Appendix A **Scoping Summary**

California Highway Patrol

Santa Fe Springs Area Office Replacement Project

3	Scoping Summary
4	Prepared for:
5	State of California
6	Department of General Services
7	707 Third Street
8	West Sacramento, CA 95605
9	
10	On behalf of the Lead Agency:
11	California Highway Patrol
12	601 N. 7 th Street, Building C
13	Sacramento, CA 95811
14	Prepared by:
15	Horizon Water and Environment, LLC
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17	Sacramento, CA 95814
18	Contact: Megan Giglini
19 20	(916) 465-8073
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21	June 2019

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1 CONTENTS

2	Scoping Summary1
3	Overview of Project Scoping Process1
4	Public Comments Received2
5	March 19, 2019 Meeting Summary2
6	Comment Letters2
7	Comment Summary by Topic2
8	Initial Study3
9	EIR4
LO	Permits and Regulations5
l1	
L2	Attachments
L3	Attachment 1. Public Notices
L4	Attachment 2. Meeting Materials
L5	Attachment 3. Public Comments Received
L6	
17	

California Highway Patrol		Appendix A. Scoping Summary
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SCOPING SUMMARY

Scoping refers to the public outreach process used under CEQA to determine the coverage and content of an environmental impact report (EIR). The scoping comment period offers an important opportunity for the public and agencies to review and comment during the early phases of the environmental compliance process. Scoping contributes to the selection of a range of alternatives to be considered in the EIR, and can also help to establish methods of analysis, identify the environmental effects that will be considered in detail, and develop mitigation measures to avoid or compensate for adverse effects. In some cases, it may also identify issues that the public feels do not warrant analysis.

This summary describes the scoping process undertaken by the California Highway Patrol (CHP) for the CHP Santa Fe Springs Area Office Replacement Project (Project). It also summarizes comments received. Comments are reproduced in their entirety in the attachments to this report.

Overview of Project Scoping Process

Scoping is initiated when the lead agency issues a Notice of Preparation (NOP) announcing the beginning of the EIR process. As required by CEQA and the CEQA Guidelines, an NOP was developed that provided information on the background, goals, and objectives of the Proposed Project; announced preparation of, and requested public and agency comment on, the EIR; and provided information on the public scoping meeting to be held in support of the EIR. A copy of the NOP is included in the attachments to this report.

The NOP for the Project was received by the State Office of Planning and Research, State Clearinghouse on March 8, 2019, which initiated the public scoping period. The NOP was distributed for review and comment to numerous federal and state agencies; departmental and public services agencies within Los Angeles County and the City of Norwalk; and private property owners within 500 feet of the Project site. The private property owner mailing list was generated based on the most current Los Angeles County data, which was last updated in 2018. The public review ended on April 8, 2019.

On March 19, 2019, the CHP conducted a public scoping meeting for the Proposed Project. The meeting was held from 5:30 pm to 7:30 pm at the Town Center Hall, Meeting Room 1, 11740 Telegraph Road, Santa Fe Springs, CA 90670. The public meeting was publicized in a

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¹ Los Angeles County. 2018. Assessor Parcel Maps. Available: http://maps.assessor.lacounty.gov/GVH_2_2/Index.html?configBase=http://maps.assessor.lacounty.gov/Geocortex/ Essentials/REST/sites/PAIS/viewers/PAIS_hv/virtualdirectory/Resources/Config/Default. Accessed December 2018.

local area newspaper, the Norwalk Patriot, on March 8, 2019. The public meeting date, time, and location information were also included in the NOP and mailed to numerous households, offices, and agencies. Copies of the newspaper advertisement and NOP distribution list are included in the attachments to this report.

The sole meeting attendee was greeted by project staff on arrival, and asked to add their names and contact information to a sign-in sheet to receive future communications on the project. Posters were on display and CHP staff was available to answer questions and take comments. A PowerPoint presentation on the Proposed Project was provided prior to soliciting comments from the attendee. Opportunities to provide comments included comment cards and a comment form. A copy of the sign-in sheet, presentation, and comment form are included in the attachments to this report.

Public Comments Received

March 19, 2019 Meeting Summary

One person from the City of Santa Fe Springs (the Director of Planning and Community Development) attended this meeting. The main question received from the public at the scoping meeting related to future use of the existing Santa Fe Springs CHP office and the land on which it is located.

Comment Letters

Four comment letters were received during the scoping period. Copies of all comments received from the public are included in the attachments to this report.

Comment Summary by Topic

The comments received during the scoping period have been placed in one of three categories, as follows: Initial Study, EIR, and Permits and Regulations. Comments on the Initial Study relate to recommended edits and considerations for figures, resource sections, and mitigation measures. Comments for the proposed EIR relate to recommended additional analyses and studies, and inclusion of hazardous materials identification and remediation. Comments on permits and regulations relate to suggested recommendations on permits that may need to be obtained for the project and compliance with regulations. These comments have been considered in the EIR evaluation.

Initial Study

Figures

• Figures 2-3 and 2-4 have inconsistent cardinal directions of labeled elevations. The elevations labeled north and south should be east and west, respectively; while elevations labeled west and east should be north and south, respectively.

Air Quality

- Consider the 1993 *CEQA Air Quality Handbook* when preparing the air quality analyses.
- Consider the use of the CalEEMod land use emissions software.
- Request that the criteria pollutant emissions results are quantified and compared to SCAQMD's CEQA regional pollutant emissions significance thresholds to determine air quality impacts, and that localized air quality impacts are calculated and the results compared to localized significance thresholds (LSTs). Recommend performing a localized analysis by either using the LSTs developed by SCAQMD staff or performing dispersion modeling as necessary.
- Identify potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis.
- Recommend that a mobile-source health risk assessment be performed in the event that the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles. Recommend analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants.
- Consult guidance on siting incompatible land uses (such as placing homes near freeways) in CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process.

Land Use and Planning

 Recommend removal of reference to the Los Angeles County Plan on pages 3-77 and 3-78 as the subject site is entirely within the jurisdictional boundaries of the City of Norwalk; the Los Angeles County General Plan only applies to unincorporated portions of Los Angeles County.

Noise

• Recommend including in the noise ordinance discussion on page 3-91 that the ordinance establishes a 65 dB limit for all other zones including the Professional Office Zone, which is adjacent to the subject site to the south.

Utilities and Service Systems

• Connections into the sewer and stormwater systems should be coordinated with the City of Norwalk's City Engineer.

Mitigation Measures

• If the Proposed Project generates significant adverse air quality impacts, consider the resources listed by the commenter to assist with identifying potential mitigation measures.

EIR

Alternatives

• If the Proposed Project generates significant adverse air quality impacts, consider and discuss alternatives to the project. The Draft EIR should include sufficient information about each alternative, including a "no project" alternative, to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Hazards and Hazardous Materials

- Recommend that the document identify and determine whether current or historic
 uses at the project site have resulted in any release of hazardous wastes/substances
 at the project area.
- Recommend that the document identify any known or potentially contaminated sites
 within the proposed project area. For all identified sites, the document needs to
 evaluate whether conditions at the site pose a threat to human health or the
 environment.
- Recommend that the document identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.
- If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil exists, the document should identify how any required investigation or remediation will be conducted, and which government agency will provide appropriate regulatory oversight.

