, 2019

1. Introduction

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2. Environmental Checklist

2.1 PROJECT INFORMATION

1. **Project Title:** 19465 East Walnut Drive Electronic Billboard

2. **Lead Agency Name and Address:**

City of Industry
15625 Stafford Street
City of Industry, CA 91744

3. **Contact Person and Phone Number:**

Kathy Tai, Development Services Manager
626.333.2211

4. **Project Location:** The proposed project is located at 19465 East Walnut Drive North in the City of Industry, Los Angeles County, (APN: 8760-008-005). The closest major intersection is Fairway Drive and East Walnut Drive North, approximately 1,745 feet to the northeast

5. **Project Sponsor's Name and Address:**

Peter Rauli, POP! Outdoor Media
970 North Broadway, Suite 201
Los Angeles, CA, 90012

6. **General Plan Designation:**

Employment

7. **Zoning:**

Industrial

8. **Description of Project:**

The proposed project involves the conversion of an existing static double-sided billboard that is 67'-1.5" in height with 14-foot high by 48-foot wide sign faces into a new double-sided electronic billboard that is the same height and width and the static billboard.

9. **Surrounding Land Uses and Setting:**

The uses surrounding the proposed billboard consist of a mix industrial uses west, north, and east and some proximate commercial and residential uses to the south.

10. **Other Public Agencies Whose Approval Is Required (e.g., permits, financing approval, or participating agreement):**

California Department of Transportation (Caltrans) for Outdoor Advertising Permit

2. Environmental Checklist

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.94 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

The Soboba Band of Luiseno Indians and the Gabrieleño Band of Mission Indians – Kizh Nation are on the City of Industry's notification list pursuant to AB 52. The City prepared notification letters and distributed them to the identified tribal representatives on May 26, 2020. Only the Gabrieleño Band of Mission Indians – Kizh Nation requested consultation and the City is currently engaged in consultation with the tribe. The outcome of this consultation has been reported in this Mitigated Negative Declaration.

2. Environmental Checklist

2.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact," as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture / Forestry Resources | <input type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use / Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |

2.3 DETERMINATION (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

2. Environmental Checklist

2.4 EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) **Earlier Analyses Used.** Identify and state where they are available for review.
 - b) **Impacts Adequately Addressed.** Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) **Mitigation Measures.** For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

2. Environmental Checklist

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
 - a) the significance criteria or threshold, if any, used to evaluate each question; and
 - b) the mitigation measure identified, if any, to reduce the impact to less than significance.

2. Environmental Checklist

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3. Environmental Analysis

Section 2.4 provided a checklist of environmental impacts. This section provides an evaluation of the impact categories and questions contained in the checklist and identifies mitigation measures, if applicable.

3.1 AESTHETICS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact. The proposed project would allow for the replacement of a 67'-1.5" tall static billboard with an electronic billboard that is the same height and width in the same location of a highly urbanized area of the City of Industry. The display area of the proposed electronic billboard would be 14-feet high by 48-foot wide sign face, the same dimensions as the existing static billboard. The proposed billboard would be approximately 30 feet taller than the adjacent industrial buildings, the same as existing conditions. The billboard would be located along the southern perimeter of the property, and would not obstruct any views of the windowless industrial buildings.

The closest major intersection is Fairway Drive and East Walnut Drive North, approximately 1,745 feet to the northeast. There are no scenic vistas in the project area. The sign installation would occur adjacent to a roadway surrounded by industrial uses to the west, north, and east, and SR-60 located approximately 125 feet to the south. Views along these roadways consist entirely of buildings and ornamental landscaping. Replacement of the static billboard with an electronic billboard would not interrupt any scenic vista; therefore, no impact would occur.

3. Environmental Analysis

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no trees, historic buildings or rock outcroppings onsite. The project site is not in a state scenic highway, as the nearest such highway to the site is SR-91 approximately 11 miles to the south (Caltrans 2020). As there are no resources near, or affected by the proposed project, no impact would occur.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. Industrial uses exist in the immediate vicinity of the project site to the west, north, and east. The Union Pacific railroad runs proximate to the northern boundary of the project site. Directly south of the project site is SR-60 with auto-oriented commercial uses south of SR-60. The proposed project would allow for the construction of a double-sided electronic billboard, which replaces an existing static billboard. The new billboard would be internally lit and could display different images, unlike the existing non-electronic sign, but the installation of the billboard would occur in highly urbanized and lit environments.

The proposed project would be required to comply with the provisions of the City of Industry's Municipal Code (Code), Section 15.32.050.I regarding Off-site signs. Per Section 15.32.050.I.4.c. v. the display would be visible for a minimum of 8-seconds before changing, and the image projected would appear static. According to Section 15.32.050.I.4.c.vi. of the Code, the existing support pole may be replaced if necessary in order to support the new electronic message board sign; however, the new support must be the same height as the existing pole and must be located in the same location or up to five feet from the existing foundation. The proposed project would be located five feet to the north of the existing static billboard, and would have a total height of 67'-1.5", same as the existing billboard. As with the existing billboard, the face display would be oriented to face the travel lanes of SR-60, and would not be located within 1,000 feet of another electronic billboard along the westbound lanes of SR-60, or within 200 feet of residential uses. Therefore, the project would not conflict with zoning or other regulations and impacts to scenic quality would be less than significant.

d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed billboard would create a new source of light and glare during daylight and evening hours as it would operate 24 hours per day. The new electronic billboard will be 67'-1.5" in height (same as the existing billboard) with a double sided display face that would be 14-feet high by 48-feet wide, for with an area of 672 square feet per display face — the exact same display face dimensions as the existing billboard. The new electronic billboard would consist of a 36-foot pipe column fixed to the ground, five feet north of the original footing – as allowed by Section 15.32050.I.4.c.vi. – and would run vertically toward a 30-foot horizontal pipe column supporting the east and west facing electronic signs. A center catwalk would run above the horizontal pipe column and between the two signs. Approximately half of the billboard will be suspended over the existing paved parking lot with the other portion suspended over landscaping. The billboard will include a series of lights—light-emitting diodes (LED) with a changing display. Per Section

3. Environmental Analysis

15.32.05.I.4.c.iv. the display would be visible for a minimum of 8-seconds before changing, and the image projected would appear static, and at no time may the image project the appearance of motion or any effect that gives the appearance of movement.

Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies. In some cases, excessive light and glare can be annoying to residents or other sensitive land uses; be disorienting or dangerous to drivers; impair the character of rural communities; and/or adversely affect wildlife.

The nighttime illumination and glare analysis addresses the effects of a project’s nighttime lighting on adjoining uses and areas. Light and glare impacts are determined through a comparison of the existing light sources with the proposed lighting plan or policies. If the project has the potential to generate spill light on adjacent sensitive receptors or generate glare at receptors in the vicinity of the site, mitigation measures can be provided to reduce potential impacts, as necessary. The following provides relevant lighting assessment terminology used in this analysis.

Foot-candle. The unit of measure expressing the quantity of light on a surface. One foot-candle is the illuminance produced by a candle on a surface of one square foot from a distance of one foot. The general benchmarks for light levels are shown in Table 1.

Table 1 General Light Levels Benchmark

Outdoor Light	Foot-candles
Direct Sunlight	10,000
Full Daylight	1,000
Overcast Day	100
Dusk	10
Twilight	1
Deep Twilight	0.1
Full Moon	0.01
Quarter Moon	0.001
Moonless Night	0.0001
Overcast Night	0.00001
Gas station canopies	25–30
Typical neighborhood streetlight	1.0–5.0

Source: NOAA 2016.

Per Section 15.32.05.I.4.c.iii, the billboard must be installed with automatic dimming technology to adjust the brightness of the sign relative to ambient light so that light levels of the proposed project do not exceed ambient daytime or nighttime lighting by 0.3 foot candles. In order to determine the level of illumination and glare that can be generated from the electronic message sign, and in accordance with Section 15.32.050.I.4.c.iii. of the City’s Code, a light level survey was prepared by a City-approved lighting engineer to determine if the proposed

3. Environmental Analysis

project would adversely impact surrounding light sensitive uses such as the residential uses located approximately 750 feet to the south of the project site, included as Appendix A to this Initial Study. Light levels were calculated for distances of up to 500 feet from the project site. Table 2, Maximum Light Levels, shows the results of the lighting study:

Table 2 Maximum Light Levels

Distance	Degrees				
	0	20	40	60	75
100	0.6814	0.56214	0.3795	0.1717	0.0341
200	0.1703	0.1405	0.0949	0.0429	0.0085
300	0.0757	0.0625	0.0422	0.0191	0.0038
400	0.0426	0.0351	0.0237	0.0107	0.0021
500	0.0273	0.0225	0.0152	0.0069	0.0014

Source: Watchfire Signs, 2019

The results of the study show that light levels would not exceed one-foot candle at any location.¹ Further, with an assumed daytime ambient light level of 1,000 foot candles, and an evening ambient light level presumed to be above 1.0 foot candles due to the presence of street lighting, SR-60 lighting and security lighting for the existing billboards, the proposed project would not increase ambient lighting above 0.3 foot candles during either day time or nighttime conditions. With installation of the automatic dimmer as required by Section 15.32.05.I.4.c.iii, implementation of the proposed project would not be a substantial source of light or glare and impacts would be less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

¹ A foot-candle is the amount of light produced by a single candle when measured from 1 foot away. For reference, a 100-watt light bulb produces 137 foot-candles at 1 foot away, .0548 foot-candles at 50 feet and .0137 foot-candles at 100 feet.

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**
- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**
- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?**
- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**
- e) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

a-e) No Impact. The following analysis addresses environmental checklist questions a) through e) for Agriculture and Forestry Resources. The California Department of Conservation manages the Farmland Mapping and Monitoring Program (FMMP), which identifies and maps significant farmland. Farmland is classified using a system of five categories including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land. The classification of farmland as Prime Farmland, Unique Farmland, and Farmland of Statewide Importance is based on the suitability of soils for

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agricultural production, as determined by a soil survey conducted by the Natural Resources Conservation Service (NRCS). The California Department of Conservation manages an interactive website, the California Important Farmland Finder. This website program identifies the project site as being outside of the survey area, and it is therefore not considered agriculturally important land (CIFF 2014).

The proposed billboard site is in an urbanized area of the City; neither the site or surrounding areas contain agricultural resources or are used for agricultural purposes. The proposed billboard is located on the southeastern corner of a parcel which is zoned Industrial and contains two warehouses, surface parking, and ornamental landscaping. The project site is not used, zoned, or designated for agriculture. No designated forest land exists on or near the project site, or within the City of Industry. Therefore, project development would not convert mapped important farmland to non-agricultural uses, and no impact to agriculture or forestry resources would occur.

3.3 AIR QUALITY

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

The Air Quality section addresses the impacts of the proposed project on ambient air quality and the exposure of people, especially sensitive individuals, to unhealthful pollutant concentrations. A background discussion on the air quality regulatory setting, meteorological conditions, existing ambient air quality in the vicinity of the project site, and air quality modeling can be found in Appendix B.

The primary air pollutants of concern for which ambient air quality standards (AAQS) have been established are ozone (O₃), carbon monoxide (CO), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), and lead (Pb). Areas are classified under the federal and California Clean Air Act as either in attainment or nonattainment for each criteria pollutant based on whether the AAQS have been achieved. The South Coast Air Basin (SoCAB), which is managed by the South Coast Air Quality Management District (South Coast AQMD), is designated nonattainment for O₃, and PM_{2.5} under the California and National AAQS, nonattainment for PM₁₀ under the California AAQS, and nonattainment for lead (Los Angeles County only) under the National AAQS (CARB 2017b).

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Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. South Coast AQMD adopted the 2016 Air Quality Management Plan on March 3, 2017. Regional growth projections are used by South Coast AQMD to forecast future emission levels in the SoCAB. For southern California, these regional growth projections are provided by the Southern California Association of Governments (SCAG) and are partially based on land use designations included in city/county general plans. Typically, only large, regionally significant projects have the potential to affect the regional growth projections. In addition, the consistency analysis is generally only required in connection with the adoption of General Plans, specific plans, and significant projects.

The proposed project is not considered a regionally significant project that would warrant Intergovernmental Review by SCAG under CEQA Guidelines section 15206. Additionally, the proposed project would not affect the regional growth projections as it would only consist of the installation of two-sided digital billboard, which is a non-habitable structure.

Additionally, as demonstrated in Section 3.3. b, the regional emissions that would be generated by the construction and operational phases of the proposed project would be less than the South Coast AQMD emissions thresholds and would therefore not be considered by South Coast AQMD to be a substantial source of air pollutant emissions that would have the potential to affect the attainment designations in the SoCAB. Therefore, the proposed project would not affect the regional emissions inventory or conflict with strategies in the AQMP. Impacts would be less than significant and no mitigation measures are necessary.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. The following describes project-related impacts from regional short-term construction activities and regional long-term operation of the proposed project.

Regional Short-Term Construction Impacts

The proposed project would result in the installation of a billboard sign that would take approximately seven days. Construction of the proposed digital billboard display would generate air pollutants associated with construction equipment exhaust and fugitive dust from demolition, grading, and billboard installation. Due to the SCAB being in non-compliance for ozone standards, the construction activities would be required to control fugitive dust and particulate matter in compliance with South Coast AQMD's Rule 403. The proposed project construction-related emissions shown in Table 2, *Maximum Daily Regional Construction Emissions*, are quantified using California Emissions Estimator Model, Version 2016.3.2.25 (CalEEMod), and are based on the construction duration and equipment mix for the project provided by the Applicant. As shown in the table, air pollutant emissions from construction-related activities would be less than their respective South Coast AQMD regional significance threshold values. Therefore, air quality impacts from project-related construction activities would be less than significant.

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Table 2 Maximum Daily Regional Construction Emissions

Construction Phase	Criteria Air Pollutant Emissions (lbs/day) ^{1,2}					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Demolition	1	9	5	<1	<1	<1
Grading	<1	4	2	<1	<1	<1
Billboard Installation	1	9	4	<1	<1	<1
Maximum Daily Construction Emissions						
Maximum Daily Emissions	1	9	5	<1	<1	<1
South Coast AQMD Regional Significance Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod Version 2016.3.2.25

Notes: Totals may not total to 100 percent due to rounding.

¹ Construction phasing and equipment is based on the preliminary information for the project provided by the Applicant. Where specific information regarding proposed project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment and phasing for comparable projects.

² Includes implementation of fugitive dust control measures under South Coast AQMD Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.

Regional Long-Term Operation-Phase Impacts

Due to its small-scale nature, the proposed project would not have any direct operational impacts that would affect air quality. The proposed digital LED billboard would use a nominal amount of electricity for illumination purposes, and it is assumed that over time the portion of the sign column without aluminum cladding would require repainting, resulting in emissions from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of maintenance. It is also assumed that due to the multitude of LED lights inherent to digital billboard signs, the electricity consumption from digital LED billboards would be greater than the electricity consumption of static signs. However, these impacts are expected to be minimal.

It is assumed that the proposed sign would employ the current generation of high quality, energy efficient LEDs. Moreover, the incorporated Aesthetics Mitigation Measures would control for brightness during both the day and night. Therefore, given the annual reduction in energy that can be expected from high quality LEDs and brightness control, it can be estimated that the proposed sign would use between 29,000- and 94,000-kilowatt hours per year. Furthermore, operation of the proposed digital LED billboard would not generate customer trips and would only require periodic maintenance visits.

The proposed project would not impact traffic levels on SR-22 Freeway, and as such no other mobile-source emissions impacts would occur, including carbon monoxide impacts. As there are no mobile sources or direct emissions associated with operation of the proposed billboard, the proposed project's operational emissions are anticipated to be nominal and less than significant.

The Basin is currently in non-attainment standards for State, Federal criteria pollutants ozone, nitrogen dioxide, and fine particulate matter (PM_{2.5} and PM₁₀) 8 . Short-term, construction-related emissions and long-term, operational emissions from the proposed digital LED billboard project would not contribute considerably to any potential cumulative air quality impact. The project would contribute a minimal amount of criteria

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pollutants to the area during the short-term project construction and operation, and impacts would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. The following describes changes in localized impacts from short-term construction activities and long-term operation of the proposed project.

Construction

Localized Construction Impacts

A project could expose sensitive receptors, such as the elderly, those with respiratory conditions and young children, to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevated levels. Unlike the mass of construction emissions shown in the regional emissions analysis in Table 1 which is described in pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or $\mu\text{g}/\text{m}^3$) and can be correlated to potential health effects. The screening-level localized significance thresholds (LSTs) are the amount of project-related emissions at which localized concentrations (ppm or $\mu\text{g}/\text{m}^3$) could exceed the California AAQs for criteria air pollutants for which the SoCAB is designated nonattainment and are based on the proposed project site size and distance to the nearest sensitive receptor. The California AAQS, which are the most stringent AAQS, were established to provide a margin of safety in the protection of the public health and welfare. The screening-level LSTs are designed to protect sensitive receptor areas most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. The closest sensitive receptors to the proposed project site are located approximately 550 feet to the south, across the SR-60.

Air pollutant emissions generated by construction activities are anticipated to cause temporary increases in air pollutant concentrations, even with implementation of South Coast AQMD's Rule 403. Table 3, *Maximum Daily Onsite Localized Construction Emissions*, shows the maximum daily construction emissions (pounds per day) generated during onsite construction activities compared with the South Coast AQMD's screening-level construction LSTs. As shown in the table, the construction of the proposed project would not generate construction-related onsite emissions that would exceed the screening-level LSTs. Thus, project-related construction activities would not have the potential to expose sensitive receptors to substantial pollutant concentrations. Therefore, localized air quality impacts from construction activities would be less than significant and no mitigation measures are necessary.

Table 3 Maximum Daily Onsite Localized Construction Emissions

Construction Activity	Pollutants (lbs/day) ¹			
	NO _x	CO	PM ₁₀ ²	PM _{2.5} ²
South Coast AQMD ≤1.00 -acre LST	225	2,709	66	23
Demolition	9	4	<1	<1
Grading	4	2	<1	<1
Billboard Installation	9	4	<1	<1

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Table 3 Maximum Daily Onsite Localized Construction Emissions

Exceeds Screening-Level LST?	No	No	No	No
Source: CalEEMod Version 2016.3.2., and South Coast AQMD 2008 and 2011.				
Notes: In accordance with South Coast AQMD methodology, only onsite stationary sources and mobile equipment occurring on the project site are included in the analysis. For the project site in SRA 10, NO _x and CO screening-level LSTs are based on a 450 ft receptor (employees), while PM ₁₀ and PM _{2.5} screening-level LSTs are based on a 750 ft receptor (residences) as employees would not be in office 24 hours per day.				
¹ Based on information provided by the Applicant. Where specific information regarding project-related construction activities or processes was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by the South Coast AQMD.				
² Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 15 miles per hour on unpaved surfaces, replacing ground cover quickly, and street sweeping with Rule 1186-compliant sweepers.				

