

OAKLEY



CALIFORNIA

California Environmental Quality Act (CEQA)

Initial Study

for

**Gateway Self Storage
and 7-Eleven**

(GPA 05-16, RZ 07-16, TPM 02-16, CUP 02-16, DR 14-16)

June 2016

Prepared by

 **RANEY**
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INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

A. BACKGROUND

1. Project Title: Gateway Self Storage and 7-Eleven
2. Lead Agency Name and Address: City of Oakley
3231 Main Street
Oakley, CA 94561
3. Contact Person and Phone Number: Joshua McMurray
Planning Manager
(925) 625-7004
4. Project Location: 3979 Empire Avenue
Southwest corner of Laurel Road and Empire Avenue
Assessor's Parcel Number (APN) 053-071-050
5. Project Sponsors: Sutter & Pierce EPC, LLC
190 Hartz Avenue, Suite 200
Danville, CA 94526
And
7-Eleven, Inc.
3200 Hackberry Road
Irving, TX 75063
6. Existing General Plan: Public and Semi-Public Facilities (PS)
7. Proposed General Plan: Commercial (CO)
8. Existing Zoning: Public and Semi-Public (P)
9. Proposed Zoning: General Commercial (C)
10. Project Description Summary:

Application requesting approval of: 1) a General Plan Amendment (GPA 05-16) to amend the land use designation from Public and Semi-Public Facilities (PS) to Commercial (CO); 2) a Rezone (RZ 07-16) from Public and Semi-Public (P) to General Commercial (C); 3) Tentative Parcel Map (TPM 02-16) to subdivide 3.63 acres into two parcels; 4) Conditional Use Permit (CUP 02-16) to establish a self-storage and gas station; and 5) Design Review (DR 14-16) to construct an approximately 101,997-square-foot (sf) self-storage facility including a convenience store with a six multi-product dispenser fueling station with canopy at the southwest corner of the Laurel Road and Empire Avenue intersection, 3979 Empire Avenue (APN 053-071-050).

B. SOURCES

All technical reports and modeling results prepared for the project analysis are available upon request at the City of Oakley City Hall, located at 3231 Main Street, Oakley, CA 94561. The following documents are referenced information sources utilized by this analysis:

1. AEI Consultants: Environmental & Engineering Services. *Phase I Environmental Site Assessment*. Prepared on February 25, 2016.
2. Bay Area Air Quality Management District. *CEQA Air Quality Guidelines*. May 2012 (updated January 16, 2014).
3. California Emissions Estimator Model. *CalEEMod*. Version 2011.1. Accessed on June 2016.
4. California Environmental Protection Agency, California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. Published April 2005.
5. City of Oakley, Oakley 2020 General Plan, December 2002.
6. City of Oakley, Oakley 2020 General Plan Background Report, September 2001.
7. City of Oakley, Oakley 2020 General Plan Environmental Impact Report, December 2002.
8. City of Oakley. *Oakley Commercial & Industrial Design Guidelines*. February 2005.
9. City of Oakley. *Oakley Municipal Code*. Accessible at <http://www.codepublishing.com/CA/Oakley/>. Passed May 10, 2016.
10. Contra Costa LAFCo. *Water and Wastewater Municipal Services Review for East Contra Costa County*. Approved December 19, 2007
11. Diablo Water District. *Final 2010 Urban Water Management Plan*. June 2011.
12. ENGEO Incorporated. *Geotechnical Exploration Self Storage Facility and 7-Eleven Oakley, California*. Prepared on February 9, 2016.
13. Federal Emergency Management Agency, National Flood Insurance Program. *Flood Insurance Rate Map Number 06013C035SF* Effective June 16, 2009.
14. Ironhouse Sanitary District. *Water Recycling Facility*. Accessible at <http://ironhousesanitarydistrict.com/pages/wrf.html>. Accessed on June 9, 2016.
15. State of California, Natural Resources Agency, Department of Conservation. *Contra Costa County Important Farmland 2012*. Published April 2014.
16. Mid-Valley Engineering, Inc. *Stormwater Control Plan for 3979 Empire Ave. 7-Eleven Oakley*. Prepared on February 3, 2016.
17. Robert A. Karn & Associates, Inc. *Stormwater Control Plan for Oakley Self Storage, Laurel Road & Empire Avenue Oakley, CA*. Prepared on March 9, 2016.
18. Sycamore Environmental Consultants, Inc. *Application Form and Planning Survey Report*. Submitted on April 28, 2016.
19. TJKM Traffic Consultants. *Traffic Impact Study Report Laurel Road Gas Station and Self-Storage Facility TIA City of Oakley, California*. Prepared on March 10, 2016.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Less Than Significant With Mitigation Incorporated” as indicated by the checklist on the following pages.

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

D. DETERMINATION

On the basis of this Initial Study:

- 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 applicant. 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” 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Joshua McMurray
Printed Name

Date

City of Oakley
For

E. BACKGROUND AND INTRODUCTION

This Initial Study/Mitigated Negative Declaration (IS/MND) provides an environmental analysis pursuant to the California Environmental Quality Act (CEQA) for the proposed project. The applicant has submitted this application to the City of Oakley, which is the Lead Agency for the purposes of CEQA review. The IS/MND contains an analysis of the environmental effects of construction and operation of the proposed project.

In December 2002, the City of Oakley adopted the Oakley General Plan and the Oakley General Plan Environmental Impact Report (EIR). The General Plan EIR was a program-level EIR, prepared pursuant to Section 15168 of the CEQA Guidelines (Title 14, California Code of Regulations, Sections 15000 *et seq.*). The General Plan EIR analyzed full implementation of the Oakley General Plan and identified measures to mitigate the significant adverse project and cumulative impacts associated with the General Plan. Pursuant to CEQA Guidelines Section 15150(a), the City of Oakley General Plan and General Plan EIR are incorporated by reference. Both documents are available at the City of Oakley, 3231 Main Street, Oakley, CA 94561.

The environmental setting and impact discussion for each section of this IS/MND have been largely based on information in the *Oakley General Plan* and the *Oakley General Plan* EIR. In addition, detailed technical reports including a Planning Survey Report prepared by Sycamore Environmental Consultants, a Phase I Environmental Site Assessment prepared by AEI Consultants, a Geotechnical Exploration prepared by ENGEO Incorporated, and a Traffic Impact Study Report prepared by TKJM Traffic Consultants, were prepared specifically for the proposed project and are utilized, where appropriate.

The mitigation measures prescribed for environmental effects described in this IS/MND would be implemented in conjunction with the project, as required by CEQA, and the mitigation measures would be incorporated into the project. In addition, findings and a project Mitigation Monitoring and Reporting Program (MMRP) would be adopted in conjunction with approval of the project.

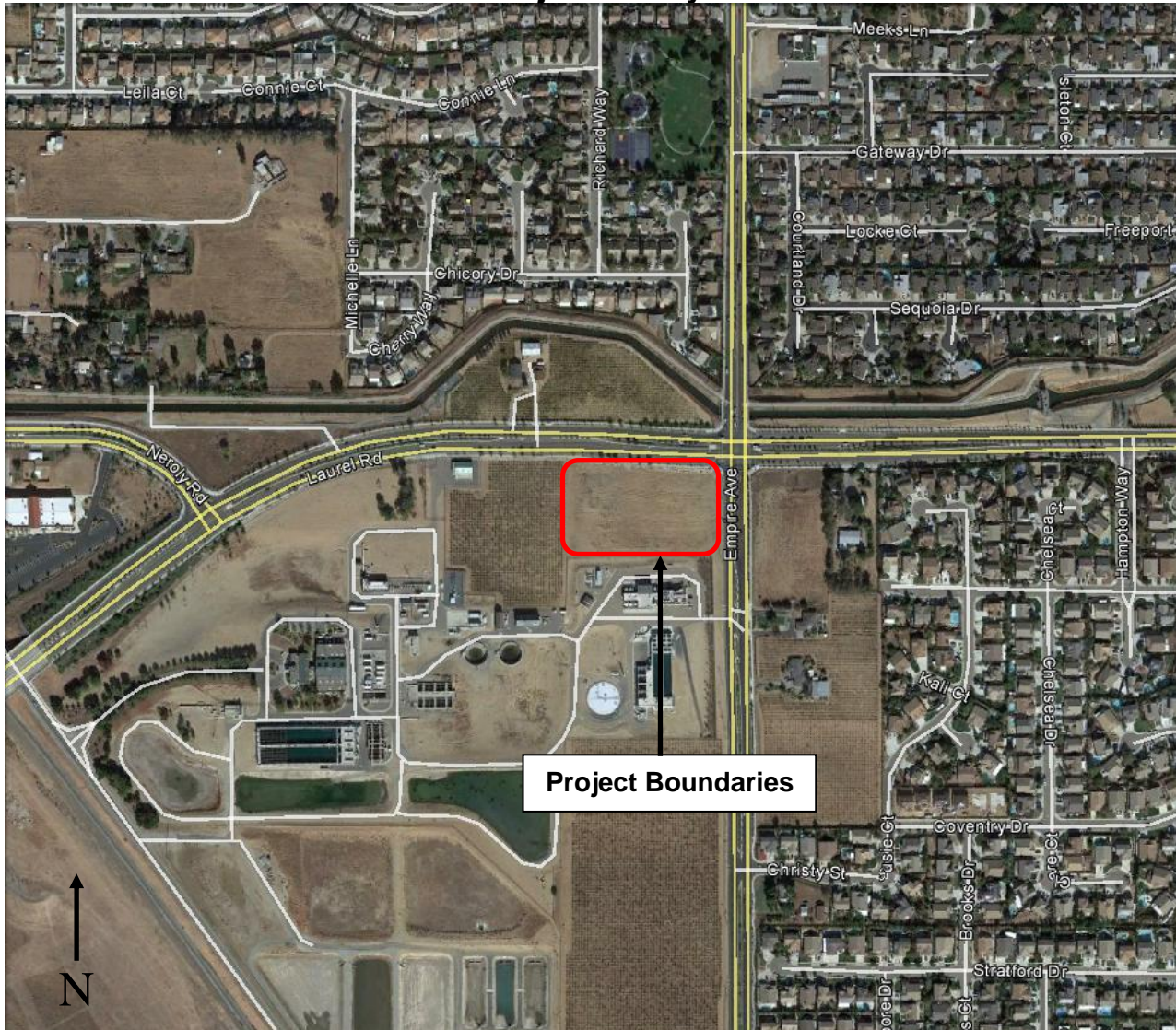
F. PROJECT DESCRIPTION

The following Section includes a description of the project's location and surrounding land uses, as well as a discussion of the project components and discretionary actions requested of the City of Oakley by the project.

Project Location and Surrounding Land Uses

The project site is located at the southwest corner of the Laurel Road and Empire Avenue intersection, 3979 Empire Avenue designated by APN 053-071-050 (See Figure 1). The property to the south and west includes land owned by the Contra Costa Water District. To the south is a developed water treatment plant and to the west is a vineyard. North of the project site, across Laurel Road, is a vineyard with single family housing beyond. East of the project site, across Empire Avenue is undeveloped land, beyond which are single family homes.

**Figure 1
Project Vicinity**



Project Components

The proposed project includes a request for approval of a General Plan Amendment, Rezone, Tentative Parcel Map, Conditional Use Permit, and Design Review to construct a self-storage facility and a convenience store with a fueling station. The applicant is proposing to subdivide the 3.63-acre vacant site into two parcels to construct a 2.86-acre self-storage facility and a 0.77-acre 7-Eleven gas station. The self-storage facility will include six one- and two-story storage buildings totaling 99,637 sf. In addition, a two-story manager's building consisting of a residential unit and office space will be located on-site. A total of 21 parking spaces will be provided for the self-storage facility (see Figure 2). The 7-Eleven parcel will include a 3,795 sf 7-Eleven store, six multi-product dispenser fueling stations with a canopy and 28 parking spaces, including 12 at the fueling stations (see Figure 3).

Discretionary Actions

Implementation of the proposed project would require the following discretionary actions by the City of Oakley City Council:

- Adoption of the Mitigated Negative Declaration;
- Adoption of the Mitigation Monitoring and Reporting Program;
- Approval of a General Plan Amendment (GPA 05-16) to amend the land use designation from Public and Semi-Public Facilities (PS) to Commercial (CO);
- Approval of a Rezone (RZ 07-16) from Public and Semi-Public (P) to General Commercial (C);
- Approval of a Tentative Parcel Map (TPM 02-16) to subdivide 3.63 acres into two parcels;
- Approval of a Conditional Use Permit (CUP02-16) to establish a self-storage and gas station; and
- Approval of a Design Review (DR 14-16) to construct a self-storage and 7-Eleven with a fueling station.

Figure 2
Gateway Self-Storage Site Plan

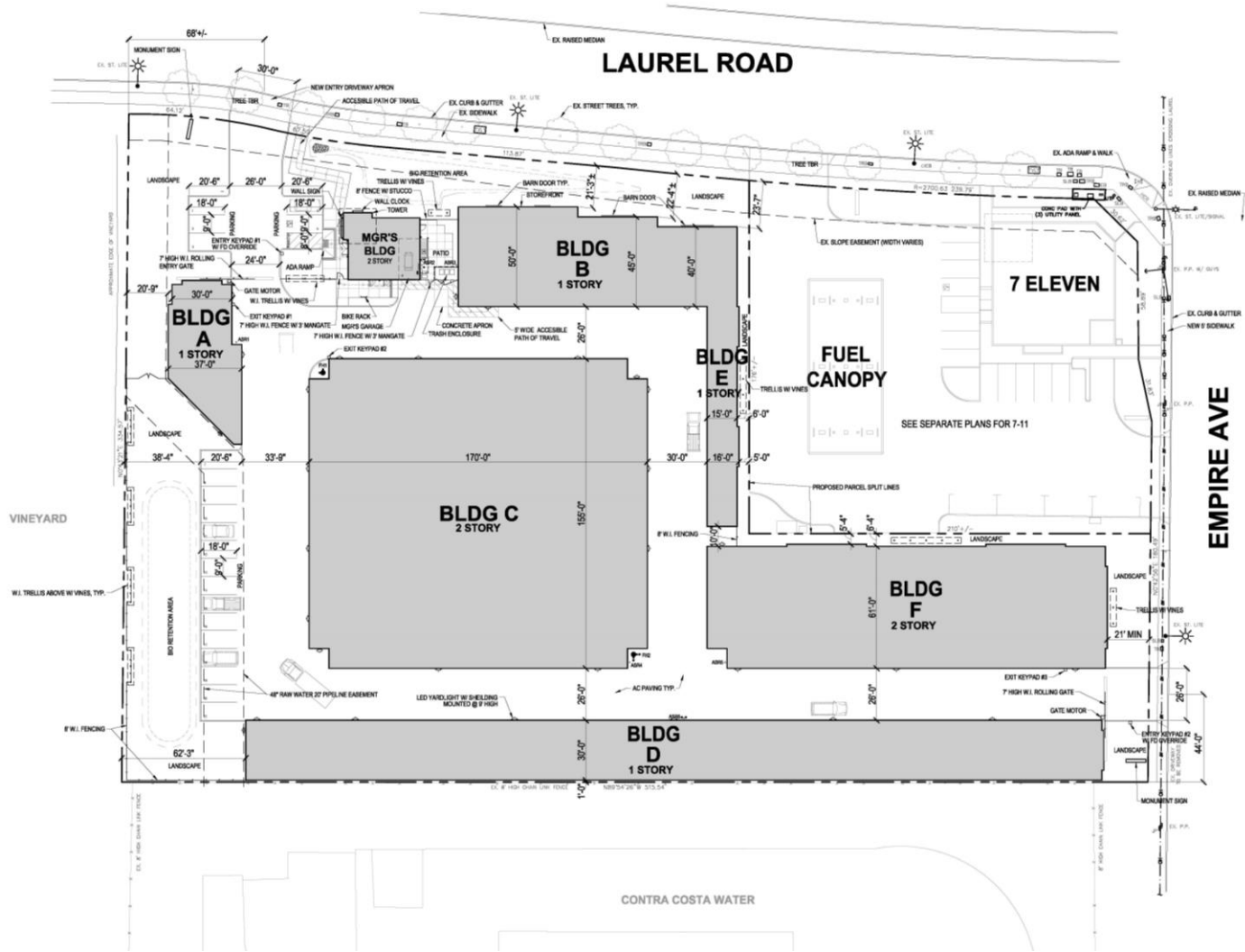
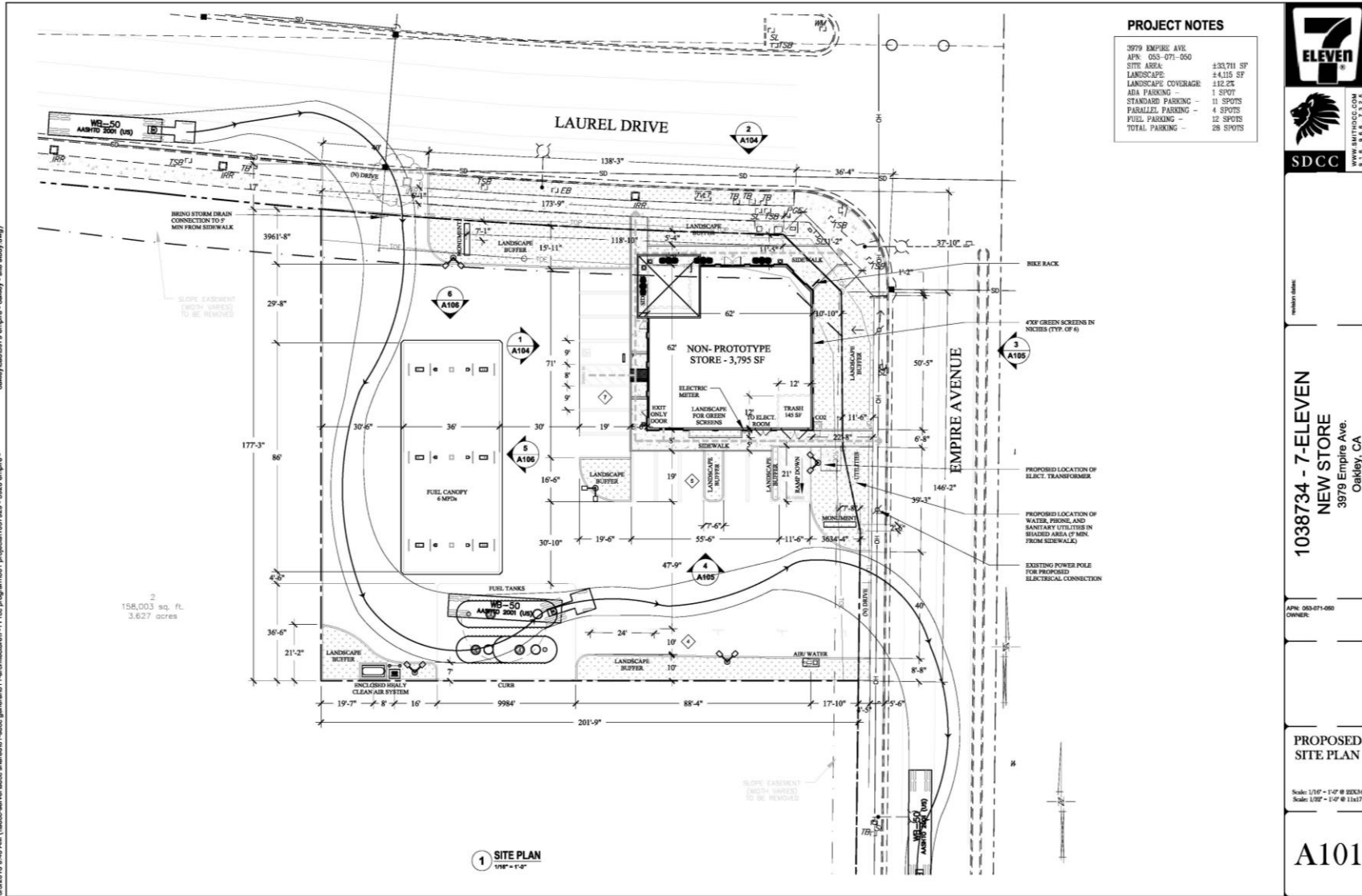


Figure 3
7-Eleven Gas Station Site Plan



PROJECT NOTES

3979 EMPIRE AVE.	
APR. 055-071-050	±33,711 SF
SITE AREA	±4,115 SF
LANDSCAPE	±12.2%
ADA PARKING	1 SPOT
STANDARD PARKING	11 SPOTS
PARALLEL PARKING	4 SPOTS
FUEL PARKING	12 SPOTS
TOTAL PARKING	28 SPOTS



SDCC

1038734 - 7-ELEVEN
NEW STORE
3979 Empire Ave.
Oakley, CA

PROPOSED
SITE PLAN

A101

3/20/2016 9:40 AM (\\sdcc-server\elc\sdcc-general\011-architecture\7-11-roc\program\001-projects\1037829-3920-empire - oakley\3979\7979-empire - oakley - site study.dwg)

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue area identified in the checklist. Included in each discussion are project-specific mitigation measures required, where necessary, as part of the proposed project.