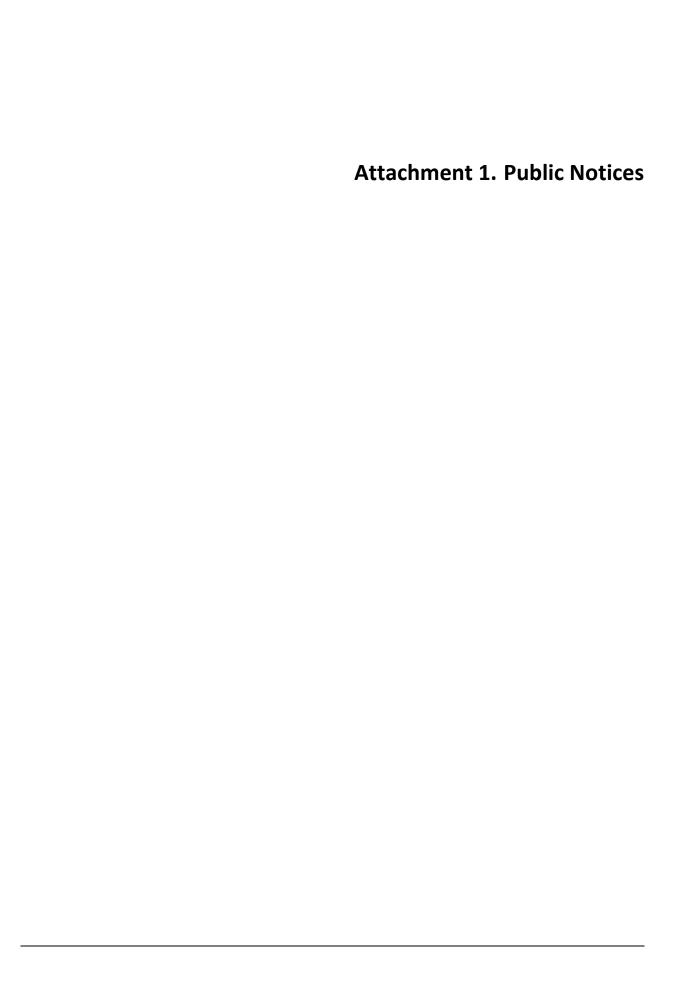
Transportation

 Because there may be potentially significant impacts in sections a-d [of the IS], further studies are warranted. All studies related to circulation, transit, vehicle trips, traffic, intersections, etc. for the preparation of the EIR shall be completed in coordination/ collaboration with the City of Norwalk's City Engineer and Traffic Engineering Deputy.

Permits and Regulations

- A permit is needed from SCAQMD. SCAQMD should be identified as a Responsible Agency in the Draft EIR. Recommend visiting the SCAQMD website for permitting information and/or SCAQMD Engineering and Permitting staff.
- Recommend that the Draft EIR discuss how the Proposed Project will comply with applicable SCAQMD Rules, including, but not limited to, Rule 201 – Permit to Construct, Rule 203 – Permit to Operate, and Rule 461 – Gasoline Transfer and Dispensing.
- A Caltrans transportation permit will be required for transportation of heavy construction equipment and/or materials, which requires the use of oversizedtransport vehicles on State highways. Caltrans recommends that trips by large-size trucks be limited to off-peak commute periods.

California Highway Patrol		Appendix A. Scoping Summary
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Notice of Preparation

Notice of Preparation

Date: March 8, 2019

To: State Clearinghouse, Responsible Agencies, Trustee Agencies, Federal Agencies,

Interested Parties, and Organizations

Subject: Notice of Preparation of a Draft Environmental Impact Report for the CHP

Santa Fe Springs Area Office Replacement Project in Norwalk, California

Lead Agency: California Highway Patrol, 601 N. 7th Street, Building C, Sacramento, CA 95811

Contact: Jennifer Parson, Senior Environmental Planner

State of California Department of General Services

Real Estate Services Division, Project Management & Development Branch

707 Third Street, 4th Floor, MS509 West Sacramento, CA 95605

santa-fe-springs-comments@chp-ceqa.com

Purpose of Notice

The California Highway Patrol (CHP), with assistance from the Department of General Services – Real Estate Services Division (DGS), is the lead agency for preparation of an environmental impact report (EIR) pursuant to the California Environmental Quality Act (CEQA) for construction and operation of the CHP Santa Fe Springs Area Office Replacement Project (Proposed Project).

Pursuant to provisions of CEQA, DGS has prepared a notice of preparation (NOP) for the Proposed Project. The purpose of the NOP is to solicit comments from responsible and trustee agencies, and interested parties on the scope and content of the environmental information to be included in the EIR.

Project Location

The Proposed Project site will be a 6-acre parcel that will be sectioned from the existing 165-acre campus of the Metropolitan State Hospital, located at 11401 Bloomfield Avenue (Assessor's parcel number 8025-003-902) in the City of Norwalk in Los Angeles County (see Figures 2-1 and 2-2 in the attached initial study).

Project Description

The project description is contained in the attached initial study, also available at the website www.chp-ceqa.com/santa-fe-springs.

Potential Environmental Effects

The EIR will analyze the reasonably foreseeable direct, indirect and cumulative effects (e.g., climate change) of the Proposed Project and on focused resources, including but not limited to:

Air Quality

Energy

Biological Resources

Hazards and Hazardous Materials

Cultural Resources

Noise

Greenhouse Gas Emissions

Transportation

Tribal Cultural Resources

Comments provided in response to the NOP and during the scoping meeting, and ensuing analyses, may identify additional environmental resources to be evaluated.

Public Review Period

The Notice of Preparation is being circulated for public review and comment for a period of 30 days beginning March 8, 2019. **Written comments will be accepted by DGS through 5:00 P.M. on April 8, 2019**. Comments must be mailed or emailed to Jennifer Parson at the above addresses.

The Notice of Preparation is available for review at the following locations:

- Norwalk Library: 12350 Imperial Highway, Norwalk, CA 90650 (562) 868-0775
- California Department of General Services: 707 Third Street, Fourth Floor, Suite 401, West Sacramento, CA 95605 (916) 376-1605
- www.chp-ceqa.com/santa-fe-springs

Alternate formats of this document are available upon request.