Health Risk

South Coast AQMD currently does not require health risk assessments to be conducted for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The OEHHA adopted new guidance for the preparation of health risk assessments in March 2015 (OEHHA 2015). OEHHA has developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. South Coast AQMD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. The proposed project is anticipated to be developed over 7 days. The relatively short duration when compared to a 30-year time frame would limit exposures to on-site and off-site receptors. In addition, exhaust emissions from off-road vehicles associated with overall project-related construction activities would not exceed the screening-level LSTs. For these reasons, it is anticipated that construction emissions would not pose a threat to off-site receptors near the proposed project, and project-related construction health impacts would be less than significant.

Operation

As discussed in Section 3.2.b), the proposed project does not include components that would result in stationary-source emissions of criteria air pollutants. Furthermore, the project would not generate an increase in vehicle trips and associated mobile-source emissions. Due to the nature of the proposed project, its long-term operation would not generate an increase in criteria pollutants on- or off-site and therefore no localized air pollutant impacts or CO hotspots would occur, and impacts would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The threshold for odor is if a project creates an odor nuisance pursuant to South Coast AQMD Rule 402, Nuisance, which states:

A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

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The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed digital billboard display does not fall within the aforementioned land uses; no operational odors are anticipated.

During installation of the proposed two-sided digital billboard, emissions from construction equipment, such as diesel exhaust, may generate odors. However, these odors would be low in concentration, temporary, disperse rapidly, and are not expected to affect a substantial number of people. Any odors produced during the installation phase are not expected to be significant or highly objectionable and would be in compliance with South Coast AQMD Rule 402. Therefore, impacts would be less than significant.

3.4 BIOLOGICAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				X
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Would the project:

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- a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

No Impact. Sensitive biological resources are habitats or species that have been recognized by federal, state, and/or local agencies as being endangered, threatened, rare, or in decline throughout all or part of their historical distribution. The project site is an in urbanized area of the City and contains no native vegetation. Approximately half of the billboard will be suspended over an existing paved parking lot with the other portion suspended over landscaping. The billboard column will be fixed to the ground and surrounded by landscaped grass. As a result, no suitable habitat for sensitive species on the site, and no natural biological resources or communities exist on, adjacent to, or near the site. Therefore, the proposed project would have no impact on or interfere with any species, habitat, natural community, riparian area, migratory fish or wildlife, or migratory wildlife corridor identified by any local, regional, state, or federal agency. No mitigation measures are necessary.

- b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?**

No Impact. See responses to Sections 3.4(a), above, and 3.4(c), below. Riparian habitats are those occurring along the banks of rivers and streams; and are jurisdictional to the California Department of Fish and Wildlife. There are no riparian habitats or other sensitive natural communities located on the proposed billboard project site or the surrounding areas (USFW 2018). Therefore, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community. No impact would occur, and no mitigation measures are necessary.

- c) **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Impact. Wetlands are defined under the federal Clean Water Act as land that is flooded or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that normally does support, a prevalence of vegetation adapted to life in saturated soils. Wetlands include areas such as swamps, marshes, and bogs. The National Wetlands Mapper, which is operated and maintained by the U.S. Fish and Wildlife Service (USFWS), does not show any federally-protected streams, wetlands, or other water bodies or any riparian habitat onsite, adjacent to, or within proximity of any of the proposed billboard sites (USFWS 2020). Therefore, no impact to wetlands would occur and no mitigation measures are necessary.

- d) **Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

No Impact. See responses to Sections 3.4(a) and 3.4(c), above. No surface water bodies, streams or waterways occur on the proposed billboard site. The proposed project does not provide nursery sites for wildlife, nor are they conducive to function as corridors for migratory wildlife. Installation of the billboard would not result in

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the removal of trees. Therefore, the proposed project would not interfere with the movement of any native resident or migratory species or impede the use of native wildlife nursery sites. No impact would occur and no mitigation measures are necessary.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The City of Industry has no ordinances protecting biological resources. No impact would occur.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. There are no adopted habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans that govern the project site (CDFW 2019). No impact would occur.

3.5 CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				X

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?

No Impact. Section 15064.5 defines historic resources as resources listed or determined to be eligible for listing by the State Historical Resources Commission, a local register of historical resources, or the lead agency. Generally, a resource is considered “historically significant” if it meets one of the following criteria:

- i) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
 - ii) Is associated with the lives of persons important in our past;
 - iii) Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- or

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- iv) Has yielded, or may be likely to yield, information important in prehistory or history.

The proposed project is located in an urbanized area of the City. The project site contains two warehouses constructed in 1979, associated parking lot, and hardscape (LA County Assessor). Pursuant to CCR § 4852, in order for a resource to be considered eligible for listing, the resource generally needs to be a least 50-years old and so the warehouses do not meet this eligibility criteria. Furthermore, the proposed project would not result in the alteration or removal of the warehouse or associated structures. Therefore, no impacts to historic resources would occur at the site and no mitigation measures are necessary .

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Less Than Significant Impact. The project site is in an urbanized area of the City and has already been previously disturbed. Any archaeological resources would have likely been discovered or disturbed during the original grading activities that occurred at the proposed billboard site. Additionally, the proposed project would result in only minor localized grading activities (e.g., minimal soil disturbance) for installation of the pylon bases for the proposed two-sided digital billboard. Therefore, the discovery of archaeological resources is a remote possibility during any project-related ground disturbance; there is also no evidence that there are any resources that could be impacted. Therefore, impacts to cultural resources would be less than significant.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact. There are no known human remains on the proposed billboard site, and there are no cemeteries within the vicinity of the site. Additionally, the proposed billboard site is in an urbanized area of the City and has already been previously disturbed and developed; the site has already been subject to similar construction and ground-disturbing activities that would be associated with installation of the digital billboard. In addition, the proposed project would result in only minor localized grading activities (e.g., minimal soil disturbance) for installation of the pylon bases for the digital billboard. Therefore, the likelihood that human remains may be discovered during site clearing and grading activities is considered extremely low.

In the unlikely event of discovery of human remains onsite, the project applicant would be responsible for compliance with California Health and Safety Code Section 7050.5 and CEQA Guidelines Section 15064.5. California Health and Safety Code Section 7050.5 requires that in the event that human remains are discovered within the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes or has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. The proposed project would comply with existing law, and there would be no potential impacts to human remains.

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3.6 ENERGY

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

Would the project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

Less Than Significant Impact.

The following discusses the potential energy demands from construction activities associated with installation of the proposed digital billboard and its operation.

Short-Term Construction

Construction of the proposed project would create temporary increased demands for electricity and vehicle fuels. Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. Transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles, and construction employee vehicles that would use diesels fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Upon completion of project construction, all construction-equipment would cease. Furthermore, the construction contractors are anticipated to minimize non-essential idling of construction equipment during construction in accordance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9 (SCAQMD 2014). Such required practices would limit wasteful and unnecessary energy consumption.

While electric-powered construction equipment could be used, it is anticipated that the equipment would be limited to hand tools (e.g., power drills) and lighting, which would result in minimal electricity demands. Furthermore, it is not anticipated construction activities would require use of natural gas-powered equipment. Therefore, overall, it is expected that construction fuel associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than similar projects and impacts would be less than significant with respect to construction-related energy demands.

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Long-Term Operation

Due to the nature of the proposed project, its operation would not generate demand for natural gas and transportation energy. However, operation of the proposed project would create additional demands for electricity to account for lighting of the digital signs. Southern California Edison (SCE) provides electric service to the City of Industry, including the project site. As mentioned in Section 3.7 Greenhouse Gas Emissions, the digital signs would be in use for 24 hours per day, totaling 30 kWh daily per sign and 113,150 kWh annually per sign. While the billboard would contribute to energy use throughout the City, due to the requirements that the lighting levels of the proposed billboard would not exceed 0.3 foot candles of the ambient light levels during daytime and evening hours (refer to Section 3.1 for an analysis of the proposed project's light level impacts), operation of the billboard would use less energy than electronic billboards without the illumination controls. Additionally, with increases in energy efficient lighting, the billboard would be more efficient and produce higher quality lighting than similar billboards designed even a few years previous. Furthermore, operation of the billboard would comply with the California Code of Regulations (CCR) Title 24, Part 6, Section 148a and 148b, the Federal Code of Regulation FCC Part 15 regulations for Class A devices, the Underwriters Laboratories, Inc. Standards for Electric Signs (UL 48), and UL Energy Efficiency Verified (Green Leaf Certification). Compliance with these regulations indicates the sign meets the safety and energy efficiency requirements from the National Electric Code and requirements from Underwriters Laboratories, Inc. Furthermore, as required by the City of Industry Municipal Code 15.32.050.I., the light levels would not exceed 0.3-foot candle above ambient day or night conditions. As the LED lights would not be operating at full output, the billboard energy use is not excessive. Thus, operation of the billboard would not result in inefficient, wasteful, or unnecessary consumption of energy during operation.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact. The state's electricity grid is transitioning to renewable energy under California's Renewable Energy Program. Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. Electricity production from renewable sources is generally considered carbon neutral. Executive Order S-14-08, signed in November 2008, expanded the state's renewable portfolios standard (RPS) to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. Senate Bill 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. On September 10, 2018, Senate Bill 100 (SB 100) was signed and raised California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also established a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under SB 100 the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target. The new digital signs would not conflict with any state or local plans for renewable energy or energy efficiency. No impacts would occur

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3.7 GEOLOGY AND SOILS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X

Would the project:

- a) **Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
 - i) **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning map, issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

No Impact. The Alquist-Priolo Earthquake Fault Zoning Act was passed to prevent construction of buildings used for human occupancy on the surface of active faults. Before cities and counties can permit development within Alquist-Priolo Earthquake Fault Zones, geologic investigations are required to show that sites are not threatened by surface rupture from future earthquakes. An active fault is a fault that has had surface displacement within the last 11,000 years. The project site is not within or near an established Alquist-Priolo Earthquake Fault Zone and the nearest mapped active faults—that is, a fault that has

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ruptured during Holocene time (the last 11,700 years)—is the Whittier Fault approximately 4.3 miles to the south (CGS 1999, CGS 2010). Due to the distance to the active fault, the potential for surface rupture of a fault onsite is considered very low. Additionally, the proposed project would not introduce any habitable buildings or structures; the project consists of the installation of an unmanned and non-habitable digital billboard. Therefore, no impacts from a fault rupture would occur and no mitigation measures are necessary.

ii) Strong seismic ground shaking?

Less Than Significant Impact. The most significant geologic hazard to the design life of the proposed project is the potential for moderate to strong ground shaking resulting from earthquakes generated on the faults in seismically active southern California. It is anticipated that the proposed billboard site will periodically experience ground shaking as the result of earthquakes. The closest known active fault, the Whittier Fault, is located approximately three miles south. This fault, as well as others in the region, is considered capable of producing earthquakes that would cause strong shaking at sites. A moderate to large magnitude earthquake on the Whittier Fault or regional faults could cause moderate to severe seismic shaking in the City, exposing the structures of the proposed digital billboard to potential adverse effects. The intensity of ground shaking on the proposed billboard site would depend on the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the site.

However, the proposed billboard site is not at greater risk of seismic activity or impacts than other sites in southern California. Additionally, the state and local jurisdictions regulate development in California through a variety of tools that reduce hazards from earthquakes and other geologic hazards. The California Building Code (CBC) comprises California Code of Regulations Title 24 Part 2, and the City's Building Code as set forth in Section 15.04 of the City's Code, contain provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The design and construction of the proposed billboard would be required to adhere to the provisions of the CBC, and the City's Code, which are imposed on development projects by the City's Building Division during the development review and building plan check process. Compliance with the requirements of the CBC and City's Code for structural safety during a seismic event would reduce hazards from strong seismic ground shaking. Therefore, impacts resulting from strong seismic ground shaking would be less than significant and no mitigation measures are necessary.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant. When soil liquefies, it loses strength needed for supporting overlying structures. The factors known to influence liquefaction potential include soil type and grain size, relative density, groundwater level, confining pressures, and intensity and duration of ground shaking. In general, materials that are susceptible to liquefaction are loose, saturated granular soils. Common effects of liquefaction include settlement of soil and of structures on or in soil, and horizontal landslides known as lateral spreading.

According to the Seismic Hazard Zone map for the La Habra 7.5-minute quadrangle (CDMG, 1998), the subject site lies within an area that has been mapped as being potentially susceptible to earthquake-induced

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liquefaction. However, construction would comply with all CBC standards and City's Code, which would ensure adequate mitigation of the risks associated with liquefaction on or proximate to the project site. Therefore, impacts would be less than significant as a result of seismic-related ground failure, including liquefaction.

iv) Landslides?

No Impact. Landslides are the downslope movement of geologic materials. Landslides are not expected to occur on the proposed billboard site, because the site and surrounding areas are generally flat with gradual changes in elevation; there are no major slopes or bluffs on or adjacent to the site. Additionally, according to the California Geologic Survey's Seismic Hazards Zone map for the La Habra Quadrangle, the proposed billboard site is not mapped within a zone of required investigation for landslides (CGS 1998). Therefore, no impacts resulting from landslides would occur and no mitigation measures are necessary.

b) Result in substantial soil erosion or the loss of topsoil?

No Impact. Erosion is the movement of rock and soil from place to place and is a natural process. Erosion occurs naturally by agents such as wind and flowing water; however, grading and construction activities can greatly increase erosion if effective erosion control measures are not used. Common agents of erosion in the project region include wind and flowing water. Significant erosion typically occurs on steep slopes where stormwater and high winds can carry topsoil down hillsides. Erosion can be increased greatly by earthmoving activities if erosion-control measures are not used.

Erosion is not expected to occur at the proposed billboard site, because the site and surrounding areas are generally flat with minimal changes in elevation; there are no major slopes or bluffs on or adjacent to the site. Additionally, the proposed digital billboard would be located in an area that is primarily paved with exposed soils limited to landscaping and turf areas adjacent the existing buildings. The proposed project would require a minimal amount of grading; therefore, no soil erosion or loss of topsoil is anticipated during grading activities. Soil erosion impacts from project-related grading and operational activities would have no impact.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

No Impact. See responses to Sections 3.7(a)(iii) and 3.6(a)(iv), above, and Section 3.7(d), below.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact. Expansive soils are fine-grained silts and clays that are subject to swelling and contracting. The amount of swelling and contracting is subject to the amount of fine-grained clay materials present in the soils and the amount of moisture either introduced or extracted from the soils. Installation of the proposed digital billboard would not create a risk to life or property, as the billboard is an unmanned and non-habitable structure,

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and construction will comply with the CBC and City’s building codes. Therefore, no impact from expansive soils would occur and no mitigation measures are necessary.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The proposed project includes the installation of a digital billboard display and does not include the use of septic tanks or any form of alternative wastewater disposal systems. Therefore, no impact would occur, and no mitigation measures are necessary.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant. The proposed billboard site is in an urbanized area that have been previously disturbed. Any paleontological or unique geologic features would have likely been discovered or disturbed during the original grading activities that occurred at the proposed billboard site. Additionally, the proposed requires only minor localized grading activities (e.g., minimal soil disturbance) for installation of the pylon bases for the proposed digital billboard. Therefore, the discovery of paleontological resources is a remote possibility during any project-related ground disturbance; there is also no evidence that there are any resources that could be impacted. Impacts to paleontological resources would be less than significant.

3.8 GREENHOUSE GAS EMISSIONS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				X

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as greenhouse gases (GHGs), into the atmosphere. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG

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identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons.^{2, 3}

This section analyzes the project's contribution to global climate change impacts in California through an analysis of project-related GHG emissions. Information on manufacture of cement, steel, and other "life cycle" emissions that would occur as a result of the project are not applicable and are not included in this analysis.⁴ A background discussion on the GHG regulatory setting and GHG modeling can be found in Appendix B to this Initial Study.

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

Would the proposed project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough greenhouse gas emissions on its own to influence global climate change significantly; hence, the issue of global climate change is by definition a cumulative environmental impact.

Electricity required for operation of the proposed digital billboard display would result in an indirect increase in GHG emissions. Annual average construction emissions were amortized over 30 years and included in the emissions inventory to account for one-time GHG emissions from the construction phase of the project. The project long-term emissions along with construction-related emissions are quantified and shown in Table 4, *Project-Related GHG Emissions*. As shown in the table, the proposed project would not result in GHG emissions that would exceed South Coast AQMD's bright-line significance threshold. Therefore, GHG emissions impacts are less than significant and no mitigation measures are necessary.

² Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

³ Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of PM emitted from burning fuels. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017c). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

⁴ Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

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Table 4 Project-Related GHG Emissions

Source	MTCO ₂ e per Year	Percent of Project Total
Energy ¹	60	99%
Amortized Construction Emissions ²	<1	<1%
Total Emissions	30	100%
South Coast AQMD Bright Line Threshold	3,000 MTCO ₂ e	NA
Exceeds South Coast AQMD Bright Line Threshold	No	NA

Sources: CalEEMod Version 2016.3.2.

Note: Totals may not total to 100 percent due to rounding. NA: not applicable.

¹ The proposed sign would require 30 kW electricity per day, which equates to 131,400 kWh of electricity per year. Energy use is based on Southern California Edison's (SCE) carbon intensity (SCE 2019)

² Construction emissions/sequestration are amortized over a 30-year period.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact. Applicable plans adopted for the purpose of reducing GHG emissions include the California Air Resources Board's (CARB) Scoping Plan and the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). A consistency analysis with these plans is presented below.