For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which mitigation has not been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant With Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
I. AESTHETICS.				
<i>Would the project:</i>				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or night-time views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. Scenic resources in Oakley include predominant natural landscape features such as the Delta, Dutch Slough, Marsh Creek, agricultural and other open space lands, as well as the views of Mount Diablo to the west. The proposed project site is not located within an area designated as a scenic vista, nor does the site include any significant scenic resources such as rock outcroppings or historic buildings. The City of Oakley General Plan Environmental Impact Report (Oakley GP EIR) does not designate the proposed project site a scenic vista. The proposed project would include the construction of one and two-story structures on the project site that would not have size and mass that could obstruct views, including views of Mount Diablo. Therefore, a ***less-than-significant*** impact would occur.
- b. According to the California Scenic Highway Mapping System, administered by Caltrans, a portion of SR 4, from the intersection of SR 160 with SR 4, west towards the Contra Costa County line is eligible for State Scenic Highway designation. The proposed project is located a half mile east of SR 4 within the section of the roadway eligible for state designation. However, views of the project site from SR 4 are obstructed by the Contra Costa Water District Water Treatment Plant, and the Laurel Road overpass. Because the proposed project is not visible from SR 4 the project would not damage scenic resources within a state scenic highway, and a ***less-than-significant*** impact would occur.

- c. The project site is a vacant graded property bordered to the south by the existing Contra Costa Water District Water Treatment Plant. The development of the proposed project would place structures on a vacant site which would change the visual character of the site. However, the City has adopted Commercial & Industrial Design Guidelines which are intended to integrate new development into the existing fabric of Oakley, and preserve the City's human scale and sense of place. The City's Design Review of the proposed project would include compliance with the City's Commercial & Industrial Design Guidelines, which would ensure that the proposed project would be compatible with the surrounding area and the visual quality would not be substantially degraded. Therefore, the impact would be considered ***less than significant***.

- d. The proposed project would include the installation of parking lot and building lighting. The City's Commercial & Industrial Design Guidelines require that site lighting incorporate cut-offs to prevent spill-over laterally onto adjacent properties and upwards into the night sky. The plans for the self-storage facility included a photometric lighting plan which indicates that lighting levels at the property line would be zero. A plan has not been submitted for the 7-Eleven parcel; however, compliance with City's Commercial & Industrial Design Guidelines would ensure that the proposed project would not result in the addition of a substantial source of light or glare. Therefore, the creation of new sources of light and glare by the project would be considered a ***less-than-significant*** impact.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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II. AGRICULTURE 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 Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
d.	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
e.	Involve other changes in the existing environment which, due to their location or nature, could individually or cumulatively result in loss of Farmland to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion

- a,e. The proposed project site is designated as “Other Land” on the Contra Costa County Important Farmland Map 2012 published by the Department of Conservation. Other Land is land not included in any other mapping category. Common examples include low density rural developments, as well as vacant and nonagricultural land surrounded on all sides by urban development. Small vineyards are located on the adjacent undeveloped portion of the Contra Costa Water District Water Treatment Plant property. The vineyard site is designated for Public/Semi-Public uses. Because the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses or involve changes which could cumulatively result in loss of Farmland, ***no impact*** would occur.

- b. The project site is not zoned agricultural, nor is the site under a Williamson Act contract. Completion of the proposed project would not conflict with existing zoning for agricultural use and would not conflict with a Williamson Act contract. Therefore, ***no impact*** would occur.

- c,d. The project site is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have ***no impact*** with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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III. AIR QUALITY.

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 project:

a.	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a-c. The City of Oakley is located in the San Francisco Bay Area Air Basin (SFBAAB), which is under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD), who regulates air quality in the San Francisco Bay Area. The SFBAAB area is currently designated as a nonattainment area for the State and federal ozone, State and federal particulate matter 2.5 microns in diameter (PM_{2.5}), and State particulate matter 10 microns in diameter (PM₁₀) standards. The SFBAAB is designated attainment or unclassified for all other ambient air quality standards (AAQS). It should be noted that on January 9, 2013, the U.S. Environmental Protection Agency (EPA) issued a final rule to determine that the Bay Area has attained the 24-hour PM_{2.5} federal AAQS. Nonetheless, the Bay Area must continue to be designated as nonattainment for the federal PM_{2.5} AAQS until such time as the BAAQMD submits a redesignation request and a maintenance plan to the EPA, and the EPA approves the proposed redesignation.

In compliance with regulations, due to the nonattainment designations of the area, the BAAQMD periodically prepares and updates air quality plans that provide emission reduction strategies to achieve attainment of the AAQS,

including control strategies to reduce air pollutant emissions via regulations, incentive programs, public education, and partnerships with other agencies. The current air quality plans are prepared in cooperation with the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG). The most recent federal ozone plan is the 2001 Ozone Attainment Plan, which was adopted on October 24, 2001 and approved by the California Air Resources Board (CARB) on November 1, 2001. The plan was submitted to the EPA on November 30, 2001 for review and approval. The most recent State ozone plan is the 2010 Clean Air Plan (CAP), adopted on September 15, 2010. The 2010 CAP was developed as a multi-pollutant plan that provides an integrated control strategy to reduce ozone, PM, toxic air contaminants (TACs), and greenhouse gases (GHGs). Although a plan for achieving the State PM₁₀ standard is not required, the BAAQMD has prioritized measures to reduce PM in developing the control strategy for the 2010 CAP. The control strategy serves as the backbone of the BAAQMD's current PM control program.

The aforementioned air quality plans contain mobile source controls, stationary source controls, and transportation control measures (TCMs) to be implemented in the region to attain the State and federal standards within the SFBAAB. Adopted BAAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. The BAAQMD's established significance thresholds associated with development projects for emissions of the ozone precursors reactive organic gases (ROG) and oxides of nitrogen (NO_x), as well as for PM₁₀, and PM_{2.5}, expressed in pounds per day (lbs/day) and tons per year (tons/yr), are listed in Table 1. Thus, by exceeding the BAAQMD's mass emission thresholds for operational emissions of ROG, NO_x, or PM₁₀, a project would be considered to conflict with or obstruct implementation of the BAAQMD's air quality planning efforts.

Table 1 BAAQMD Thresholds of Significance			
Pollutant	Construction	Operational	
	Average Daily Emissions (lbs/day)	Average Daily Emissions (lbs/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82	82	15
PM _{2.5}	54	54	10

Source: BAAQMD, CEQA Guidelines, May 2010.

It should be noted that the BAAQMD resolutions adopting and revising the 2010 significance thresholds were set aside by the Alameda County Superior Court on March 5, 2012. The Alameda Superior Court did not determine whether the

thresholds were valid on their merits, but found that the adoption of the thresholds was a project under CEQA, necessitating environmental review. The BAAQMD subsequently appealed the Alameda County Superior Court's decision. The Court of Appeal of the State of California, First Appellate District, reversed the trial court's decision. The Court of Appeal's decision was appealed to the California Supreme Court, which granted limited review confined to the questions of under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? On review, the Supreme Court rejected the BAAQMD's argument that CEQA requires an analysis of the environment's impact on a project in every instance. Rather, the Court held that CEQA review should be "limited to those impacts on a project's users or residents that arise from the project's effects on the environment." Ultimately, the Supreme Court reversed the Court of Appeal's decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court's opinion. The California Supreme Court did not review the underlying question whether adoption of the thresholds is a project under CEQA, and no court has indicated that the thresholds lack evidentiary support.

The BAAQMD continues to provide direction on recommended analysis methodologies, but have withdrawn the recommended quantitative significance thresholds for the time being. The May 2012 BAAQMD CEQA Air Quality Guidelines state that lead agencies may reference the Air District's 1999 Thresholds of Significance available on the Air District's website. Lead agencies may also reference the Air District's CEQA Thresholds Options and Justification Report developed by staff in 2009. The CEQA Thresholds Options and Justification Report, available on the District's website, outlines substantial evidence supporting a variety of thresholds of significance. The air quality and GHG analysis in this IS/MND uses the previously-adopted 2010 thresholds of significance to determine the potential impacts of the proposed project, as the 2010 thresholds are supported by substantial evidence.

The proposed project's construction and operational emissions were quantified using the California Emissions Estimator Model (CalEEMod) software version 2013.2.2 - a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions, including GHG emissions, from land use projects. The model applies inherent default values for various land uses, including construction data, trip generation rates based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information should be applied in the model. As such, the proposed project's modeling assumed the following:

- Construction was assumed to commence in January 2017 and occur over an approximately one-year period;

- An average daily trip rate of 162.78 for the Convenience market (with gas pumps), and a daily trip rate of 2.5 for the self-storage facility were assumed based on the project specific Traffic Impact Study Report prepared by TJKM Transportation Consultants; and
- Compliance with the current California Building Energy Efficiency Standards Code.

The proposed project’s estimated emissions associated with construction and operations are presented and discussed in further detail below.

Construction Emissions

According to the CalEEMod results, the proposed project would result in maximum construction criteria air pollutant emissions as shown in Table 2. As shown in the table, the proposed project’s construction emissions would be below the applicable thresholds of significance.

Table 2				
Maximum Unmitigated Construction Emissions (lbs/day)				
	ROG	NO_x	PM₁₀	PM_{2.5}
Project Construction Emissions	15.79	28.20	6.21	3.78
Thresholds of Significance	54	54	82	54
Exceeds Threshold?	NO	NO	NO	NO
<i>Source: CalEEMod, June 2016 (see Appendix A).</i>				

In addition, all projects under the jurisdiction of the BAAQMD are required to implement all of the BAAQMD’s Basic Construction Mitigation Measures, which include the following:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
4. All vehicle speeds on unpaved roads shall be limited to 15 mph.
5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
8. Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

As such, the proposed project would implement the BAAQMD's Basic Construction Mitigation Measures listed above, to the extent that the measures are feasible for the proposed project's construction activities. Compliance with the aforementioned measures would help to further minimize any construction-related emissions.

Because the proposed project would be below the applicable thresholds of significance for construction emissions, the proposed project would not be considered to result in a significant air quality impact during construction.

Operational Emissions

According to the CalEEMod results, the proposed project would result in maximum operational criteria air pollutant emissions as shown in Table 3. As shown in the table, the proposed project's operational emissions would be below the applicable thresholds of significance.

CalEEMod does not fully capture the ROG emissions associated with the gas dispensing operations of the gas station when applying a "Convenience Market with Gas Pumps" land use to the model. As such, in order to adequately account for such emissions, an additional calculation has been performed using the California Air Pollution Control Officers Association (CAPCOA) emission factor for a gas dispensing facility of 1.27 lbs of ROG per 1,000 gallons of gasoline dispensed. The ROG emissions calculated using the CAPCOA emission factor has been added to the ROG emissions calculated using CalEEMod in order to present the total ROG emissions for the project.¹

Because the proposed project's operational emissions would be below the applicable thresholds of significance, the proposed project would not be considered to result in a significant air quality impact during operations.

¹ A throughput of 1.2 million gallons per year was assumed for this analysis.

Table 3				
Maximum Unmitigated Operational Emissions				
	ROG	NO_x	PM₁₀	PM_{2.5}
Average Daily Emissions (lbs/day)				
Project Operational Emissions	13.20 ¹	7.79	3.90	1.10
Thresholds of Significance	54	54	82	54
Exceeds Threshold?	NO	NO	NO	NO
Maximum Annual Emissions (tons/year)				
Project Operational Emissions	2.31 ¹	1.37	0.68	0.19
Thresholds of Significance	10	10	15	10
Exceeds Threshold?	NO	NO	NO	NO
¹ Includes ROG emissions estimated using CalEEMod (9.03 lbs/day and 1.55 tons/year), as well as the CAPCOA emission factor for gas dispensing operations (4.17 lbs/day and 0.76 tons/year).				
<i>Source: CalEEMod, June 2016 (see Appendix A)</i>				

Cumulative Emissions

Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By nature, air pollution is largely a cumulative impact. A single project is not sufficient in size to, by itself, result in nonattainment of AAQS. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant. In developing thresholds of significance for air pollutants, BAAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. The thresholds of significance presented in Table 1 represent the levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If a project exceeds the significance thresholds presented in Table 1, the proposed project's emissions would be cumulatively considerable, resulting in significant adverse cumulative air quality impacts to the region's existing air quality conditions. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be expected to result in a cumulatively considerable contribution the region's existing air quality conditions.

Conclusion

As stated previously, the applicable regional air quality plans include the 2001 Ozone Attainment Plan and the 2010 CAP. According to BAAQMD, if a project would not result in significant and unavoidable air quality impacts, after the application of all feasible mitigation, the project may be considered consistent with the air quality plans. Because the proposed project would result in emissions below the applicable thresholds of significance, the project would not be considered to conflict with or obstruct implementation of regional air quality plans.

Because the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, violate any air quality standards or contribute substantially to an existing or projected air quality violation, or result in a cumulatively considerable net increase in any criteria air pollutant, impacts would be considered ***less than significant***.

- d. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, childcare centers, playgrounds, retirement homes, convalescent homes, hospitals, and medical clinics. The proposed project would not involve the construction of any new land uses that would be considered sensitive receptors. The nearest existing sensitive receptors to the site would be the single-family residences east of Empire Road and north or Laurel Road.

The major pollutant concentrations of concern are localized carbon monoxide (CO) emissions and Toxic Air Contaminants (TAC) emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Emissions of CO are of potential concern, as the pollutant is a toxic gas that results from the incomplete combustion of carbon-containing fuels such as gasoline or wood. CO emissions are particularly related to traffic levels.

In order to provide a conservative indication of whether a project would result in localized CO emissions that would exceed the applicable threshold of significance, the BAAQMD has established screening criteria for localized CO emissions. According to BAAQMD, a proposed project would result in a less-than-significant impact related to localized CO emission concentrations if all of the following conditions are true for the project:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans;

- The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, underpass, etc.).

According to the Contra Costa Transportation Authority (CCTA) Congestion Management Plan (CMP), any land development application generating more than 100 peak hour trips is required to prepare a study of the development's traffic impacts on the CMP network.² Such a study was prepared by TJKM Traffic Consultants, and the Traffic Report determined that the project would result in 2,208 new daily vehicle trips, with 61 new AM and 99 new PM peak hour vehicle trips. As discussed in further detail in the Transportation/Circulation section of this IS/MND, the increase in daily vehicle trips and peak hour trips would not cause a reduction in the level of service of any intersection or roadway in the area covered by CCTA or by City of Oakley standards. Therefore, the project would be consistent with the applicable congestion management program because it would not degrade existing level of service standards to below levels acceptable by the CCTA or the City of Oakley.

The main roadways in the project vicinity would be Empire Avenue, Neroly Road, and Laurel Road. Empire Avenue is a four-lane, north-south divided arterial roadway, which provides access to local residential and regional commercial areas. Laurel Road is a four-lane east-west divided road, and Neroly Road at the intersection of Neroly Road and Laurel Road is also a four lane divided road. According to the Traffic Impact Study Report the intersection of Neroly Road and Laurel Road experiences a peak hourly traffic volume of 2,250 trips between 7:30 AM and 8:30 PM. The intersection of Laurel Road and Empire Avenue also experiences its peak volume from 7:30 AM to 8:30 PM with a peak hourly traffic volume of 2,977 trips. The proposed project's increase of a maximum of 61 new AM peak hour trips 99 PM peak hour trips, and 2,208 daily vehicle trips would not increase traffic volumes at nearby intersections to more than the hourly traffic volumes set forth in the BAAQMD's localized CO screening criteria and presented above. Additionally, the proposed project is not in an area where vertical or horizontal air mixing is substantially limited.

Therefore, the proposed project would be consistent with all applicable congestion management programs, the project would not increase traffic volumes to more than 44,000 vehicles per hour at any study intersection, nor would the project increase traffic volumes to more than 24,000 vehicles per hour where mixing is substantially limited. As such, according to the BAAQMD's screening criteria the proposed project would result in a less-than-significant impact related to CO emissions.

² Contra Costa Transportation Authority. 2011 Contra Costa Congestion Management Program [page 62]. Adopted November 16, 2011.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, gasoline stations, freeways and high traffic roads, distribution centers, and rail yards. The CARB Handbook provides recommended setback distances for sensitive land uses from major sources of TACs.

The proposed project would introduce a new gasoline station that would have associated TAC emissions.

The CARB Handbook recommends a setback of 300 feet from a sensitive receptor to a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater) or a setback of 50 feet from a typical dispensing facility (defined as a facility with a throughput of less than 3.6 million gallons per year). The proposed gas station is anticipated to involve a throughput of 1.2 million gallons per year, and would thus be considered a typical gas dispensing facility. However, the nearest sensitive receptor (i.e., the single-family residence east of Empire Avenue) would be located approximately 350 feet southeast of the project site (as measured from the closest corner of the project site to the residence, the actual distance of the gas pumps would be greater than this conservative approximation). Therefore, the proposed gas station would be located outside of the CARB-recommended setback of 50 feet for typical gas dispensing facilities and the CARB-recommended setback of 300 feet for large gas station. Additionally, the self-storage component of the proposed project includes an on-site manager's residence, which may be considered a new sensitive receptor. However, the manager's residence is outside of the 50-foot setback zone recommended by the CARB handbook. Therefore, the proposed project would not involve the siting of new sensitive receptors within a setback area from a source of TACs.

The CARB also identifies diesel particulate matter (DPM) from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant heavy diesel semi-truck traffic (such as distribution centers) are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

The CARB handbook identifies significant sources of DPM as land uses accommodating 100 heavy diesel semi-trucks per day. Although the gas station component of the proposed project would involve increased vehicle traffic in the area, and occasional gas delivery vehicles, the gas station would not be

expected to attract 100 diesel semi-trucks or more to the area. Additionally, while the storage facility may result in increased truck trips to the project site it is unlikely that heavy diesel-semi-trucks would make up a large portion of the daily vehicle trips to the project site. The self-storage facility is sized for use by the surrounding residential community and the unit sizing would make the use of heavy diesel semi-trucks impractical. Therefore, it is unlikely the project would induce a combined total of 100 diesel semi-trucks per day. As such the proposed project would not be expected to generate a substantial amount of DPM.

Short-term, construction-related activities could result in the generation of DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction is temporary and occurs over a relatively short duration in comparison to the operational lifetime of the proposed project, particularly so for the proposed project, as the construction activities would likely occur over an approximately one-year period (based on applicant information). All construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM. Project construction would also be required to comply with all applicable BAAQMD rules and regulations, particularly associated with permitting of air pollutant sources.

According to BAAQMD, research conducted by CARB indicates that DPM is highly dispersive in the atmosphere and is reduced by 70 percent at a distance of approximately 500 feet. In addition, per the City of Oakley Municipal Code, construction activities would be limited to daytime hours only.

Because construction equipment on-site would not operate for any long periods of time and would be used at varying locations within the site, associated emissions of DPM would not occur at the same location (or be evenly spread throughout the entire project site) for long periods of time. Health risks associated with TACs are a function of the concentration of emissions, the proximity of receptors to the emissions, and the duration of exposure, where the higher the concentration, closer the receptor is to the emission, and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk. Due to the temporary nature of construction, the distance of the nearest sensitive receptors and the relatively short duration of potential exposure to associated emissions, sensitive receptors in the area would not be exposed to pollutants for a permanent or substantially extended period of time.

Considering the short-term nature of construction activities, the regulated and intermittent nature of the operation of construction equipment, and the highly dispersive nature of DPM, the likelihood that any one sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. For the aforementioned reasons, project construction would not be expected to expose sensitive receptors to substantial pollutant concentrations.

Conclusion

Based on the above considerations, the proposed project would not cause to be exposed to substantial pollutant concentrations, including localized CO or TACs, and impacts related to such would be ***less than significant***.

- e. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Typical odor-generating land uses include, but are not limited to, wastewater treatment plants, landfills, and composting facilities. The proposed project would not introduce any such land uses. Although, the project site is adjacent to a Contra Costa Water District water treatment plant, the plant does not include the treatment of wastewater, and therefore wouldn't be anticipated to create significant odors.

The convenience store, would serve food and drinks. Decomposition of biological materials, such as food waste and other trash, could create objectionable odors if not properly contained and handled. The project site would include waste receptacles throughout the facility and would utilize outdoor trash dumpsters with plastic flip-top lids, which would be picked up regularly during normal solid waste collection operating hours within the City. The dumpster lids are intended to contain odors emanating from the dumpsters. The dumpsters would be stored in an enclosed area for further protection from potential objectionable odors. The garbage collected on-site and stored in the outdoor dumpsters would not be on-site long enough to cause substantial odors. Thus, the outdoor, enclosed, and covered trash dumpsters that would be picked up regularly would be considered proper containment and handling of the trash generated on-site.

The proposed project would include a gasoline dispensing facility, which could generate odorous emissions. However, as noted previously, the proposed fueling station would be located over 300 feet away from the nearest sensitive receptors. Additionally, the manager's residence would be separated from the fueling station by two of the self-storage buildings and would be unlikely to be effected by odors from the fueling station. Therefore, the gasoline dispensing facility included in the project would be unlikely to significantly impact any of the sensitive receptors in the area.