Scoping Meeting

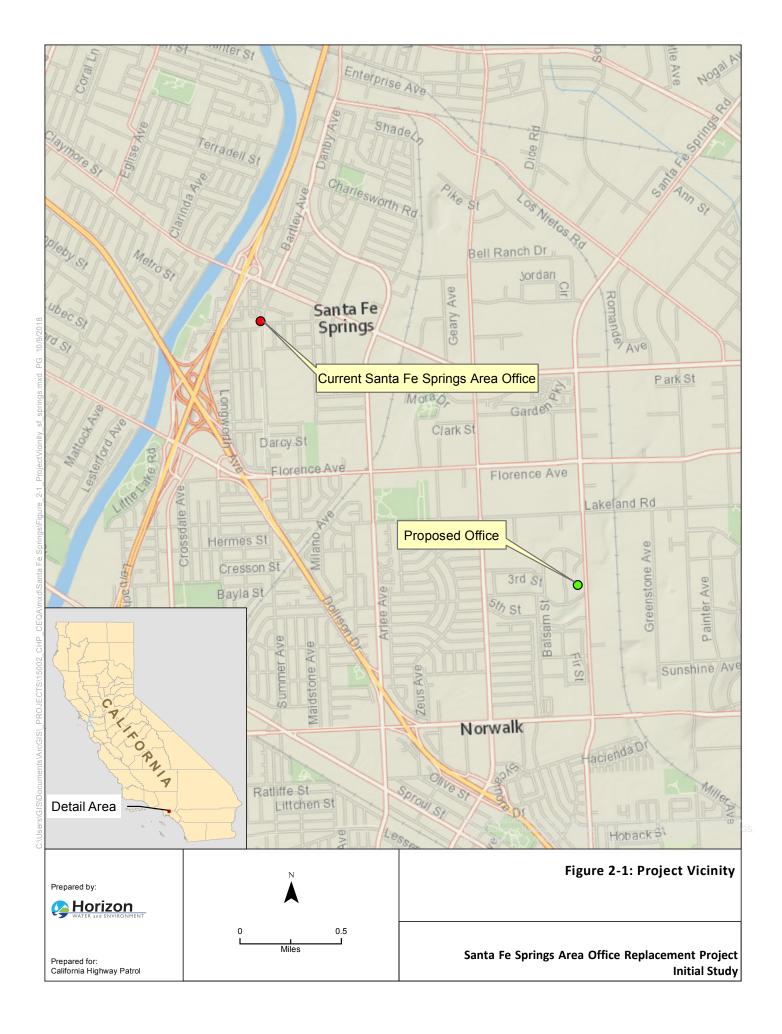
To provide the public and regulatory agencies an opportunity to ask questions and submit comments on the scope of the EIR, a scoping meeting will be held during the NOP review period. The scoping meeting will solicit input from the public and public agencies regarding the nature and scope of environmental impacts to be addressed in the Draft EIR. Prepared written comments will be accepted during the meetings, as well as throughout the 30-day NOP review period. The scoping meeting will be held at **5:30 p.m. on Tuesday, March 19, at the Town Center Hall, Meeting Room 1, located at 11740 Telegraph Road, Santa Fe Springs, CA 90670.** If reasonable accommodation is needed, call Megan Giglini, Horizon Water and Environment, at (916) 465-8073.

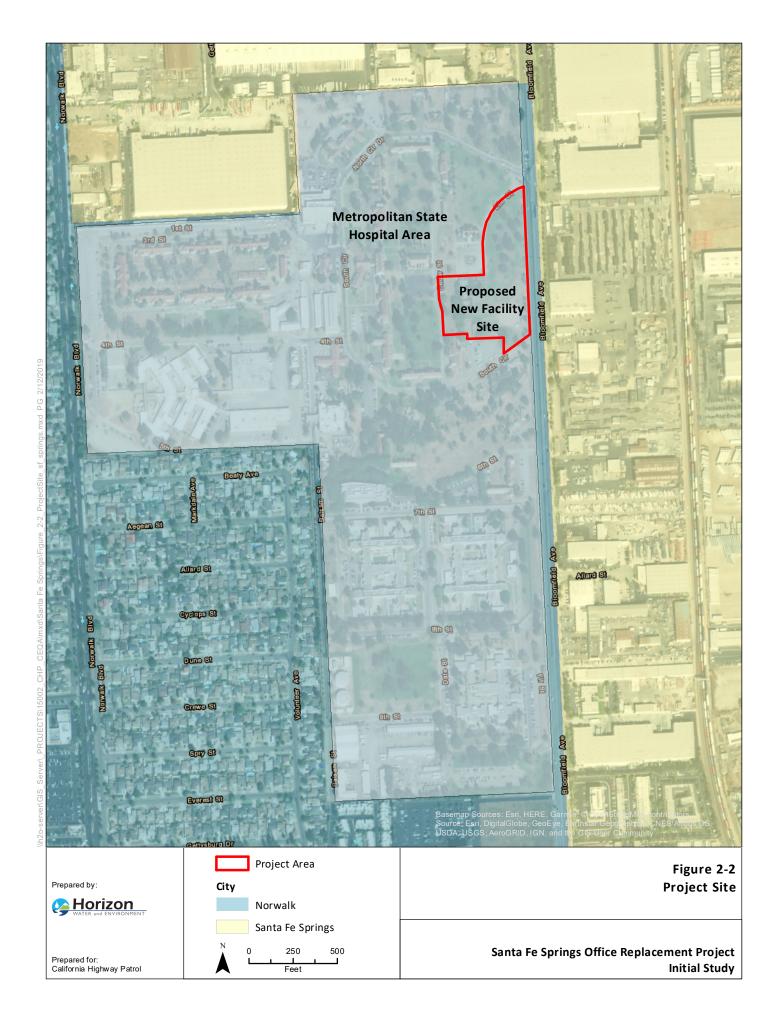
Please contact Jennifer Parson if you have any questions about the environmental review process for the CHP Santa Fe Springs Area Office Replacement Project.

Sincerely,

Chuck King, Assistant Chief

California Highway Patrol / Administrative Services Division





Appendix-1. Initial Study. Note: The Project's Initial Study, originally distributed with the Notice of Preparation, is included at the end of this Scoping Summary.

Newspaper Ad

PROOF OF PUBLICATION

(2015.5 C.C.P.)

STATE OF CALIFORNIA County of Los Angeles

)

I am a citizen of the United States and a resident of the county aforesaid; I am over the age of eighteen years, and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of THE NORWALK PATRIOT, a newspaper of general circulation, published weekly in the City of Norwalk, County of Los Angeles and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Los Angeles, State of California, under the date of 5/18/16. Case Number BS154952; that the notice of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

3/8/19

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Norwalk, California this 8th day of March, 2019.

Signature

PUBLICATION PROCESSED BY:

THE NORWALK PATRIOT 14783 CARMENITA ROAD NORWALK, CA 90650 (562) 404-3008 PHONE

This space is for the County Clerk's Filing Stamp

Proof of Publication

Join us for a
CEQA public scoping meeting
on the
CHP Santa Fe Springs Area Office
Replacement Project

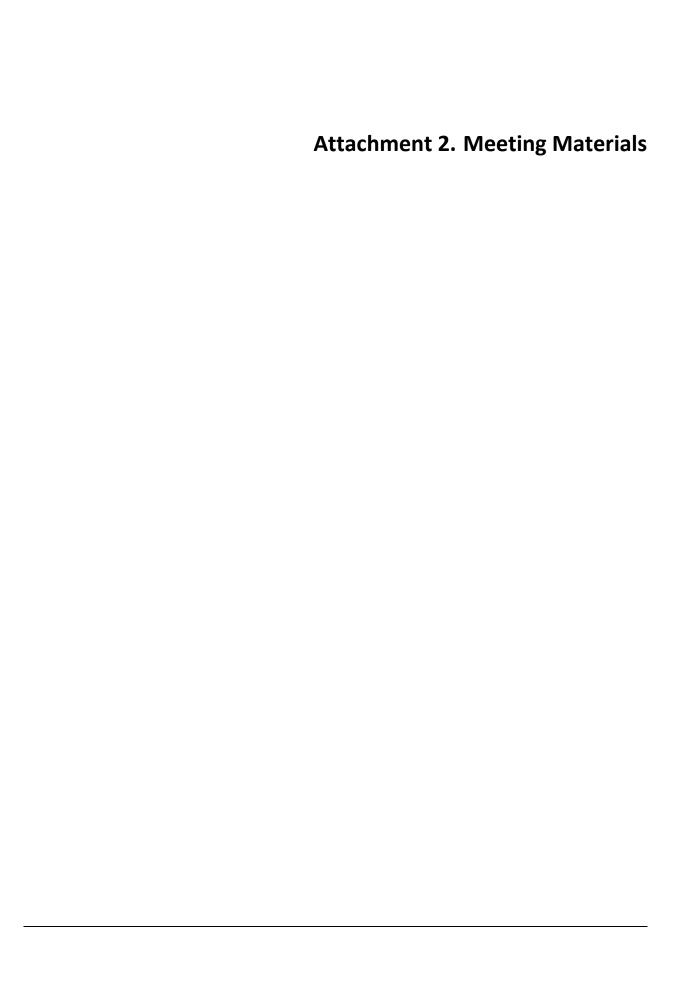
The California Highway Patrol (CHP), with assistance from the Department of General Services (DGS), is preparing an environmental impact report (EIR) for construction and operation of the CHP Santa Fe Springs Area Office Replacement Project pursuant to the California Environmental Quality Act (CEQA). Information regarding the project is available at: www.chp-ceqa/santa-fe-springs.com. DGS requests input from interested individuals, public agencies, and other parties regarding the scope and content of the EIR during the public scoping period. The scoping period will begin on March 8, 2019 and ends on April 8, 2019. During this period, DGS will hold a public meeting on the following date and location.