CARB Scoping Plan

CARB's Scoping Plan is California's GHG reduction strategy to achieve the state's GHG emissions reduction target established by AB 32, which is to return to 1990 emission levels by year 2020, and SB 32, which is to reduce emissions 40 percent below 1990 levels by 2030 (CARB 2017a). The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool that is used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

Since adoption of the Scoping Plan, state agencies have adopted programs identified in the plan, and the legislature has passed additional legislation to achieve the GHG reduction targets. Statewide strategies to reduce GHG emissions include the Low Carbon Fuel Standard, California Appliance Energy Efficiency regulations, California Renewable Energy Portfolio standard, changes in the Corporate Average Fuel Economy standards, and other early action measures as necessary to ensure the state is on target to achieve the GHG emissions reduction goals of AB 32 and SB 32. Also, new buildings are required to comply with the current Building Energy Efficiency Standards and California Green Building Code. While measures in the Scoping Plan apply to state agencies and not the proposed project, the project's GHG emissions would be reduced from compliance with statewide measures that have been adopted since AB 32 and SB 32 were adopted. Therefore, as with the approved project, the proposed project would not obstruct implementation of the CARB Scoping Plan.

SCAG's Regional Transportation Plan/Sustainable Communities Strategy

SCAG's 2016-2040 RTP/SCS was adopted April 7, 2016. The RTP/SCS identifies multimodal transportation investments, including bus rapid transit, light rail transit, heavy rail transit, commuter rail, high-speed rail, active transportation strategies (e.g., bike ways and sidewalks), transportation demand management strategies,

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transportation systems management, highway improvements (interchange improvements, high-occupancy vehicle lanes, high-occupancy toll lanes), arterial improvements, goods movement strategies, aviation and airport ground access improvements, and operations and maintenance to the existing multimodal transportation system.

The RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in the 2016-2040 RTP/SCS is to provide for a plan that allows the southern California region to grow in more compact communities in existing urban areas; provides neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserves more of the region’s remaining natural lands (SCAG 2016). The 2016-2040 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth as well as forecast development that is generally consistent with regional-level general plan data. The projected regional development pattern, when integrated with the proposed regional transportation network identified in the RTP/SCS, would reduce per capita vehicular travel-related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region.

The RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers. The proposed project would only provide billboard displays proximate to a major transportation corridor. Therefore, implementation of the proposed project would not interfere with SCAG’s ability to implement the regional strategies outlined in the RTP/SCS.

Based on the foregoing, no impacts would occur as a result of the project.

3.9 HAZARDS AND HAZARDOUS MATERIALS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

No Impact. The term “hazardous material” can be defined in different ways. For purposes of this environmental document, the definition of “hazardous material” is the one outlined in the California Health and Safety Code, Section 25501:

Hazardous materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the unified program agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

“Hazardous waste” is a subset of hazardous materials, and the definition is essentially the same as in the California Health and Safety Code, Section 25117, and in the California Code of Regulations, Title 22, Section 66261.2:

Hazardous wastes are those that, because of their quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hazardous materials can be categorized as hazardous nonradioactive chemical materials, radioactive materials, and biohazardous materials (infectious agents such as microorganisms, bacteria, molds, parasites, viruses, and medical waste).

Exposure of the public or the environment to hazardous materials could occur through the following: improper handling or use of hazardous materials or hazardous wastes, particularly by untrained personnel; transportation accident; environmentally unsound disposal methods; and/or fire, explosion, or other emergencies. The severity

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of potential effects varies with the activity conducted, the concentration and type of hazardous material or wastes present, and the proximity of sensitive receptors.

Following is a discussion of the proposed project's potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials during the construction and operational phases.

Project Construction

Construction activities of the proposed project would involve the use of small amounts of hazardous materials, such as fuels, lubricants, and greases in construction equipment. However, the materials used would not be in such quantities or stored in such a manner as to pose a significant safety hazard. These activities would also be short term or one time in nature, and construction workers would be trained in safe handling and hazardous materials use. Additionally, the use, storage, transport, and disposal of construction-related hazardous materials and waste would be required to conform to existing laws and regulations of the federal, state, and local agencies. Compliance with applicable laws and regulations would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts to occur. Therefore, hazards to the public or the environment arising from the routine use of hazardous materials during project construction would not occur and no mitigation measures are necessary.

Project Operation

The proposed project includes the installation of a two-sided digital billboard, which are unmanned and non-habitable structures. Due to the nature of the proposed project, operation of the billboard would not involve the use, storage, transport, or disposal of hazardous materials. Therefore, hazards to the public or the environment arising during project operation would not occur. No impact would occur and no mitigation measures are necessary.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact. See response to Section 3.9(a), above.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. There are no schools within a quarter mile of the proposed project. The closest school is Ybarra Academy of Arts and Technology approximately 0.5 miles to the southwest. As discussed above in Section 3.9(a), hazards to the public or the environment, which would include nearby schools, arising from the routine use, storage, transportation, and disposal of hazardous materials during project construction and operation phases would not occur. Additionally, the transport of any hazardous materials during the proposed project's construction phase would generally occur along SR-60, and East Walnut Road. The transport of such materials would not occur along or around the streets that surround the school sites. Furthermore, the proposed project consists of the installation of a two-sided digital billboard, which would not generate air toxins that would

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require a permit by SCAMQD. Therefore, no significant impacts to nearby schools would occur and no mitigation measures are necessary.

- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

No Impact. The project site does not appear on any regulatory agency database, including GeoTracker, EJSCREEN, EnviroMapper, EnviroStor, or the SWIS facility database. Adherence to existing laws and regulations would ensure that the no impact associated with exposure to hazardous materials from the development of the proposed project would occur.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

No Impact. The proposed project site is approximately 10 miles southeast of the San Gabriel Airport. According to the San Gabriel Airport Influence Area Map, the proposed project site is not in an airport land use plan area (Los Angeles 2019). The project site is approximately 2 miles southeast of the Los Angeles Sheriff's Department private heliport. The proposed project would replace an existing static billboard that is 67'-1.5" in height with 14-foot high by 48-foot wide sign faces with an electronic billboard that is the same height and width as the existing billboard. As the proposed project would result in the same height, the proposed project would not result in safety hazards or excessive noise for people residing or working in the area from either the public airport or private heliport, and no impact would occur.

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

No Impact. The emergency response plan in effect in Los Angeles County is the Los Angeles County Operational Area Emergency Response Plan (OAERP) maintained by the County Office of Emergency Management, and approved by the County Board of Supervisors in 2012. Project construction and operation of the project as a double-sided electronic billboard would not block access to the project site or to surrounding properties and would not impede the evacuation program. Notification of emergency personnel of impending blockages, detour signs, and a construction plan for traffic would ensure that there would be no impact in the case of emergency evacuation. Project development would be conducted in accordance with regulatory standards and would not interfere with implementation of the OAERP. Therefore, implementation of the proposed project would have no impact on emergency response or evacuation plans. Refer also to Response 3.20(a).

- g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

No Impact. The proposed project site and surrounding area are characterized by features typical of an urban landscape. The proposed project is surrounded by commercial development and is not located within a state

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responsibility area or land classified as a very high fire hazard severity zone, as identified in the Los Angeles County Fire Hazard Severity Zone Map (CAL FIRE 2007). The nearest FHSZ in the SRA and the LRA is a VHFHSZ approximately 1.5 miles south of the project site where open space interfaces with the urban edge, south of Colima Road. Land between the edge of the FHSZ and the project site is dense urban development and includes SR-60. Consequently, due to intervening development and infrastructural barriers, development of the proposed project would not result in the direct or indirect exposure of people or structures to hazards associated with wildland fires, and impacts would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				X
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				X
i) result in a substantial erosion or siltation on- or off-site;				X
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				X
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
iv) impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Would the project:

- a) **Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?**

No Impact. The proposed project includes the installation of a double-sided electronic billboard, which is an unmanned and non-habitable structure. No aspects of the proposed project would result in a change in water

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quality or increase in water or wastewater discharges. Therefore, no impact would occur, and no mitigation measures are necessary.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. Installation of the billboard would not change the amount of pervious surface on the proposed billboard site. Additionally, operation of the billboard would not require the use of water nor require any connections to municipal water supplies. Therefore, no impact to groundwater supplies would occur and no mitigation measures are necessary.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in a substantial erosion or siltation on- or off-site?

No Impact. Installation of the billboard would not change the amount of pervious surface at the project site nor alter the existing drainage pattern of the site or areas surrounding the site in a manner that would cause erosion or siltation impacts on- or offsite. Installation of the proposed billboard would involve minimal soil disturbance for installation of the column base for the billboard and would not result in substantial erosion or siltation off-site. Therefore, impacts would be less than significant, and no mitigation measures are necessary.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

No Impact. There are no streams or rivers located in the project vicinity. During operation of the project, storm water or any runoff irrigation waters would be directed into existing storm drains that are currently receiving surface water runoff under existing conditions. Installation of the billboard would not change the amount of pervious surface at the project site, change the rate or volume of runoff from the site, or alter the existing drainage pattern of the site or areas surrounding the sites in a manner that would cause flooding impacts on- or offsite. Therefore, no impact would occur, and no mitigation measures are necessary.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. The proposed project includes the installation of a digital billboard, which is an unmanned and non-habitable structure. No aspects of the proposed project would result in the creation or contribution of runoff water into existing or planned storm water drainage systems. Therefore, no impact would occur, and no mitigation measures are necessary.

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iv) Impede or redirect flood flows?

No Impact. Flood hazard areas identified on the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Map (FIRM) are identified as a Special Flood Hazard Area (SFHA). An SFHA is an area that will be inundated by a flood event that has a 1 percent chance of being equaled or exceeded in any given year. The 1 percent annual chance flood zone is also referred to as the base flood zone or 100-year flood zone.

The proposed billboard site is not in a 100-year flood zone (or SFHA), as indicated on FIRM Map Number 06037C1875F (effective September 26, 2008). The proposed billboard site is in Zone X, indicating that the project site is outside of 100- and 500-year flood zones. Therefore, no impacts would occur and no mitigation measures are necessary.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact. As stated in Response 3.10(c)(iv), the proposed project site is not within a flood hazard area. A seiche is a surface wave created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to water storage facilities because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam or other artificial body of water.

However, there are no large water tanks in the area that could impact the proposed project site. Additionally, the project site is about 20 miles inland from the Pacific Ocean and at an elevation of approximately 400 feet above mean sea level; therefore, there is no tsunami flood risk at the site. In sum, the proposed project is not subject to inundation by tsunami, seiche, or flood, and no impacts would occur.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. As stated in Responses 3.10(a) and 3.10(b), above, compliance with existing laws and regulations would ensure that the proposed project would result in a less than significant impact regarding conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan.

3.11 LAND USE AND PLANNING

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

Would the project:

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a) Physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a large project or project feature that eliminates a way of accessing a site or neighborhood, or otherwise reduces mobility within an existing neighborhood or community.

The proposed project includes the installation of a digital billboard; the billboard would be placed on private property. Installation of the billboard would not result in the physical division of an established community. The proposed digital billboard would be installed within the confines of the individual site and would not introduce roadways or other infrastructure improvements that would bisect or transect the site or surrounding uses or communities. Access to the surrounding uses and communities would not be interrupted as a result of the project development. Therefore, no impact would occur, and no mitigation measures are necessary.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The land use for the site is zoned as Industrial (“I”) and designated as Employment in the General Plan. Construction and operation of the two-sided digital billboard would be allowed under existing zoning and General Plan designations. The proposed project would conform with all of the provision of the City of Industry’s Municipal Code (Code), Section 15.32.050.I regarding Off-site signs. Per Section 15.32.050.I.4.c.v. the display would be visible for a minimum of 8-seconds before changing, and the image projected would appear static. Additionally, the applicant would be required to demonstrate that the lighting levels of the proposed billboard would not exceed 0.3 foot candles of the ambient light levels during daytime and evening hours (refer to Section 3.1.d) for an analysis of the proposed project’s light level impacts).Additional approvals required from the City currently in process include approval of a Development Plan Application. As such, the proposed project would not conflict with the City’s General Plan and Zoning, and no impact would occur.

3.12 MINERAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Would the project:

3. Environmental Analysis

a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?

No Impact. The proposed billboard site is in urbanized area of the City; surrounding land uses include industrial uses and major roadways. No locally or regionally important mineral resource recovery sites are on or near the proposed billboard site. Additionally, neither the site nor surrounding areas support mineral extraction operations. Furthermore, mining would be incompatible with the urban uses surrounding the site; mining is also not a permitted use under the zoning designations of the site. Therefore, no impact on mineral resources would occur and no mitigation measures are necessary.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. See response to Section 3.12(a), above. No mineral resource recovery sites are identified on or in the immediate vicinity of the proposed billboard site. There would be no loss of availability of locally important mineral resources. No impact would occur and no mitigation measures are necessary.

3.13 NOISE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?				X
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Noise Fundamentals

Noise is defined as unwanted sound and is known to have several adverse effects on people, including hearing loss, speech and sleep interference, physiological responses, and annoyance. Based on these known adverse effects of noise, the federal, state, and city governments have established criteria to protect public health and safety and to prevent the disruption of certain human activities, such as classroom instruction, communication, or sleep. The City of Industry General Plan identifies land uses particularly sensitive to noise to include residential, school, and open space recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Fundamentals of noise and vibration and additional regulatory background information, including local regulations, are included in Appendix E.

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EXISTING NOISE ENVIRONMENT AND SENSITIVE RECEPTORS

The project site is fully developed with two warehouse buildings, surface parking, and ornamental landscaping. The project site is located at 19465 East Walnut Drive North in the City of Industry, Los Angeles County. The closest major intersection is Fairway Drive and East Walnut Drive North, approximately 1,745 feet to the northeast

The site is surrounded by commercial and industrial uses. A Union Pacific Railroad line lies directly north of the project site. According to the City of Industry General Plan EIR (Industry 2014), the ambient noise environment for the project site area is at least 70 dBA CNEL. The nearest noise-sensitive receptors are single family density residential uses, approximately 800 feet to the south, in the unincorporated community of Rowland Heights. SR-60 separates the from the project site from the sensitive uses of the single-family residential neighborhoods. Boundaries of the Community of Rowland Heights are exposed to noise from the surrounding commercial, industrial, and residential uses, nearby traffic along major arterials, and train pass-bys along the Union Pacific Railroad line.

Regulatory Setting

County of Los Angeles Noise Standards Municipal Code

The City’s Code only contains exterior noise standards only as it pertains to entertainment uses (Chapter 17.12). Therefore, for the purposes of this analysis, County of Los Angeles Noise Ordinances were used to assess project impacts. County of Los Angeles Noise Ordinance (Section 12.08) establishes that the impact would be significant if project-related stationary noise exceeded the exterior noise standards included listed in Table 1, *County of Los Angeles Exterior Noise Standards*, below:

Table 5 County of Los Angeles Exterior Noise Standards

Noise Zone	Time Period	Maximum Permissible Noise Level (dBA) ^{1,2}				
		Standard 1 (L ₅₀)	Standard 2 (L ₂₅)	Standard 3 (L ₈)	Standard 4 (L ₂)	Standard 5 (L _{max})
Noise-Sensitive Area	Anytime	45	50	55	60	65
Residential Properties	10 PM to 7 AM	45	50	55	60	65
	7 AM to 10 PM	50	55	60	65	70
Commercial Properties	10 PM to 7 AM	55	60	65	70	75
	7 AM to 10 PM	60	65	70	75	80
Industrial Properties	Anytime	70	75	80	85	90

Source: County of Los Angeles Municipal Code, Section 12.08.390.

Notes:

¹ According to Section 12.08.390, if the ambient noise levels exceed the exterior noise standards above, then the ambient noise level becomes the noise standard. If the source of noise emits a pure tone or impulsive noise, the exterior noise levels limits shall be reduced by five decibels.

² If the measurement location is on a boundary property between two different zones, the noise limit shall be the arithmetic mean of the maximum permissible noise level limits of the subject zones; except when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.

City of Industry General Plan

The City’s General Plan includes the following goals and policies that relate to noise:

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- **Goal S6:** An environment where noise does not adversely affect sensitive land uses.
- **Policy S6-1:** Coordinate with Caltrans, San Gabriel Valley Council of Governments, Southern California Association of Governments, neighboring jurisdictions, and other transportation providers in the preparation and maintenance of transportation and land use plans to minimize noise impacts and provide appropriate mitigation measures.
- **Policy S6-2:** Address noise impacts through the effective enforcement of the noise ordinance, project and environmental review, and compliance with state and federal noise standards.
- **Policy S6-3:** Consider the noise levels likely to be produced by any new businesses or substantially expanded business activities locating near existing noise-sensitive uses such as schools, community facilities, and residences, as well as adjacent to established businesses involving vibration-sensitive activities.

NOISE IMPACT ASSESSMENT

The generation of noise and vibration associated with the proposed project would occur over the short-term for site construction activities. In addition, noise would result from the long-term operation of the project. Both short-term and long-term noise impacts associated with the project are examined in the following analyses that correspond to the CEQA Guidelines.

Would the project result in:

- a) **Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Less Than Significant Impact.

Construction Noise

The total duration for project construction is approximately seven days. Construction equipment for the proposed project could include equipment such as an auger and a crane. Two types of short-term noise impacts could occur during construction: (1) mobile-source noise from transport of workers, material deliveries, and debris haul and (2) stationary-source noise from use of construction equipment.

Construction Vehicles

The transport of workers and materials to and from the construction site would incrementally increase noise levels along site access roadways. Individual construction vehicle pass-bys may create momentary noise levels of up to approximately 85 dBA L_{max} at 50 feet from the worker and vendor vehicles and haul trucks. Haul trips would be limited to removal of the existing static billboard, soils removed during grading and construction related refuse. However, these occurrences would generally be infrequent and short lived. Therefore, noise impacts from construction haul trips would be less than significant.

Construction Equipment

Noise generated by on-site construction equipment is based on the type of equipment used, its location relative to sensitive receptors, and the timing and duration of noise-generating activities. Each phase of construction

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involves different kinds of equipment and has distinct noise characteristics. Noise levels from construction activities are typically dominated by the loudest piece or pieces of equipment. The dominant equipment noise source is typically the engine, although work-piece noise (such as dropping of materials) can also be noticeable. The nearest residential property line is approximately 800 feet south. Due to distance, traffic noise on SR-60, and compliance with pertinent local noise regulations, noise levels from project mechanical equipment would be less than significant.

Operational Noise

Mobile Noise

The proposed project includes the installation of a digital billboard, which is unmanned and non-habitable. Vehicle noise associated with the proposed project would be limited to routine maintenance visits, similar to existing conditions for the static billboard. Implementation of the proposed project would not generate new vehicle trips and, therefore, no mobile-source noise impact would occur.