Some odor may also occur during construction due to the use of diesel-fueled engines and equipment. However, as discussed above, construction activities would be temporary (approximately one year), and operation of construction equipment would be regulated and intermittent. Accordingly, substantial objectionable odors would not be expected to occur during construction activities or affect a substantial number of people.

For the aforementioned reasons, construction and operation of the proposed project would not create objectionable odors, nor would the project site be affected by any existing sources of substantial objectionable odors; and a ***less-than-significant*** impact related to objectionable odors would result.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact	
IV. BIOLOGICAL RESOURCES.					
<i>Would the project:</i>					
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
d.	Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

Sycamore Environmental Consultants, Inc. prepared an Application Form and Planning Survey Report to comply with the provision of the East Contra Costa County Habitat Conservation Plan and Natural Community Conservation Plan (ECCC HCP/NCCP). Sycamore Environmental reviewed sections of the East Contra Costa County HCP/NCCP, including relevant sections of Chapter 6 Conditions on Covered Activities, Development Fee Zone Maps, and Appendix D Species Profile Text and Figures. A list from the U.S. Fish and Wildlife Service (USFWS) Sacramento Field Office was obtained that identifies federally listed, candidate, or proposed species that potentially occur in the project's USGS quadrant. The California Natural Diversity Database (CNDDDB) was queried for the project's USGS quadrant and eight surrounding quadrants to determine known occurrences of special status species in or near the project site. On February 8, 2016 Sycamore Environmental biologist, Juan Mejia B.S., conducted a Planning Survey. The survey consisted of walking through the site to confirm the land cover type as ruderal and survey surrounding areas as required by each specific species. Plant species were identified to the extent needed to determine any special status and to confirm plant communities. Wildlife species, their signs and potential habitat were recorded. The following discussion is based upon the Application Form and Planning Survey Report the prepared for the project site.

- a. The entire 3.63-acre project area is categorized as Ruderal according to Figure 3-3 of the ECCC HCP/NCCP. The ECCC HCP/NCCP describes ruderal community as disturbed areas characterized by sparse non-native, typically weedy vegetation. Ruderal land cover is dominated by a mixture of non-native annual grasses and weedy species that tend to colonize quickly after disturbance.

The site consists of a relatively flat vacant lot that is regularly cleared of vegetation. The north edge and northeast corner consists of engineered fill slope for the elevated road right-of-way. The Empire Way/Laurel Road intersection was raised above original grade to allow the Empire Way bridge to cross over the canal just north of the intersection. The soil is sandy and common weedy plant species include fiddleneck, filarees or heron's bill, corn spurry, black mustard, Italian thistle, and Russian thistle. The survey confirmed that the entire project site meets the criteria for a Ruderal community.

Special-status species are plants and animals that are legally protected under the State and/or Federal Endangered Species Act (FESA) or other regulations. The FESA of 1973 declares that all federal departments and agencies shall utilize their authority to conserve endangered and threatened plant and animal species. The California Endangered Species Act (CESA) of 1984 parallels the policies of FESA and pertains to native California species.

Special-status species also include other species that are considered rare enough by the scientific community and trustee agencies to warrant special

consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. The presence of species with legal protection under the Endangered Species Act often represents a major constraint to development, particularly when the species are wide-ranging or highly sensitive to habitat disturbance and where proposed development would result in a take of these species.

Special-Status Plant Species

Special-status plants are those which are designated rare, threatened, or endangered and candidate species for listing by the U.S. Fish and Wildlife Service (USFWS). Special-status plants also include species considered rare or endangered under the conditions of Section 15380 of the CEQA Guidelines, such as those plant species identified on Lists 1A, 1B and 2 in the Inventory of Rare and Endangered Vascular Plants of California by the California Native Plant Society (CNPS). Finally, special-status plants may include other species that are considered sensitive or of special concern due to limited distribution or lack of adequate information to permit listing or rejection for State or federal status, such as those included on List 3 in the CNPS Inventory.

The PSR prepared for the project site, notes that suitable land cover types for special-status plant species is not present. The project site does not provide habitat for any covered or no-take plant species.

Special-Status Wildlife Species

The PSR prepared for the project site by Sycamore Environmental Consultants the project site has the potential to provide suitable habitat for the San Joaquin kit fox, burrowing owl, Townsend's big-eared bat, Swainson's hawk, and Golden Eagle. Each is discussed further below.

San Joaquin kit fox (Vulpes macrotis mutica)

The project site is in HCP/NCCP modeled suitable low use habitat for San Joaquin kit fox (SJKF). The species profile for SJKF states this species prefers habitats with loose-textured soil that are suitable for digging. Dens are generally located in open areas with grass or grass and scattered brush, and seldom occur in areas with thick brush. In the northern part of their range (including Contra Costa County), SJKF primarily occur in foothill grasslands. The Project site is within the valley floor of Contra Costa County (85-90 foot elevation) known occurrences of SJKF do not exist. SJKF dens or breeding habitat were not observed on the project site or within the 250 foot (ft.) radius of the project site.

Burrowing owl (Athene cunicularia)

The site is within the HCP/NCCP modeled suitable habitat for burrowing owl. Based on the HCP/NCCP Species Profile for burrowing owl, this species requires other fossorial (digging) animals to dig their burrows. Where burrows are lacking, they will also occupy drainage culverts, cavities under piles of rubble, discarded pipe, and other tunnel-like structures. Animal burrows were not observed on the site. Burrowing owls or signs of burrowing owls were not observed at the project site. Annual discing of the site limits the potential for animal burrows to become established. If animal burrows were created, the project site could provide potential breeding habitat for burrowing owls.

In accordance with the ECCC HCP/NCCP planning survey requirements, potential burrowing owl breeding habitat was identified and mapped within a 500 foot radius of the project site. Based on the ECCC HCP/NCCP burrowing owl species profile, this species selects sites that support short vegetation, even bare soil, but will tolerate tall vegetation if the tall vegetation is sparse. A small empty lot east of the project site was surveyed to determine if potential burrowing owl breeding habitat was present. The empty lot consists of non-native annual grassland interspersed with *Salsola* sp. and/or *Dittrichia* sp. Ruderal weeds are abundant in that nonnative annual grassland. Animal burrows were not observed in the empty lot. If animal burrows were created in this area, the project site could provide potential breeding habitat for burrowing owls.

The water treatment plant to the south was surveyed with binoculars from publicly accessible areas. The frequent use of equipment within the water treatment plant reduces the potential for burrowing owls to occur on the property. Sycamore Environmental staff contacted Mr. Ray Devlin (Water District representative) on February 17, 2016. Mr. Devlin stated that burrowing owls or other special status species had not been identified on the water treatment plant property. For these reasons, the water treatment plant is not considered potential breeding habitat for burrowing owls.

Vineyards to the west, north and southeast are not potential breeding habitat for burrowing owls. Potential breeding habitat was not observed within the 500 foot radius around the project site.

Townsend's big-eared bat (Corynorhinus townsendii townsendii)

Rock formations with caves, mines or abandoned buildings do not exist within the project site. The dense urban area surrounding the site precludes the presence of Townsend's big-eared bat.

Swainson's hawk (Buteo swainsoni)

The Project site is in the ECCC HCP/NCCP modeled “non-habitat” area for Swainson’s hawk. Large trees are not located on the project site that could provide nesting habitat for Swainson’s hawk. In accordance with the ECCC HCP/NCCP planning survey requirements, large trees were inspected for presence of Swainson’s hawk nest sites within a radius of 1,000 foot around the project site. Large trees that provide potential nest sites for Swainson’s hawk within the required radius occur at two locations. Approximately 425 feet east of the site there is a row of large trees (mostly eucalyptus) that line the perimeter of the first residence in that direction. Swainson’s hawks or raptor nests were not observed at this location. West approximately 700 ft. of the site are a few scattered trees which are large enough to provide nesting habitat. Swainson’s hawk or raptor nests were not observed at these locations.

Approximately 1,000 feet northwest of the project site there is a large residential property that has open ruderal fields and perimeter tree line. A pair of red-tailed hawks was observed foraging over the fields; one was observed examining a nest in the tree line. The nest is located outside the 1,000-foot buffer from the project site.

Golden Eagle (Aquila chrysaetos)

The project site is located in ECCC HCP/NCCP modeled suitable habitat for Golden eagle. Based on ECCC HCP/NCCP species profile for Golden Eagle, the model distribution assumes foraging habitat for all land cover areas except urban, aqueduct, aquatic, turf, orchards and vineyards. Traditional nesting sites are identified as secluded cliffs with overhanging ledges and large trees adjacent to suitable foraging habitat. Golden eagles favor open grasslands and oak savanna, with lesser numbers in oak woodland and open shrublands. Nesting habitat is not mapped.

Golden Eagle is included in Table 2a, *Species –Specific Planning Survey Requirements*, of the ECCC HCP/NCCP’s *Application Form and Planning Survey Report* for any land cover type. Golden Eagle habitat elements include potential nest sites within 0.5-mile of the project. Based on recent aerial photography, land use within 0.5-mile of the project sits consists of roads and streets, residential development, orchards/vineyards, the Contra Costa Canal, and a water treatment plant. Open areas consist of bare dirt interspersed through the surrounding urban areas. Secluded cliffs with overhanging ledges do not occur within 0.5-mile of the project site.

Due to the highly urbanized land use surrounding the project, the site does not provide nesting habitat for Golden eagle. As such planning surveys did not include the 0.5-mile radius for Golden eagle. Golden eagle was not observed during any of the surveys conducted.

Conclusion

The highly disturbed nature of the project site, due to periodic weed abatement, precludes on-site suitable habitat to support special-status plant species known to occur in the project vicinity. With the possible exception of burrowing owl and Swainson's hawk, special-status wildlife species are not expected to occur in or near the site on more than a very occasional or transitory basis. As a result, wildlife species surveys would be required to determine whether any special-status wildlife species or migratory birds are occupying the project site prior to initiating on-site ground disturbance and vegetation removal. If the necessary preconstruction surveys are not carried out, the project could result in a **potentially significant** 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 USFWS, or the California Department of Fish and Wildlife (CDFW).

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the impact to a *less-than-significant* level.

- IV-1. *Prior to the issuance of a grading permit or initiation of construction on the project site, the applicant shall pay the ECCC HCP/NCCP fee. The project site is located in Development Fee Zone I according to Figure 9-1 of the HCP/NCCP. A total of 3.63 acres will be permanently impacted due to the project. The total development fee is \$50,591.20 based on the Fee Calculator Worksheet (Permanent Impacts) template dated March 15, 2016. Proof of payment shall be provided to the City of Oakley Planning Division.*

Swainson's Hawk

- IV-2. *If construction commences after March 15, 2017, prior to any ground disturbance activities occurring during the nesting season (March 15 – September 15), a qualified biologist shall conduct a preconstruction survey not more than one month prior to construction to establish whether Swainson's hawk nests within 1,000 feet of the project site are occupied. If potentially occupied nests within 1,000 feet are off the project site, then their occupancy shall be determined by observation from public roads or by observations of Swainson's hawk activity (e.g., foraging) near the project site. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted. A written summary of the survey results shall be submitted to the City of Oakley Planning Division.*

If nests are not found or are unoccupied, further mitigation is not necessary.

If nests are occupied during the nesting season (March 15 – September 15), covered activities within 1,000 feet of occupied nests or nests under construction shall be prohibited to prevent nest abandonment. If site-specific conditions or the nature of the covered activity (e.g., steep topography, dense vegetation, limited activities) indicate that a smaller buffer could be used, the Implementing Entity will coordinate with CDFW/USFWS to determine the appropriate buffer size. If young fledge prior to September 15, covered activities can proceed normally. If the active nest site is shielded from view and noise from the project site by other development, topography, or other features, the project applicant can apply to the Implementing Entity for a waiver of this avoidance measure. Any waiver must also be approved by USFWS and CDFW. While the nest is occupied, activities outside the buffer can take place.

Burrowing Owl

IV-3. Prior to any ground disturbance activities, a qualified biologist shall survey the proposed disturbance footprint and a 500-foot radius from the perimeter of the proposed footprint to identify burrows and owls. Adjacent parcels under different land ownership shall not be surveyed. Surveys should take place near sunrise or sunset in accordance with CDFW guidelines. All burrows or burrowing owls shall be identified and mapped. Surveys shall take place no more than 30 days prior to construction. During the breeding season (February 1 – August 31), surveys shall document whether burrowing owls are nesting in or directly adjacent to disturbance areas. During the nonbreeding season (September 1 – January 31), surveys shall document whether burrowing owls are using habitat in or directly adjacent to any disturbance area. Survey results shall be valid only for the season (breeding or nonbreeding) during which the survey is conducted. A written summary of the survey results shall be submitted to the City of Oakley Planning Division.

If burrowing owls and/or suitable burrows are not discovered, then further mitigation is not necessary.

If burrowing owls are found during the breeding season (February 1 – August 31), the project proponent shall avoid all nest sites that could be disturbed by project construction during the remainder of the breeding season or while the nest is occupied by adults or young. Avoidance shall include establishment of a non-disturbance

buffer zone (described below). Construction may occur during the breeding season if a qualified biologist monitors the nest and determines that the birds have not begun egg-laying and incubation or that the juveniles from the occupied burrows have fledged. During the nonbreeding season (September 1 – January 31), the project proponent should avoid the owls and the burrows they are using, if possible. Avoidance shall include the establishment of a buffer zone.

During the breeding season, buffer zones of at least 250 feet in which construction activities cannot occur, shall be established around each occupied burrow (nest site). Buffer zones of 160 feet shall be established around each burrow being used during the nonbreeding season. The buffers shall be delineated by highly visible, temporary construction fencing. If occupied burrows for burrowing owls are not avoided, passive relocation shall be implemented. Owls should be excluded from burrows in the immediate impact zone and within a 160-foot buffer zone by installing one-way doors in burrow entrances. These doors should be in place for 48 hours prior to excavation. The project area should be monitored daily for one week to confirm that the owl has abandoned the burrow. Whenever possible, burrows should be excavated using hand tools and refilled to prevent reoccupation (California Department of Fish and Game 1995). Plastic tubing or a similar structure should be inserted in the tunnels during excavation to maintain an escape route for any owls inside the burrow.

- b,c. Based on the Sycamore Environmental biologist site visit, creeks, rivers, ponds, or wetlands do not occur on the property. A small, two-inch storm drain pipe extends out from a fill slope located on the water treatment plant property. Water from the pipe drains onto the project site, creating an erosion rill across the center of the property. The bare, sandy soil exacerbates the human-made erosion rill. Soil and plants were examined along and at the end of the erosion rill and indicators of hydrophytic vegetation or hydric soil were not present. Plant species and soil characteristics of the erosion rill were consistent with the rest of the project site. The erosion rill does not meet the criteria for Jurisdictional wetlands or waters as defined by U.S. Army Corps of Engineers or the ECCC HCP/ NCCP. Therefore, impacts to wetlands and riparian habitat would be considered ***less than significant***.
- d. The project site is surrounded by urban and developed land, and does not support a wildlife corridor and does not contain any watercourses that would support migratory fish. Therefore, the development of the project site would result in a ***less-than-significant*** impact.

- e. The site is a vacant, graded parcel. Trees do not exist on the project site. Therefore, the proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance and a ***less-than-significant*** impact would occur.

- f. The ECCC HCP/NCCP was approved in August 2007 and the City of Oakley approved the implementing ordinance on November 13, 2007. The project is located within the City; therefore, the project is included in the ECC HCP/NCCP. In compliance with the implementing ordinance, the proposed project has completed the Application and Planning Survey Report to comply with and receive permit coverage under the ECCC HCP/NCCP. The proposed project will be required to comply with the ECCC HCP/NCCP conservation strategies. Because the project will comply with the requirements of the ECCC HCP/NCCP, a ***less-than-significant*** impact would result.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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V. CULTURAL RESOURCES.

Would the project:

a.	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Directly or indirectly destroy a unique paleontological resource on site or unique geologic features?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Disturb any human remains, including those interred outside of formal cemeteries.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

- a. The California Register of Historical Resources identifies a historical resource as the following:
- Associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States;
 - Associated with the lives of persons important to local, California, or national history;
 - Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of a master or possesses high artistic values; or
 - Yielded, or may be likely to yield, information important to the prehistory or history of the local area, California, or the nation.

The Oakley GP EIR on page 3-149 states that “while there are no officially designated historic structures in Oakley, there are numerous buildings, primarily in the old town area, eligible for such designation or listing [...] Oakley’s historic resources are generally in need of official recognition.” The project site is not listed in the California Register of Historical Resources, nor is it listed in a local register or determined to be a historic resource by the Oakley General

Plan. Therefore, historical resources would not be affected by the project and a ***less-than-significant*** impact would occur.

- b-d. According to the Oakley GP EIR (p. 3-148), few archeological or paleontological finds have occurred in the City of Oakley. However, the EIR states that given the rich history of the Planning Area and region, the City will continue to require site evaluation prior to development of undeveloped areas, as well as required procedures if artifacts are unearthed during construction. The project site does not currently contain any structures and the site has been heavily disturbed through grading and routine disking; therefore, the probability of historical or cultural resources persisting on the site is low. However, the possibility remains that ground disturbing activities could uncover previously unknown buried archaeological or paleontological materials, or human remains, resulting in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the potential construction-related impact to a *less-than-significant* level.

- V-1. *If buried historic and/or cultural resources are encountered during site grading or other site work, all such work shall be halted immediately within 100 feet of the discovery and the developer shall immediately notify the Planning Division of the discovery. In such case, the developer shall be required, at their own expense, to retain the services of a qualified archaeologist for the purpose of recording, protecting, or curating the discovery, as appropriate. The archaeologist shall be required to submit to the Planning Division for review and approval a report of the findings and method of curation or protection of the resources. Further grading or site work within the area of discovery would not be allowed until the preceding work has occurred.*
- V-2. *Pursuant to State Health and Safety Code §7050.5 (c) State Public Resources Code §5097.98, if human bone or bone of unknown origin is found during construction, all work shall stop within 100 feet of the find and the Contra Costa County Coroner shall be contacted immediately. If the remains are determined to be Native American, the coroner shall notify the Native American Heritage Commission, who shall notify the person believed to be the most likely descendant. The most likely descendant shall work with the contractor to develop a program for re-internment of the human remains and any associated artifacts. Additional work is not to take place within 100 feet of the find until the identified appropriate actions have been implemented.*

- e. Tribal cultural resources are generally defined by Public Resources Code 21074 as sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe. Because the proposed project includes a request for a General Plan Amendment, in compliance with Senate Bill (SB) 18, the City of Oakley initiated consultation with the pertinent Native American Tribes. The City received a response from a representative of the Muwekma Ohlone Indian Tribe of the San Francisco Bay Area, and consultation pursuant to SB 18 is on-going. Additionally, the City of Oakley distributed project notification letters, in compliance with Assembly Bill (AB) 52, to the Torres Martinez Desert Cahuilla Indians, and the Lone Band of Miwok Indians. At the time of publication of this document the City has not received requests for further consultation under AB 52 from any of the contacted tribes. Concurrently, a records search of the Sacred Lands File was performed by the Native American Heritage Commission. The Sacred Lands File search returned negative results for known cultural resources on the project site. The project site does not contain any existing structures and past disturbance of the site makes the persistence of surficial tribal resources unlikely. Although past disturbance of the project site makes the discovery of surficial resources unlikely, application of Mitigation Measures V-1 and V-2 would reduce the project's impacts to possible unknown cultural, tribal or historical resources to less than significant levels. Given the low likelihood of the presence of tribal resources as described in the City's General Plan EIR and the required Mitigation Measures V-1 and V-2 which require construction to halt if any potential resources are found, as well as the City's compliance with AB 52 and SB 18, the project would result in a ***less-than-significant*** impact to tribal cultural resources.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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VI. GEOLOGY AND SOILS.

Would the project:

a.	Expose people or structures to 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 based on other substantial evidence of a known fault?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
ii.	Strong seismic ground shaking?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
iii.	Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
iv.	Landslides?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
b.	Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
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?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
d.	Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion

The following discussion is based on the Geotechnical Exploration of the project site prepared by ENGEO, Inc.

ai-iv,c. The site is located in an area of moderate to high seismicity. Known active faults are not mapped across the property and the site is not located within an Alquist-Priolo Earthquake Fault Zone; however, large (>Mw7) earthquakes have historically occurred in the Bay Area and along the margins of the Central Valley and many earthquakes of low magnitude occur every year. The two nearest earthquake faults zoned as active by the State of California Geological Survey are the Great Valley fault located approximately seven miles west, and the Greenville fault located about eight miles to the southwest. The Great Valley fault is a blind thrust fault with no known surface expression; the postulated fault location has been based on regional seismic activity and isolated subsurface information.

Portions of the Great Valley fault are considered seismically active thrust faults; however, because the Great Valley fault segments are not known to extend to the ground surface, the State of California has not defined Earthquake Fault Hazard Zones around the postulated traces. The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults.