Tuesday, March 19, 2019 at 5:30 p.m. - 7:30 p.m. Town Center Hall Meeting Room 1 11740 Telegraph Road Santa Fe Springs, CA 90670

Will you need an accommodation in order to attend and/or participate in this event? If so, please contact Megan Giglini, Horizon Water and Environment, at (916) 465-8073. Auxiliary aides and services are available to individuals with disabilities upon request.

The Norwalk Patriot 3/8/19





CHP Santa Fe Springs Area Office Replacement Project

Public Scoping Meeting Sign In Sheet March 19, 2019 – Santa Fe Springs, CA

Name	Address	Email Address	Organization (optional)	Phone Number (optional)
Wayne M. Morrell	santa Fe Springs 90670 11710 Telegraph Rd	Wmorrell@santafesprings.or	Local	562 868 051)
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Disclaimer: Before including your name, address, e-mail address or other personal identifying information, please be aware that your name and contact information will be added to the project mailing list and your personal identifying information may be made publicly available at any time. While you can request that your personal identifying information be withheld from public review, CHP cannot guarantee that this will be possible.

Posters



Welcome

To the California Highway Patrol
Santa Fe Springs Area Office
Replacement Project
Public Meeting



Sign-In/Orientation

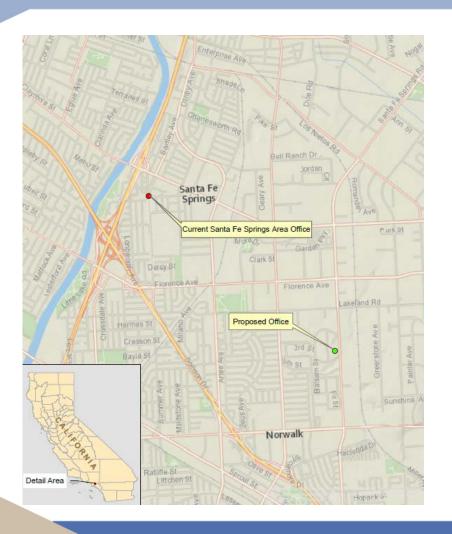


- All Guests Sign In Here
- Information and Comment Cards for Tonight's Meeting



Project Location



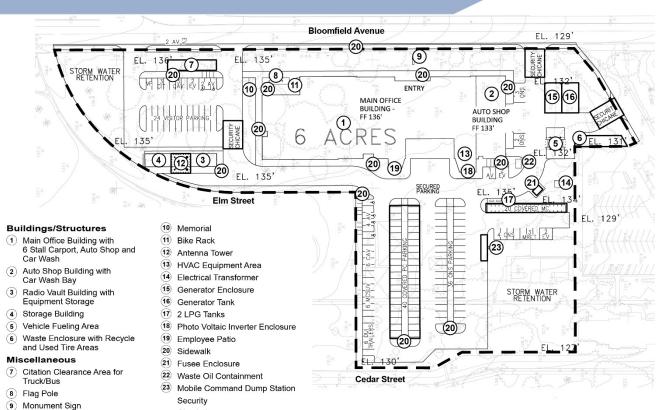




Conceptual Site Layout Horizon

Circulation

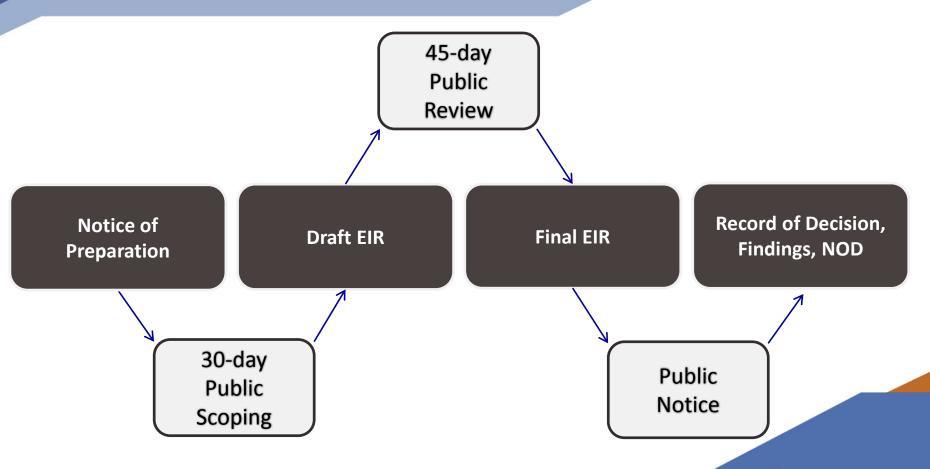






EIR Process





How to Comment



Submit oral or written comments tonight. Fill out a speaker card and wait to be called or write your comments on a written comment form.

Or submit written comments via mail or email. Send comments to:

Jennifer Parson, Senior Environmental Planner
State of California Department of General Services
Real Estate Services Division, Project Management & Development
Branch
707 Third Street, 4th Floor, MS509
West Sacramento, CA 95605
santa-fe-springs-comments@chp-ceqa.com



Presentation



CHP Santa Fe Springs Area Office Replacement Project

CEQA Scoping Meeting

California Highway Patrol
California Department of General Services



Meeting Agenda



- 1. Meeting purpose and protocol
- 2. Project overview
- Overview of the California Environmental Quality Act (CEQA)
- 4. Receipt of public comment



Meeting Purpose



CEQA Scoping: To allow the public and agencies to provide input on the scope and content of the project's environmental impact analysis.

Scoping comments inform the scope and nature of the CEQA environmental analysis.



Meeting Protocol



- Please silence cell phones.
- One person speaks at a time; please do not interrupt a speaker.
- Make clear and succinct comments in order for us to effectively capture the comment in notes.
- Be respectful of each other and differing points of view.



Project Background & Purpose



Relocate/replace the Santa Fe Springs Area Office with new facilities that will provide adequate workspace, vehicle, and equipment storage.

Part of statewide effort to replace aging or inadequate CHP field offices and other facilities.