Stationary-Source Noise

Operation of the proposed digital billboard display may generate noise from the LED components and associated equipment (such as cooling systems). However, any noise generated from the billboard would not be substantial in comparison to the traffic along adjacent roadways and other existing conditions. The proposed digital billboard's operational noise would not expose people to noise levels in excess of established standards. Therefore, impacts would be less than significant, and no mitigation measures are necessary.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No Impact.

Construction Induced Vibration

Installation of the proposed digital billboard would require minimal construction activity. Equipment potentially used for construction includes drill rig, loader, concrete pump, crane, mobile, and man-lift. This equipment has little to no ground borne vibration (concrete pump, crane, man-lift). Vibration levels at a reference distance of 25 feet are 0.089 in/sec PPV for drilling and 0.003 in/sec PPV for a small bulldozer or loader. At a distance of 25 feet, both pieces of equipment would be below the 0.2 in/sec PPV criterion. The drill hole for the billboard is approximately 800 feet to the nearest sensitive receptor structure and, therefore, vibration impacts would not exceed 0.20 in/sec PPV and would be less than significant.

Operational Groundborne Noise

Following installation, the on-going operations of the proposed digital billboard would not generate substantial levels of vibration since there are no significant vibration-generating sources associated with the billboard. Therefore, vibration impacts from the operation of the proposed project, would not occur and no mitigation measures are necessary.

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- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project site is not located within an area covered by an airport land use plan or within two miles of a public airport or public-use airport. The nearest public airports are El Monte Airport, approximately 8.3 miles northwest of the site, and Fullerton Municipal Airport, approximately 10 miles south of the site (Airnav, Google Earth Pro, 2017). While light plane and other aircraft noise is occasionally noticeable in the project area, the project is well beyond any airport’s 60 dBA CNEL zone.

Additionally, there are no private airstrips near the project site. The closest heliports to the site are the LA County Sheriff’s Department Helicopter, approximately one mile to the northwest (Airnav.com, Google Earth Pro, 2017). This facility has infrequent and sporadic use, which would result in negligible amounts of noise at the project site. As above, these limited helicopter operations may, occasionally, be noticeable in the project area, but the project site would not be exposed to private aircraft-generated noise levels anywhere near 60 dBA CNEL. Therefore, no impacts would occur due to excessive aircraft noise levels or private airports and heliports and no mitigation measures are necessary.

3.14 POPULATION AND HOUSING

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

Would the project:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. No residential development is proposed under the project; therefore, the proposed project would not directly induce population growth in the area. Additionally, the proposed project would not require or result in the extension of utilities or roadways. The proposed project would generate a small number of short-term construction jobs; however, construction employment would be absorbed from the local labor force rather than attract new workers to the region. Therefore, no impact would occur, and no mitigation measures are necessary.

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b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. No housing exists on the proposed billboard site. Implementation of the proposed project would not result (either directly or indirectly) in the displacement of housing or people. No impacts would occur, and no mitigation measures are necessary.

3.15 PUBLIC SERVICES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire protection?

No Impact. The Los Angeles County Fire Department (LACoFD) provides fire protection and emergency medical services to the City of Industry. The proposed project includes the installation of a digital billboard, which is an unmanned and non-habitable structure. The proposed project would not increase demands for fire protection and emergency medical services nor require the need for new or physically altered fire facilities. No impact would occur, and no mitigation measures are necessary.

b) Police protection?

No Impact. The Los Angeles County Sheriff’s Department (LASD) provides police protection to the City of Industry. The nearest LASD station to the project site is the Industry Station at 150 North Hudson Avenue in the City of Industry, approximately three miles to the northwest. The proposed project includes the installation of a digital billboard, which is an unmanned and non-habitable structure, and which would not increase

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demands for police protection services nor require the need for new or physically altered police facilities. No impact would occur, and no mitigation measures are necessary.

c) Schools?

No Impact. The increase in the student generation and the need for new or the expansion of existing school facilities is tied to population growth. The project would not generate an increase in the student population in the area nor require the need for new or physically altered school facilities. Therefore, no impact would occur, and no mitigation measures are necessary.

d) Parks?

No Impact. See response to Section 3.16(a), below.

e) Other public facilities?

No Impact. The need for new or the expansion of existing library services and facilities is tied to population growth. No residential development is proposed under the project; installation of the proposed two-sided digital billboard would not generate a need for new or physically altered library facilities. Therefore, no impact would occur, and no mitigation measures are necessary.

3.16 RECREATION

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The increase in the use of existing parks and recreational facilities and the need for new or the construction or expansion of existing recreational facilities is tied to population growth. No residential development is proposed under the project; therefore, no population growth or increase in the use of existing parks or other recreational facilities would occur. Additionally, the proposed project would not include recreational facilities or require the construction or expansion of recreational facilities. No impact would occur and no mitigation measures are necessary.

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b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. See response to Section 3.16(a), above

3.17 TRANSPORTATION

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?				X
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

Would the project:

a) **Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

No Impact. The proposed project includes the installation of a digital billboard. With the exception of the installation of the proposed digital billboard, no aspects of the proposed project’s operation phase would result in the generation of any traffic or increase in vehicle miles traveled (VMT). Construction activities associated with installation of the proposed digital billboard would generate small numbers of worker commute trips and heavy truck trips. However, the traffic generated during the construction phase would be minimal and would cease upon installation of each billboard.

The proposed project would also not result in the need for new or expanded pedestrian, bicycle, or public transit services or facilities. Installation of the billboard would not interrupt or block public sidewalks or bicycle lanes adjacent to or surrounding the proposed billboard site. Installation of the billboard would also not result in the interruption of or block access to public transit.

Based on the preceding, the proposed project would not create new demand on or result in an impact to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit. Therefore, no transportation impacts would occur, and no mitigation measures are necessary.

b) **Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?**

No Impact. As noted above in Section 3.16(a), with the exception of the installation of the proposed billboard, no aspects of the proposed project’s operation phase would result in the generation of any traffic or increase

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in VMT. The traffic generated during the construction phase would be minimal and would cease upon installation of the billboard. Therefore, the proposed project would not conflict with any CMP intersections or facilities. No impacts would occur and no mitigation measures are necessary.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The proposed project includes the installation of a digital billboard; the pylon bases for the proposed two-sided digital billboard would be placed on private property, installation of the proposed digital billboard display would not involve any major changes to existing on-site circulation patterns, building footprints, or landscaping.

The California Department of Transportation (Caltrans) is involved in the control of offsite displays along state highways. Such displays advertise products or services of businesses located on properties other than that which the display is located. Caltrans does not regulate on-site displays. The California Outdoor Advertising Act contains a number of provisions relating to the construction and operation of billboards:

- The sign must be constructed to withstand a wind pressure of 20 pounds per square feet of exposed surface (§5401).
- No sign shall display any statements or words of an obscene, indecent, or immoral character (§5402).
- No sign shall display flashing, intermittent or moving light or lights (§5403[h]).
- Signs are restricted from areas within 300 feet of an intersection of highways or of highway and railroad rights-of-way, but a sign may be located at the point of interception, as long as a clear view is allowed for 300 feet, and no sign shall be installed that would prevent a traveler from obtaining a clear view of approaching vehicles for a distance of 500 feet along the highway (§5404).
- Message center signs may not include any illumination or message change that is in motion or appears to be in motion or that changes or exposes a message for less than four seconds. No message center sign may be located within 500 feet of an existing billboard, or 1,000 feet of another message center display, on the same side of the highway (§5405).

The proposed digital LED billboard would require a Department of Transportation Outdoor Advertising Act Permit from Caltrans. As a condition of that permit, digital LED billboard signs are required to comply with the brightness requirements outlined in the Outdoor Advertising Act in that the illumination shall not be of such brilliance or so positioned as to cause a hazardous condition on adjacent highways. The standard used by Caltrans for enforcing sign brightness is as follows:

“The brightness reading of an objectionable light source shall be measured with a 1½ degree photoelectric brightness meter placed at the driver’s point of view. The maximum measured brightness of the light source within 10 degrees from the driver’s normal line of sight shall not be more than 1,000 times the minimum measured brightness in the driver’s field of view, except that when the minimum measured brightness in the field of view is 10 foot-lamberts or less, the measured brightness of the light source in foot-lamberts shall not exceed 500 plus 100 times the angle, in degrees, between the driver’s line of sight and the light source.”

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With compliance of Caltrans Outdoor Advertising Act Permit, and the provisions of the City’s Municipal Code, Section 15.32.050.I regarding off-site signs, which would ensure that the display would be visible for a minimum of 8-seconds before changing, and that the lighting levels of the proposed billboard would not exceed 0.3 foot candles of the ambient light levels during daytime and evening hours, no hazardous design features or incompatible uses would result from the proposed project, and impacts would be less than significant.

d) Result in inadequate emergency access?

No Impact. Emergency access points and roadways (including SR-60) adjacent to and surrounding the proposed billboard site would remain unchanged from the existing conditions. Furthermore, installation of the proposed billboard display would not require road closures or otherwise impact the functionality of surrounding roadways, which serves as a public safety access route. Therefore, the proposed project would not result in impact to emergency access and no mitigation measures are necessary.

3.18 TRIBAL CULTURAL RESOURCES

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES.				
a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				X
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.		X		

a) **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural**

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landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

- i) **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

No Impact. As shown in Figure 3, *Aerial Photograph*, the project site is currently developed with two industrial buildings that were developed in 1979, surface parking, and ornamental landscaping. The existing billboard sign is located along the southeastern perimeter of the proposed project site, approximately 30 feet higher than the adjacent industrial buildings. Project development involves the conversion of an existing static double-sided billboard into a new double-sided electronic billboard. The proposed project would not result in the alteration or removal of the warehouse or associated structures. The project site is not identified on any federal or state historic registers or sources, including the National Register of Historic Places and California State Historical Landmarks and Points of Historical Interest (NPS 2020, OHP 2020). Therefore, no impact to historical resources would occur and no mitigation measures are necessary.

- ii) **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

Less Than Significant Impact with Mitigation Incorporated. Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that is either eligible or listed in the California Register of Historical Resources or local register of historical resources (Public Resources Code § 21074). In order to determine whether there are any tribal cultural resources that could be impacted by implementation of the proposed project, California Native American tribes that are traditionally and culturally affiliated with the project site will be contacted (Public Resources Code § 21080.3.1).

In accordance with Public Resources Code Section 21080.1(d), a lead agency is required to provide formal notification of intended development projects to Native American tribes that have requested to be on the lead agency's list for receiving such notification. The formal notification is required to include a brief description of the proposed project and its location, lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation for tribal cultural resources. The Gabrieleno Band of Mission Indians – Kizh Nation and the Soboba Band of Luiseno Indians are on the City of Industry's notification list pursuant to AB 52. The City notified both tribes on May 26, 2020. Only the Gabrieleño Band of Mission Indians – Kizh Nation requested consultation and the City of Industry is currently engaged in consultation with the tribe. The Gabrieleño Band of Mission Indians – Kizh Nation indicated that the project site is located within and around a sacred village (Pimokangna), adjacent to sacred water courses and major traditional trade routes. Therefore, there is a potentially significant impact to tribal cultural resources being present within the soil from prehistoric activities that

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occurred within and around these areas. Mitigation measure TCR-1 has been identified to ensure impacts to tribal cultural resources would be less than significant.

Mitigation Measure

TCR-1 **Retain a Native American Monitor/Consultant:** Prior to the commencement of any ground disturbing activity at the project site, the project applicant shall retain a Native American Monitor approved by the Gabrieleno Band of Mission Indians-Kizh Nation – the tribe that consulted on this project pursuant to Assembly Bill A52 - SB18 (the “Tribe” or the “Consulting Tribe”). A copy of the executed contract shall be submitted to the Lead Agency prior to the issuance of any permit necessary to commence a ground-disturbing activity. The Tribal monitor will only be present on-site during the construction phases that involve ground-disturbing activities. Ground disturbing activities are defined by the Tribe as activities that may include, but are not limited to, pavement removal, potholing or auguring, grubbing, tree removals, boring, grading, excavation, drilling, and trenching, within the project area. The Tribal Monitor will complete daily monitoring logs that will provide descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The on-site monitoring shall end when all ground-disturbing activities on the Project Site are completed, or when the Tribal Representatives and Tribal Monitor have indicated that all upcoming ground-disturbing activities at the Project Site have little to no potential for impacting Tribal Cultural Resources.

Upon discovery of any Tribal Cultural Resources, construction activities shall cease in the immediate vicinity of the find (not less than the surrounding 50 feet) until the find can be assessed. All Tribal Cultural Resources unearthed by project activities shall be evaluated by the Tribal monitor approved by the Consulting Tribe and a qualified archaeologist if one is present. If the resources are Native American in origin, the Consulting Tribe will retain it/them in the form and/or manner the Tribe deems appropriate, for educational, cultural and/or historic purposes.

If human remains and/or grave goods are discovered or recognized at the Project Site, all ground disturbance shall immediately cease, and the county coroner shall be notified per Public Resources Code Section 5097.98, and Health & Safety Code Section 7050.5. Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2). Work may continue in other parts of the Project site while evaluation and, if necessary, mitigation takes place (CEQA Guidelines Section 15064.5[f]). Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. Any historic archaeological material that is not Native American in origin (non-TCR) shall be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution

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agrees to accept the material. If no institution accepts the archaeological material, it shall be offered to a local school or historical society in the area for educational purposes.

In addition, the project applicant shall follow/implement the following measures during the project's construction phases that involve ground-disturbing activities.

- **Unanticipated Discovery of Human Remains and Associated Funerary Objects:** Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in PRC 5097.98, are also to be treated according to this statute. Health and Safety Code 7050.5 dictates that any discoveries of human skeletal material shall be immediately reported to the County Coroner and excavation halted until the coroner has determined the nature of the remains. If the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC and PRC 5097.98 shall be followed.
- **Resource Assessment & Continuation of Work Protocol:** Upon discovery of human remains, the tribal and/or archaeological monitor/consultant/consultant will immediately divert work at minimum of 100 feet and place an exclusion zone around the discovery location. The monitor/consultant(s) will then notify the Tribe, the qualified lead archaeologist, and the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are human and subsequently Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the finds are determined to be Native American, the coroner will notify the NAHC as mandated by state law who will then appoint a Most Likely Descendent (MLD).
- **Kizh-Gabrieleño Procedures for Burials and Funerary Remains:** If the Gabrieleno Band of Mission Indians – Kizh Nation is designated MLD, the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects.
 - *Treatment Measures:* Prior to the continuation of ground disturbing activities, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. In the case where discovered human remains cannot be fully documented and recovered on

3. Environmental Analysis

the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. The Tribe will work closely with the qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure completely recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. Once complete, a final report of all activities is to be submitted to the Tribe and the NAHC. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

- *Professional Standards:* Native American and Archaeological monitoring during construction projects will be consistent with current professional standards. All feasible care to avoid any unnecessary disturbance, physical modification, or separation of TCR's shall be taken. The Native American monitor must be approved by the Gabrieleno Band of Mission Indians-Kizh Nation. Principal personnel for Archaeology must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a principal investigator working with Native American archaeological sites in southern California.

3.19 UTILITIES AND SERVICE SYSTEMS

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X

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Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				X
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				X
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				X

Would the project:

- a) **Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

No Impact. No aspects of the proposed project would result in a change of or increase in water or wastewater discharges; therefore, the proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. No impact would occur, and no mitigation measures are necessary.

No aspects of the proposed project would result in the creation or contribution of runoff water into existing or planned storm water drainage systems. Therefore, the proposed project would not require or result in the construction of new storm water drainage facilities or expansion of existing facilities. No impact would occur and no mitigation measures are necessary.

- b) **Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

No Impact. Operation of the billboard would not require the use of water or require any connections to municipal water supplies. Therefore, no impact to water supplies would occur and no mitigation measures are necessary.

- c) **Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

No Impact. See response to Section 3.19(a) and (b), above.

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d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

No Impact. With the exception of the installation of the proposed digital billboard, no aspects of the proposed project’s operation phase would result in the generation of solid waste. Installation of the billboard may briefly generate a small amount of solid waste during construction. However, solid waste generated during the construction phase would be minimal and would cease upon installation the billboard. Therefore, no new or expanded landfill capacity would be needed to serve the proposed project. No impact would occur, and no mitigation measures are necessary.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. As noted above in Section 3.19(d), the proposed project’s operation phase would not generate solid waste; installation of the proposed digital billboard would briefly generate a small amount of solid waste during the construction phase. A significant impact would occur if the proposed project were to generate solid waste that is not disposed of in accordance with applicable regulations. As stated above, the proposed project would not result in a significant increase in the demand for solid waste services. Solid waste generated on the project site would be disposed of in accordance with all applicable federal, state, and local regulations related to solid waste. In addition, because the proposed project site is in California, it would be required to comply with the California Integrated Waste Management Act of 1989 (AB 939), which was enacted to reduce, recycle, and reuse solid waste generated in the state to the maximum amount feasible. Project implementation would not interfere with applicable statutes and regulations. Therefore, impacts would be less than significant.

3.20 WILDFIRE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

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If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. Wildland fire protection in California is the responsibility of either the State, local government, or the federal government. State Responsibility Areas (SRA) are the areas in the State where the State of California has the primary financial responsibility for the prevention and suppression of wildland fires. The SRA forms one large area over 31 million acres to which the State Department of Forestry and Fire Protection (CAL FIRE) provides a basic level of wildland fire prevention and protection services. Local Responsibility Areas (LRA) include incorporated cities, cultivated agriculture lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government. CAL FIRE uses an extension of the SRA Fire Hazard Severity Zone model as the basis for evaluating fire hazard in LRA. The LRA hazard rating reflects flame and ember intrusion from adjacent wildlands and from flammable vegetation in the urban area. The Los Angeles County Fire Department currently provides fire protection and emergency medical services to the City.