Other active faults in the San Francisco Bay Area capable of producing significant ground shaking at the site include the Concord-Green Valley fault, 15 miles west; the Calaveras fault, 19 miles southwest; the Hayward fault, 28 miles southwest; and the San Andreas fault, 46 miles southwest. Any one of these faults could generate an earthquake capable of causing strong ground shaking at the subject site. Earthquakes of Moment Magnitude seven and larger have historically occurred in the Bay Area and Central Valley and numerous small magnitude earthquakes occur every year.

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. The common secondary seismic hazards include ground rupture, ground shaking, and liquefaction, and ground lurching. Based on topographic and lithologic data, the risk of regional subsidence or uplift, lateral spreading, and landslides, is considered low to negligible at the site.

Ground Rupture

Because active faults are not known to cross the property and the site is not located within an Earthquake Fault Special Study Zone, the geotechnical report concludes that ground rupture is unlikely at the subject property.

Ground Shaking

An earthquake of moderate to high magnitude generated within the region could cause considerable ground shaking at the site, similar to that which has occurred in the past. To mitigate the shaking effects, structures should be designed using sound engineering judgment and the 2013 California Building Code (CBC) requirements, as a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake; however, well-designed and well-constructed structures can reasonably be expected not to collapse or cause loss of life in a major earthquake.

Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded and fine-grained sands. Empirical evidence indicates that loose to medium-dense gravels, silty sands, and low- to moderate-plasticity silts and clays may be susceptible to liquefaction. In addition, sensitive high-plasticity soils may be susceptible to significant strength loss (cyclic softening) as a result of significant cyclic loading. Silts and clays were not encountered during site borings and, therefore, the site is not subject to cyclic softening. Groundwater was not encountered during subsurface exploration so liquefaction is also unlikely at the subject property.

Ground Lurching

Ground lurching is a result of the rolling motion imparted to the ground surface during energy released by an earthquake. Such rolling motion can cause ground cracks to form in weaker soils. The potential for the formation of these cracks is considered greater at contacts between deep alluvium and bedrock. Such an occurrence is possible at the site as in other locations in the region, but based on the site location, the offset is expected to be minor. However, foundation and pavement must be designed to reduce the potential for adverse impacts from lurch cracking.

Landslides

The project area is relatively flat; therefore, landslides do not represent a likely hazard.

Existing Undocumented Fill

The Geotechnical exploration of the site concluded that previous undocumented grading of the site had occurred. Such grading could have included the placement of non-engineered fill throughout the project site. To avoid any potential impacts from non-engineered fill the Geotechnical Exploration recommended the removal of the upper 18 inches of soil. The exposed soil surface should then be ripped to approximately 12 inches and engineered fill shall be used to replace the removed material.

Conclusion

The project site is not within an Alquist-Priolo Special Studies Zone; however, the Geotechnical Exploration report prepared for the proposed project indicates that the Oakley area is located in a seismically active zone. Development of the proposed project in this seismically active zone could expose people or structures to substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault and/or strong seismic ground shaking. Therefore, a ***potentially significant*** impact could result.

Mitigation Measure(s)

Implementation of the following mitigation measure would ensure the potential impact is *less than significant*.

- VI-1. *All grading and foundation plans for the development shall be designed by a Civil and Structural Engineer and reviewed and approved by the Director of Public Works/City Engineer, Chief Building Official, and a qualified Geotechnical Engineer prior to issuance of grading and building permits to ensure that all geotechnical recommendations specified in the geotechnical report are properly incorporated and utilized in the project design.*
- b. The City of Oakley General Plan Background Report (Section 9, p. 9-3) indicates that the project site is characterized by soils grouped within the lowland soil association. According to the General Plan EIR, such soils are described as slowly to very slowly permeable, highly expansive and corrosive with slight erosion hazard (3-160). Because the soils on the site possess little erosion hazard, the project site is not likely to suffer substantial soil erosion or loss of topsoil. However, any disturbance of the soil, such as surface grading, relocates topsoil and breaks the soil into easily transported particles, rendering earth surfaces susceptible to erosion from wind and water. As part of standard City

requirements, preparation of an Erosion Control Plan and Stormwater Pollution Prevention Plan (SWPPP) prior to construction activities and implementation of BMPs during construction is required. The erosion control measures required for implementation on the proposed project by both the SWPPP and the Erosion Control Plan would ensure that the proposed project would not result in substantial soil erosion or the loss of topsoil. Therefore, impacts from soil erosion resulting from grading of the project area would be considered ***less than significant***.

- d. The project site is within a region that is identified in the Oakley General Plan EIR as possessing soils that are very slowly permeable and highly expansive. Highly expansive soils are prone to shrink/swell activity, which could have adverse affects on structures constructed on such soils. The Geotechnical Exploration recommends that finish grades be sloped away from buildings and pavements to the maximum extent practical to reduce the potential impacts from expansive soils. The Exploration further recommends that discharge from roof downspouts be directed away from foundations, and water is not allowed to pond near foundations, as such roof flow or ponding could cause impacts from expansive soils. Mitigation Measure VI-1 requires compliance with recommendations in a geotechnical report which would ensure that the foundations and pavements are designed in order to reduce the impact of the proposed project from expansive soils to a ***less-than-significant*** level.
- e. The proposed project will not involve the use of septic tanks or alternative wastewater disposal systems; therefore, ***no impact*** would occur.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VII. GREENHOUSE GAS EMISSIONS.				
<i>Would the project:</i>				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

a,b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on earth. An individual project’s GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to future development would be primarily associated with increases of carbon dioxide (CO₂) and, to a lesser extent, other GHG pollutants, such as methane (CH₄) and nitrous oxide (N₂O) associated with area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste. The primary source of GHG emissions for the project would be mobile source emissions. The common unit of measurement for GHG is expressed in terms of annual metric tons of CO₂ equivalents (MTCO₂e/yr).

Construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Neither the City nor BAAQMD has an adopted threshold of significance for construction-related GHG requiring quantification. Nonetheless, to provide a conservative estimate of the project’s total GHG emissions, the proposed project’s construction GHG emissions have been amortized over the anticipated operational lifetime of the project, which was assumed to be 25 years, and

included in the annual operational GHG emissions for disclosure purposes.³ Utilizing the CalEEMod modeling software, the total annual construction-related GHG emissions were estimated to be 397.24 MTCO_{2e}, or 15.89 MTCO_{2e} per year over the operational lifetime of the proposed project.

The BAAQMD threshold of significance for project-level operational GHG emissions is 1,100 MTCO_{2e}/yr. The BAAQMD’s approach to developing a threshold of significance for GHG emissions is to identify the emissions level for which a project would not be expected to substantially conflict with existing California legislation adopted to reduce statewide GHG emissions needed to move towards climate stabilization. If a project would generate GHG emissions above the threshold level, the project would be considered to generate significant GHG emissions and conflict with applicable GHG regulations. It should be noted that the BAAQMD was challenged in the Alameda County Superior Court, and was ordered to set aside the proposed thresholds of significance and screening criteria.⁴ However, because the BAAQMD thresholds of significance were set aside due to procedural challenges rather than objections to the validity of the thresholds, the BAAQMD thresholds remain the best available option for evaluation of GHG impacts for the project and, thus, are used in this analysis.

Utilizing CalEEMod and taking into account construction-related emissions, the proposed project’s total GHG emissions were estimated and are presented in Table 4.

Table 4	
Unmitigated Project GHG Emissions	
	Annual GHG Emissions (MTCO_{2e}/yr)
Operational GHG Emissions	957.47
Construction-Related GHG Emissions ¹	15.89
Total Annual GHG Emissions	973.36
Threshold of Significance	1,100
Exceeds Threshold?	NO
¹ Total annual construction-related GHG emissions of 417.28 MTCO _{2e} /yr amortized over the anticipated 25-year operational lifetime of the proposed project.	
<i>Source: CalEEMod, June 2016.</i>	

³The BAAQMD does not recommend any specific operational lifetimes for use in amortizing construction-related GHG emissions; however, the SMAQMD, per its *Guide to Air Quality Assessment in Sacramento County*, suggests an operational lifetime for a new conventional commercial building of 25 years. The estimates are derived from the State of California Executive Order D-16-00 and US Green Building Council’s October 2003 report on *The Costs and Financial Benefits of Green Buildings*.

⁴The BAAQMD was challenged in Superior Court, on the basis that the BAAQMD failed to comply with CEQA when it adopted its CEQA guidelines. The BAAQMD was ordered to set aside the proposed thresholds and conduct CEQA review of the thresholds. On August 13, 2013, the First District Court of Appeal reversed the trial court’s decision. The Court of Appeal’s held that CEQA does not require BAAQMD to prepare an EIR before adopting thresholds of significance to assist in determining whether air emissions of proposed projects might be deemed “significant.” The Court of Appeal’s decision provides the means by which BAAQMD may ultimately reinstate the GHG emissions thresholds, though the court’s decision does not become immediately effective. It should be further noted that a petition for review has been filed; however, the court has limited review to the following issue: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project?

As shown in Table 4, the project's total unmitigated annual GHG emissions, including construction-related emissions, would not exceed the BAAQMD threshold of significance for GHG emissions. Because the project's unmitigated annual GHG emissions would not exceed the 1,100 MTCO₂e per year threshold utilized by BAAQMD, the proposed project would not be considered to generate GHG emissions directly or indirectly, which may have a significant impact on the environment, nor would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, the proposed project would be considered to result in a ***less-than-significant*** cumulative impact related to GHG emissions and global climate change.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact	
VIII. HAZARDS AND HAZARDOUS MATERIALS.					
<i>Would the project:</i>					
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	<input type="checkbox"/>	✘	<input type="checkbox"/>	<input type="checkbox"/>
c.	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
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 for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
f.	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
h.	Expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion

- a,b. Construction activities would involve the short-term use and storage of on-site hazardous materials that are common to construction sites (fuels, solvents, etc.). All materials would be used, stored, and disposed of in accordance with all applicable federal, State, and local regulations and by way of the recommended manufacturer's directions. Potential impacts related to construction activities of the self-storage facility and fueling station are not considered to be significant.

The proposed project would include a self-storage facility and a convenience store with a six multi-product dispenser fueling station with canopy. Fuel would be stored on-site in underground storage tanks (USTs), which would dispense fuels via six multi-product dispensers (12 fuel pumps). It should be noted that underground storage of hazardous materials is subject to the provisions of the California Health and Safety Code and Title 23 of the California Code of Regulations. The Contra Costa Health Services Hazardous Materials Programs (CCHSHM) is the designated local agency assigned to implement the program to protect the public health from exposure to hazardous materials stored in the USTs, including the protection of groundwater from contamination. Activities to obtain these objectives include annual inspections and the issuance of operating permits, which are also issued for UST system installation, removals, upgrades, and repairs. CCHSHM personnel witness specified phases of the work being conducted on the UST system to ensure that the work is conforming to plans approved by the CCHSHM. Compliance with the CCHSHM requirements would ensure that the potential impacts related to the release of hazardous materials into the environment would be less than significant.

A Phase I Environmental Site Assessment (ESA) was prepared for the proposed project by AEI Consultants to determine potentially hazardous conditions at the site. The proposed project site is currently vacant and graded. The following summarizes the findings of the ESA.

Recognized Environmental Condition (REC)

REC is defined by the ASTM Standard Practice as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. AEI did not identify evidence of RECs during the course of the assessment.

Controlled Recognized Environmental Condition (CREC)

CREC is defined by the ASTM Standard Practice E1527-13 as a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or

petroleum products allowed to remain in place subject to the implementation of required controls. AEI did not identify evidence of CRECs during the course of the assessment.

Historical Recognized Environmental Condition (HREC)

HREC is defined by the ASTM Standard Practice E1527-13 as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls. AEI did not identify evidence of HRECs during the course of the assessment.

Other Environmental Considerations

Other Environmental Considerations warrant discussion, but do not qualify as RECs as defined by the ASTM Standard Practice. Based on a review of aerial photographs, the subject property was historically used for agricultural purposes as an orchard from approximately 1939 to 1984. Therefore, the potential exists that agricultural chemicals, such as pesticides, herbicides and fertilizers, were used on site, and that the subject property has been impacted by the use of such agricultural chemicals.

In addition, although not observed during the AEI site visit, one groundwater monitoring well was installed on the subject property in 2009, in connection with groundwater monitoring for nearby waste water treatment plants, according to records on file with the Contra Costa County Department of Environmental Health. The current status of the well is unknown; however, the subject property owner representative indicated that the well had been decommissioned and moved to the south adjacent site. AEI recommends that the presence or absence of the well be confirmed, and if present, the well should be properly decommissioned.

Findings

The proposed project could create a significant hazard to the public or the environment through the upset of hazardous materials or through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials to the environment resulting in a ***potentially significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measures would ensure that the above impacts are reduced to a *less-than-significant* level.

VIII-1. *Prior to issuance of a grading permit, the applicant shall hire an Environmental Consultant to perform a Phase II Environmental Site Assessment (ESA) in order to determine whether pesticides are persistent in on-site soils. The soil analytical results shall be documented in the Phase II ESA report and submitted to the City of Oakley Planning Division. If the Phase II ESA determines that the on-site soils have not been impacted, further mitigation is not required.*

VIII-2. *If the Phase II ESA determines that on-site soils have been impacted, and contaminants are identified in excess of the California Human Health Screening Levels [CHHSLs] for commercial land uses, the contaminated areas shall be remediated such that the resultant concentrations are below the CHHSLs for commercial land uses. The Phase II ESA shall specify measures for the remediation of the soils, including proper removal and disposal procedures. The relative efficacy of potential removal technologies is dependent on subsurface conditions, including soil lithology, groundwater depth, and contaminant type/extent. Accordingly, several remediation options may be considered. For soil contamination, potential removal technologies could include, but would not necessarily be limited to, the following:*

- *Excavation and off-haul – Impacted soils are excavated until the excavation base and sidewalls do not exhibit impact above a specific screening level or cleanup goal. The excavated soils are transported and disposed of at an appropriate landfill facility.*
- *Bioremediation – Nutrients, oxygen, and biological cofactors are introduced to the soil (either in-place or post-excavation in a treatment area) to stimulate natural biological breakdown of the contaminants.*
- *Bioaugmentation – Similar to bioremediation, except that bioaugmentation involves the introduction of engineered microorganisms to the soil to degrade the contaminants.*
- *Soil vapor extraction (SVE) – Soil gas is extracted from the subsurface under vacuum and brought to the surface, where it is treated.*

The project applicant shall comply with all recommendations of the Phase II ESA for the review and approval by the Contra Costa County Environmental Health Department and the City of Oakley.

VIII-3. *Prior to issuance of a grading permit, the applicant shall provide proof to the City of Oakley Planning Division that the groundwater monitoring well has been legally decommissioned. If legally*

decommissioned, further mitigation is not required. If not, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Contra Costa County Health Services Department, and properly abandon the on-site well, pursuant to review and approval by the City Engineer and the Contra Costa County Environmental Health Department.

- c. The proposed project is not located within one-quarter mile of a school of an existing or proposed school. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school and ***no impact*** would occur.
- d. The proposed project is not located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and would not create a significant hazard to the public or the environment. Therefore, ***no impact*** would occur.
- e,f. The proposed project is not located in the vicinity of a private airstrip or within an airport land use plan. Therefore, implementation of the proposed project would result in ***no impact***.
- g. Implementation of the proposed project would not interfere with an adopted emergency response plan or emergency evacuation plan. Two access points will be provided to the site and all development will comply with City standards. Therefore, ***no impact*** would occur.
- h. The site is not located within an area where wildland fires occur. Therefore, ***no impact*** would occur.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY.				
<i>Would the project:</i>				
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year floodplain, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Place within a 100-year floodplain structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

- a.f. During the early stages of construction activities, topsoil would be exposed due to grading and excavation of the site. After grading and excavation and prior to overlaying the ground surface with impervious surfaces and structures, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which would adversely affect water quality.

Every application for a development project in the City of Oakley is subject to the development runoff requirements in the City's NPDES permit. Each application is required to be accompanied by a stormwater control plan that meets the criteria in the most recent version of the Contra Costa Clean Water Program Stormwater C. 3. Guidebook. Therefore, as preparation of a stormwater control plan is required by the Oakley Municipal Code, Chapter 11, impacts to water quality would be *less than significant*.

- b. Water is provided to the project site by the Diablo Water District (DWD). According to the DWD Final 2010 Urban Water Management Plan, water demand and connection projections for DWD are based on buildout land uses in current adopted general plans. Over the period from 2010 to 2035, DWD's demand is estimated to increase from 1,815 million gallons (MG) per year to 5,572 MG per year. The primary water supply for DWD's distribution system is treated surface water from the Bureau of Reclamation's Central Valley Project (CVP) purchased from the Contra Costa Water District (CCWD). CVP water is conveyed through the Contra Costa Canal and treated at the Randall-Bold Water Treatment Plant (WTP) in Oakley, which is jointly owned by DWD and CCWD. DWD has developed a groundwater supply system, which provides additional supply reliability. The first groundwater well came online in 2006. When fully implemented, groundwater may comprise up to 20 percent of DWD's total supply. As indicated in the Urban Water Management Plan, DWD has adequate supply sources to meet future needs under normal year, single year and multi-year drought conditions.

Impervious surfaces do not currently exist on the project site as the site is presently vacant. The addition of impervious surfaces would have the potential to prevent stormwater from infiltrating the soil and could therefore decrease groundwater recharge. However, the proposed project would integrate certain Best Management Practices (BMPs) outlined in the C.3 Guidebook, which would allow for runoff from impervious surfaces to infiltrate on-site soils. The self-storage facility would include 4,189 sf of bioretention areas, which would use permeable soils and non-compacted gravels to treat stormwater. Runoff entering the bioretention areas would filter through permeable soils of the bioretention areas allowing for soil infiltration and groundwater recharge. Additionally, the 7-Eleven would include 1,155 sf of treatment area in a similar bioretention area as well as 5,616 sf of treatment area in self-retaining areas. The proposed self-retaining areas would also allow for groundwater recharge through soil infiltration

by capturing at least the first inch of rainfall on the site. The incorporation of BMPs into the proposed project would allow for continued infiltration of stormwater on the project site, and would prevent decreases in groundwater recharge that would otherwise result from the placement of impervious surfaces over the project area.

Therefore, the proposed project would not interfere with the City's groundwater supply or recharge, resulting in a ***less-than-significant*** impact.

- c-e. All municipalities within Contra Costa County (and the County itself) are required to develop more restrictive surface water control standards for new development projects as part of the renewal of the Countywide NPDES permit. Known as the "C.3 Standards," new development and redevelopment projects that create or replace 10,000 or more sf of impervious surface area must contain and treat stormwater runoff from the site. The proposed project is a C.3 regulated project and is required to include appropriate site design measures, source controls, and hydraulically-sized stormwater treatment measures. Separate Stormwater Control Plans (SWCP) were prepared for the self-storage site and the 7-Eleven.

Self-Storage Site

According to the SWCP prepared for the self-storage project site, development of the proposed project would result in the creation of approximately 99,833 sf of impervious surface area. Because the new impervious surface area exceeds one acre, hydrograph modification would be required.

The storm run-off would be conveyed by way of a pipe connecting to an existing storm drain lateral located on Laurel Road. Storm water will be treated on-site by bio-retention areas located along the northern side of the manager's office and along the western property line. The two bio-retention facilities total 4,189 sf. Based upon the 99,833 sf of impervious surface area, the minimum basin size is 3,358 sf. As demonstrated in the SWCP prepared for the proposed project, the bio-retention basin proposed for the project would exceed the minimum sizing requirement with respect to treatment area volume.

7-Eleven Site

According to the SWCP prepared for the 7-Eleven project site, development of the proposed project would result in the creation of approximately 29,304 sf of impervious surface area.

Storm water would be treated on-site by a bio-retention area located along Laurel Road. The bio-retention area totals 1,155 sf. Based upon the 29,304 sf of impervious surface area, the minimum basin size is 992 square feet. As demonstrated in the SWCP prepared for the proposed project, the bio-retention

basin proposed for the project would exceed the minimum sizing requirement with respect to treatment area volume.

Conclusion

Because the SWCPs have been designed in accordance with the Countywide NPDES permit and C.3 Standards, a ***less-than-significant*** impact would occur related to stormwater runoff.

- g-i. A project would have a significant impact if implementation were to place people or structures in an area where flooding is likely to occur, exposing them to the risk of loss, injury, or death in the event of such flooding. The Federal Emergency Management Agency Flood Insurance Rate Map (06013C035SF) dated June 16, 2009, designates the project site as within flood zone X. Zone X is defined as an area of minimal flood hazard, determined to be outside the 500-year flood and protected by levee from 100-year flood. Therefore, the project would have a ***less-than-significant*** impact.
- j. Tsunamis are ocean waves created by undersea fault movement. A tsunami poses little danger away from shorelines; however, when a tsunami reaches the shoreline, a high swell of water breaks and washes inland with great force. Waves may reach 50 feet in height on unprotected coasts. Historic records of the Bay Area used by one study indicate that nineteen tsunamis were recorded in San Francisco Bay during the period of 1868-1968. Maximum wave height recorded at the Golden Gate tide gauge, where wave heights peak, was 7.4 feet. The available data indicate a standard decrease of original wave height from the Golden Gate to about half original wave height on the shoreline near Richmond, and to nil at the head of the Carquinez Strait. The City of Oakley is several miles inland from the Carquinez Strait; therefore, the project site is not exposed to flooding risks from tsunamis.