Project Objectives

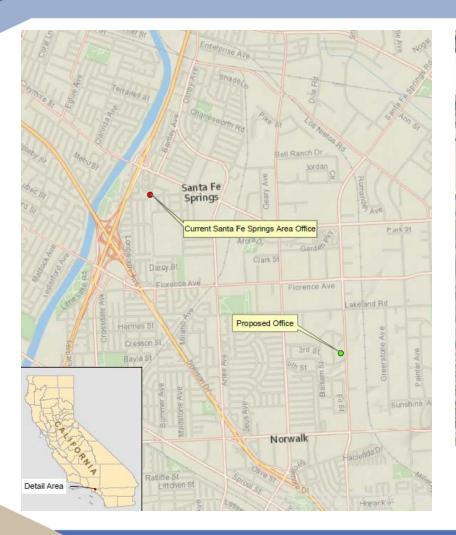


- Construct a facility in the Santa Fe Springs area that is near a freeway
- Develop a CHP facility that is LEED "silver" or better level of certification
- Meet California Essential Services Building Seismic Safety Act requirements by designing and constructing a facility capable of providing essential services to the public after a disaster
- Construct facility that meets Americans with Disability Act standards,
 - California Green
 Code, and Title 24 energy
 and resource standards



Project Location









Project Components

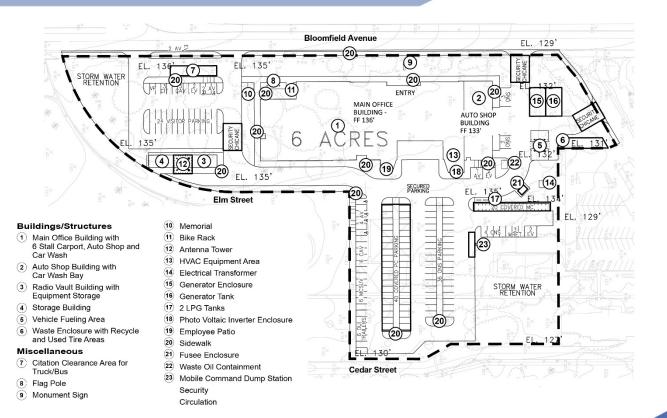


- Structures
 - Office building
 - Auto service building
 - Radio vault building
 - Property storage building
- Ancillary Improvements
 - Fencing
 - Fire water line and hydrants
 - Landscape & irrigation
 - Lighting
 - Flagpole and monument

- Parking and Citation Clearance Area
- Miscellaneous Site Elements
 - Radio antenna tower
 - Vehicle fueling area
 - Waste enclosure
 - Waste oil containment
 - HVAC equipment area
 - Generator enclosure
 - Fusee enclosure

Conceptual Site Layout







CEQA Overview



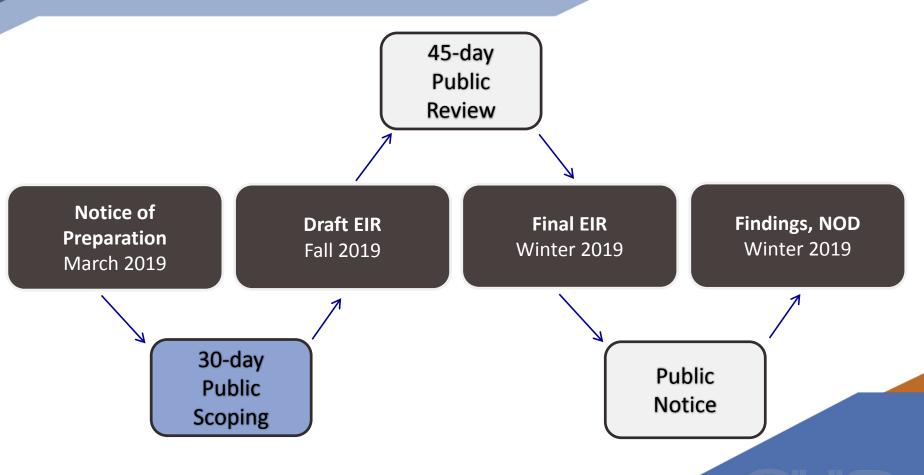
Basic purposes of CEQA (State CEQA Guidelines, Section 15002):

- Inform governmental decision makers and public about potential, significant environmental effects of proposed activities.
- Identify ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to environment by requiring changes in projects through the use of alternatives or mitigation measures when governmental agency finds changes to be feasible.
- Disclose to public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.



EIR Process





CEQA Resource Topics



- Aesthetics
- Agricultural resources
- Air quality
- Biological resources
- Cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality

- Land use and planning
- Mineral Resources
- Noise
- Population and housing
- Public services
- Recreation
- Transportation
- Tribal cultural resources
- Utilities and service systems
- Wildfire
- Cumulative impacts

Focused EIR



The purpose of a Focused EIR is to evaluate resource topics that might have potentially significant impacts.

These are the resource topics that have been carried forward to the EIR:

- Air quality
- Biological resources
- Cultural resources
- Energy

- Greenhouse gas emissions
- Hazards and hazardous materials
- Noise
- Transportation
- Tribal Cultural Resources



Purpose of Scoping



To provide the public and agencies the opportunity to provide input on the scope and content of the environmental impact analysis.

Scoping comments can include information on:

- ✓ Potential environmental issues
- ✓ Potential mitigation measures
- ✓ Characteristics of the existing environment
- ✓ Resources that may be cumulatively affected



How to Comment



Submit oral or written comments tonight. Fill out a speaker card and wait to be called or write your comments on a written comment form.

Or submit written comments via mail or email. Send comments to:

Jennifer Parson, Senior Environmental Planner
State of California Department of General Services
Real Estate Services Division, Project Management & Development
Branch
707 Third Street, 4th Floor, MS509
West Sacramento, CA 95605
santa-fe-springs-comments@chp-ceqa.com

Comments accepted until 5:00 p.m. on Monday, April 8, 2019.

Speaker Card

CHP Santa Fe Springs	Area Office Replacement Project - EIR Scoping Speaker Card
Name:	Date:
Comment(s):	2 acci
CHP Santa Fe Springs	Area Office Replacement Project - EIR Scoping
	Speaker Card
Name: Comment(s):	Date:
commences).	

Comment Card

CALIFORNIA HIGHWAY PATROL: CHP SANTA FE SPRINGS AREA OFFICE REPLACEMENT PROJECT

Scoping Comment Form

Name:
Group/Organization (optional):
Mailing Address:
Telephone No. (optional):
Email (optional):
Comments/Issues:

Please use additional sheets if necessary.

SUBMIT WRITTEN COMMENTS (POSTMARKED NO LATER APRIL 8, 2019) TO:

MAIL: Jennifer Parson, Senior Environmental Planner

State of California Department of General Services

Real Estate Services Division, Project Management & Development Branch

707 Third Street, 4th Floor, MS509

West Sacramento, CA 95605

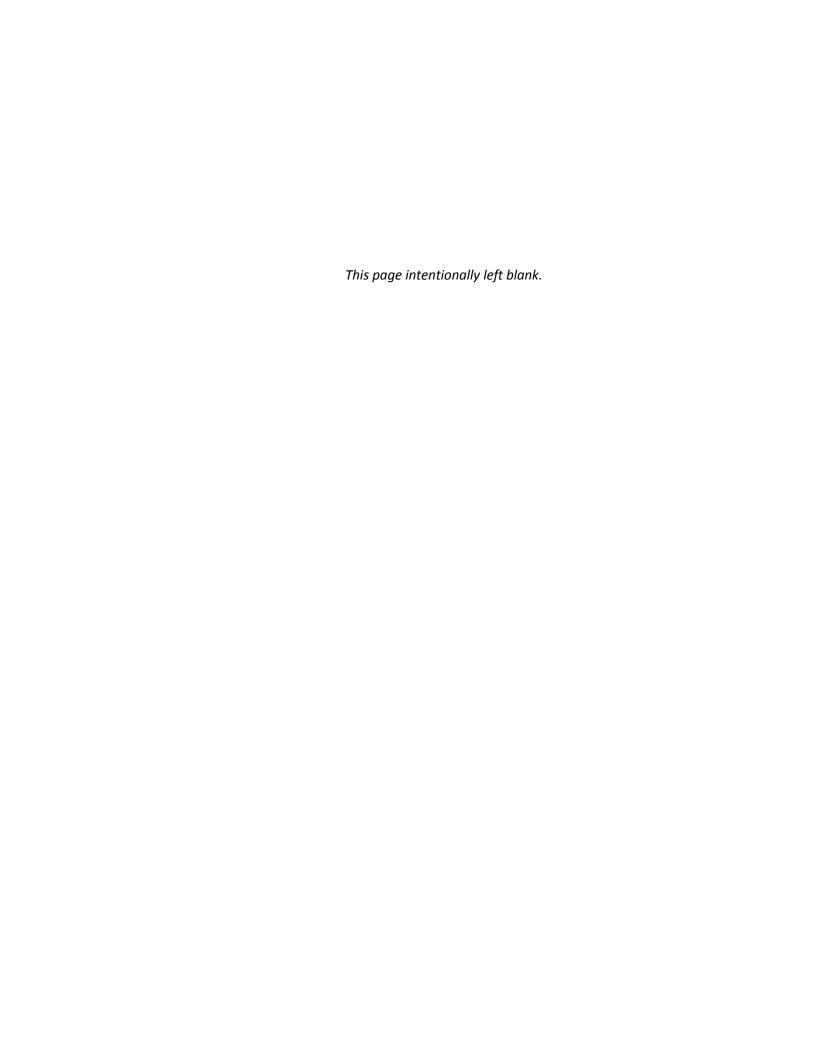
EMAIL: santa-fe-springs-comments@chp-ceqa.com

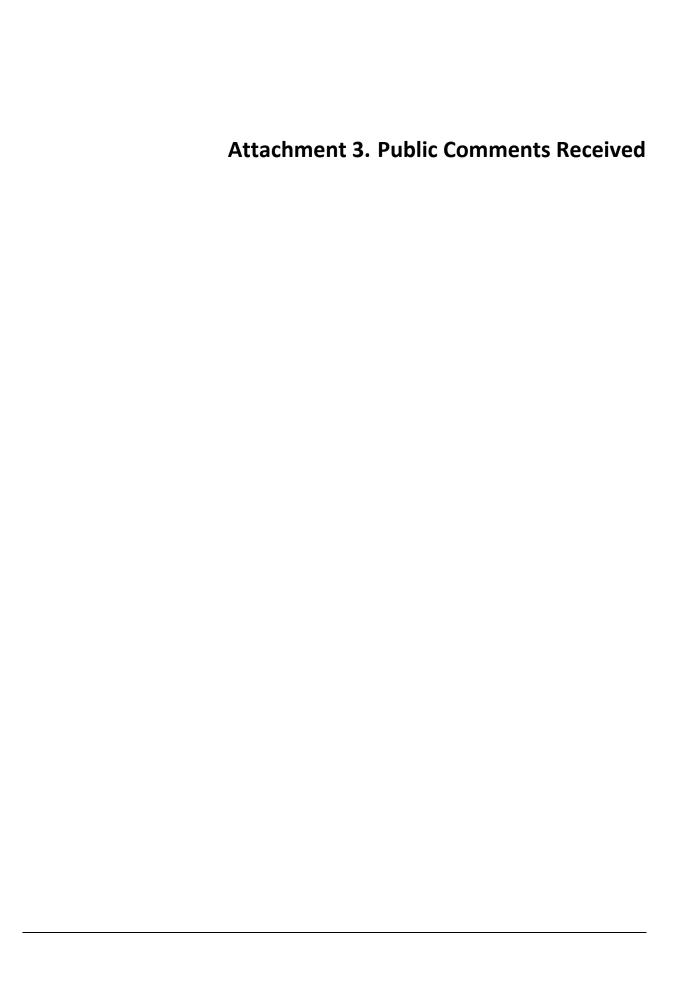
Place Stamp Here

Jennifer Parson, Senior Environmental Planner California Department of General Services Real Estate Services Division, Project Management and Development Branch 707 Third Street, 4th Floor, MS509 West Sacramento, CA 95605

(fold here)

Tape Here-Do not staple





SENT VIA USPS AND E-MAIL:

April 2, 2019

Santa-fe-springs-comments@chp-ceqa.com
Jennifer Parson, Senior Environmental Planner
State of California, Department of General Services
Real Estate Services Division
Project Management & Development Branch
707 Third Street, 4th Floor, MS509
West Sacramento, CA 95605

Notice of Preparation of a Draft Environmental Impact Report for the Proposed California Highway Patrol Santa Fe Springs Area Office Replacement Project

South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. SCAQMD staff's comments are recommendations regarding the analysis of potential air quality impacts from the Proposed Project that should be included in the Draft Environmental Impact Report (EIR). Please send SCAQMD a copy of the Draft EIR upon its completion. Note that copies of the Draft EIR that are submitted to the State Clearinghouse are not forwarded to SCAQMD. Please forward a copy of the Draft EIR directly to SCAQMD at the address shown in the letterhead. In addition, please send with the Draft EIR all appendices or technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all air quality modeling and health risk assessment files¹. These include emission calculation spreadsheets and modeling input and output files (not PDF files). Without all files and supporting documentation, SCAQMD staff will be unable to complete our review of the air quality analyses in a timely manner. Any delays in providing all supporting documentation will require additional time for review beyond the end of the comment period.

Air Quality Analysis

SCAQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. SCAQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from SCAQMD's Subscription Services Department by calling (909) 396-3720. More guidance developed since this Handbook is also available on SCAQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). SCAQMD staff also recommends that the Lead Agency use the CalEEMod land use emissions software. This software has recently been updated to incorporate up-to-date state and locally approved emission factors and methodologies for estimating pollutant emissions from typical land use development. CalEEMod is the only software model maintained by the California Air Pollution Control Officers Association (CAPCOA) and replaces the now outdated URBEMIS. This model is available free of charge at: www.caleemod.com.

SCAQMD has also developed both regional and localized significance thresholds. SCAQMD staff requests that the Lead Agency quantify criteria pollutant emissions and compare the results to SCAQMD's CEQA regional pollutant emissions significance thresholds to determine air quality impacts. SCAQMD's CEQA regional pollutant emissions significance thresholds can be found here: http://www.aqmd.gov/docs/default-

¹ Pursuant to the CEQA Guidelines Section 15174, the information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant environmental impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and data in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR. Appendices to the EIR may be prepared in volumes separate from the basic EIR document, but shall be readily available for public examination and shall be submitted to all clearinghouses which assist in public review.

source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf. In addition to analyzing regional air quality impacts, SCAQMD staff recommends calculating localized air quality impacts and comparing the results to localized significance thresholds (LSTs). LSTs can be used in addition to the recommended regional significance thresholds as a second indication of air quality impacts when preparing a CEQA document. Therefore, when preparing the air quality analysis for the Proposed Project, it is recommended that the Lead Agency perform a localized analysis by either using the LSTs developed by SCAQMD staff or performing dispersion modeling as necessary. Guidance for performing a localized air quality analysis can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis.

In the event that the Proposed Project generates or attracts vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment. Guidance for performing a mobile source health risk assessment ("Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis") can be found at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis. An analysis of all toxic air contaminant impacts due to the use of equipment potentially generating such air pollutants should also be included.

In addition, guidance on siting incompatible land uses (such as placing homes near freeways) can be found in the California Air Resources Board's *Air Quality and Land Use Handbook: A Community Health Perspective*, which can be found at: http://www.arb.ca.gov/ch/handbook.pdf. CARB's Land Use Handbook is a general reference guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process. Guidance² on strategies to reduce air pollution exposure near high-volume roadways can be found at: https://www.arb.ca.gov/ch/rd_technical_advisory_final.PDF.