Fire Hazard Severity Zones (FHSZ) are identified by Moderate, High and Very High in an SRA, and Very High in an LRA. The proposed project is not located within a state responsibility area or land classified as a very high fire hazard severity zone, as identified in the Los Angeles County Fire Hazard Severity Zone Map (CAL FIRE 2007). The nearest FHSZ in the SRA and the LRA is a VHFHSZ 1.5 miles south of the project site where open space interfaces with the urban edge, south of Colima Road. Land between the edge of the FHSZ and the project site is dense urban development and includes SR-60. The emergency response plan in effect in Los Angeles County is the Los Angeles County Operational Area Emergency Response Plan (OAERP) maintained by the County Office of Emergency Management and approved by the County Board of Supervisors in 2012. Installing a two-sided digital billboard in the same location as an existing static billboard would not block access to the project site or to surrounding properties and would not impede the evacuation program. There would be no impact in the case of emergency evacuation.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The project is in a relatively flat area, and there are no steep slopes immediately adjacent to the site where high winds can exacerbate wildfire risks. The proposed project site and surrounding area are characterized by features typical of an urban landscape with prevailing winds moving to the northeast. The California Department of Forestry and Fire Prevention (CAL FIRE) classifies the wildland urban interface approximately 1.5 miles to the south as a Very High Fire Hazard Severity Zone (VHFHSZ). Despite this proximity to the project site, no wildlands exist within the immediate vicinity of the site and SR-60 runs east to west in between the project site and the VHFHSZ. The project site is at approximately 400 feet above sea level while the edge of the VHFHSZ is at approximately 470 feet above sea level and continues to gain in elevation further south. Although prevailing wind patterns flow in the direction of the project suite, due to intervening

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development and the relatively level topography north of the VHFHSZ, project development is not anticipated to exacerbate wildfire risk. Impacts would be less than significant.

- c) **Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

No Impact. The proposed project does not require the installation or maintenance of associated infrastructure because the project consists of the installation of an unmanned and non-habitable digital billboard. Therefore, the proposed project would not result in or exacerbate fire risk that may result in temporary or ongoing impacts to the environment. No impact would occur.

- d) **Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

No Impact. Refer to Responses 3.7(a)(iv), 3.10(c)(i) and 3.10(c)(ii). The topography of the proposed project site is relatively flat, and the soils on the proposed project site are not susceptible to landslides. Additionally, implementation of the proposed project would not alter the existing drainage patterns or substantially increase the amount of runoff because stormwater would be retained onsite using the existing garden area and additional turf areas for drainage and groundwater recharge. Therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, and no impact would occur.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

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- a) **Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Less than Significant with Mitigation Incorporated. The proposed billboard is in an urbanized area of the City and consists of a 36-foot pipe column fixed to the ground, surrounded by landscaping, and would run vertically toward a 30-foot horizontal pipe column supporting the east and west facing electronic signs. The uses surrounding the proposed billboard site include major roadways, and commercial and industrial. The site does not contain, abut or is in proximity of any sensitive natural resources that could be disturbed as a result of project implementation. As demonstrated in Section 3.4, *Biological Resources*, the proposed project would not result in the reduction of the habitat of fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; result in an impact to migratory birds; threaten to eliminate a plant or animal community; or reduce the number or restrict the range of a rare or endangered plant or animal. Additionally, as demonstrated in Section 3.5, *Cultural Resources*, no historic resources occur on the project site; therefore, the proposed project does not have the potential to eliminate important examples of California history or prehistory. As demonstrated in Section 3.18, *Tribal Cultural Resources*, there is a potential impact to tribal cultural resources due to the project site being located within and around a sacred village, adjacent to sacred water courses and major traditional trade routes. Impacts to tribal cultural resources would be reduced to a level of less than significant with implementation of Mitigation Measure TCR-1.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)**

Less than Significant Impact. Implementation of the proposed project, in conjunction with other approved or pending projects in the region, has the potential to result in cumulatively considerable impacts to the physical environment. However, implementation of the proposed project would not result in cumulatively considerable impacts. Where appropriate, the environmental checklist questions above include a cumulative construction impact discussion to address the cumulative impacts of the proposed project when developed in conjunction with related projects. As concluded throughout the analysis, the proposed project would include both operation- and construction-related mitigation measures to ensure the proposed project’s incremental contribution would be less than cumulatively considerable. Further, the proposed project would not achieve short-term environmental goals to the disadvantage of long-term goals. Therefore, impacts would be considered less than significant.

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- c) **Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?**

Less Than Significant. The analysis in this Initial Study has not identified any substantial adverse impacts that the proposed project would have on human beings, either directly or indirectly. Impacts would be less than significant, and no mitigation measures are required.

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4. References

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Appendix A Billboard Lighting Study

Appendix

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September 23, 2019

Background on Optical Measurements and Calculations

Watchfire Signs has manufactured outdoor electric signs since 1932 and led signs since 1996. We have more than 60,000 led signs in operation worldwide.

Incandescent signs were commonly measured using illuminance measurements, partly because the light bulb is ideally a point source of light, illuminating equally in all directions, and illuminance meters are commonly available and inexpensive. Foot-candle measurements are made at a defined distance from the sign and the magnitude depends on the physical size of the sign.

LED signs are highly directional however, which is an advantage in an urban setting since the light can be directed more precisely to the intended audience. Luminance measurements have been used to specify LED signs by the industry. The candela per square meter (NITs) unit allows a specification that does not depend on size or viewing distance.

The study done on the sign adjacent to a residential area used actual lab measurements made on modules using an illuminance meter. These measurements and extrapolations are then scaled up to the size of the sign and the distance corrections are made using the inverse square law.

Watchfire adopted brightness standards set forth by both the ISA (International sign Association) and OAAA (Outdoor Advertising Association of America). The standards used are based on the studies of Dr. Lewin and the IESNA (Illuminating Engineering Society of North America).

Below is a list of some of the measurement equipment used by Watchfire engineers.

Equipment used by Watchfire engineers to make lighting measurements:

Foot-candles/Lux - Minolta Illuminance Meter T-10

NITs/candela/sq. m – Minolta Luminance Meter LS-100

Sign Calibration – Minolta CS-1000 Spectra radiometer

SIGN LIGHTING STUDY

Sign Details

Size: 14x48 Digital Billboard Display

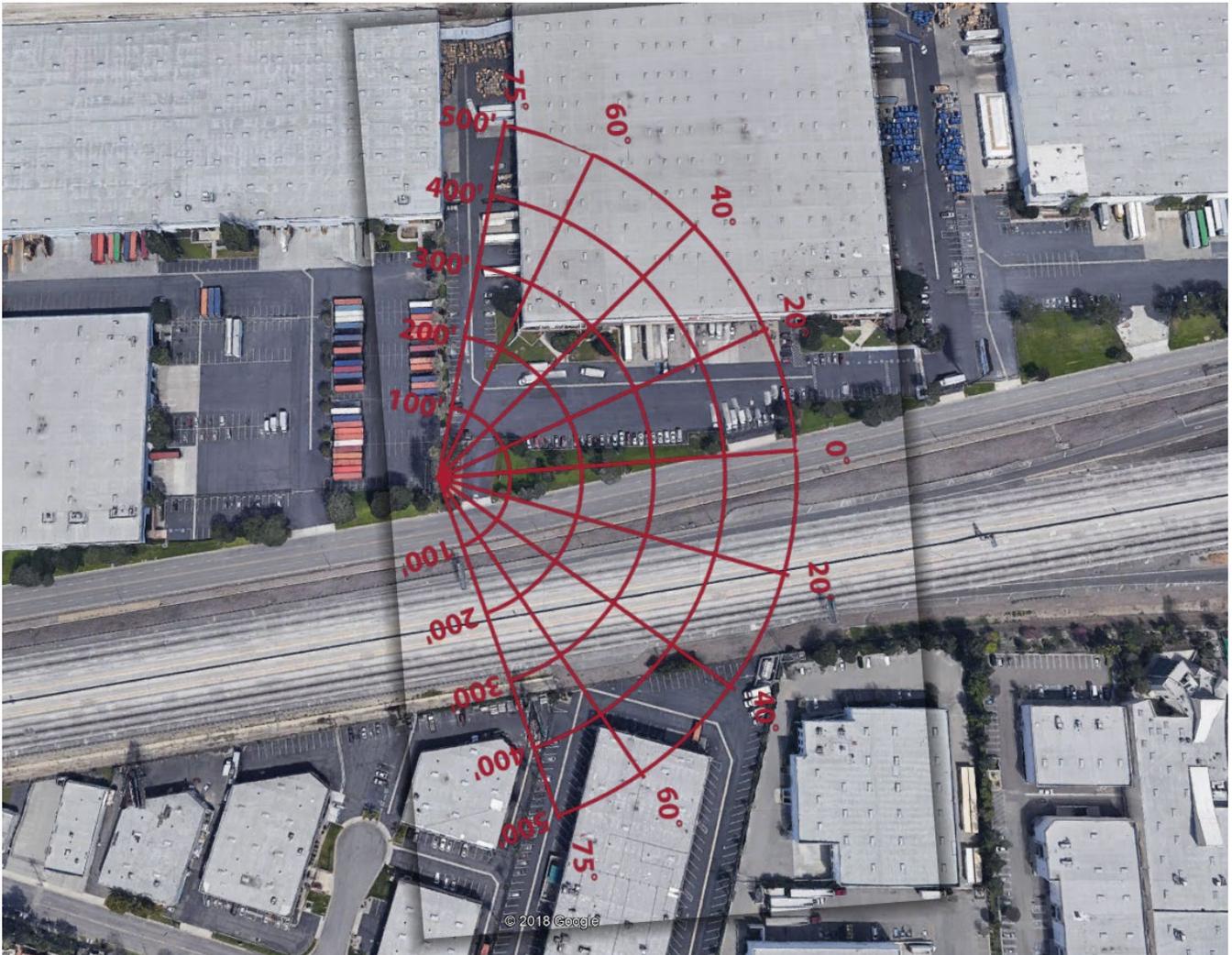
Location: *City of Industry, 33.995881, -117.876252*

Light measurements are completed in foot-candles. A foot-candle is the amount of light produced by a single candle when measured from 1 foot away. For reference, a 100-watt light bulb produces 137 foot-candles at 1 foot away, .0548 foot-candles at 50 feet and .0137 foot-candles at 100 feet.

The table represents the total increase in ambient light produced by the sign under normal or typical operation at night. The ambient light increases will be less than shown in the chart since they fail to consider any objects blocking the line of site to the sign. Obstructions such as trees would further reduce real world overall ambient light increases. In addition to obstructions any existing light within the viewing cone will further diminish any light increase.

	0 degrees	20 degrees	40 degrees	60 degrees	75 degrees
100'	0.6814	0.5621	0.3795	0.1717	0.0341
200'	0.1703	0.1405	0.0949	0.0429	0.0085
300'	0.0757	0.0625	0.0422	0.0191	0.0038
400'	0.0426	0.0351	0.0237	0.0107	0.0021
500'	0.0273	0.0225	0.0152	0.0069	0.0014

Light values in foot-candles at night under typical operation





Conclusion

Given the above comparisons and measurements, the area will see an almost undetectable difference in ambient light after installation of the digital led displays. Ambient light levels are more heavily impacted by street, building, and landscape lights than the increases produced by a digital billboard display.

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Appendix B. Air Quality and Green Gas Background and Modeling Data

Appendix

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Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Climate/Meteorology

SOUTH COAST AIR BASIN

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site with temperature data is the Montebello, California Monitoring Station (ID No. 045790). The lowest average temperature is reported at 47.2°F in December, and the highest average temperature is 89.7°F in August (WRCC 2020).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall historically averages 14.78 inches per year in the project area (WRCC 2020).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (South Coast AQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

Air Quality Regulations

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve

and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect “sensitive receptors” most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health based AAQS for seven air pollutants. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m ³	150 µg/m ³	
	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Respirable Fine Particulate Matter (PM _{2.5}) ⁴	24 hours	*	35 µg/m ³	photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
Lead (Pb)	30-Day Average	1.5 µg/m ³	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m ³	
	Rolling 3-Month Average	*	0.15 µg/m ³	
Sulfates (SO ₄) ⁵	24 hours	25 µg/m ³	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

- California standards for O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

CRITERIA AIR POLLUTANTS

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb) are primary air pollutants. Of these, CO, SO₂, NO₂, PM₁₀, and PM_{2.5} are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O₃) and NO₂ are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; USEPA 2019a). The SoCAB is designated under the California and National AAQS as being in attainment of CO criteria levels (CARB 2017a).

Volatile Organic Compounds (VOC) are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O₃), South Coast AQMD has established a significance threshold for this pollutant (South Coast AQMD 2005).

Nitrogen Oxides (NO_x) are a byproduct of fuel combustion and contribute to the formation of O₃, PM₁₀, and PM_{2.5}. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO₂). The principal form of NO₂ produced by combustion is NO, but NO reacts with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO₂ is only potentially irritating. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm).

NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure (South Coast AQMD 2005; USEPA 2019a). The SoCAB is designated as an attainment area for NO₂ under the National AAQS California AAQS (CARB 2017a).

Sulfur Dioxide (SO₂) is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO₂ (South Coast AQMD 2005; USEPA 2019a). When sulfur dioxide forms sulfates (SO₄) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO₂ is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS (CARB 2017a).

Suspended Particulate Matter (PM₁₀ and PM_{2.5}) consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM₁₀, include the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or PM_{2.5}, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM₁₀ and PM_{2.5} may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (South Coast AQMD 2005).

The US Environmental Protection Agency's (EPA) scientific review concluded that PM_{2.5}, which penetrates deeply into the lungs, is more likely than PM₁₀ to contribute to health effects and at concentrations that extend well below those allowed by the current PM₁₀ standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms (South Coast AQMD 2005). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), known as ultrafine particulates (UFPs), have human health implications, because UFPs toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA or CARB have yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental

effects such as visibility impairment,¹ environmental damage,² and aesthetic damage³ (South Coast AQMD 2005; USEPA 2019a). The SoCAB is a nonattainment area for PM_{2.5} under California and National AAQS and a nonattainment area for PM₁₀ under the California AAQS (CARB 2017a).⁴

Ozone (O₃) is commonly referred to as “smog” and is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in the presence of sunlight. O₃ is a secondary criteria air pollutant. O₃ concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O₃ can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O₃ also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O₃ also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O₃ harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2019a). The SoCAB is designated as extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2017a).

Lead (Pb) is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; USEPA 2019a). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA’s regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted stricter lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.⁵ As a result of these

¹ PM_{2.5} is the main cause of reduced visibility (haze) in parts of the United States.

² Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

³ Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

⁴ CARB approved the SCAQMD’s request to redesignate the SoCAB from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the National AAQS on March 25, 2010, because the SoCAB has not violated federal 24-hour PM₁₀ standards during the period from 2004 to 2007. In June 2013, the EPA approved the State of California’s request to redesignate the PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

⁵ Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

violations, the Los Angeles County portion of the SoCAB is designated nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2017a). Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the project.

TOXIC AIR CONTAMINANTS

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit designated TACs. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions. To date, CARB has established formal control measures for 11 TACs, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

CARB has promulgated the following specific rules to limit TAC emissions:

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

Multiple Airborne Toxics Exposure Study (MATES)

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and estimated the potential health risks from air toxics in the SoCAB. In 2008, South Coast AQMD conducted its third update to the MATES study (MATES III). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the cancer risk (South Coast AQMD 2008b).

South Coast AQMD recently released the fourth update (MATES IV). The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources while 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, accounting for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basin-wide population-weighted risk decreased by approximately 57 percent compared to the analysis done for the MATES III time period (South Coast AQMD 2015a).

The Office of Environmental Health Hazard Assessment (OEHHA) updated the guidelines for estimating cancer risks on March 6, 2015. The new method utilizes higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined together, South Coast AQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher using the proposed updated methods identified in MATES IV (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (South Coast AQMD 2015a).

Air Quality Management Planning

South Coast AQMD is the agency responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

On March 3, 2017, South Coast AQMD adopted the 2016 AQMP as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031,
- 2012 National annual PM_{2.5} standard by 2025⁶,
- 2006 National 24-hour PM_{2.5} standard by 2019,
- 1997 National 8-hour ozone standard by 2023, and the
- 1979 National 1-hour ozone standard by year 2022.

It is projected that total NO_x emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (South Coast AQMD 2017), which requires reducing NO_x emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO_x emissions would also reduce PM_{2.5} concentrations in the SoCAB. However, as the goal is to meet the 2012 federal annual PM_{2.5} standard no later than year 2025, South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in

⁶ The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National PM_{2.5} standard.

the 2016 AQMP would be implemented in collaboration between CARB and the EPA (South Coast AQMD 2017).

LEAD STATE IMPLEMENTATION PLAN

In 2008 EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **Unclassified:** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- **Attainment:** a pollutant is in attainment if the CAAQS for that pollutant was not violated at any site in the area during a three-year period.
- **Nonattainment:** a pollutant is in nonattainment if there was at least one violation of a state AAQS for that pollutant in the area.
- **Nonattainment/Transitional:** a subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB is designated as nonattainment for lead (Los Angeles County only) under the National AAQS.

Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment/Maintenance
PM _{2.5}	Nonattainment	Nonattainment ¹
CO	Attainment	Attainment
NO ₂	Attainment	Attainment/Maintenance
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) ²
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2017b.

¹ South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under federal PM_{2.5} standard.

² In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 10 – Pomona/Walnut Valley. The air quality monitoring station within SRA 10 closest to the project site is the Pomona Monitoring Station. This station monitors O₃ and NO₂. Data for PM₁₀ and PM_{2.5} is supplemented by the Azusa Monitoring Station. The most current five years of data from these monitoring stations are included in Table 3, *Ambient Air Quality Monitoring Summary*. The data show regular violations of the state and federal O₃, the state PM₁₀, and federal PM_{2.5} standards in the last five years.

Table 3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2014	2015	2016	2017	2018
Ozone (O₃)¹					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	22	30	20	18	7
State 8-hour ≥ 0.07 ppm (days exceed threshold)	56	55	29	38	11
Federal 8-Hour > 0.075 ppm (days exceed threshold)	33	36	14	20	8
Max. 1-Hour Conc. (ppm)	0.123	0.136	0.127	0.147	0.112
Max. 8-Hour Conc. (ppm)	0.099	0.098	0.092	0.114	0.092
Nitrogen Dioxide (NO₂)¹					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0889	0.0723	0.0693	0.0812	0.0679
Coarse Particulates (PM₁₀)²					
State 24-Hour > 50 µg/m ³ (days exceed threshold)	21	12	12	7	10
Federal 24-Hour > 150 µg/m ³ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m ³)	96.0	101.0	74.0	83.9	78.3
Fine Particulates (PM_{2.5})¹					
Federal 24-Hour > 35 µg/m ³ (days exceed threshold)	0	2	0	0	1
Max. 24-Hour Conc. (µg/m ³)	32.4	70.3	32.1	24.9	41.8

Source: CARB 2020.

ppm: parts per million; parts per billion, µg/m³: micrograms per cubic meter

Notes: * Data not available.