A seiche is a long wavelength, large-scale wave action set up in a closed body of water such as a lake or reservoir, and has a destructive capacity that is not as great as that of a tsunami. Seiches are known to have occurred during earthquakes, but have not been recorded in the Bay Area. Therefore, future inundation of the project site by seiches is highly improbable.

Mudflows typically occur in mountainous or hilly terrain. The project site and surrounding areas are relatively flat; therefore, the potential for the occurrence of mudflows is minimal.

The project does not include the creation of new structures, or the placement of persons in areas subject to floods, seiches, tsunamis, or mudflows. Therefore, ***no impact*** would occur.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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X. LAND USE AND PLANNING.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Conflict with any applicable land use plans, policies, or regulations of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating on environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Conflict with any applicable habitat conservation plan or natural communities conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a. The proposed project involves the development of a self-storage facility and a 7-Eleven on a vacant project site. The site is served by two existing roadways and would not alter access to existing communities. The project would not introduce any physical barriers to divide an established community. Therefore, the project would have **no impact** on established communities.
- b. The proposed project includes a request for a General Plan Amendment to amend the land use designation from Public and Semi-Public Facilities (PS) to Commercial (CO), as well as Rezone from Public and Semi-Public (P) to General Commercial (C). The project site is a vacant portion of the Contra Costa Water District Water Treatment Plant site that is not needed by the District. Therefore, the Public General Plan and zoning designations are not currently applicable to the project site. The applicant is requesting Commercial General Plan and zoning designations for the site in order to accommodate the proposed project. The City of Oakley General Plan Goal 2.3 encourages new, high-quality commercial development in the City. Policy 2.3.3 promotes the location of commercial centers to allow for easy access to arterial streets. The proposed project includes two new businesses located on existing arterial streets. In addition, the General Plan Economic Development Element encourages the expansion of Oakley's economic base. Therefore, the proposed project is consistent with the goals and policies of the General Plan. Should the City Council amend the land use designation to Commercial, the proposed project would not conflict with any applicable land use plans, policies, or regulations and would result in a **less-than-significant** impact.
- c. The East Contra Costa County HCP was approved in August 2007 and the City of Oakley approved the implementing ordinance on November 13, 2007. The

project is within the City and, therefore, is included in the HCP. In compliance with the implementing ordinance, the proposed project would be required to comply with the HCP conservation strategies as further discussed in the biological resources section above. Therefore, the proposed project would not conflict with the adopted HCP, and a ***less-than-significant*** impact would occur.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XI. MINERAL RESOURCES.				
<i>Would the project:</i>				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion

a,b. The City of Oakley General Plan Background Report states that the only mineral resource currently mined in the City of Oakley is sand. The project site consists of the land immediately associated with the existing roadway. Mining of sand does not occur adjacent to or within the project area. The proposed project would not result in the loss of availability of a known mineral resource; therefore, the proposed project would have ***no impact*** to mineral resources.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. NOISE.				
<i>Would the project result in:</i>				
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,c. The City of Oakley General Plan Policy 9.1.5 states that noise levels resulting from transportation noise sources shall be maintained at or below 65 dBA Ldn at residential outdoor use areas. Table 9-6 of the General Plan indicates that predicted noise levels at General Plan buildout along Laurel Road in the vicinity of the proposed project range from 60.3 to 63.8 dB. Predicted noise levels along Empire Avenue in the vicinity of the proposed project range from 60.4 to 63.2 dB.

A traffic study was prepared for the proposed project by TJKM which indicates a total of 2,208 trips per day added to the roadways as a result of the self-storage facility and 7-Eleven. In the AM peak hour, the trips total 61 and in the PM peak hour, the trips total 99. The traffic study notes the distribution of these trips along the local roadways. The distribution ranges from 20 to 30 percent of the trips

traveling north and south on Empire Avenue and from 20 to 35 percent of the trips traveling east and west along Laurel Road. Of the maximum 99 PM peak hour trips, a maximum of 35 trips would be generated on Empire Avenue and Laurel Road, in each direction.

The maximum predicted noise level on Laurel Road and Empire Avenue is 63.8 dB. The addition of 35 trips on the roadway would not result in an increase in the noise level beyond the allowed 65 dB at the backyards of the existing residential units. In addition, the existing residential units adjacent to Laurel Road and Empire Avenue have a minimum six-foot masonry wall separating the backyards from the street, which would further reduce the noise levels. Therefore, the increase in noise levels due to operations of the proposed project would result in a ***less-than-significant*** impact.

- b,d. Construction of the proposed project would include the use of backhoes, excavators, dump trucks, front-end loaders, asphalt pavement grinders, compaction equipment, asphalt pavers, concrete trucks and various passenger vehicles. The noise assessment determined that vibration levels generated by proposed construction activities occurring at distances 30 feet or greater from the nearest sensitive residential structures would range from 0.002 peak particle velocity (ppv) to 0.160 ppv, and would not exceed the 0.2 in/sec ppv City of Oakley significance criteria. Residential land uses near the project site would not be subject to excessive vibration levels over extended periods of time. In addition, construction would occur during allowable hours, as stated in the City of Oakley Municipal Code (Monday through Friday between the hours of 7:30 AM and 7:00 PM and on Saturdays, Sundays, and holidays between the hours of 9:00 AM and 7:00 PM). Therefore, construction of the proposed project would not expose persons to excessive groundborne vibrations or a temporary increase in ambient noise levels resulting in a ***less-than-significant*** impact.
- e,f. The project site is not located near an existing airport or private airstrip and is not within an area covered by an existing airport land use plan. Therefore, the proposed project would have ***no impact***.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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XIII. POPULATION AND HOUSING.

Would the project:

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	✘

Discussion

- a. The proposed project would only include the construction of one housing unit, which would not be expected to induce significant population growth. Additionally, the commercial facilities included in the proposed project would not create a large enough demand for employees to induce significant population growth. The facilities are proposed to serve the existing population of Oakley and the surrounding communities. Therefore, the proposed project would not induce population growth beyond the growth anticipated by the General Plan and would result in a **less-than-significant** impact.
- b,c. The project site is currently vacant. Therefore, the proposed project would not involve displacement of existing housing or people and would result in **no impact**.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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XIV. PUBLIC SERVICES.

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?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
b. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
c. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>
d. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	✘	<input type="checkbox"/>

Discussion

- a. The City of Oakley is provided fire protection by the East Contra Costa Fire Protection District (ECCFPD). All new development is subject to the East Contra Costa Fire Protection District’s impact fee, which is based on total square footage of buildings. The project applicant would be required to pay the fee at the time of building permit issuance, and would cover the project’s fair share of fire protection services. Therefore, the proposed project would not result in the need for new or physically altered fire protection facilities the construction of which could cause environmental impacts, resulting in a **less-than-significant** impact.
- b. The proposed project is not expected to create any significant drain on police service that would result in the need for new or physically altered facilities, or any changes to police service in order to maintain the current levels of service. The project site is within the current police service area for the City of Oakley and would not add a significant number of new residents to the City that would affect the police officer/citizen ratio. In addition, the project would be conditioned to participate in the funding of the City’s Special Police Services Tax by voting to approve the special tax for the parcel. Therefore, the proposed project would not result in the need for new or physically altered police protection facilities the construction of which could cause environmental impacts, resulting in a **less-than-significant** impact.
- c. The proposed project includes a single on-site manager’s unit which may induce a minor increase in new students. The project applicant, however, would be required to pay the appropriate school impact fees resulting in a **less-than-significant** impact to schools.

- d. The proposed project would be subject to the City's Park Acquisition and Improvement impact fees, which are based on total square footage of buildings. The project applicant would be required to pay the fee at the time of building permit issuance, which would cover the project's fair share cost of park services. In addition, the project includes a single on-site manager's unit which would only minimally utilize the City's parks. Therefore, the proposed project would not result in the need for new or physically altered park facilities the construction of which could cause environmental impacts, resulting in a ***less-than-significant*** impact.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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XV. RECREATION.

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Discussion

- a-b. The proposed project would be subject to the City’s Park Acquisition and Improvement impact fees, which are based on total square footage of buildings. The project applicant would be required to pay the fee at the time of building permit issuance, which would cover the project’s fair share cost of park services. In addition, the project includes a single on-site manager’s unit which would only minimally utilize the City’s parks. Therefore, the proposed project would not result in physical deterioration of park facilities or the need for new or expanded recreational facilities the construction of which could cause environmental impacts, resulting in a ***less-than-significant*** impact.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
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XVI. TRANSPORTATION/TRAFFIC.

Would the project:

a. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion

a,b. The proposed project includes the construction of a 2.86-acre self-storage facility and a 0.77-acre 7-Eleven gas station. The self-storage facility will include six one- and two-story storage buildings totaling 99,637 sf. In addition, a two-story manager’s building consisting of a residential unit and office space will be located on-site. The 7-Eleven parcel will include a 3,795 sf 7-Eleven store, six multi-product dispenser fueling stations with a canopy.

TJKM prepared a traffic impact analysis for the proposed project. The traffic analysis included the intersections of Empire Avenue/Laurel Road and Neroly Road/Laurel Road. The analysis studied existing and existing plus project conditions.

TJKM used published trip rates for the ITE land use Gasoline pumps with Convenience Market (ITE Code 945) for the 7-Eleven portion of the project. TJKM applied pass-by trip reduction as per ITE Trip Generation Manual, 9th Edition and ITE Trip Generation Manual, 9th Edition Volume 1: User’s Guide

and Handbook. Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. Pass-by trips are not diverted from another roadway. Therefore, existing traffic counts include the pass-by trips. The proposed 7-Eleven portion of the project is expected to generate approximately 46 weekday AM peak hour trips (23 inbound trips, 23 outbound trips) and 72 weekday PM peak hour trips (36 inbound trips, 36 outbound trips).

TJKM used published trip rates for the ITE land use Mini Warehouse (ITE Code 151) for the self-storage portion of the project as the land uses most closely match the trip characteristics of the proposed self-storage facility. The proposed self-storage facility is expected to generate approximately 15 weekday AM peak hour trips (eight inbound trips, seven outbound trips) and 27 weekday PM peak hour trips (14 inbound trips, 13 outbound trips).

Combined, the self-storage facility and 7-Eleven would result in 61 weekday AM peak hour trips (31 inbound trips, 30 outbound trips) and 99 weekday PM peak hour trips (50 inbound trips, 49 outbound trips).

The Neroly Road/Laurel Road intersection currently operates at LOS C for both AM and PM peak hours, with a current volume to capacity (V/C) ratio of 0.496 in the AM peak hour and 0.371 in the PM peak hour. With the addition of the proposed project traffic, the intersection continues to operate at LOS C but with a slightly increased AM peak hour V/C ratio of 0.498 and PM peak hour V/C ratio to 0.373. The Empire Avenue/Laurel Road intersection currently operates at LOS D in the AM and LOS C in the PM peak hours, with a V/C ratio of 0.733 in the AM peak hour and a V/C ratio of 0.650 in the PM peak hour. With the addition of the proposed project traffic, the intersection continues to operate at LOS D and C with the V/C ratios increasing to 0.753 and 0.684 for the AM and PM peak hours, respectively. The City of Oakley standard for intersection operations is LOS D or a volume-to-capacity (v/c) ratio of 0.89.

The project's contribution to the cumulative traffic levels would be less than cumulatively significant. The maximum 99 peak hour trips would not result in an increase that would cause the LOS to exceed the City's thresholds. In addition, the proposed project would be required to pay the City of Oakley and Regional Traffic fees to fund fair share of traffic improvements. Therefore, the proposed project would result in a **less-than-significant** impact related to an increase in traffic.

- c. The project site would not be located near an airport; therefore, the proposed project would not require any changes to existing regional air traffic activity and **no impact** would occur.

- d-e. The proposed project has been designed in compliance with City standards. Changes are not being made to the existing roadways and adequate access is provided to the site. TJKM, in the traffic analysis reviewed the on-site circulation and determined that all circulation aisles accommodate two-way travel and the turning radii are adequate for the refueling trucks and delivery trucks. TJKM recommends that One-Way signs be installed in the center concrete median on Empire Avenue to enhance traffic safety and operations at the driveways. The signs will be a condition of project approval. Therefore, the proposed project would not result in any potential design-related traffic hazards or inadequate emergency access and would result in a **less-than-significant** impact.
- f. The proposed project would be provided bus service by Tri Delta Transit. Route 383 serves the City of Oakley and is the closest route to the project site. In addition, the project includes bicycle racks as required by City Municipal Code. Class II bike lanes are provided along Laurel Road and along Empire Avenue, south of the intersection of Empire Avenue/Laurel Road. North of the intersection, Class III bike lanes are provided along Empire Avenue. In the project vicinity, all signalized study intersections are equipped with countdown pedestrian signal heads. All the study intersections have crosswalks and are compliant with the Americans with Disabilities Act. Continuous sidewalks are present on Laurel Road and Empire Avenue along both sides within the project vicinity. All the existing sidewalks are approximately six to nine feet wide varying along the project area. The proposed project would not alter any existing facilities. Therefore, the proposed project would not conflict with policies supporting alternative transportation routes and **no impact** would occur.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVII. UTILITIES AND SERVICE SYSTEMS.				
<i>Would the project:</i>				
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Discussion

a,b,e. The Ironhouse Sanitary District (ISD) provides wastewater service to Oakley and unincorporated areas of the County. The City of Oakley is entirely within ISD's boundary. The wastewater services involve the transmission of wastewater from residential, commercial and light industry to a treatment facility and the final disposal of the wastewater and residual waste solids. ISD owns and operates the wastewater collection, treatment, storage, and effluent recycling facilities that serve the City of Oakley.

The proposed project would tie into the existing eight-inch sanitary sewer line located within Empire Avenue. The proposed self-storage facility would generate minimal wastewater, primarily associated with the small office and on-site manager's unit. The 7-Eleven convenience store would also generate minimal wastewater associated with the on-site restrooms. The ISD opened a new water treatment facility in 2011. With the opening of the new facility the ISD's capacity was increased from 2.7 million gallons per day (mgd) to at least 7 mgd, with ultimate plans to increase the capacity to 11.3 mgd.^{5,6} The minimal wastewater production associated with the proposed project can be accommodated within the existing ISD systems. In addition, the project would be required to pay the necessary sewer connection and capacity fees. Therefore, the proposed project would not require the construction of new wastewater treatment facilities or expansion of existing facilities. Therefore, a **less-than-significant** impact to wastewater treatment facilities would occur.

- c. As discussed in questions c-e of the Hydrology and Water Quality section of the IS/MND, the self-storage facility and 7-Eleven prepared SWCPs which included bio-retention basins that exceed the minimum size requirements with respect to treatment area volume. From the bio-retention basins, the proposed storm water run-off will be conveyed by way of a pipe connection to an existing storm drain lateral located in Laurel Road. Because the SWCPs have been designed in accordance with the Countywide NPDES permit and C.3 Standards, a **less-than-significant** impact would occur related to stormwater runoff.
- d. Water is provided to the project site by the DWD. According to the DWD Final 2010 Urban Water Management Plan (UWMP), water demand and connection projections for DWD are based on buildout land uses in current adopted general plans. Over the period from 2010 to 2035, DWD's demand is estimated to increase from 1,815 MG per year to 5,572 MG per year. DWD's primary water supply for its distribution system is treated surface water from the Bureau of Reclamation's CVP purchased from the CCWD. CVP water is conveyed through the Contra Costa Canal and treated at the Randall-Bold WTP in Oakley, which is jointly owned by DWD and CCWD. DWD has developed a groundwater supply system, which provides additional supply reliability. The first groundwater well came online in 2006. When fully implemented, groundwater may comprise up to 20 percent of DWD's total supply. As indicated in the Urban Water Management Plan, DWD has adequate supply sources to meet future needs under normal year, single year and multi-year drought conditions.

The proposed project would tie into the existing 24-inch water main in Empire Avenue. The water demand estimates discussed above were based on area General Plan buildout projections. Because the proposed project requests a

⁵ Contra Costa LAFCo. *Water and Wastewater Municipal Services Review for East Contra Costa County*. Approved December 19, 2007.

⁶ Ironhouse Sanitary District. *Water Recycling Facility*. Accessible at <http://ironhousesanitarydistrict.com/pages/wrf.html>. Accessed on June 9, 2016.

redesignation of the project site from Public and Semi-Public to Commercial, the proposed project would not have been anticipated by the growth estimates of the UWMP. To determine whether or not adequate water capacity exists for the project site, the proposed project's water demand must be compared to the water demand assumed for the project site by the UWMP. Table 3-2 of the 2010 UWMP includes water delivery projections for each water use sector. The existing General Plan designation of Public and Semi-Public was assumed to be within the Institutional water use sector, while the self-storage facility and 7-Eleven were determined to be within the commercial water use sector. The UWMP assumes that for every two-acres of commercial or institutional land there would be one meter connection, and every commercial meter connection produces an estimated demand of 1.23 MG while institutional meter connections create an estimated demand of 2.77 MG.⁷ The project site is 2.85 acres and the proposed project would include the operation of two separate businesses, one self-storage facility, and one 7-Eleven. To ensure a conservative comparison of the currently proposed project to what was anticipated for the project site by the UWMP, development of the project site as a Public and Semi-Public project (assuming institutional water sector demand rates) was assumed to require a minimum amount of water and only one meter connection. Because two businesses are included in the proposed project, two meters were assumed for buildout of the project. Therefore, the current general plan designation would result in a demand estimate of 2.77 MG for an institutional land use and a redesignation to commercial would result in an estimated demand of 2.46 MG of commercial water use. As such the proposed project would not be expected to exceed the water demand estimated for the project site by the UWMP. Consequently, the proposed project can be accommodated within the existing DWD systems and adequate water supply exists. In addition, the project would be required to pay the necessary sewer connection and capacity fees. Therefore, the proposed project would result in a **less-than-significant** impact.

- f,g. Solid waste collected by Oakley Disposal in the City limits of Oakley is hauled to the recycling Center and Transfer Station in Pittsburg, which is operated by Contra Costa Waste Service. Residential, commercial, and industrial waste is processed at this transfer facility and the residual material is hauled to Potrero Hills Landfill (PHLF) outside Suisun City. PHLF is permitted to accept waste through 2048. Oakley Disposal Service provides weekly curbside recycling service whereby each residential customer is provided two 12-gallon crates for discarding recyclables. Additionally, commercial customers are offered multiple sizes of waste and recycling receptacles. Green waste service is provided on a bi-weekly basis. The curbside material is transported to the Concord Facility (Mt. Diablo Recycling) where the recyclables are sorted and moved to the appropriate markets for processing, composting, etc. The Concord Facility is permitted to accept up to 1,500 tons of waste per day, and the facility does not have an expected closure date. Additionally, as of January 2006 the PHLF had a

⁷ Diablo Water District. *Final 2010 Urban Water Management Plan* [p. 3-2-3 and Table 3-2]. June 2011.

remaining capacity of 13,872,000 cubic yards. As such, the proposed project could be accommodated by the Concord Facility and the PHLF within the existing solid waste facilities and will comply with all the required local and state regulations; therefore, a ***less-than-significant*** impact would result.

Issues	Potentially Significant Impact	Less-Than-Significant With Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to 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, 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?	☐	☐	✘	☐
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)?	☐	☐	✘	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	✘	☐

Discussion

- a. Although relatively unlikely, based upon the current land cover types found on-site, special-status wildlife species and/or federally- or state-protected birds not covered under the ECCCHCP could be occupying the site. In addition, although unlikely, the possibility exists for subsurface excavation of the site during grading and other construction activities to unearth deposits of cultural significance. However, this IS/MND includes mitigation measures that would reduce any potential impacts to less-than-significant levels. Therefore, the proposed project would have **less-than-significant** impacts related to degradation of the quality of the environment, reduction of habitat, threatened species, and/or California’s history or prehistory.

- b. The proposed project in conjunction with other development within the City of Oakley could incrementally contribute to cumulative impacts in the area. However, mitigation measures for all potentially significant project-level impacts identified for the proposed project in this IS/MND have been included that would reduce impacts to less-than-significant levels. As such, the project’s incremental contribution towards cumulative impacts would not be considered significant. In addition, all future discretionary development projects in the area would be required to undergo the same environmental analysis and mitigate any potential impacts, as necessary. Therefore, the proposed project would not have any

impacts that would be cumulatively considerable, and impacts would be ***less than significant***.

- c. The potential impacts identified in this study are minor and would be mitigated to a less-than-significant level with implementation of required mitigation measures. The proposed project would not result in a substantial adverse effect on human beings, either directly or indirectly. Therefore, impacts related to environmental effects that could cause adverse effects on human beings would be ***less than significant***.