Mitigation Measures

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize these impacts. Pursuant to CEQA Guidelines Section 15126.4 (a)(1)(D), any impacts resulting from mitigation measures must also be discussed. Several resources are available to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project, including:

- Chapter 11 "Mitigating the Impact of a Project" of SCAQMD'S CEQA Air Quality Handbook.
 SCAQMD's CEQA web pages available here: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies
- SCAQMD's Rule 403 Fugitive Dust, and the Implementation Handbook for controlling construction-related emissions and Rule 1403 Asbestos Emissions from Demolition/Renovation Activities

² In April 2017, CARB published a technical advisory, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory*, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective. This technical advisory is intended to provide information on strategies to reduce exposures to traffic emissions near high-volume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. The technical advisory is available at: https://www.arb.ca.gov/ch/landuse.htm.

- SCAQMD's Mitigation Monitoring and Reporting Plan (MMRP) for the 2016 Air Quality Management Plan (2016 AQMP) available here (starting on page 86): http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf
- CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures* available here: http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

Alternatives

In the event that the Proposed Project generates significant adverse air quality impacts, CEQA requires the consideration and discussion of alternatives to the project or its location which are capable of avoiding or substantially lessening any of the significant effects of the project. The discussion of a reasonable range of potentially feasible alternatives, including a "no project" alternative, is intended to foster informed decision-making and public participation. Pursuant to CEQA Guidelines Section 15126.6(d), the Draft EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the Proposed Project.

Permits and SCAQMD Rules

The Propose Project would include, among other things, a 3,500-square-foot fuel canopy and a 12,000-gallon aboveground fuel storage tank with two dispensers on six acres. A permit from SCAQMD would be required. SCAQMD should be identified as a Responsible Agency for the Proposed Project in the Draft EIR. The assumptions in the air quality analysis in the Final CEQA document will be the basis for permit conditions and limits. The 2015 revised Office of Environmental Health Hazard Assessment (OEHHA) methodology is being used by SCAQMD for determining operational health impacts for permitting applications and also for all CEQA projects where SCAQMD is the Lead Agency. For general information on permits, please visit the SCAQMD webpage at: http://www.aqmd.gov/home/permits. Permitting questions can be directed to SCAQMD Engineering and Permitting staff at (909) 396-3385. The Draft EIR should also discuss how the Proposed Project will comply with applicable SCAQMD Rules, including, but may not be limited to, Rule 201 – Permit to Construct, Rule 203 – Permit to Operate, and Rule 461 – Gasoline Transfer and Dispensing.

Data Sources

SCAQMD rules and relevant air quality reports and data are available by calling SCAQMD's Public Information Center at (909) 396-2039. Much of the information available through the Public Information Center is also available at SCAQMD's webpage at: http://www.aqmd.gov.

SCAQMD staff is available to work with the Lead Agency to ensure that project air quality and health risk impacts are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at lsun@aqmd.gov or (909) 396-3308.

Sincerely,

Lijin Sun

Lijin Sun, J.D. Program Supervisor, CEQA IGR Planning, Rule Development & Area Sources

LS <u>LAC190313-06</u> Control Number



Santa Fe Springs Comments <santa-fe-springs-comments@chp-ceqa.com>

CEQA Comments on NOP/IS – CHP Santa Fe Springs Area Office Replacement Project @ Metropolitan State Hospital

1 message

Beth Chow <bchow@norwalkca.gov>

Mon, Apr 8, 2019 at 3:57 PM

To: "santa-fe-springs-comments@chp-ceqa.com" <santa-fe-springs-comments@chp-ceqa.com>

Dear Ms. Parson:

Thank you for the opportunity to comment on the proposed California Highway Patrol (CHP) Santa Fe Springs Area Office Replacement Project located on the campus of the Metropolitan State Hospital. The City has the following comments to offer in response to the Initial Study that was prepared for the above referenced project:

- 1) Figure 2-4 showing the conceptual general building design calls out the proposed elevations on the building. The cardinal directions of the labeled elevations are inconsistent with Figure 2.3 showing the conceptual project overview. The elevations labeled north and south should be east and west, respectively; while elevations labeled west and eat should be north and south, respectively.
- 2) Section 3.1 Land Use and Planning, pages 3-77 and 3-78 references the Los Angeles County General Plan. which only applies to the unincorporated portions of Los Angeles County. All such references to the Los Angeles County General Plan should be removed from the document as the subject site is entirely within the jurisdictional boundaries of City of Norwalk which makes the City of Norwalk General Plan applicable.
- 3) Section 3.13 Noise, pages 3-91 acknowledges Norwalk's noise ordinance, discussing noise levels for areas of residential development, however it should also reference that the ordinance establishes a 65 dB limit for all other zones including the Professional Office Zone which is adjacent to the subject site to the south.
- 4) Section 3.17 Transportation, as acknowledged in the Initial Study, there may be potentially significant impacts, in sections a-d. Based on this determination further study is warranted with regards to the issues. All such studies related to circulation, transit, vehicle trips, traffic, intersections, etc. for the preparation of the EIR shall be completed in coordination/collaboration with the City of Norwalk. When conducting such studies, please refer the matter to the following parties:

City Engineer

City of Norwalk

12700 Norwalk Boulevard, Room 12

Norwalk, CA 90650

and

Joanne Itagaki, Traffic Engineering Deputy

City of Norwalk

12700 Norwalk Boulevard, Room 12

Norwalk, CA 90650

jitagaki@norwalkca.gov

(562) 929-5723

5) Section 3.19 Utilities and Service Systems, pages 3-122 and 3-123 discusses the sewer and stormwater systems. Connections into the two systems shall be coordinated with the following party:

City Engineer

City of Norwalk

12700 Norwalk Boulevard, Room 12

Norwalk, CA 90650

These comments are based NOP/IS dated March 2019. Should you have any questions regarding these comments, please contact Beth Chow, Senior Planner of the Planning Division at (562) 929-5744.



Beth Chow, AICP
Senior Planner
Community Development Department
562-929-5953

DEPARTMENT OF TRANSPORTATION

DISTRICT 7 - Office of Regional Planning 100 S. MAIN STREET, MS 16 LOS ANGELES, CA 90012 PHONE (213) 897-0673 FAX (213) 897-1337 www.dot.ca.gov



April 8, 2019

Mr. Chuck King California Highway Patrol 601 N. 7th Street, Building C Sacramento, CA 95811

> RE: CHP Santa Fe Springs Area Office Replacement Project Notice of Preparation (NOP) for an Environmental Impact Report (EIR) SCH#2019030003 GTS #07-LA-2019-02366 Vic. LA/ 5/ PM 6.201

Dear Mr. King:

Thank you for including the California Department of Transportation (Caltrans) in the review process for the above-referenced project. The Proposed project would consist of construction and operation of buildings and other structures, auto service bays, a 12-foot tall radio antenna tower, secured and visitor parking areas, equipment enclosures and storage areas, a fuel island with gas tanks, an emergency generator, utility, improvements and other ancillary improvements.

The nearest State facility to the proposed project is I-5. In the proposed project's Initial Study checklist, Transportation section, potential impacts were mentioned and indicated to be further analyzed in the EIR. Caltrans looks forward to receiving the EIR for review and provide further comments, if warranted.