¹ Data obtained from the Pomona Monitoring Station.

² Data obtained from the Azusa Monitoring Station.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest sensitive receptors to the proposed project site are the employees of the Furniture of America, Frank and Son Trucking Company, and Legend Footwear to the northeast, north, and west of the project site, respectively. The nearest residential receptors are about 750 feet to the south of the project site.

Methodology

Projected construction-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25. CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, on-road emissions, and off-road emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. The calculated emissions of the project are compared to thresholds of significance for individual projects using the South Coast AQMD’s CEQA Air Quality Analysis Guidance Handbook.

Thresholds of Significance

The analysis of the proposed project’s air quality impacts follows the guidance and methodologies recommended in South Coast AQMD’s *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD’s website (South Coast AQMD 1993).⁷ CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed through an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project’s cumulative impact on air quality in the SoCAB. Table 4, *South Coast AQMD Significance Thresholds*, lists South Coast AQMD’s regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 4 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2019.

⁷ SCAQMD’s Air Quality Significance Thresholds are current as of March 2015 and can be found here: <http://www.aqmd.gov/ceqa/hdbk.html>.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk (PM_{2.5}, TACs)
- Aggravates respiratory disease (O₃, PM_{2.5})
- Increases bronchitis (O₃, PM_{2.5})
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- Reduces resistance to infections and increases fatigue (O₃)
- Reduces lung growth in children (PM_{2.5})
- Contributes to heart disease and heart attacks (PM_{2.5})
- Contributes to premature death (O₃, PM_{2.5})
- Linked to lower birth weight in newborns (PM_{2.5}) (South Coast AQMD 2015b)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015c).

Mass emissions in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact. South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hot spot analysis conducted for the attainment by South Coast AQMD for busiest intersections in Los

Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.⁸ As identified in South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).

LOCALIZED SIGNIFICANCE THRESHOLDS

South Coast AQMD developed LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 5, *South Coast AQMD Localized Significance Thresholds*.

Table 5 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³

Source: South Coast AQMD 2019.

ppm – parts per million; µg/m³ – micrograms per cubic meter

¹ Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 5 for projects under 5-acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

In accordance with South Coast AQMD's LST methodology, construction LSTs are based on the acreage disturbed per day based on equipment use. The construction LSTs for the project site in SRA 10 are shown in Table 6, *South Coast AQMD Screening-Level Construction Localized Significance Thresholds*, sensitive receptors within 450 feet (137 meters) for NO_x and CO and 750 feet (229 meters) for PM₁₀ and PM_{2.5}. These two distances

⁸ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

represent residences at 750 feet, which are assumed to be exposed to construction emissions 24 hours a day, and the worker population at 450 feet, who would not be exposed to construction emissions for most of the day.

Table 6 South Coast AQMD Screening-Level Construction Localized Significance Thresholds

Acreage Disturbed	Threshold (lbs/day)			
	Nitrogen Oxides (NO _x) ¹	Carbon Monoxide (CO) ¹	Coarse Particulates (PM ₁₀) ²	Fine Particulates (PM _{2.5}) ²
≤1.00 Acre Disturbed Per Day	225	2,709	66	23

Source: South Coast AQMD 2008a and 2011.

¹ LSTs are based on receptors within 450 feet (137 meters) in SRA 10.

² LSTs are based on receptors within 750 feet (229 meters) in SRA 10.

Because the project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern associated with the project.

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 7, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. (*California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369 (Case No. S213478)*). CEQA does not require CEQA-level environmental document to analyze the environmental effects of attracting development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users, when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

Table 7 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: South Coast AQMD 2019.

GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,⁹ carbon (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).¹⁰ The major GHG are briefly described below.

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH₄)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N₂O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.
 - **Chlorofluorocarbons (CFCs)** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases

⁹ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

¹⁰ Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017a). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

- **Perfluorocarbons (PFCs)** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF₄] and perfluoroethane [C₂F₆]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
- **Sulfur Hexafluoride (SF₆)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF₆ is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
- **Hydrochlorofluorocarbons (HCFCs)** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
- **Hydrofluorocarbons (HFCs)** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2019b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 8, *GHG Emissions and Their Relative Global Warming Potential Compared to CO₂*. The GWP is used to convert GHGs to CO₂-equivalence (CO₂e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH₄, a project that generates 10 metric tons (MT) of CH₄ would be equivalent to 250 MT of CO₂.¹¹

Table 8 GHG Emissions and Their Relative Global Warming Potential Compared to CO₂

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO ₂ ¹	Fourth Assessment Report Global Warming Potential Relative to CO ₂ ¹
Carbon Dioxide (CO ₂)	50 to 200	50 to 200	1	1
Methane ² (CH ₄)	12 (±3)	12	21	25
Nitrous Oxide (N ₂ O)	120	114	310	298
Hydrofluorocarbons:				
HFC-23	264	270	11,700	14,800
HFC-32	5.6	4.9	650	675
HFC-125	32.6	29	2,800	3,500
HFC-134a	14.6	14	1,300	1,430
HFC-143a	48.3	52	3,800	4,470
HFC-152a	1.5	1.4	140	124
HFC-227ea	36.5	34.2	2,900	3,220
HFC-236fa	209	240	6,300	9,810
HFC-4310mee	17.1	15.9	1,300	1,030
Perfluoromethane: CF ₄	50,000	50,000	6,500	7,390
Perfluoroethane: C ₂ F ₆	10,000	10,000	9,200	12,200
Perfluorobutane: C ₄ F ₁₀	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C ₆ F ₁₄	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF ₆)	3,200	NA	23,900	22,800

Source: IPCC 1995; IPCC 2007.

Notes: The GWP values in the IPCC's Fifth Assessment Report (2013) reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO₂. However, South Coast AQMD uses the AR4 GWP values to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the AR4 GWP values.

¹ Based on 100-year time horizon of the GWP of the air pollutant relative to CO₂.

² The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO₂ is not included.

California's Greenhouse Gas Sources and Relative Contribution

In 2019, the statewide GHG emissions inventory was updated for 2000 to 2017 emissions using the GWPs in IPCC's AR4.¹² Based on these GWPs, California produced 424.10 MMTCO₂e GHG emissions in 2017. California's transportation sector was the single largest generator of GHG emissions, producing 40.1 percent of the state's total emissions. Industrial sector emissions made up 21.1 percent, and electric power generation made up 14.7 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (9.7 percent), agriculture and forestry (7.6 percent) high GWP (4.7 percent), and recycling and waste (2.1 percent) (CARB 2019a).

California's GHG emissions have followed a declining trend since 2007. In 2017, emissions from routine GHG emitting activities statewide were 424 MMTCO₂e, 5 MMTCO₂e lower than 2016 levels. This represents an overall decrease of 14 percent since peak levels in 2004 and 7 MMTCO₂e below the 1990 level and the state's

¹² Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

2020 GHG target. During the 2000 to 2017 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 MTCO₂e per capita to 10.7 MTCO₂e per capita in 2017, a 24 percent decrease. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining, representing a 41 percent decline since the 2001 peak, while the state's GDP has grown 52 percent during this period. For the first time since California started to track GHG emissions, California uses more electricity from zero-GHG sources (hydro, solar, wind, and nuclear energy) (CARB 2019b).

Regulatory Settings

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The EPA announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO₂ per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025 that will require a fleet average of 54.5 miles per gallon in 2025.

While the EPA is reexamining the 2017–2025 emissions and CAFE standards, a consortium of automakers and California have agreed on a voluntary framework to reduce emissions that can serve as an alternative path forward for clean vehicle standards nationwide. Automakers who agreed to the framework are Ford, Honda,

BMW of North America and Volkswagen Group of America. The framework supports continued annual reductions of vehicle greenhouse gas emissions through the 2026 model year, encourages innovation to accelerate the transition to electric vehicles, and provides industry the certainty needed to make investments and create jobs. This commitment means that the auto companies party to the voluntary agreement will only sell cars in the United States that meet these standards (CARB 2019c).

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence Executive Order. It officially rescinds the Clean Power Plan rule issued during the Obama Administration and sets emissions guidelines for states in developing plans to limit CO₂ emissions from coal-fired power plants.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32) and Senate Bill 375 (SB 375).

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 MMTCO_{2e} in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMTCO_{2e} (471 million tons) for the state (CARB 2008). In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than

25,000 MTCO_{2e} per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 MMTCO_{2e} 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 MMTCO_{2e} (CARB 2014).

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals (CARB 2014). CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014).

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaptation strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan Update

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197

requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO_{2e} for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017c).

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and TACs emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the State's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than 6 MTCO_{2e} or less per capita by 2030 and 2 MTCO_{2e} or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the State's

1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population)—consistent with the Scoping Plan and the state’s long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the business-as-usual (BAU) yardstick—that is, what would the GHG emissions look like if the State did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 9, *2017 Climate Change Scoping Plan Emissions Reductions Gap*. It includes the existing renewables requirements, advanced clean cars, the “10 percent” Low Carbon Fuel Standard (LCFS), and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 MMTCO₂e above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology deployment, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

Table 9 2017 Climate Change Scoping Plan Emissions Reductions Gap

Modeling Scenario	2030 GHG Emissions MMTCO ₂ e
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	260
Gap to 2030 Target	60

Source: CARB 2017c.

Table 10, *2017 Climate Change Scoping Plan Emissions Change by Sector*, provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 10 2017 Climate Change Scoping Plan Emissions Change by Sector

Scoping Plan Sector	1990 MMTCO _{2e}	2030 Proposed Plan Ranges MMTCO _{2e}	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink ¹	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
Total	431	260	-40%

Source: CARB 2017c.

Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.

¹ Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH₄. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the “Final Proposed Short-Lived Climate Pollutant Reduction Strategy,” which identifies the state’s approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s despite the tripling of diesel fuel use (CARB 2017b). In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017b). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the SoCAB.

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle

trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMTCO_{2e} in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018). CARB adopted the updated targets and methodology on March 22, 2018. All SCSs adopted after October 1, 2018 are subject to these new targets.

SCAG's 2016-2040 RTP/SCS

SB 375 requires each MPO to prepare an SCS in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016, and is an update to the 2012 RTP/SCS (SCAG 2016). In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the aforementioned regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and livable corridors and creating neighborhood mobility areas to integrate land use and transportation and plan for more active lifestyles (SCAG 2016). However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and was anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the RPS established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-

2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon), was signed into law in September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, which replaces the SB 350 requirement of 45 percent renewable energy by 2027 with the requirement of 50 percent by 2026 and also raises California's RPS requirements for 2050 from 50 percent to 60 percent. SB 100 also establishes RPS requirements for publicly owned utilities that consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. Furthermore, the bill also establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO₂e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017.

The 2016 Standards continues to improve upon the previous 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2015b).

The 2019 standards move towards cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of 3 stories and less. Four key areas the 2019 standards will focus on include 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings will be 30 percent more energy efficient compared to the 2016 standards while single-family homes will be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.¹³ The mandatory provisions of CALGreen became effective January 1, 2011, and were last updated in 2016. The 2016 CALGreen became effective on January 1, 2017.

¹³ The green building standards became mandatory in the 2010 edition of the code.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as “business as usual,” they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Regulations

California’s Integrated Waste Management Act of 1989 (AB 939; Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327; Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2016 and 2019 CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

Water Efficiency Regulations

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a

water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.¹⁴

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, South Coast AQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

¹⁴ The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. South Coast AQMD is proposing a screening-level threshold of 3,000 MTCO_{2e} annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO_{2e} for commercial projects, 3,500 MTCO_{2e} for residential projects, or 3,000 MTCO_{2e} for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The South Coast AQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 MTCO_{2e} per year per service population (MTCO_{2e}/year/SP) for project-level analyses and 6.6 MTCO_{2e}/year/SP for plan level projects (e.g., program-level projects such as general plans) for the year 2020.¹⁵ The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.

For purposes of this analysis, because the proposed project has an anticipated opening year post-2020 (year 2021), the bright-line screening-level criterion of 3,000 MTCO_{2e}/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 MTCO_{2e}/yr threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

¹⁵ It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

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Regional Construction Emissions Worksheet:

Demolition							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2020 Summer					
	Fugitive Dust					0.09	0.01
	Off-Road	0.73	8.91	4.20	0.02	0.32	0.30
	Total	0.73	8.91	4.20	0.02	0.41	0.31
Offsite							
	Hauling	0.01	0.29	0.06	0.00	0.02	0.01
	Vendor	0.01	0.21	0.06	0.00	0.01	0.00
	Worker	0.02	0.02	0.22	0.00	0.05	0.01
	Total	0.04	0.52	0.34	0.00	0.08	0.02
TOTAL		0.77	9.43	4.53	0.02	0.49	0.34
Onsite		2020 Winter					
	Fugitive Dust					0.09	0.01
	Off-Road	0.73	8.91	4.20	0.02	0.32	0.30
	Total	0.73	8.91	4.20	0.02	0.41	0.31
Offsite							
	Hauling	0.01	0.29	0.07	0.00	0.02	0.01
	Vendor	0.01	0.21	0.06	0.00	0.01	0.00
	Worker	0.03	0.02	0.20	0.00	0.05	0.01
	Total	0.04	0.52	0.33	0.00	0.08	0.02
TOTAL		0.77	9.44	4.53	0.02	0.49	0.34
Onsite		2020					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.09	0.01
	Off-Road	0.73	8.91	4.20	0.02	0.32	0.30
	Total	0.73	8.91	4.20	0.02	0.41	0.31
Offsite							
	Hauling	0.01	0.29	0.07	0.00	0.02	0.01
	Vendor	0.01	0.21	0.06	0.00	0.01	0.00
	Worker	0.03	0.02	0.22	0.00	0.05	0.01
	Total	0.04	0.52	0.34	0.00	0.08	0.02
TOTAL		0.77	9.44	4.53	0.02	0.49	0.34
Grading							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2019 Summer					
	Fugitive Dust					0.00	0.00
	Off-Road	0.28	3.52	2.08	0.01	0.10	0.09
	Total	0.28	3.52	2.08	0.01	0.10	0.09
Offsite							
	Hauling	0.01	0.19	0.04	0.00	0.01	0.00
	Vendor	0.01	0.21	0.06	0.00	0.01	0.00
	Worker	0.01	0.01	0.13	0.00	0.03	0.01
	Total	0.03	0.41	0.23	0.00	0.06	0.02
TOTAL		0.30	3.94	2.31	0.01	0.16	0.11
Onsite		2019 Winter					
	Fugitive Dust					0.00	0.00
	Off-Road	0.28	3.52	2.08	0.01	0.10	0.09
	Total	0.28	3.52	2.08	0.01	0.10	0.09
Offsite							
	Hauling	0.01	0.19	0.05	0.00	0.01	0.00
	Vendor	0.01	0.21	0.06	0.00	0.01	0.00
	Worker	0.02	0.01	0.12	0.00	0.03	0.01
	Total	0.03	0.42	0.23	0.00	0.06	0.02
TOTAL		0.31	3.94	2.31	0.01	0.16	0.11
Onsite		2019					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.28	3.52	2.08	0.01	0.10	0.09
	Total	0.28	3.52	2.08	0.01	0.10	0.09
Offsite							
	Hauling	0.01	0.19	0.05	0.00	0.01	0.00
	Vendor	0.01	0.21	0.06	0.00	0.01	0.00
	Worker	0.02	0.01	0.13	0.00	0.03	0.01
	Total	0.03	0.42	0.23	0.00	0.06	0.02
TOTAL		0.31	3.94	2.31	0.01	0.16	0.11

Billboard Installation		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2020 Summer					
	Off-Road	0.73	8.93	4.21	0.02	0.32	0.30
	Total	0.73	8.93	4.21	0.02	0.32	0.30
Offsite							
	Hauling	0.01	0.29	0.06	0.00	0.02	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.29	0.06	0.00	0.02	0.01
TOTAL		0.74	9.22	4.27	0.02	0.34	0.30
Onsite		2020 Winter					
	Off-Road	0.73	8.93	4.21	0.02	0.32	0.30
	Total	0.73	8.93	4.21	0.02	0.32	0.30
Offsite							
	Hauling	0.01	0.29	0.07	0.00	0.02	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.29	0.07	0.00	0.02	0.01
TOTAL		0.74	9.22	4.27	0.02	0.34	0.30
Onsite		2020					
	Off-Road	0.73	8.93	4.21	0.02	0.32	0.30
	Total	0.73	8.93	4.21	0.02	0.32	0.30
Offsite							
	Hauling	0.01	0.29	0.07	0.00	0.02	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.01	0.29	0.07	0.00	0.02	0.01
TOTAL		0.74	9.22	4.27	0.02	0.34	0.30
Demolition		0.77	9.44	4.53	0.02	0.49	0.34
Grading		0.31	3.94	2.31	0.01	0.16	0.11
Billboard Installation		0.74	9.22	4.27	0.02	0.34	0.30
MAX DAILY		0.77	9.44	4.53	0.02	0.49	0.34
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Construction LSTs Worksheet:

Demolition						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Fugitive Dust				0.09	0.01
	Off-Road		8.91	4.20	0.32	0.30
	Total		8.91	4.20	0.41	0.31
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			8.91	4.20	0.41	0.31
Onsite		2020				
	Fugitive Dust				0.09	0.01
	Off-Road		8.91	4.20	0.32	0.30
	Total		8.91	4.20	0.41	0.31
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			8.91	4.20	0.41	0.31
Onsite		2020				
	Fugitive Dust		0.00	0.00	0.09	0.01
	Off-Road		8.91	4.20	0.32	0.30
	Total		8.91	4.20	0.41	0.31
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
TOTAL			8.91	4.20	0.41	0.31
Grading						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2019				
	Fugitive Dust				0.00	0.00
	Off-Road		3.52	2.08	0.10	0.09
	Total		3.52	2.08	0.10	0.09
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			3.52	2.08	0.10	0.09
Onsite		2019				
	Fugitive Dust				0.00	0.00
	Off-Road		3.52	2.08	0.10	0.09
	Total		3.52	2.08	0.10	0.09
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			3.52	2.08	0.10	0.09
Onsite		2019				
	Fugitive Dust		0.00	0.00	0.00	0.00
	Off-Road		3.52	2.08	0.10	0.09
	Total		3.52	2.08	0.10	0.09
Offsite						
	Hauling		0.00	0.00	0.00	0.00
	Vendor		0.00	0.00	0.00	0.00
	Worker		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.00	0.00
TOTAL			3.52	2.08	0.10	0.09

Billboard Installation			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2020				
	Off-Road		8.93	4.21	0.32	0.30
	Total		8.93	4.21	0.32	0.30
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			8.93	4.21	0.32	0.30
Onsite		2020				
	Off-Road		8.93	4.21	0.32	0.30
	Total		8.93	4.21	0.32	0.30
Offsite						
	Hauling					
	Vendor					
	Worker					
	Total					
TOTAL			8.93	4.21	0.32	0.30
Demolition			8.91	4.20	0.41	0.31
	1.00 Acre LST		225	2,709	66	23
	Exceeds LST?		no	no	no	no
Grading			3.52	2.08	0.10	0.09
	1.00 Acre LST		225	2,709	66	23
	Exceeds LST?		no	no	no	no
Billboard Installation			8.93	4.21	0.32	0.30
	1.00 Acre LST		225	2,709	66	23
	Exceeds LST?		no	no	no	no

**NOx and CO LSTs based on 450 ft receptor (employees), PM10 and PM2.5 LSTs based on 750 ft receptor (residences) as employees would not be in office 24hrs/day

GHG Summary

Source	Annual GHG (MTons)
Digital Signage	60
TOTAL	60

Southern California Edison Emission Factors: Illuminated Signage

	Intensity factor ¹	
	lbs/MWH	lbs/KWH
CO ₂	504.43634	0.50443634
CH ₄	0.029	0.000029
N ₂ O	0.00617	0.00000617

Source: South Coast Air Quality Management District (SCAQMD). 2011. California Emissions Estimator Model (CalEEMod), Version 2011.1.1. Based on the California Air Resources Board (CARB) Local Government Operations Protocol (LGO) for CO₂ and E-Grid values for CH₄ and N₂O. Appendix D, Default Data Tables. Table 1.2, Electrical Utility Emission Factors of GHGs.