APPENDIX A

Air Quality and Greenhouse Gas Modeling Results

Oakley Gateway Self-Storage & 7-Eleven Bay Area AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	102.00	1000sqft	1.44	101,997.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	3,795.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	414.88	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - co2 intensity factor adjusted based on PG&E's anticipated progress towards Statewide RPS goals

Land Use - Self-storage applied as Industrial-Unrefrigerated Warehouse-No Rail; 7-Eleven & Gas Station applied as Retail-Convenience Market with Gas Pumps

Construction Phase - Applicant Information

Grading - based on information provided by applicant

Vehicle Trips - Based on Information from project specific Traffic Study

Construction Off-road Equipment Mitigation - Applicant Information

Energy Mitigation -

Trips and VMT - soil would be imported from Brentwood or Antioch (approximately 5.3 miles from site)

tblConstEquipMitigation	Tier	No Change	Tier 1
tblConstructionPhase	NumDays	10.00	239.00
tblConstructionPhase	NumDays	200.00	239.00
tblConstructionPhase	NumDays	4.00	24.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	PhaseEndDate	12/10/2018	1/23/2018
tblConstructionPhase	PhaseStartDate	1/10/2018	2/23/2017
tblGrading	AcresOfGrading	9.00	2.85
tblGrading	AcresOfGrading	1.00	0.00
tblGrading	MaterialImported	0.00	11,500.00
tblLandUse	LandUseSquareFeet	1,694.10	3,795.00
tblLandUse	LotAcreage	2.34	1.44
tblProjectCharacteristics	CO2IntensityFactor	641.35	414.88
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripLength	20.00	5.30
tblVehicleTrips	ST_TR	204.47	162.78
tblVehicleTrips	ST_TR	2.59	2.50
tblVehicleTrips	SU_TR	166.88	162.78
tblVehicleTrips	SU_TR	2.59	2.50
tblVehicleTrips	WD_TR	542.60	162.78
tblVehicleTrips	WD_TR	2.59	2.50

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5453	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003
Energy	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	105.8641	105.8641	6.3700e-003	1.6100e-003	106.4969
Mobile	1.0043	1.3527	7.3672	0.0102	0.6668	0.0157	0.6825	0.1789	0.0145	0.1934	0.0000	761.8995	761.8995	0.0349	0.0000	762.6328
Waste						0.0000	0.0000		0.0000	0.0000	19.4628	0.0000	19.4628	1.1502	0.0000	43.6173
Water						0.0000	0.0000		0.0000	0.0000	7.5230	24.1970	31.7201	0.7744	0.0186	53.7464
Total	1.5516	1.3715	7.3845	0.0103	0.6668	0.0172	0.6839	0.1789	0.0159	0.1949	26.9858	891.9636	918.9494	1.9659	0.0202	966.4965

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.5453	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003
Energy	1.4500e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	96.8993	96.8993	6.0400e-003	1.4600e-003	97.4779
Mobile	1.0043	1.3527	7.3672	0.0102	0.6668	0.0157	0.6825	0.1789	0.0145	0.1934	0.0000	761.8995	761.8995	0.0349	0.0000	762.6328
Waste						0.0000	0.0000		0.0000	0.0000	19.4628	0.0000	19.4628	1.1502	0.0000	43.6173
Water						0.0000	0.0000		0.0000	0.0000	7.5230	24.1970	31.7201	0.7742	0.0186	53.7344
Total	1.5510	1.3660	7.3798	0.0103	0.6668	0.0167	0.6835	0.1789	0.0155	0.1944	26.9858	882.9988	909.9846	1.9654	0.0200	957.4656

	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	0.04	0.40	0.06	0.29	0.00	2.45	0.06	0.00	2.64	0.22	0.00	1.01	0.98	0.02	0.84	0.93

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2017	1/3/2017	5	2	
2	Grading	Grading	1/4/2017	2/6/2017	5	24	
3	Paving	Paving	2/7/2017	2/8/2017	5	2	
4	Building Construction	Building Construction	2/9/2017	1/9/2018	5	239	
5	Architectural Coating	Architectural Coating	2/23/2017	1/23/2018	5	239	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.85

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 159,570; Non-Residential Outdoor: 53,190 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,438.00	12.40	7.30	5.30	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	52.00	21.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Site Preparation - 2017

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					5.2700e-003	0.0000	5.2700e-003	2.9000e-003	0.0000	2.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0242	0.0159	2.0000e-005		1.3100e-003	1.3100e-003		1.2000e-003	1.2000e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997
Total	2.3100e-003	0.0242	0.0159	2.0000e-005	5.2700e-003	1.3100e-003	6.5800e-003	2.9000e-003	1.2000e-003	4.1000e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0634	0.0634	0.0000	0.0000	0.0634
Total	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0634	0.0634	0.0000	0.0000	0.0634

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					5.2700e-003	0.0000	5.2700e-003	2.9000e-003	0.0000	2.9000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3800e-003	0.0217	0.0239	2.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997
Total	2.3800e-003	0.0217	0.0239	2.0000e-005	5.2700e-003	8.6000e-004	6.1300e-003	2.9000e-003	8.6000e-004	3.7600e-003	0.0000	1.5895	1.5895	4.9000e-004	0.0000	1.5997

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0634	0.0634	0.0000	0.0000	0.0634
Total	3.0000e-005	4.0000e-005	3.8000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0634	0.0634	0.0000	0.0000	0.0634

3.3 Grading - 2017

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					0.0564	0.0000	0.0564	0.0301	0.0000	0.0301	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0226	0.2375	0.1581	1.7000e-004		0.0128	0.0128		0.0118	0.0118	0.0000	15.6673	15.6673	4.8000e-003	0.0000	15.7681
Total	0.0226	0.2375	0.1581	1.7000e-004	0.0564	0.0128	0.0692	0.0301	0.0118	0.0418	0.0000	15.6673	15.6673	4.8000e-003	0.0000	15.7681

3.3 Grading - 2017

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	9.9200e-003	0.0625	0.1423	1.5000e-004	3.2200e-003	6.8000e-004	3.9000e-003	8.9000e-004	6.3000e-004	1.5100e-003	0.0000	13.6793	13.6793	1.2000e-004	0.0000	13.6818
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.7000e-004	4.5400e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7602	0.7602	4.0000e-005	0.0000	0.7610
Total	0.0102	0.0630	0.1468	1.6000e-004	4.0900e-003	6.9000e-004	4.7800e-003	1.1200e-003	6.4000e-004	1.7500e-003	0.0000	14.4394	14.4394	1.6000e-004	0.0000	14.4428

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					0.0564	0.0000	0.0564	0.0301	0.0000	0.0301	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0234	0.2135	0.2357	1.7000e-004		8.5200e-003	8.5200e-003		8.5200e-003	8.5200e-003	0.0000	15.6673	15.6673	4.8000e-003	0.0000	15.7681
Total	0.0234	0.2135	0.2357	1.7000e-004	0.0564	8.5200e-003	0.0649	0.0301	8.5200e-003	0.0386	0.0000	15.6673	15.6673	4.8000e-003	0.0000	15.7681

3.3 Grading - 2017

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	9.9200e-003	0.0625	0.1423	1.5000e-004	3.2200e-003	6.8000e-004	3.9000e-003	8.9000e-004	6.3000e-004	1.5100e-003	0.0000	13.6793	13.6793	1.2000e-004	0.0000	13.6818
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.2000e-004	4.7000e-004	4.5400e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.8000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.7602	0.7602	4.0000e-005	0.0000	0.7610
Total	0.0102	0.0630	0.1468	1.6000e-004	4.0900e-003	6.9000e-004	4.7800e-003	1.1200e-003	6.4000e-004	1.7500e-003	0.0000	14.4394	14.4394	1.6000e-004	0.0000	14.4428

3.4 Paving - 2017

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	1.1900e-003	0.0121	9.0300e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.8000e-004	6.8000e-004	0.0000	1.2226	1.2226	3.7000e-004	0.0000	1.2303
Paving	5.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7700e-003	0.0121	9.0300e-003	1.0000e-005		7.3000e-004	7.3000e-004		6.8000e-004	6.8000e-004	0.0000	1.2226	1.2226	3.7000e-004	0.0000	1.2303

3.4 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	6.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1029	0.1029	1.0000e-005	0.0000	0.1031
Total	4.0000e-005	6.0000e-005	6.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1029	0.1029	1.0000e-005	0.0000	0.1031

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	2.5600e-003	0.0172	0.0181	1.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	1.2226	1.2226	3.7000e-004	0.0000	1.2303
Paving	5.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.1400e-003	0.0172	0.0181	1.0000e-005		1.0200e-003	1.0200e-003		1.0200e-003	1.0200e-003	0.0000	1.2226	1.2226	3.7000e-004	0.0000	1.2303

3.4 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	6.0000e-005	6.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1029	0.1029	1.0000e-005	0.0000	0.1031
Total	4.0000e-005	6.0000e-005	6.2000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.1029	0.1029	1.0000e-005	0.0000	0.1031

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3427	2.2166	1.6601	2.5500e-003		0.1422	0.1422		0.1372	0.1372	0.0000	214.0749	214.0749	0.0449	0.0000	215.0182
Total	0.3427	2.2166	1.6601	2.5500e-003		0.1422	0.1422		0.1372	0.1372	0.0000	214.0749	214.0749	0.0449	0.0000	215.0182

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0281	0.2188	0.3387	5.8000e-004	0.0157	3.1500e-003	0.0188	4.5000e-003	2.9000e-003	7.3900e-003	0.0000	51.7917	51.7917	4.0000e-004	0.0000	51.8001
Worker	0.0203	0.0297	0.2856	6.5000e-004	0.0547	4.4000e-004	0.0552	0.0146	4.0000e-004	0.0150	0.0000	47.7641	47.7641	2.5000e-003	0.0000	47.8165
Total	0.0484	0.2485	0.6243	1.2300e-003	0.0704	3.5900e-003	0.0740	0.0191	3.3000e-003	0.0224	0.0000	99.5557	99.5557	2.9000e-003	0.0000	99.6166

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.5087	2.6351	2.6607	2.5500e-003		0.1875	0.1875		0.1875	0.1875	0.0000	214.0746	214.0746	0.0449	0.0000	215.0179
Total	0.5087	2.6351	2.6607	2.5500e-003		0.1875	0.1875		0.1875	0.1875	0.0000	214.0746	214.0746	0.0449	0.0000	215.0179

3.5 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0281	0.2188	0.3387	5.8000e-004	0.0157	3.1500e-003	0.0188	4.5000e-003	2.9000e-003	7.3900e-003	0.0000	51.7917	51.7917	4.0000e-004	0.0000	51.8001
Worker	0.0203	0.0297	0.2856	6.5000e-004	0.0547	4.4000e-004	0.0552	0.0146	4.0000e-004	0.0150	0.0000	47.7641	47.7641	2.5000e-003	0.0000	47.8165
Total	0.0484	0.2485	0.6243	1.2300e-003	0.0704	3.5900e-003	0.0740	0.0191	3.3000e-003	0.0224	0.0000	99.5557	99.5557	2.9000e-003	0.0000	99.6166

3.5 Building Construction - 2018**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	9.0400e-003	0.0606	0.0484	8.0000e-005		3.6900e-003	3.6900e-003		3.5600e-003	3.5600e-003	0.0000	6.4183	6.4183	1.2900e-003	0.0000	6.4454
Total	9.0400e-003	0.0606	0.0484	8.0000e-005		3.6900e-003	3.6900e-003		3.5600e-003	3.5600e-003	0.0000	6.4183	6.4183	1.2900e-003	0.0000	6.4454

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5000e-004	5.9800e-003	9.5100e-003	2.0000e-005	4.7000e-004	9.0000e-005	5.6000e-004	1.4000e-004	8.0000e-005	2.2000e-004	0.0000	1.5352	1.5352	1.0000e-005	0.0000	1.5355
Worker	5.5000e-004	8.1000e-004	7.7000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3877	1.3877	7.0000e-005	0.0000	1.3892
Total	1.3000e-003	6.7900e-003	0.0172	4.0000e-005	2.1200e-003	1.0000e-004	2.2200e-003	5.8000e-004	9.0000e-005	6.7000e-004	0.0000	2.9229	2.9229	8.0000e-005	0.0000	2.9246

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0154	0.0795	0.0803	8.0000e-005		5.6600e-003	5.6600e-003		5.6600e-003	5.6600e-003	0.0000	6.4183	6.4183	1.2900e-003	0.0000	6.4453
Total	0.0154	0.0795	0.0803	8.0000e-005		5.6600e-003	5.6600e-003		5.6600e-003	5.6600e-003	0.0000	6.4183	6.4183	1.2900e-003	0.0000	6.4453

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.5000e-004	5.9800e-003	9.5100e-003	2.0000e-005	4.7000e-004	9.0000e-005	5.6000e-004	1.4000e-004	8.0000e-005	2.2000e-004	0.0000	1.5352	1.5352	1.0000e-005	0.0000	1.5355
Worker	5.5000e-004	8.1000e-004	7.7000e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3877	1.3877	7.0000e-005	0.0000	1.3892
Total	1.3000e-003	6.7900e-003	0.0172	4.0000e-005	2.1200e-003	1.0000e-004	2.2200e-003	5.8000e-004	9.0000e-005	6.7000e-004	0.0000	2.9229	2.9229	8.0000e-005	0.0000	2.9246

3.6 Architectural Coating - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0369	0.2425	0.2074	3.3000e-004		0.0192	0.0192		0.0192	0.0192	0.0000	28.3411	28.3411	2.9900e-003	0.0000	28.4040
Total	1.1819	0.2425	0.2074	3.3000e-004		0.0192	0.0192		0.0192	0.0192	0.0000	28.3411	28.3411	2.9900e-003	0.0000	28.4040

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7300e-003	5.4600e-003	0.0526	1.2000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7895	8.7895	4.6000e-004	0.0000	8.7991
Total	3.7300e-003	5.4600e-003	0.0526	1.2000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7895	8.7895	4.6000e-004	0.0000	8.7991

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.1450					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0654	0.3595	0.3793	3.3000e-004		0.0303	0.0303		0.0303	0.0303	0.0000	28.3411	28.3411	2.9900e-003	0.0000	28.4039
Total	1.2104	0.3595	0.3793	3.3000e-004		0.0303	0.0303		0.0303	0.0303	0.0000	28.3411	28.3411	2.9900e-003	0.0000	28.4039

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7300e-003	5.4600e-003	0.0526	1.2000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7895	8.7895	4.6000e-004	0.0000	8.7991
Total	3.7300e-003	5.4600e-003	0.0526	1.2000e-004	0.0101	8.0000e-005	0.0102	2.6800e-003	7.0000e-005	2.7500e-003	0.0000	8.7895	8.7895	4.6000e-004	0.0000	8.7991

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0877					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5400e-003	0.0171	0.0158	3.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	2.1703	2.1703	2.1000e-004	0.0000	2.1746
Total	0.0902	0.0171	0.0158	3.0000e-005		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	2.1703	2.1703	2.1000e-004	0.0000	2.1746

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.8000e-004	3.6000e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.8000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.6481	0.6481	3.0000e-005	0.0000	0.6488
Total	2.6000e-004	3.8000e-004	3.6000e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.8000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.6481	0.6481	3.0000e-005	0.0000	0.6488

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0877					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0100e-003	0.0275	0.0291	3.0000e-005		2.3200e-003	2.3200e-003		2.3200e-003	2.3200e-003	0.0000	2.1703	2.1703	2.1000e-004	0.0000	2.1746
Total	0.0927	0.0275	0.0291	3.0000e-005		2.3200e-003	2.3200e-003		2.3200e-003	2.3200e-003	0.0000	2.1703	2.1703	2.1000e-004	0.0000	2.1746

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	3.8000e-004	3.6000e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.8000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.6481	0.6481	3.0000e-005	0.0000	0.6488
Total	2.6000e-004	3.8000e-004	3.6000e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.8000e-004	2.1000e-004	1.0000e-005	2.1000e-004	0.0000	0.6481	0.6481	3.0000e-005	0.0000	0.6488

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0043	1.3527	7.3672	0.0102	0.6668	0.0157	0.6825	0.1789	0.0145	0.1934	0.0000	761.8995	761.8995	0.0349	0.0000	762.6328
Unmitigated	1.0043	1.3527	7.3672	0.0102	0.6668	0.0157	0.6825	0.1789	0.0145	0.1934	0.0000	761.8995	761.8995	0.0349	0.0000	762.6328

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	1,953.36	1,953.36	1953.36	1,047,791	1,047,791
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	254.99	254.99	254.99	744,453	744,453
Total	2,208.35	2,208.35	2,208.35	1,792,244	1,792,244

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546229	0.063048	0.174586	0.122573	0.033968	0.004845	0.015596	0.024745	0.002089	0.003270	0.006707	0.000678	0.001667

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	82.5253	82.5253	5.7700e-003	1.1900e-003	83.0164
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	85.4931	85.4931	5.9800e-003	1.2400e-003	86.0019
NaturalGas Mitigated	1.4500e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	14.3740	14.3740	2.8000e-004	2.6000e-004	14.4615
NaturalGas Unmitigated	2.0600e-003	0.0187	0.0157	1.1000e-004		1.4200e-003	1.4200e-003		1.4200e-003	1.4200e-003	0.0000	20.3710	20.3710	3.9000e-004	3.7000e-004	20.4950

5.2 Energy by Land Use - NaturalGas
Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	372289	2.0100e-003	0.0183	0.0153	1.1000e-004		1.3900e-003	1.3900e-003		1.3900e-003	1.3900e-003	0.0000	19.8668	19.8668	3.8000e-004	3.6000e-004	19.9877
Convenience Market With Gas Pumps	9449.55	5.0000e-005	4.6000e-004	3.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.5043	0.5043	1.0000e-005	1.0000e-005	0.5073
Total		2.0600e-003	0.0187	0.0157	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003	0.0000	20.3710	20.3710	3.9000e-004	3.7000e-004	20.4950

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	262744	1.4200e-003	0.0129	0.0108	8.0000e-005		9.8000e-004	9.8000e-004		9.8000e-004	9.8000e-004	0.0000	14.0210	14.0210	2.7000e-004	2.6000e-004	14.1064
Convenience Market With Gas Pumps	6614.69	4.0000e-005	3.2000e-004	2.7000e-004	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.3530	0.3530	1.0000e-005	1.0000e-005	0.3551
Total		1.4600e-003	0.0132	0.0111	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003	0.0000	14.3740	14.3740	2.8000e-004	2.7000e-004	14.4615

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	44363.6	8.3486	5.8000e-004	1.2000e-004	8.3983
Parking Lot	17248	3.2458	2.3000e-004	5.0000e-005	3.2652
Unrefrigerated Warehouse-No Rail	392688	73.8986	5.1700e-003	1.0700e-003	74.3384
Total		85.4931	5.9800e-003	1.2400e-003	86.0019

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	40526.8	7.6266	5.3000e-004	1.1000e-004	7.6720
Parking Lot	17248	3.2458	2.3000e-004	5.0000e-005	3.2652
Unrefrigerated Warehouse-No Rail	380755	71.6529	5.0100e-003	1.0400e-003	72.0793
Total		82.5253	5.7700e-003	1.2000e-003	83.0164

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5453	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003
Unmitigated	0.5453	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003
Total	0.5453	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0555					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4897					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.5000e-004	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003
Total	0.5453	1.0000e-005	1.5200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	2.9100e-003	2.9100e-003	1.0000e-005	0.0000	3.0800e-003

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	31.7201	0.7742	0.0186	53.7344
Unmitigated	31.7201	0.7744	0.0186	53.7464

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.2183	4.1000e-003	1.0000e-004	0.3351
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.5875 / 0	31.5018	0.7703	0.0185	53.4113
Total		31.7201	0.7744	0.0186	53.7464

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.125486 / 0.0769109	0.2183	4.1000e-003	1.0000e-004	0.3351
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.5875 / 0	31.5018	0.7701	0.0185	53.3994
Total		31.7201	0.7742	0.0186	53.7344

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	19.4628	1.1502	0.0000	43.6173
Unmitigated	19.4628	1.1502	0.0000	43.6173

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	95.88	19.4628	1.1502	0.0000	43.6173
Total		19.4628	1.1502	0.0000	43.6173

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	95.88	19.4628	1.1502	0.0000	43.6173
Total		19.4628	1.1502	0.0000	43.6173

9.0 Operational Offroad

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

Oakley Gateway Self-Storage & 7-Eleven Bay Area AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	102.00	1000sqft	1.44	101,997.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	3,795.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4	Operational Year		2018	
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	414.88	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - co2 intensity factor adjusted based on PG&E's anticipated progress towards Statewide RPS goals

Land Use - Self-storage applied as Industrial-Unrefrigerated Warehouse-No Rail; 7-Eleven & Gas Station applied as Retail-Convenience Market with Gas Pumps

Construction Phase - Applicant Information

Grading - based on information provided by applicant

Vehicle Trips - Based on Information from project specific Traffic Study

Construction Off-road Equipment Mitigation - Applicant Information

Energy Mitigation -

Trips and VMT - soil would be imported from Brentwood or Antioch (approximately 5.3 miles from site)

tblConstEquipMitigation	Tier	No Change	Tier 1
tblConstructionPhase	NumDays	10.00	239.00
tblConstructionPhase	NumDays	200.00	239.00
tblConstructionPhase	NumDays	4.00	24.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	PhaseEndDate	12/10/2018	1/23/2018
tblConstructionPhase	PhaseStartDate	1/10/2018	2/23/2017
tblGrading	AcresOfGrading	9.00	2.85
tblGrading	AcresOfGrading	1.00	0.00
tblGrading	MaterialImported	0.00	11,500.00
tblLandUse	LandUseSquareFeet	1,694.10	3,795.00
tblLandUse	LotAcreage	2.34	1.44
tblProjectCharacteristics	CO2IntensityFactor	641.35	414.88
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripLength	20.00	5.30
tblVehicleTrips	ST_TR	204.47	162.78
tblVehicleTrips	ST_TR	2.59	2.50
tblVehicleTrips	SU_TR	166.88	162.78
tblVehicleTrips	SU_TR	2.59	2.50
tblVehicleTrips	WD_TR	542.60	162.78
tblVehicleTrips	WD_TR	2.59	2.50

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Energy	0.0113	0.1025	0.0861	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003		123.0423	123.0423	2.3600e-003	2.2600e-003	123.7911
Mobile	5.6745	7.0054	34.5337	0.0593	3.8062	0.0860	3.8923	1.0182	0.0793	1.0975		4,864.1051	4,864.1051	0.2115		4,868.5474
Total	8.6748	7.1081	34.6367	0.0599	3.8062	0.0939	3.9001	1.0182	0.0871	1.1053		4,987.1830	4,987.1830	0.2140	2.2600e-003	4,992.3762

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Energy	7.9600e-003	0.0724	0.0608	4.3000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003		86.8200	86.8200	1.6600e-003	1.5900e-003	87.3483
Mobile	5.6745	7.0054	34.5337	0.0593	3.8062	0.0860	3.8923	1.0182	0.0793	1.0975		4,864.1051	4,864.1051	0.2115		4,868.5474
Total	8.6714	7.0779	34.6113	0.0597	3.8062	0.0916	3.8978	1.0182	0.0848	1.1030		4,950.9607	4,950.9607	0.2133	1.5900e-003	4,955.9335

	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	0.04	0.42	0.07	0.32	0.00	2.44	0.06	0.00	2.63	0.21	0.00	0.73	0.73	0.33	29.65	0.73

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2017	1/3/2017	5	2	
2	Grading	Grading	1/4/2017	2/6/2017	5	24	
3	Paving	Paving	2/7/2017	2/8/2017	5	2	
4	Building Construction	Building Construction	2/9/2017	1/9/2018	5	239	
5	Architectural Coating	Architectural Coating	2/23/2017	1/23/2018	5	239	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.85

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 159,570; Non-Residential Outdoor: 53,190 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,438.00	12.40	7.30	5.30	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	52.00	21.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Site Preparation - 2017

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					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022		1,752.1239	1,752.1239	0.5369		1,763.3977
Total	2.3109	24.2288	15.9299	0.0171	5.2693	1.3067	6.5761	2.8965	1.2022	4.0987		1,752.1239	1,752.1239	0.5369		1,763.3977

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0290	0.0348	0.4059	9.3000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		75.0164	75.0164	3.6500e-003			75.0931
Total	0.0290	0.0348	0.4059	9.3000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		75.0164	75.0164	3.6500e-003			75.0931

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					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000	
Off-Road	2.3832	21.7030	23.9107	0.0171		0.8642	0.8642		0.8642	0.8642	0.0000	1,752.1239	1,752.1239	0.5369			1,763.3977
Total	2.3832	21.7030	23.9107	0.0171	5.2693	0.8642	6.1335	2.8965	0.8642	3.7606	0.0000	1,752.1239	1,752.1239	0.5369			1,763.3977

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0290	0.0348	0.4059	9.3000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		75.0164	75.0164	3.6500e-003			75.0931
Total	0.0290	0.0348	0.4059	9.3000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		75.0164	75.0164	3.6500e-003			75.0931

3.3 Grading - 2017

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					4.6967	0.0000	4.6967	2.5045	0.0000	2.5045			0.0000			0.0000	
Off-Road	1.8844	19.7889	13.1786	0.0141		1.0661	1.0661		0.9808	0.9808		1,439.1894	1,439.1894	0.4410			1,448.4496
Total	1.8844	19.7889	13.1786	0.0141	4.6967	1.0661	5.7628	2.5045	0.9808	3.4853		1,439.1894	1,439.1894	0.4410			1,448.4496

3.3 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7174	5.0360	9.0107	0.0128	0.2776	0.0566	0.3342	0.0761	0.0520	0.1281		1,260.9448	1,260.9448	0.0108		1,261.1719
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	0.0290	0.0348	0.4059	9.3000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		75.0164	75.0164	3.6500e-003		75.0931
Total	0.7464	5.0708	9.4166	0.0137	0.3530	0.0572	0.4102	0.0961	0.0526	0.1487		1,335.9612	1,335.9612	0.0145		1,336.2650

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					4.6967	0.0000	4.6967	2.5045	0.0000	2.5045			0.0000			0.0000
Off-Road	1.9456	17.7948	19.6427	0.0141		0.7100	0.7100		0.7100	0.7100	0.0000	1,439.1894	1,439.1894	0.4410		1,448.4496
Total	1.9456	17.7948	19.6427	0.0141	4.6967	0.7100	5.4067	2.5045	0.7100	3.2145	0.0000	1,439.1894	1,439.1894	0.4410		1,448.4496

3.3 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7174	5.0360	9.0107	0.0128	0.2776	0.0566	0.3342	0.0761	0.0520	0.1281		1,260.9448	1,260.9448	0.0108		1,261.1719
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	0.0290	0.0348	0.4059	9.3000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		75.0164	75.0164	3.6500e-003		75.0931
Total	0.7464	5.0708	9.4166	0.0137	0.3530	0.0572	0.4102	0.0961	0.0526	0.1487		1,335.9612	1,335.9612	0.0145		1,336.2650

3.4 Paving - 2017

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.5764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7621	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677

3.4 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0471	0.0565	0.6596	1.5100e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		121.9017	121.9017	5.9400e-003			122.0263
Total	0.0471	0.0565	0.6596	1.5100e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		121.9017	121.9017	5.9400e-003			122.0263

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	2.5578	17.1479	18.0918	0.0133		1.0248	1.0248		1.0248	1.0248	0.0000	1,347.6575	1,347.6575	0.4052			1,356.1677
Paving	0.5764					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	3.1342	17.1479	18.0918	0.0133		1.0248	1.0248		1.0248	1.0248	0.0000	1,347.6575	1,347.6575	0.4052			1,356.1677

3.4 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0471	0.0565	0.6596	1.5100e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		121.9017	121.9017	5.9400e-003			122.0263
Total	0.0471	0.0565	0.6596	1.5100e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		121.9017	121.9017	5.9400e-003			122.0263

3.5 Building Construction - 2017

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	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823		2,034.2860	2,034.2860	0.4268			2,043.2497
Total	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823		2,034.2860	2,034.2860	0.4268			2,043.2497

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2159	1.8243	2.2491	5.0000e-003	0.1396	0.0270	0.1667	0.0399	0.0249	0.0647		493.7507	493.7507	3.7700e-003			493.8299
Worker	0.1884	0.2261	2.6384	6.0300e-003	0.4904	3.7600e-003	0.4941	0.1301	3.4600e-003	0.1335		487.6067	487.6067	0.0237			488.1053
Total	0.4043	2.0504	4.8875	0.0110	0.6300	0.0308	0.6608	0.1699	0.0283	0.1982		981.3574	981.3574	0.0275			981.9352

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	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,034.2860	2,034.2860	0.4268			2,043.2497
Total	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,034.2860	2,034.2860	0.4268			2,043.2497

3.5 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2159	1.8243	2.2491	5.0000e-003	0.1396	0.0270	0.1667	0.0399	0.0249	0.0647		493.7507	493.7507	3.7700e-003		493.8299
Worker	0.1884	0.2261	2.6384	6.0300e-003	0.4904	3.7600e-003	0.4941	0.1301	3.4600e-003	0.1335		487.6067	487.6067	0.0237		488.1053
Total	0.4043	2.0504	4.8875	0.0110	0.6300	0.0308	0.6608	0.1699	0.0283	0.1982		981.3574	981.3574	0.0275		981.9352

3.5 Building Construction - 2018**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	2.5826	17.3173	13.8357	0.0220		1.0532	1.0532		1.0172	1.0172		2,021.4136	2,021.4136	0.4059		2,029.9373
Total	2.5826	17.3173	13.8357	0.0220		1.0532	1.0532		1.0172	1.0172		2,021.4136	2,021.4136	0.4059		2,029.9373

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.1932	1.6528	2.0472	4.9900e-003	0.1396	0.0250	0.1646	0.0399	0.0230	0.0629		485.0791	485.0791	3.7000e-003			485.1569
Worker	0.1692	0.2036	2.3715	6.0300e-003	0.4904	3.6300e-003	0.4940	0.1301	3.3500e-003	0.1334		469.5605	469.5605	0.0218			470.0189
Total	0.3624	1.8564	4.4187	0.0110	0.6300	0.0287	0.6586	0.1699	0.0264	0.1963		954.6395	954.6395	0.0255			955.1758

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	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,021.4136	2,021.4136	0.4059			2,029.9373
Total	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,021.4136	2,021.4136	0.4059			2,029.9373

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1932	1.6528	2.0472	4.9900e-003	0.1396	0.0250	0.1646	0.0399	0.0230	0.0629		485.0791	485.0791	3.7000e-003		485.1569
Worker	0.1692	0.2036	2.3715	6.0300e-003	0.4904	3.6300e-003	0.4940	0.1301	3.3500e-003	0.1334		469.5605	469.5605	0.0218		470.0189
Total	0.3624	1.8564	4.4187	0.0110	0.6300	0.0287	0.6586	0.1699	0.0264	0.1963		954.6395	954.6395	0.0255		955.1758

3.6 Architectural Coating - 2017

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					
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721
Total	10.6476	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297		282.0721

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0362	0.0435	0.5074	1.1600e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		93.7705	93.7705	4.5700e-003			93.8664
Total	0.0362	0.0435	0.5074	1.1600e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		93.7705	93.7705	4.5700e-003			93.8664

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.5893	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4481	281.4481	0.0297			282.0721
Total	10.9046	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4481	281.4481	0.0297			282.0721

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0362	0.0435	0.5074	1.1600e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		93.7705	93.7705	4.5700e-003			93.8664
Total	0.0362	0.0435	0.5074	1.1600e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		93.7705	93.7705	4.5700e-003			93.8664

3.6 Architectural Coating - 2018

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102
Total	10.6139	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0325	0.0392	0.4561	1.1600e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		90.3001	90.3001	4.2000e-003			90.3883
Total	0.0325	0.0392	0.4561	1.1600e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		90.3001	90.3001	4.2000e-003			90.3883

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Off-Road	0.5893	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4485	281.4485	0.0267			282.0102
Total	10.9046	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4485	281.4485	0.0267			282.0102

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0325	0.0392	0.4561	1.1600e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		90.3001	90.3001	4.2000e-003		90.3883
Total	0.0325	0.0392	0.4561	1.1600e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		90.3001	90.3001	4.2000e-003		90.3883

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.6745	7.0054	34.5337	0.0593	3.8062	0.0860	3.8923	1.0182	0.0793	1.0975		4,864.1051	4,864.1051	0.2115		4,868.5474
Unmitigated	5.6745	7.0054	34.5337	0.0593	3.8062	0.0860	3.8923	1.0182	0.0793	1.0975		4,864.1051	4,864.1051	0.2115		4,868.5474

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	1,953.36	1,953.36	1953.36	1,047,791	1,047,791
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	254.99	254.99	254.99	744,453	744,453
Total	2,208.35	2,208.35	2,208.35	1,792,244	1,792,244

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546229	0.063048	0.174586	0.122573	0.033968	0.004845	0.015596	0.024745	0.002089	0.003270	0.006707	0.000678	0.001667

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.9600e-003	0.0724	0.0608	4.3000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003		86.8200	86.8200	1.6600e-003	1.5900e-003	87.3483
NaturalGas Unmitigated	0.0113	0.1025	0.0861	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003		123.0423	123.0423	2.3600e-003	2.2600e-003	123.7911

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	1019.97	0.0110	0.1000	0.0840	6.0000e-004		7.6000e-003	7.6000e-003		7.6000e-003	7.6000e-003		119.9965	119.9965	2.3000e-003	2.2000e-003	120.7268
Convenience Market With Gas Pumps	25.8892	2.8000e-004	2.5400e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		3.0458	3.0458	6.0000e-005	6.0000e-005	3.0643
Total		0.0113	0.1025	0.0861	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003		123.0423	123.0423	2.3600e-003	2.2600e-003	123.7911

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Fuel	0.719847	7.7600e-003	0.0706	0.0593	4.2000e-004		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003		84.6879	84.6879	1.6200e-003	1.5500e-003	85.2033
Convenience Market With Gas Pumps	0.0181224	2.0000e-004	1.7800e-003	1.4900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.1321	2.1321	4.0000e-005	4.0000e-005	2.1450
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		7.9600e-003	0.0724	0.0608	4.3000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003		86.8200	86.8200	1.6600e-003	1.5900e-003	87.3484

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Unmitigated	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Total	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Total	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Oakley Gateway Self-Storage & 7-Eleven Bay Area AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	102.00	1000sqft	1.44	101,997.00	0
Parking Lot	49.00	Space	0.44	19,600.00	0
Convenience Market With Gas Pumps	12.00	Pump	0.04	3,795.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	64
Climate Zone	4			Operational Year	2018
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MW hr)	414.88	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - co2 intensity factor adjusted based on PG&E's anticipated progress towards Statewide RPS goals

Land Use - Self-storage applied as Industrial-Unrefrigerated Warehouse-No Rail; 7-Eleven & Gas Station applied as Retail-Convenience Market with Gas Pumps

Construction Phase - Applicant Information

Grading - based on information provided by applicant

Vehicle Trips - Based on Information from project specific Traffic Study

Construction Off-road Equipment Mitigation - Applicant Information

Energy Mitigation -

Trips and VMT - soil would be imported from Brentwood or Antioch (approximately 5.3 miles from site)

tblConstEquipMitigation	Tier	No Change	Tier 1
tblConstructionPhase	NumDays	10.00	239.00
tblConstructionPhase	NumDays	200.00	239.00
tblConstructionPhase	NumDays	4.00	24.00
tblConstructionPhase	NumDays	10.00	2.00
tblConstructionPhase	PhaseEndDate	12/10/2018	1/23/2018
tblConstructionPhase	PhaseStartDate	1/10/2018	2/23/2017
tblGrading	AcresOfGrading	9.00	2.85
tblGrading	AcresOfGrading	1.00	0.00
tblGrading	MaterialImported	0.00	11,500.00
tblLandUse	LandUseSquareFeet	1,694.10	3,795.00
tblLandUse	LotAcreage	2.34	1.44
tblProjectCharacteristics	CO2IntensityFactor	641.35	414.88
tblProjectCharacteristics	OperationalYear	2014	2018
tblTripsAndVMT	HaulingTripLength	20.00	5.30
tblVehicleTrips	ST_TR	204.47	162.78
tblVehicleTrips	ST_TR	2.59	2.50
tblVehicleTrips	SU_TR	166.88	162.78
tblVehicleTrips	SU_TR	2.59	2.50
tblVehicleTrips	WD_TR	542.60	162.78
tblVehicleTrips	WD_TR	2.59	2.50

2.0 Emissions Summary

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Energy	0.0113	0.1025	0.0861	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003		123.0423	123.0423	2.3600e-003	2.2600e-003	123.7911
Mobile	6.0292	7.7159	47.0538	0.0559	3.8062	0.0871	3.8933	1.0182	0.0802	1.0984		4,581.7971	4,581.7971	0.2121		4,586.2501
Total	9.0295	7.8186	47.1568	0.0565	3.8062	0.0949	3.9012	1.0182	0.0881	1.1063		4,704.8750	4,704.8750	0.2145	2.2600e-003	4,710.0789

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Energy	7.9600e-003	0.0724	0.0608	4.3000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003		86.8200	86.8200	1.6600e-003	1.5900e-003	87.3483
Mobile	6.0292	7.7159	47.0538	0.0559	3.8062	0.0871	3.8933	1.0182	0.0802	1.0984		4,581.7971	4,581.7971	0.2121		4,586.2501
Total	9.0262	7.7884	47.1314	0.0563	3.8062	0.0927	3.8989	1.0182	0.0858	1.1040		4,668.6527	4,668.6527	0.2138	1.5900e-003	4,673.6362

	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	0.04	0.39	0.05	0.34	0.00	2.41	0.06	0.00	2.60	0.21	0.00	0.77	0.77	0.33	29.65	0.77

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2017	1/3/2017	5	2	
2	Grading	Grading	1/4/2017	2/6/2017	5	24	
3	Paving	Paving	2/7/2017	2/8/2017	5	2	
4	Building Construction	Building Construction	2/9/2017	1/9/2018	5	239	
5	Architectural Coating	Architectural Coating	2/23/2017	1/23/2018	5	239	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.85

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 159,570; Non-Residential Outdoor: 53,190 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Graders	1	8.00	174	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	255	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	174	0.41
Grading	Rubber Tired Dozers	1	6.00	255	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	125	0.42
Paving	Paving Equipment	1	8.00	130	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	6.00	226	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	3	8.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	1,438.00	12.40	7.30	5.30	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	52.00	21.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	10.00	0.00	0.00	12.40	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Clean Paved Roads

3.2 Site Preparation - 2017

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					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000
Off-Road	2.3109	24.2288	15.9299	0.0171		1.3067	1.3067		1.2022	1.2022		1,752.1239	1,752.1239	0.5369		1,763.3977
Total	2.3109	24.2288	15.9299	0.0171	5.2693	1.3067	6.5761	2.8965	1.2022	4.0987		1,752.1239	1,752.1239	0.5369		1,763.3977

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0289	0.0431	0.3932	8.6000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		69.2078	69.2078	3.6500e-003			69.2845
Total	0.0289	0.0431	0.3932	8.6000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		69.2078	69.2078	3.6500e-003			69.2845

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					5.2693	0.0000	5.2693	2.8965	0.0000	2.8965			0.0000			0.0000	
Off-Road	2.3832	21.7030	23.9107	0.0171		0.8642	0.8642		0.8642	0.8642	0.0000	1,752.1239	1,752.1239	0.5369			1,763.3977
Total	2.3832	21.7030	23.9107	0.0171	5.2693	0.8642	6.1335	2.8965	0.8642	3.7606	0.0000	1,752.1239	1,752.1239	0.5369			1,763.3977

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0289	0.0431	0.3932	8.6000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		69.2078	69.2078	3.6500e-003		69.2845
Total	0.0289	0.0431	0.3932	8.6000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		69.2078	69.2078	3.6500e-003		69.2845

3.3 Grading - 2017

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					4.6967	0.0000	4.6967	2.5045	0.0000	2.5045			0.0000			0.0000
Off-Road	1.8844	19.7889	13.1786	0.0141		1.0661	1.0661		0.9808	0.9808		1,439.1894	1,439.1894	0.4410		1,448.4496
Total	1.8844	19.7889	13.1786	0.0141	4.6967	1.0661	5.7628	2.5045	0.9808	3.4853		1,439.1894	1,439.1894	0.4410		1,448.4496

3.3 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9459	5.2813	14.6193	0.0128	0.2776	0.0572	0.3348	0.0761	0.0525	0.1286		1,250.520 1	1,250.520 1	0.0112		1,250.756 1
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	0.0289	0.0431	0.3932	8.6000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		69.2078	69.2078	3.6500e-003		69.2845
Total	0.9748	5.3243	15.0126	0.0137	0.3530	0.0578	0.4108	0.0961	0.0531	0.1492		1,319.727 9	1,319.727 9	0.0149		1,320.040 6

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					4.6967	0.0000	4.6967	2.5045	0.0000	2.5045			0.0000			0.0000
Off-Road	1.9456	17.7948	19.6427	0.0141		0.7100	0.7100		0.7100	0.7100	0.0000	1,439.189 4	1,439.189 4	0.4410		1,448.449 6
Total	1.9456	17.7948	19.6427	0.0141	4.6967	0.7100	5.4067	2.5045	0.7100	3.2145	0.0000	1,439.189 4	1,439.189 4	0.4410		1,448.449 6

3.3 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.9459	5.2813	14.6193	0.0128	0.2776	0.0572	0.3348	0.0761	0.0525	0.1286		1,250.5201	1,250.5201	0.0112		1,250.7561
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	0.0289	0.0431	0.3932	8.6000e-004	0.0754	5.8000e-004	0.0760	0.0200	5.3000e-004	0.0205		69.2078	69.2078	3.6500e-003		69.2845
Total	0.9748	5.3243	15.0126	0.0137	0.3530	0.0578	0.4108	0.0961	0.0531	0.1492		1,319.7279	1,319.7279	0.0149		1,320.0406