¹ Southern California Edison. 2019. 2018 Sustainability Report.

<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf>.

Global Warming Potentials

	(GWP)	SCE (lbs/KWH)
CO ₂	1	0.50443634
CH ₄	25	0.00073
N ₂ O	298	0.00183866
Total CO ₂ e		0.507

Source: Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

lbs to Tons	2000
Tons to Mton	0.9071847

Source: California Air Resources Board (CARB). 2008. Local Government Operations Protocol. Appendix F, Standard Conversion Factors

Backlit Signage Energy Use Estimates

Number of Signs	1 units
Energy Use Per Sign Per Day	720 kWh
Average Annual Per Unit*	262,800 kWh - Annual

* The energy use for the double faced sign would be 30,000 W. Provided by the Applicant.

GHG Emissions from Electricity Use

	lbs CO ₂ e	MTons
Average Annual	133,240	60

CalEEMod Inputs - 19465 Walnut Drive Billboard Project

Name: 19465 Walnut Drive Billboard Project
Project Number: IND-22
Project Location: 19465 East Walnut Drive North, City of Industry
County/Air Basin: Los Angeles County, South Coast Air Basin (SoCAB)
Climate Zone: 9
Land Use Setting: Urban
Operational Year: 2021
Utility Company: Southern California Edison
Air Basin: SoCAB
Air District: SCAQMD
SRA: 10

Project Acreage <1

Land Use *

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Commercial	User Defined Commercial	1.00	User Defined Unit	0.0	0
					0.0

Demolition

None

Component	Amount to be Demolished (Tons)	Haul Truck Capacity		Total Trip Ends	Trip Ends/ day	Total Days
		(tons)	Haul Distance (miles)			
Billboard	19.1	20	20	2	1	2
Total	19.1			2		

Soil Haul¹

Construction Activities	Haul Truck Capacity (cy)	Import Volume (CY)	No. of total one-way import haul (trip ends)	No. of total one-way haul (trip ends/day)	Export Volume (CY)	No. of total one-way export haul (trip ends)	No. of total one-way haul (trip ends/day)	Total Days
Grading	16	0	0	0	14	2	1	3
		0	0					

Export Haul Travel Distance (1-Way): 20

Southern California Edison Carbon Intensity Factors

CO ₂ ^{-1,2}	504.43634	pounds per megawatt hour
CH ₄ ⁻³	0.029	pound per megawatt hour
N ₂ O ⁻³	0.00617	pound per megawatt hour

¹ Based on CO2e intensity factor of 507 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report. <https://www.edison.com/content/dam/eix/documents/sustainability/eix-2018-sustainability-report.pdf>.

² Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH4 and N2O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate

³ CalEEMod default values.

Construction Mitigation

SCAQMD Rule 403

Replace Ground Cover	PM10:	<u> 5 </u>	% Reduction
Replace Ground Cover	PM2.5:	<u> 5 </u>	% Reduction
Water Exposed Area	Frequency:	<u> 2 </u>	per day
	PM10:	<u> 55 </u>	% Reduction
	PM25:	<u> 55 </u>	% Reduction
Unpaved Roads	Vehicle Speed:	<u> 15 </u>	mph

SCAQMD Rule 1186

Clean Paved Road	<u> 9 </u>	% PM Reduction
------------------	--	----------------

Construction Activities and Schedule Assumptions:

Project Site				
Construction Activities	Phase Type	Construction Schedule		
		Start Date	End Date	CalEEMod Duration (Workday)
Demolition	Grading	5/4/2020	5/5/2020	2
Grading	Grading	5/6/2020	5/8/2020	3
Billboard Installation	Building Construction	5/11/2020	5/12/2020	2

CalEEMod Construction Off-Road Equipment Inputs

Equipment details provided by Applicant.

General Construction Hours: 8 hours

btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Construction Equipment Details						
Equipment		# of Equipment	hr/day	hp *	load factor *	total trips
Demolition						
Auger		1	8	221	0.5025	
Crane		1	8	231	0.2881	
Worker Trips						5
Vendor Trips						2
Hauling Trips						2
Grading						
Auger		1	8	221	0.5025	
Crane		1	8	231	0.2881	
Worker Trips						3
Vendor Trips						2
Hauling Trips						2
Billboard Installation						
Auger		1	8	221	0.5025	
Crane		1	8	231	0.2881	
Worker Trips						0
Vendor Trips						0
Hauling Trips*						2

* Assumes old billboard and new billboard would require the same number of trips

Construction Trips Worksheet

	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Total Trip Ends Per Day	Workdays
Demolition	5	2	1	8	2
Grading	3	2	1	2	3
Billboard Installation	0	0	1	2	2
Maximum Daily Trips	8	4	3	12	

19465 Walnut Drive Billboard Construction Run - Los Angeles-South Coast County, Summer

**19465 Walnut Drive Billboard Construction Run
Los Angeles-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	504.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 Sustainability Report

Land Use -

Construction Phase - billboard installation

Off-road Equipment - using bore/drill rig as proxy for auger

Off-road Equipment - using bore/drill rig as proxy for auger

Off-road Equipment - using bore/drill rig as proxy for auger

Grading -

Demolition -

Trips and VMT - 2 VT/water truck/day, assuming old and new billboard would require same number of trips

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	0.00	2.00
tblConstructionPhase	NumDays	0.00	2.00
tblConstructionPhase	NumDays	0.00	3.00
tblConstructionPhase	PhaseEndDate	5/3/2020	5/12/2020
tblConstructionPhase	PhaseEndDate	5/3/2020	5/5/2020
tblConstructionPhase	PhaseEndDate	5/3/2020	5/8/2020
tblConstructionPhase	PhaseStartDate	5/4/2020	5/11/2020
tblConstructionPhase	PhaseStartDate	5/4/2020	5/6/2020
tblGrading	MaterialExported	0.00	14.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated 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					
2020	0.7698	9.4304	4.5345	0.0171	0.2905	0.3261	0.6167	0.0542	0.3001	0.3544	0.0000	1,668.3903	1,668.3903	0.4860	0.0000	1,680.5411
Maximum	0.7698	9.4304	4.5345	0.0171	0.2905	0.3261	0.6167	0.0542	0.3001	0.3544	0.0000	1,668.3903	1,668.3903	0.4860	0.0000	1,680.5411

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					
2020	0.7698	9.4304	4.5345	0.0171	0.1672	0.3261	0.4933	0.0350	0.3001	0.3351	0.0000	1,668.3903	1,668.3903	0.4860	0.0000	1,680.5411
Maximum	0.7698	9.4304	4.5345	0.0171	0.1672	0.3261	0.4933	0.0350	0.3001	0.3351	0.0000	1,668.3903	1,668.3903	0.4860	0.0000	1,680.5411

	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
Percent Reduction	0.00	0.00	0.00	0.00	42.47	0.00	20.01	35.55	0.00	5.44	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	5/4/2020	5/5/2020	5	2	
2	Grading	Grading	5/6/2020	5/8/2020	5	3	
3	Building Construction	Building Construction	5/11/2020	5/12/2020	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Cranes	1	8.00	231	0.29
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37

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	2	5.00	2.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	1	3.00	2.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	0.00	0.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Demolition - 2020

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					0.2044	0.0000	0.2044	0.0309	0.0000	0.0309			0.0000			0.0000
Off-Road	0.7309	8.9138	4.1961	0.0152		0.3238	0.3238		0.2979	0.2979		1,468.5965	1,468.5965	0.4750		1,480.4709
Total	0.7309	8.9138	4.1961	0.0152	0.2044	0.3238	0.5281	0.0309	0.2979	0.3288		1,468.5965	1,468.5965	0.4750		1,480.4709

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	8.7300e-003	0.2875	0.0637	7.9000e-004	0.0175	9.2000e-004	0.0184	4.7900e-003	8.8000e-004	5.6700e-003		85.5832	85.5832	5.8300e-003		85.7288
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0230	0.0164	0.2189	5.9000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		58.8056	58.8056	1.8500e-003		58.8520
Total	0.0389	0.5167	0.3384	1.9000e-003	0.0862	2.3900e-003	0.0886	0.0233	2.2700e-003	0.0256		199.7938	199.7938	0.0111		200.0703

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					0.0874	0.0000	0.0874	0.0132	0.0000	0.0132			0.0000			0.0000
Off-Road	0.7309	8.9138	4.1961	0.0152		0.3238	0.3238		0.2979	0.2979	0.0000	1,468.5965	1,468.5965	0.4750		1,480.4709
Total	0.7309	8.9138	4.1961	0.0152	0.0874	0.3238	0.4111	0.0132	0.2979	0.3111	0.0000	1,468.5965	1,468.5965	0.4750		1,480.4709

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	8.7300e-003	0.2875	0.0637	7.9000e-004	0.0163	9.2000e-004	0.0172	4.5000e-003	8.8000e-004	5.3800e-003		85.5832	85.5832	5.8300e-003		85.7288
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0120	1.0000e-003	0.0130	3.4800e-003	9.6000e-004	4.4400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0230	0.0164	0.2189	5.9000e-004	0.0515	4.7000e-004	0.0520	0.0138	4.3000e-004	0.0142		58.8056	58.8056	1.8500e-003		58.8520
Total	0.0389	0.5167	0.3384	1.9000e-003	0.0798	2.3900e-003	0.0822	0.0217	2.2700e-003	0.0240		199.7938	199.7938	0.0111		200.0703

3.3 Grading - 2020

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					5.3000e-004	0.0000	5.3000e-004	8.0000e-005	0.0000	8.0000e-005			0.0000			0.0000
Off-Road	0.2775	3.5223	2.0808	9.4000e-003		0.1015	0.1015		0.0934	0.0934		909.8069	909.8069	0.2943		917.1631
Total	0.2775	3.5223	2.0808	9.4000e-003	5.3000e-004	0.1015	0.1020	8.0000e-005	0.0934	0.0934		909.8069	909.8069	0.2943		917.1631

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	0.1917	0.0425	5.3000e-004	0.0117	6.1000e-004	0.0123	3.2000e-003	5.9000e-004	3.7800e-003		57.0555	57.0555	3.8800e-003		57.1525
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0128	1.0000e-003	0.0138	3.6900e-003	9.6000e-004	4.6400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0138	9.8200e-003	0.1314	3.5000e-004	0.0335	2.8000e-004	0.0338	8.8900e-003	2.6000e-004	9.1500e-003		35.2834	35.2834	1.1100e-003		35.3112
Total	0.0267	0.4143	0.2296	1.4000e-003	0.0580	1.8900e-003	0.0599	0.0158	1.8100e-003	0.0176		147.7438	147.7438	8.3700e-003		147.9532

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					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000			0.0000
Off-Road	0.2775	3.5223	2.0808	9.4000e-003		0.1015	0.1015		0.0934	0.0934	0.0000	909.8069	909.8069	0.2943		917.1631
Total	0.2775	3.5223	2.0808	9.4000e-003	2.3000e-004	0.1015	0.1017	3.0000e-005	0.0934	0.0934	0.0000	909.8069	909.8069	0.2943		917.1631

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	0.1917	0.0425	5.3000e-004	0.0109	6.1000e-004	0.0115	3.0000e-003	5.9000e-004	3.5900e-003		57.0555	57.0555	3.8800e-003		57.1525
Vendor	7.1100e-003	0.2127	0.0557	5.2000e-004	0.0120	1.0000e-003	0.0130	3.4800e-003	9.6000e-004	4.4400e-003		55.4049	55.4049	3.3800e-003		55.4895
Worker	0.0138	9.8200e-003	0.1314	3.5000e-004	0.0309	2.8000e-004	0.0312	8.2500e-003	2.6000e-004	8.5100e-003		35.2834	35.2834	1.1100e-003		35.3112
Total	0.0267	0.4143	0.2296	1.4000e-003	0.0538	1.8900e-003	0.0556	0.0147	1.8100e-003	0.0165		147.7438	147.7438	8.3700e-003		147.9532

3.4 Building Construction - 2020

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	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983		1,473.1455	1,473.1455	0.4765		1,485.0567
Total	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983		1,473.1455	1,473.1455	0.4765		1,485.0567

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	8.7300e-003	0.2875	0.0637	7.9000e-004	0.0175	9.2000e-004	0.0184	4.7900e-003	8.8000e-004	5.6700e-003		85.5832	85.5832	5.8300e-003		85.7288
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
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
Total	8.7300e-003	0.2875	0.0637	7.9000e-004	0.0175	9.2000e-004	0.0184	4.7900e-003	8.8000e-004	5.6700e-003		85.5832	85.5832	5.8300e-003		85.7288

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	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983	0.0000	1,473.1455	1,473.1455	0.4765		1,485.0567
Total	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983	0.0000	1,473.1455	1,473.1455	0.4765		1,485.0567

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	8.7300e-003	0.2875	0.0637	7.9000e-004	0.0163	9.2000e-004	0.0172	4.5000e-003	8.8000e-004	5.3800e-003		85.5832	85.5832	5.8300e-003		85.7288
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
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
Total	8.7300e-003	0.2875	0.0637	7.9000e-004	0.0163	9.2000e-004	0.0172	4.5000e-003	8.8000e-004	5.3800e-003		85.5832	85.5832	5.8300e-003		85.7288

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

19465 Walnut Drive Billboard Construction Run - Los Angeles-South Coast County, Winter

**19465 Walnut Drive Billboard Construction Run
Los Angeles-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	504.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 Sustainability Report

Land Use -

Construction Phase - billboard installation

Off-road Equipment - using bore/drill rig as proxy for auger

Off-road Equipment - using bore/drill rig as proxy for auger

Off-road Equipment - using bore/drill rig as proxy for auger

Grading -

Demolition -

Trips and VMT - 2 VT/water truck/day, assuming old and new billboard would require same number of trips

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	0.00	2.00
tblConstructionPhase	NumDays	0.00	2.00
tblConstructionPhase	NumDays	0.00	3.00
tblConstructionPhase	PhaseEndDate	5/3/2020	5/12/2020
tblConstructionPhase	PhaseEndDate	5/3/2020	5/5/2020
tblConstructionPhase	PhaseEndDate	5/3/2020	5/8/2020
tblConstructionPhase	PhaseStartDate	5/4/2020	5/11/2020
tblConstructionPhase	PhaseStartDate	5/4/2020	5/6/2020
tblGrading	MaterialExported	0.00	14.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated 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					
2020	0.7729	9.4359	4.5258	0.0170	0.2905	0.3262	0.6167	0.0542	0.3002	0.3544	0.0000	1,661.9668	1,661.9668	0.4864	0.0000	1,674.1257
Maximum	0.7729	9.4359	4.5258	0.0170	0.2905	0.3262	0.6167	0.0542	0.3002	0.3544	0.0000	1,661.9668	1,661.9668	0.4864	0.0000	1,674.1257

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					
2020	0.7729	9.4359	4.5258	0.0170	0.1672	0.3262	0.4933	0.0350	0.3002	0.3351	0.0000	1,661.9668	1,661.9668	0.4864	0.0000	1,674.1257
Maximum	0.7729	9.4359	4.5258	0.0170	0.1672	0.3262	0.4933	0.0350	0.3002	0.3351	0.0000	1,661.9668	1,661.9668	0.4864	0.0000	1,674.1257

	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
Percent Reduction	0.00	0.00	0.00	0.00	42.47	0.00	20.01	35.55	0.00	5.44	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	5/4/2020	5/5/2020	5	2	
2	Grading	Grading	5/6/2020	5/8/2020	5	3	
3	Building Construction	Building Construction	5/11/2020	5/12/2020	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Cranes	1	8.00	231	0.29
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37

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	2	5.00	2.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	1	3.00	2.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	0.00	0.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Demolition - 2020

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					0.2044	0.0000	0.2044	0.0309	0.0000	0.0309			0.0000			0.0000
Off-Road	0.7309	8.9138	4.1961	0.0152		0.3238	0.3238		0.2979	0.2979		1,468.5965	1,468.5965	0.4750		1,480.4709
Total	0.7309	8.9138	4.1961	0.0152	0.2044	0.3238	0.5281	0.0309	0.2979	0.3288		1,468.5965	1,468.5965	0.4750		1,480.4709