3.4 Paving - 2017

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	1.1857	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677
Paving	0.5764					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.7621	12.0981	9.0308	0.0133		0.7333	0.7333		0.6755	0.6755		1,347.6575	1,347.6575	0.4052		1,356.1677

3.4 Paving - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0469	0.0700	0.6390	1.3900e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		112.4627	112.4627	5.9400e-003			112.5874
Total	0.0469	0.0700	0.6390	1.3900e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		112.4627	112.4627	5.9400e-003			112.5874

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	2.5578	17.1479	18.0918	0.0133		1.0248	1.0248		1.0248	1.0248	0.0000	1,347.6575	1,347.6575	0.4052			1,356.1677
Paving	0.5764					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	3.1342	17.1479	18.0918	0.0133		1.0248	1.0248		1.0248	1.0248	0.0000	1,347.6575	1,347.6575	0.4052			1,356.1677

3.4 Paving - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0469	0.0700	0.6390	1.3900e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		112.4627	112.4627	5.9400e-003			112.5874
Total	0.0469	0.0700	0.6390	1.3900e-003	0.1226	9.4000e-004	0.1235	0.0325	8.7000e-004	0.0334		112.4627	112.4627	5.9400e-003			112.5874

3.5 Building Construction - 2017

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	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823		2,034.2860	2,034.2860	0.4268			2,043.2497
Total	2.9546	19.1088	14.3110	0.0220		1.2257	1.2257		1.1823	1.1823		2,034.2860	2,034.2860	0.4268			2,043.2497

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2719	1.9093	3.5687	4.9800e-003	0.1396	0.0273	0.1669	0.0399	0.0251	0.0650		489.9630	489.9630	3.8700e-003			490.0443
Worker	0.1877	0.2798	2.5560	5.5600e-003	0.4904	3.7600e-003	0.4941	0.1301	3.4600e-003	0.1335		449.8508	449.8508	0.0237			450.3494
Total	0.4596	2.1891	6.1247	0.0105	0.6300	0.0311	0.6611	0.1699	0.0286	0.1985		939.8138	939.8138	0.0276			940.3937

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	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,034.2860	2,034.2860	0.4268			2,043.2497
Total	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,034.2860	2,034.2860	0.4268			2,043.2497

3.5 Building Construction - 2017**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2719	1.9093	3.5687	4.9800e-003	0.1396	0.0273	0.1669	0.0399	0.0251	0.0650		489.9630	489.9630	3.8700e-003		490.0443
Worker	0.1877	0.2798	2.5560	5.5600e-003	0.4904	3.7600e-003	0.4941	0.1301	3.4600e-003	0.1335		449.8508	449.8508	0.0237		450.3494
Total	0.4596	2.1891	6.1247	0.0105	0.6300	0.0311	0.6611	0.1699	0.0286	0.1985		939.8138	939.8138	0.0276		940.3937

3.5 Building Construction - 2018**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	2.5826	17.3173	13.8357	0.0220		1.0532	1.0532		1.0172	1.0172		2,021.4136	2,021.4136	0.4059		2,029.9373
Total	2.5826	17.3173	13.8357	0.0220		1.0532	1.0532		1.0172	1.0172		2,021.4136	2,021.4136	0.4059		2,029.9373

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2393	1.7291	3.3575	4.9700e-003	0.1396	0.0253	0.1649	0.0399	0.0233	0.0631		481.3473	481.3473	3.8100e-003			481.4272
Worker	0.1670	0.2520	2.2771	5.5600e-003	0.4904	3.6300e-003	0.4940	0.1301	3.3500e-003	0.1334		433.1570	433.1570	0.0218			433.6155
Total	0.4063	1.9812	5.6346	0.0105	0.6300	0.0289	0.6589	0.1699	0.0266	0.1965		914.5043	914.5043	0.0256			915.0428

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	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,021.4136	2,021.4136	0.4059			2,029.9373
Total	4.3849	22.7166	22.9374	0.0220		1.6166	1.6166		1.6166	1.6166	0.0000	2,021.4136	2,021.4136	0.4059			2,029.9373

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.2393	1.7291	3.3575	4.9700e-003	0.1396	0.0253	0.1649	0.0399	0.0233	0.0631		481.3473	481.3473	3.8100e-003			481.4272
Worker	0.1670	0.2520	2.2771	5.5600e-003	0.4904	3.6300e-003	0.4940	0.1301	3.3500e-003	0.1334		433.1570	433.1570	0.0218			433.6155
Total	0.4063	1.9812	5.6346	0.0105	0.6300	0.0289	0.6589	0.1699	0.0266	0.1965		914.5043	914.5043	0.0256			915.0428

3.6 Architectural Coating - 2017

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3323	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297			282.0721
Total	10.6476	2.1850	1.8681	2.9700e-003		0.1733	0.1733		0.1733	0.1733		281.4481	281.4481	0.0297			282.0721

3.6 Architectural Coating - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0361	0.0538	0.4915	1.0700e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		86.5098	86.5098	4.5700e-003			86.6057
Total	0.0361	0.0538	0.4915	1.0700e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		86.5098	86.5098	4.5700e-003			86.6057

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.5893	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4481	281.4481	0.0297			282.0721
Total	10.9046	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4481	281.4481	0.0297			282.0721

3.6 Architectural Coating - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0361	0.0538	0.4915	1.0700e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		86.5098	86.5098	4.5700e-003			86.6057
Total	0.0361	0.0538	0.4915	1.0700e-003	0.0943	7.2000e-004	0.0950	0.0250	6.7000e-004	0.0257		86.5098	86.5098	4.5700e-003			86.6057

3.6 Architectural Coating - 2018

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102
Total	10.6139	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267			282.0102

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
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	0.0321	0.0485	0.4379	1.0700e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		83.2994	83.2994	4.2000e-003			83.3876
Total	0.0321	0.0485	0.4379	1.0700e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		83.2994	83.2994	4.2000e-003			83.3876

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						
Archit. Coating	10.3153					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.5893	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4485	281.4485	0.0267			282.0102
Total	10.9046	3.2389	3.4172	2.9700e-003		0.2734	0.2734		0.2734	0.2734	0.0000	281.4485	281.4485	0.0267			282.0102

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.0321	0.0485	0.4379	1.0700e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		83.2994	83.2994	4.2000e-003		83.3876
Total	0.0321	0.0485	0.4379	1.0700e-003	0.0943	7.0000e-004	0.0950	0.0250	6.5000e-004	0.0257		83.2994	83.2994	4.2000e-003		83.3876

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0292	7.7159	47.0538	0.0559	3.8062	0.0871	3.8933	1.0182	0.0802	1.0984		4,581.797 1	4,581.797 1	0.2121		4,586.250 1
Unmitigated	6.0292	7.7159	47.0538	0.0559	3.8062	0.0871	3.8933	1.0182	0.0802	1.0984		4,581.797 1	4,581.797 1	0.2121		4,586.250 1

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	1,953.36	1,953.36	1953.36	1,047,791	1,047,791
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	254.99	254.99	254.99	744,453	744,453
Total	2,208.35	2,208.35	2,208.35	1,792,244	1,792,244

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Convenience Market With Gas	9.50	7.30	7.30	0.80	80.20	19.00	14	21	65
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.546229	0.063048	0.174586	0.122573	0.033968	0.004845	0.015596	0.024745	0.002089	0.003270	0.006707	0.000678	0.001667

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	7.9600e-003	0.0724	0.0608	4.3000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003		86.8200	86.8200	1.6600e-003	1.5900e-003	87.3483
NaturalGas Unmitigated	0.0113	0.1025	0.0861	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003		123.0423	123.0423	2.3600e-003	2.2600e-003	123.7911

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Pail	1019.97	0.0110	0.1000	0.0840	6.0000e-004		7.6000e-003	7.6000e-003		7.6000e-003	7.6000e-003		119.9965	119.9965	2.3000e-003	2.2000e-003	120.7268
Convenience Market With Gas Pumps	25.8892	2.8000e-004	2.5400e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004		3.0458	3.0458	6.0000e-005	6.0000e-005	3.0643
Total		0.0113	0.1025	0.0861	6.2000e-004		7.7900e-003	7.7900e-003		7.7900e-003	7.7900e-003		123.0423	123.0423	2.3600e-003	2.2600e-003	123.7911

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Fuel	0.719847	7.7600e-003	0.0706	0.0593	4.2000e-004		5.3600e-003	5.3600e-003		5.3600e-003	5.3600e-003		84.6879	84.6879	1.6200e-003	1.5500e-003	85.2033
Convenience Market With Gas Pumps	0.0181224	2.0000e-004	1.7800e-003	1.4900e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.1321	2.1321	4.0000e-005	4.0000e-005	2.1450
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		7.9600e-003	0.0724	0.0608	4.3000e-004		5.5000e-003	5.5000e-003		5.5000e-003	5.5000e-003		86.8200	86.8200	1.6600e-003	1.5900e-003	87.3484

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Unmitigated	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Total	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3040					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.6834					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.6100e-003	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377
Total	2.9890	1.6000e-004	0.0169	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005		0.0357	0.0357	1.0000e-004		0.0377

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

**Oakley Gateway Self-Storage & 7-Eleven
Bay Area AQMD Air District, Mitigation Report**

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	-0.02	-0.48	-0.66	0.00	-0.59	-0.59	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	-0.43	-0.17	-0.44	0.00	-0.32	-0.36	0.00	0.00	0.00	0.00	0.00	0.00
Grading	-0.02	0.08	-0.25	0.00	0.32	0.26	0.00	0.00	0.00	0.00	0.00	0.00
Paving	-0.76	-0.42	-0.94	0.00	-0.40	-0.50	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	-0.03	0.10	-0.49	0.00	0.34	0.28	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	Tier 1	1	1	No Change	0.00
Cement and Mortar Mixers	Diesel	Tier 1	1	1	No Change	0.00
Cranes	Diesel	Tier 1	1	1	No Change	0.00
Forklifts	Diesel	Tier 1	1	1	No Change	0.00
Generator Sets	Diesel	Tier 1	1	1	No Change	0.00
Graders	Diesel	Tier 1	2	2	No Change	0.00
Pavers	Diesel	Tier 1	1	1	No Change	0.00
Paving Equipment	Diesel	Tier 1	1	1	No Change	0.00
Rollers	Diesel	Tier 1	1	1	No Change	0.00
Rubber Tired Dozers	Diesel	Tier 1	2	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	Tier 1	4	4	No Change	0.00
Welders	Diesel	Tier 1	3	3	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	3.94200E-002	2.59590E-001	2.23120E-001	3.60000E-004	2.05200E-002	2.05200E-002	0.00000E+000	3.05114E+001	3.05114E+001	3.20000E-003	0.00000E+000	3.05786E+001
Cement and Mortar Mixers	4.00000E-005	2.80000E-004	2.30000E-004	0.00000E+000	1.00000E-005	1.00000E-005	0.00000E+000	3.43700E-002	3.43700E-002	0.00000E+000	0.00000E+000	3.44500E-002
Cranes	5.78400E-002	6.86810E-001	2.46280E-001	5.10000E-004	3.06000E-002	2.81500E-002	0.00000E+000	4.69112E+001	4.69112E+001	1.43800E-002	0.00000E+000	4.72132E+001
Forklifts	1.88200E-002	1.63030E-001	1.11850E-001	1.40000E-004	1.34400E-002	1.23600E-002	0.00000E+000	1.26986E+001	1.26986E+001	3.89000E-003	0.00000E+000	1.27804E+001
Generator Sets	6.79000E-002	5.32240E-001	4.50840E-001	7.90000E-004	3.57600E-002	3.57600E-002	0.00000E+000	6.75423E+001	6.75423E+001	5.45000E-003	0.00000E+000	6.76567E+001
Graders	9.53000E-003	9.64100E-002	4.83800E-002	6.00000E-005	5.42000E-003	4.98000E-003	0.00000E+000	5.78422E+000	5.78422E+000	1.77000E-003	0.00000E+000	5.82144E+000
Pavers	2.70000E-004	3.02000E-003	2.13000E-003	0.00000E+000	1.50000E-004	1.40000E-004	0.00000E+000	3.14350E-001	3.14350E-001	1.00000E-004	0.00000E+000	3.16370E-001
Paving Equipment	2.80000E-004	3.22000E-003	2.54000E-003	0.00000E+000	1.60000E-004	1.50000E-004	0.00000E+000	3.72260E-001	3.72260E-001	1.10000E-004	0.00000E+000	3.74660E-001
Rollers	2.70000E-004	2.54000E-003	1.74000E-003	0.00000E+000	1.80000E-004	1.70000E-004	0.00000E+000	2.12860E-001	2.12860E-001	7.00000E-005	0.00000E+000	2.14230E-001
Rubber Tired Dozers	1.17500E-002	1.30280E-001	9.81600E-002	9.00000E-005	6.05000E-003	5.57000E-003	0.00000E+000	8.15227E+000	8.15227E+000	2.50000E-003	0.00000E+000	8.20472E+000
Tractors/Loaders/Backhoes	3.22200E-002	3.09770E-001	2.44320E-001	3.20000E-004	2.32700E-002	2.14000E-002	0.00000E+000	2.94730E+001	2.94730E+001	9.03000E-003	0.00000E+000	2.96627E+001
Welders	1.78950E-001	6.23430E-001	6.85130E-001	9.20000E-004	4.56600E-002	4.56600E-002	0.00000E+000	6.74771E+001	6.74771E+001	1.45600E-002	0.00000E+000	6.77828E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	7.04300E-002	3.87050E-001	4.08350E-001	3.60000E-004	3.26700E-002	3.26700E-002	0.00000E+000	3.05114E+001	3.05114E+001	3.20000E-003	0.00000E+000	3.05785E+001
Cement and Mortar Mixers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	3.43700E-002	3.43700E-002	0.00000E+000	0.00000E+000	3.44500E-002
Cranes	3.93700E-002	6.14350E-001	7.14840E-001	5.10000E-004	1.11900E-002	1.11900E-002	0.00000E+000	4.69112E+001	4.69112E+001	1.43800E-002	0.00000E+000	4.72132E+001
Forklifts	3.34800E-002	1.84010E-001	1.94140E-001	1.40000E-004	1.55300E-002	1.55300E-002	0.00000E+000	1.26986E+001	1.26986E+001	3.89000E-003	0.00000E+000	1.27804E+001
Generator Sets	1.55900E-001	8.56800E-001	9.03970E-001	7.90000E-004	7.23200E-002	7.23200E-002	0.00000E+000	6.75422E+001	6.75422E+001	5.45000E-003	0.00000E+000	6.76567E+001
Graders	1.03200E-002	8.22900E-002	8.68200E-002	6.00000E-005	3.45000E-003	3.45000E-003	0.00000E+000	5.78422E+000	5.78422E+000	1.77000E-003	0.00000E+000	5.82143E+000
Pavers	5.70000E-004	4.54000E-003	4.79000E-003	0.00000E+000	1.90000E-004	1.90000E-004	0.00000E+000	3.14350E-001	3.14350E-001	1.00000E-004	0.00000E+000	3.16370E-001
Paving Equipment	6.80000E-004	5.40000E-003	5.70000E-003	0.00000E+000	2.30000E-004	2.30000E-004	0.00000E+000	3.72260E-001	3.72260E-001	1.10000E-004	0.00000E+000	3.74660E-001
Rollers	5.60000E-004	3.07000E-003	3.24000E-003	0.00000E+000	2.60000E-004	2.60000E-004	0.00000E+000	2.12860E-001	2.12860E-001	7.00000E-005	0.00000E+000	2.14230E-001
Rubber Tired Dozers	6.75000E-003	1.05350E-001	1.22580E-001	9.00000E-005	1.92000E-003	1.92000E-003	0.00000E+000	8.15226E+000	8.15226E+000	2.50000E-003	0.00000E+000	8.20471E+000
Tractors/Loaders/Balkhoes	7.69300E-002	4.22770E-001	4.46040E-001	3.20000E-004	3.56800E-002	3.56800E-002	0.00000E+000	2.94729E+001	2.94729E+001	9.03000E-003	0.00000E+000	2.96627E+001
Welders	2.27740E-001	6.88440E-001	5.36620E-001	9.20000E-004	6.28200E-002	6.28200E-002	0.00000E+000	6.74770E+001	6.74770E+001	1.45600E-002	0.00000E+000	6.77827E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	-7.86657E-001	-4.91005E-001	-8.30181E-001	0.00000E+000	-5.92105E-001	-5.92105E-001	0.00000E+000	1.31099E-006	1.31099E-006	0.00000E+000	0.00000E+000	9.81080E-007
Cement and Mortar Mixers	1.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	1.00000E+000	1.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	3.19329E-001	1.05502E-001	-1.90255E+000	0.00000E+000	6.34314E-001	6.02487E-001	0.00000E+000	1.27901E-006	1.27901E-006	0.00000E+000	0.00000E+000	1.27083E-006
Forklifts	-7.78959E-001	-1.28688E-001	-7.35717E-001	0.00000E+000	-1.55506E-001	-2.56472E-001	0.00000E+000	7.87486E-007	7.87486E-007	0.00000E+000	0.00000E+000	1.56490E-006
Generator Sets	-1.29602E+000	-6.09800E-001	-1.00508E+000	0.00000E+000	-1.02237E+000	-1.02237E+000	0.00000E+000	1.18444E-006	1.18444E-006	0.00000E+000	0.00000E+000	1.18244E-006
Graders	-8.28961E-002	1.46458E-001	-7.94543E-001	0.00000E+000	3.63469E-001	3.07229E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.71779E-006
Pavers	-1.11111E+000	-5.03311E-001	-1.24883E+000	0.00000E+000	-2.66667E-001	-3.57143E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Paving Equipment	-1.42857E+000	-6.77019E-001	-1.24409E+000	0.00000E+000	-4.37500E-001	-5.33333E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	-1.07407E+000	-2.08661E-001	-8.62069E-001	0.00000E+000	-4.44444E-001	-5.29412E-001	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	4.25532E-001	1.91357E-001	-2.48778E-001	0.00000E+000	6.82645E-001	6.55296E-001	0.00000E+000	1.22665E-006	1.22665E-006	0.00000E+000	0.00000E+000	1.21881E-006
Tractors/Loaders/Balckhoes	-1.38765E+000	-3.64787E-001	-8.25639E-001	0.00000E+000	-5.33305E-001	-6.67290E-001	0.00000E+000	1.35718E-006	1.35718E-006	0.00000E+000	0.00000E+000	1.34849E-006
Welders	-2.72646E-001	-1.04278E-001	2.16762E-001	0.00000E+000	-3.75821E-001	-3.75821E-001	0.00000E+000	1.18559E-006	1.18559E-006	0.00000E+000	0.00000E+000	1.18024E-006

Fugitive Dust Mitigation

Yes/No Mitigation Measure Mitigation Input Mitigation Input Mitigation Input

No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
No	Water Exposed Area	PM10 Reduction	0.00	PM2.5 Reduction	0.00	Frequency (per day)
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	0.00	

Yes	Clean Paved Road	% PM Reduction	0.00				
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Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.07	0.02	0.07	0.02	0.00	0.00
Grading	Fugitive Dust	0.06	0.03	0.06	0.03	0.00	0.00
Grading	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.01	0.00	0.01	0.00	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.47	3.47	3.51	3.23	3.47
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	29.13	29.45	29.45	27.27	30.07	30.07	0.00	29.44	29.44	28.21	27.03	29.44
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.16	0.02
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.06	0.26		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

No	Neighborhood Enhancements	Improve Pedestrian Network			
No	Neighborhood Enhancements	Provide Traffic Calming Measures			
No	Neighborhood Enhancements	Implement NEV Network	0.00		
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00		
No	Parking Policy Pricing	Limit Parking Supply	0.00		
No	Parking Policy Pricing	Unbundle Parking Costs	0.00		
No	Parking Policy Pricing	On-street Market Pricing	0.00		
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00		
No	Transit Improvements	Provide BRT System	0.00		
No	Transit Improvements	Expand Transit Network	0.00		
No	Transit Improvements	Increase Transit Frequency	0.00		
	Transit Improvements	Transit Improvements Subtotal	0.00		
		Land Use and Site Enhancement Subtotal	0.00		
No	Commute	Implement Trip Reduction Program			
No	Commute	Transit Subsidy			
No	Commute	Implement Employee Parking "Cash Out"			
No	Commute	Workplace Parking Charge			
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00		
No	Commute	Market Commute Trip Reduction Option	0.00		
No	Commute	Employee Vanpool/Shuttle	0.00		2.00
No	Commute	Provide Ride Sharing Program			
	Commute	Commute Subtotal	0.00		

No	School Trip	Implement School Bus Program	0.00		
		Total VMT Reduction	0.00		

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	150.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	150.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00

DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy		
No	Use Reclaimed Water		
No	Use Grey Water		
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction		
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape		

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	