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	8.9500e-003	0.2913	0.0677	7.8000e-004	0.0175	9.3000e-004	0.0184	4.7900e-003	8.9000e-004	5.6800e-003		84.1094	84.1094	6.0400e-003		84.2603
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0256	0.0181	0.2005	5.6000e-004	0.0559	4.7000e-004	0.0564	0.0148	4.3000e-004	0.0153		55.3710	55.3710	1.7500e-003		55.4147
Total	0.0419	0.5221	0.3297	1.8400e-003	0.0862	2.4200e-003	0.0886	0.0233	2.2900e-003	0.0256		193.3702	193.3702	0.0114		193.6549

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					0.0874	0.0000	0.0874	0.0132	0.0000	0.0132			0.0000			0.0000
Off-Road	0.7309	8.9138	4.1961	0.0152		0.3238	0.3238		0.2979	0.2979	0.0000	1,468.5965	1,468.5965	0.4750		1,480.4709
Total	0.7309	8.9138	4.1961	0.0152	0.0874	0.3238	0.4111	0.0132	0.2979	0.3111	0.0000	1,468.5965	1,468.5965	0.4750		1,480.4709

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	8.9500e-003	0.2913	0.0677	7.8000e-004	0.0163	9.3000e-004	0.0172	4.5000e-003	8.9000e-004	5.3900e-003		84.1094	84.1094	6.0400e-003		84.2603
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0120	1.0200e-003	0.0130	3.4800e-003	9.7000e-004	4.4600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0256	0.0181	0.2005	5.6000e-004	0.0515	4.7000e-004	0.0520	0.0138	4.3000e-004	0.0142		55.3710	55.3710	1.7500e-003		55.4147
Total	0.0419	0.5221	0.3297	1.8400e-003	0.0798	2.4200e-003	0.0822	0.0217	2.2900e-003	0.0240		193.3702	193.3702	0.0114		193.6549

3.3 Grading - 2020

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					5.3000e-004	0.0000	5.3000e-004	8.0000e-005	0.0000	8.0000e-005			0.0000			0.0000
Off-Road	0.2775	3.5223	2.0808	9.4000e-003		0.1015	0.1015		0.0934	0.0934		909.8069	909.8069	0.2943		917.1631
Total	0.2775	3.5223	2.0808	9.4000e-003	5.3000e-004	0.1015	0.1020	8.0000e-005	0.0934	0.0934		909.8069	909.8069	0.2943		917.1631

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	5.9600e-003	0.1942	0.0451	5.2000e-004	0.0117	6.2000e-004	0.0123	3.2000e-003	5.9000e-004	3.7900e-003		56.0729	56.0729	4.0200e-003		56.1736
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0128	1.0200e-003	0.0138	3.6900e-003	9.7000e-004	4.6600e-003		53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0153	0.0109	0.1203	3.3000e-004	0.0335	2.8000e-004	0.0338	8.8900e-003	2.6000e-004	9.1500e-003		33.2226	33.2226	1.0500e-003		33.2488
Total	0.0287	0.4178	0.2269	1.3500e-003	0.0580	1.9200e-003	0.0599	0.0158	1.8200e-003	0.0176		143.1854	143.1854	8.6700e-003		143.4023

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					2.3000e-004	0.0000	2.3000e-004	3.0000e-005	0.0000	3.0000e-005			0.0000				0.0000
Off-Road	0.2775	3.5223	2.0808	9.4000e-003		0.1015	0.1015		0.0934	0.0934	0.0000	909.8069	909.8069	0.2943			917.1631
Total	0.2775	3.5223	2.0808	9.4000e-003	2.3000e-004	0.1015	0.1017	3.0000e-005	0.0934	0.0934	0.0000	909.8069	909.8069	0.2943			917.1631

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	5.9600e-003	0.1942	0.0451	5.2000e-004	0.0109	6.2000e-004	0.0115	3.0000e-003	5.9000e-004	3.5900e-003			56.0729	56.0729	4.0200e-003		56.1736
Vendor	7.4400e-003	0.2127	0.0615	5.0000e-004	0.0120	1.0200e-003	0.0130	3.4800e-003	9.7000e-004	4.4600e-003			53.8898	53.8898	3.6000e-003		53.9799
Worker	0.0153	0.0109	0.1203	3.3000e-004	0.0309	2.8000e-004	0.0312	8.2500e-003	2.6000e-004	8.5100e-003			33.2226	33.2226	1.0500e-003		33.2488
Total	0.0287	0.4178	0.2269	1.3500e-003	0.0538	1.9200e-003	0.0557	0.0147	1.8200e-003	0.0166			143.1854	143.1854	8.6700e-003		143.4023

3.4 Building Construction - 2020

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	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983			1,473.1455	1,473.1455	0.4765		1,485.0567
Total	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983			1,473.1455	1,473.1455	0.4765		1,485.0567

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	8.9500e-003	0.2913	0.0677	7.8000e-004	0.0175	9.3000e-004	0.0184	4.7900e-003	8.9000e-004	5.6800e-003		84.1094	84.1094	6.0400e-003		84.2603
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
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
Total	8.9500e-003	0.2913	0.0677	7.8000e-004	0.0175	9.3000e-004	0.0184	4.7900e-003	8.9000e-004	5.6800e-003		84.1094	84.1094	6.0400e-003		84.2603

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	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983	0.0000	1,473.1455	1,473.1455	0.4765		1,485.0567
Total	0.7323	8.9314	4.2065	0.0152		0.3243	0.3243		0.2983	0.2983	0.0000	1,473.1455	1,473.1455	0.4765		1,485.0567

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	8.9500e-003	0.2913	0.0677	7.8000e-004	0.0163	9.3000e-004	0.0172	4.5000e-003	8.9000e-004	5.3900e-003		84.1094	84.1094	6.0400e-003		84.2603
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
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
Total	8.9500e-003	0.2913	0.0677	7.8000e-004	0.0163	9.3000e-004	0.0172	4.5000e-003	8.9000e-004	5.3900e-003		84.1094	84.1094	6.0400e-003		84.2603

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

19465 Walnut Drive Billboard Construction Run - Los Angeles-South Coast County, Annual

19465 Walnut Drive Billboard Construction Run
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Commercial	1.00	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	504.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2018 Sustainability Report

Land Use -

Construction Phase - billboard installation

Off-road Equipment - using bore/drill rig as proxy for auger

Off-road Equipment - using bore/drill rig as proxy for auger

Off-road Equipment - using bore/drill rig as proxy for auger

Grading -

Demolition -

Trips and VMT - 2 VT/water truck/day, assuming old and new billboard would require same number of trips

Construction Off-road Equipment Mitigation - SCAQMD Rule 1186

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	0.00	2.00
tblConstructionPhase	NumDays	0.00	2.00
tblConstructionPhase	NumDays	0.00	3.00
tblConstructionPhase	PhaseEndDate	5/3/2020	5/12/2020
tblConstructionPhase	PhaseEndDate	5/3/2020	5/5/2020
tblConstructionPhase	PhaseEndDate	5/3/2020	5/8/2020
tblConstructionPhase	PhaseStartDate	5/4/2020	5/11/2020
tblConstructionPhase	PhaseStartDate	5/4/2020	5/6/2020
tblGrading	MaterialExported	0.00	14.00
tblOffRoadEquipment	LoadFactor	0.50	0.50
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	4.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	504.44
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated 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					
2020	1.9700e-003	0.0246	0.0123	5.0000e-005	3.9000e-004	8.1000e-004	1.2000e-003	8.0000e-005	7.4000e-004	8.2000e-004	0.0000	4.3592	4.3592	1.2900e-003	0.0000	4.3915
Maximum	1.9700e-003	0.0246	0.0123	5.0000e-005	3.9000e-004	8.1000e-004	1.2000e-003	8.0000e-005	7.4000e-004	8.2000e-004	0.0000	4.3592	4.3592	1.2900e-003	0.0000	4.3915

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					
2020	1.9700e-003	0.0246	0.0123	5.0000e-005	2.6000e-004	8.1000e-004	1.0700e-003	6.0000e-005	7.4000e-004	8.0000e-004	0.0000	4.3592	4.3592	1.2900e-003	0.0000	4.3915
Maximum	1.9700e-003	0.0246	0.0123	5.0000e-005	2.6000e-004	8.1000e-004	1.0700e-003	6.0000e-005	7.4000e-004	8.0000e-004	0.0000	4.3592	4.3592	1.2900e-003	0.0000	4.3915

	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
Percent Reduction	0.00	0.00	0.00	0.00	33.33	0.00	10.83	25.00	0.00	2.44	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	5-4-2020	8-3-2020	0.0189	0.0189
		Highest	0.0189	0.0189

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	5/4/2020	5/5/2020	5	2	
2	Grading	Grading	5/6/2020	5/8/2020	5	3	
3	Building Construction	Building Construction	5/11/2020	5/12/2020	5	2	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Cranes	1	8.00	231	0.29
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Grading	Bore/Drill Rigs	1	8.00	221	0.50
Building Construction	Bore/Drill Rigs	1	8.00	221	0.50
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Grading	Rubber Tired Dozers	0	1.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37

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
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Demolition	2	5.00	2.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	1	3.00	2.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	2	0.00	0.00	2.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Demolition - 2020

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					2.0000e-004	0.0000	2.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3000e-004	8.9100e-003	4.2000e-003	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.3323	1.3323	4.3000e-004	0.0000	1.3431
Total	7.3000e-004	8.9100e-003	4.2000e-003	2.0000e-005	2.0000e-004	3.2000e-004	5.2000e-004	3.0000e-005	3.0000e-004	3.3000e-004	0.0000	1.3323	1.3323	4.3000e-004	0.0000	1.3431

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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772
Vendor	1.0000e-005	2.2000e-004	6.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0497	0.0497	0.0000	0.0000	0.0498
Worker	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0511	0.0511	0.0000	0.0000	0.0511
Total	4.0000e-005	5.4000e-004	3.4000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1778	0.1778	1.0000e-005	0.0000	0.1781

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					9.0000e-005	0.0000	9.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3000e-004	8.9100e-003	4.2000e-003	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.3323	1.3323	4.3000e-004	0.0000	1.3431
Total	7.3000e-004	8.9100e-003	4.2000e-003	2.0000e-005	9.0000e-005	3.2000e-004	4.1000e-004	1.0000e-005	3.0000e-004	3.1000e-004	0.0000	1.3323	1.3323	4.3000e-004	0.0000	1.3431

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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772
Vendor	1.0000e-005	2.2000e-004	6.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0497	0.0497	0.0000	0.0000	0.0498
Worker	2.0000e-005	2.0000e-005	2.1000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0511	0.0511	0.0000	0.0000	0.0511
Total	4.0000e-005	5.4000e-004	3.4000e-004	0.0000	8.0000e-005	0.0000	8.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.1778	0.1778	1.0000e-005	0.0000	0.1781

3.3 Grading - 2020

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
Off-Road	4.2000e-004	5.2800e-003	3.1200e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2481
Total	4.2000e-004	5.2800e-003	3.1200e-003	1.0000e-005	0.0000	1.5000e-004	1.5000e-004	0.0000	1.4000e-004	1.4000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2481

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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772
Vendor	1.0000e-005	3.3000e-004	9.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0745	0.0745	0.0000	0.0000	0.0747
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0460	0.0460	0.0000	0.0000	0.0460
Total	4.0000e-005	6.5000e-004	3.5000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.1976	0.1976	1.0000e-005	0.0000	0.1979

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
Off-Road	4.2000e-004	5.2800e-003	3.1200e-003	1.0000e-005		1.5000e-004	1.5000e-004		1.4000e-004	1.4000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2481
Total	4.2000e-004	5.2800e-003	3.1200e-003	1.0000e-005	0.0000	1.5000e-004	1.5000e-004	0.0000	1.4000e-004	1.4000e-004	0.0000	1.2380	1.2380	4.0000e-004	0.0000	1.2481

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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772
Vendor	1.0000e-005	3.3000e-004	9.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0745	0.0745	0.0000	0.0000	0.0747
Worker	2.0000e-005	2.0000e-005	1.9000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0460	0.0460	0.0000	0.0000	0.0460
Total	4.0000e-005	6.5000e-004	3.5000e-004	0.0000	9.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.1976	0.1976	1.0000e-005	0.0000	0.1979

3.4 Building Construction - 2020

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	7.3000e-004	8.9300e-003	4.2100e-003	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.3364	1.3364	4.3000e-004	0.0000	1.3472
Total	7.3000e-004	8.9300e-003	4.2100e-003	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.3364	1.3364	4.3000e-004	0.0000	1.3472

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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772
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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772

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	7.3000e-004	8.9300e-003	4.2100e-003	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.3364	1.3364	4.3000e-004	0.0000	1.3472
Total	7.3000e-004	8.9300e-003	4.2100e-003	2.0000e-005		3.2000e-004	3.2000e-004		3.0000e-004	3.0000e-004	0.0000	1.3364	1.3364	4.3000e-004	0.0000	1.3472

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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772
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	1.0000e-005	3.0000e-004	7.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0771	0.0771	1.0000e-005	0.0000	0.0772

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Construction Localized Significance Thresholds: Demolition

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
10	0.00	137	450	1

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	137	Tractors	0.5	0.0625		0
NOx	225	Graders	0.5	0.0625		0
CO	2,709	Dozers	0.5	0.0625		0
PM10	37.52	Scrapers	1	0.125		0
PM2.5	11.09				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	1	103	129	185	292	570
	1	103	129	185	292	570
CO	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
PM10	1	4	11	26	57	148
	1	4	11	26	57	148
	1	4	11	26	57	148
PM2.5	1	3	4	7	18	75
	1	3	4	7	18	75
	1	3	4	7	18	75
Pomona/Walnut Valley						
	0.00 Acres					
	25	50	100	200	500	
NOx	103	129	185	292	570	
CO	612	911	1741	4345	18991	
PM10	4	11	26	57	148	
PM2.5	3	4	7	18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
10	0.00	137	450	1

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	137	Tractors	0.5	0.0625		0
NOx	225	Graders	0.5	0.0625		0
CO	2,709	Dozers	0.5	0.0625		0
PM10	37.52	Scrapers	1	0.125		0
PM2.5	11.09				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	1	103	129	185	292	570
	1	103	129	185	292	570
CO	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
PM10	1	4	11	26	57	148
	1	4	11	26	57	148
	1	4	11	26	57	148
PM2.5	1	3	4	7	18	75
	1	3	4	7	18	75
	1	3	4	7	18	75
Pomona/Walnut Valley						
	0.00 Acres					
	25	50	100	200	500	
NOx	103	129	185	292	570	
CO	612	911	1741	4345	18991	
PM10	4	11	26	57	148	
PM2.5	3	4	7	18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Billboard Installation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
10	0.00	137	450	1

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	137	Tractors	0.5	0.0625		0
NOx	225	Graders	0.5	0.0625		0
CO	2,709	Dozers	0.5	0.0625		0
PM10	37.52	Scrapers	1	0.125		0
PM2.5	11.09				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	1	103	129	185	292	570
		103	129	185	292	570
CO	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
		612	911	1741	4345	18991
PM10	1	4	11	26	57	148
	1	4	11	26	57	148
		4	11	26	57	148
PM2.5	1	3	4	7	18	75
	1	3	4	7	18	75
		3	4	7	18	75
Pomona/Walnut Valley	0.00 Acres					
	25	50	100	200	500	
NOx	103	129	185	292	570	
CO	612	911	1741	4345	18991	
PM10	4	11	26	57	148	
PM2.5	3	4	7	18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
100			
Distance Increment Above			
200			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Demolition

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
10	0.00	229	750	1

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	229	Tractors	0.5	0.0625		0
NOx	319	Graders	0.5	0.0625		0
CO	5,741	Dozers	0.5	0.0625		0
PM10	65.68	Scrapers	1	0.125		0
PM2.5	23.43				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	1	103	129	185	292	570
	1	103	129	185	292	570
CO	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
PM10	1	4	11	26	57	148
	1	4	11	26	57	148
	1	4	11	26	57	148
PM2.5	1	3	4	7	18	75
	1	3	4	7	18	75
	1	3	4	7	18	75
Pomona/Walnut Valley						
	0.00 Acres					
	25	50	100	200	500	
NOx	103	129	185	292	570	
CO	612	911	1741	4345	18991	
PM10	4	11	26	57	148	
PM2.5	3	4	7	18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
10	0.00	229	750	1

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	229	Tractors	0.5	0.0625		0
NOx	319	Graders	0.5	0.0625		0
CO	5,741	Dozers	0.5	0.0625		0
PM10	65.68	Scrapers	1	0.125		0
PM2.5	23.43				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	1	103	129	185	292	570
	1	103	129	185	292	570
CO	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
PM10	1	4	11	26	57	148
	1	4	11	26	57	148
	1	4	11	26	57	148
PM2.5	1	3	4	7	18	75
	1	3	4	7	18	75
	1	3	4	7	18	75
Pomona/Walnut Valley						
	0.00 Acres					
	25	50	100	200	500	
NOx	103	129	185	292	570	
CO	612	911	1741	4345	18991	
PM10	4	11	26	57	148	
PM2.5	3	4	7	18	75	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: Billboard Installation

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
10	0.00	229	750	1

Source Receptor Distance (meters)	Pomona/Walnut Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	229	Tractors	0.5	0.0625		0
NOx	319	Graders	0.5	0.0625		0
CO	5,741	Dozers	0.5	0.0625		0
PM10	65.68	Scrapers	1	0.125		0
PM2.5	23.43				Acres	0.00

	Acres	25	50	100	200	500
NOx	1	103	129	185	292	570
	1	103	129	185	292	570
	1	103	129	185	292	570
CO	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
	1	612	911	1741	4345	18991
PM10	1	4	11	26	57	148
	1	4	11	26	57	148
	1	4	11	26	57	148
PM2.5	1	3	4	7	18	75
	1	3	4	7	18	75
	1	3	4	7	18	75

Pomona/Walnut Valley

0.00 Acres

	25	50	100	200	500
NOx	103	129	185	292	570
CO	612	911	1741	4345	18991
PM10	4	11	26	57	148
PM2.5	3	4	7	18	75

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
10	1	10	1
Distance Increment Below			
200			
Distance Increment Above			
500			

Updated: 10/21/2009 - Table C-1. 2006 – 2008