Caltrans continues to strive to improve its standards and processes to provide flexibility while maintaining the safety and integrity of the State's transportation system. It is our goal to implement strategies that are in keeping with our mission statement, which is to "provide a safe, sustainable, integrated, and efficient transportation system to enhance California's economy and livability."

As a reminder, transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a Cal trans transportation permit. Caltrans recommends that large size truck trips be limited to off-peak commute periods.

If you have any questions or concerns, please contact project coordinator, Frances Lee at (213) 897-0673 or electronically at frances.lee@dot.ca.gov and refer to GTS#07-LA-2019-02366.

MIYA EDMONSON

Sincere

IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse





Jared Blumenfeld Secretary for **Environmental Protection**

Department of Toxic Substances Control

Meredith Williams, Ph.D.

Acting Director

9211 Oakdale Avenue

Chatsworth, California 91311



Governor

April 9, 2019

Ms. Jennifer Parson Senior Environmental Planner State of California Department of General Services Real Estate Services Division, Project Management & Development Branch 707 Third Street, 4th Floor, MS509 West Sacramento, CA 95605

NOTICE OF PREPARATION OF THE ENVIRONMENTAL IMPACT REPORT FOR THE CHP SANTA FE SPRINGS AREA OFFICE REPLACEMENT PROJECT (PROJECT)

Dear Ms. Parson:

The Department of Toxic Substances Control (DTSC) has received the document for the above-mentioned project.

Based on the review of the document, the DTSC comments are as follows:

- 1) The document needs to identify and determine whether current or historic uses at the project site have resulted in any release of hazardous wastes/substances at the project area.
- 2) The document needs to identify any known or potentially contaminated site within the proposed project area. For all identified sites, the document needs to evaluate whether conditions at the site pose a threat to human health or the environment.
- The document should identify the mechanism to initiate any required investigation and/or remediation for any site that may require remediation, and which government agency will provide appropriate regulatory oversight.
- 4) If during construction of the project, soil contamination is suspected, construction in the area should stop and appropriate health and safety procedures should be implemented. If it is determined that contaminated soil exists, the document should identify how any required investigation or remediation will be conducted, and which government agency will provide appropriate regulatory oversight.

Ms. Jennifer Parson April 9, 2019 Page 2

DTSC provides guidance for Preliminary Endangerment Assessment (PEA) preparation, and cleanup oversight through the Voluntary Cleanup Program (VCP). For additional information on the VCP, please visit DTSC's web site at www.dtsc.ca.gov. If you would like to meet and discuss this matter further, please contact me at (818) 717-6555 or Pete.Cooke@dtsc.ca.gov.

Sincerely

Pete Cooke

Site Mitigation and Restoration Program - Chatsworth Office

cc: Governor's Office of Planning and Research

State Clearinghouse

P.O. Box 3044

Sacramento, California 95812-3044

Dave Kereazis

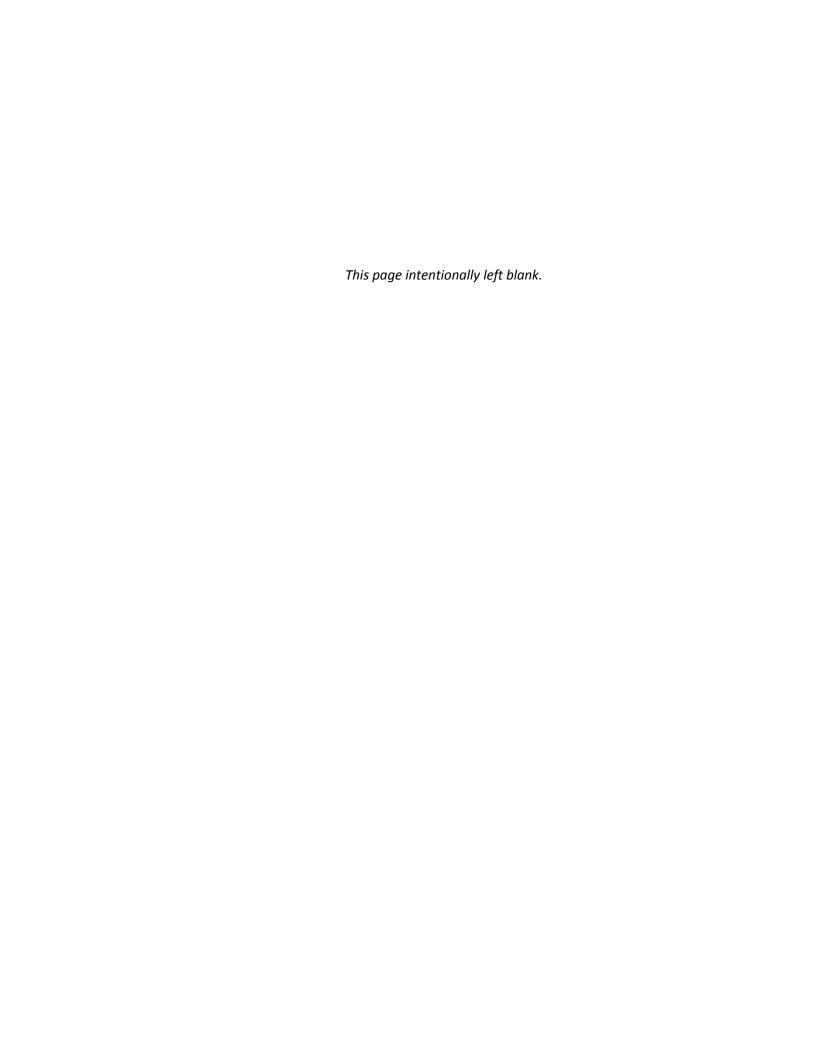
Hazardous Waste Management Program, Permitting Division

CEQA Tracking

Department of Toxic Substances Control

P.O. Box 806

Sacramento, California 95812-0806





CALIFORNIA HIGHWAY PATROL

SANTA FE SPRINGS AREA OFFICE REPLACEMENT PROJECT

Initial Study



March 2019



CALIFORNIA HIGHWAY PATROL

Santa Fe Springs Area Office Replacement Project

Initial Study

Prepared for:

State of California
Department of General Services
707 Third Street
West Sacramento, CA 95605

On behalf of the Lead Agency:

California Highway Patrol 601 N. 7th Street, Building C Sacramento, CA 95811

Prepared by:

Horizon Water and Environment, LLC 266 Grand Avenue, Suite 210 Oakland, California 94610 Contact: Tom Engels, Ph.D. (916) 790-8548

TABLE OF CONTENTS

2	Chapter 1 I	Introd	luction		1-1
3	•	1.1	Intent	and Scope of this Document	1-1
4		1.2	Public	Involvement Process	1-2
5		1.3	Orgar	nization of this Document	1-2
6		1.4	Impac	t Terminology	1-3
7	Chapter 2	Pro	ject De	scription	2-1
8	-	2.1	Backg	ground and Need for the Project	2-1
9		2.2	Projec	ct Purpose and Objectives	2-1
10		2.3	Projec	ct Location and Setting	2-2
11		2.4	Propo	sed Project Characteristics	2-3
12			2.4.1	Project Facilities	2-3
13			2.4.2	Construction	2-11
14			2.4.3	Existing and Proposed Operations	2-14
15		2.5	Permi	ts and Approvals	2-15
16	Chapter 3	Env	rironme	ental Checklist	3-1
17	•	Env	ironmeı	ntal Factors Potentially Affected	3-3
18		Dete	erminat	ion	3-4
19		3.1	Aesth	etics	3-5
20			3.1.1	Regulatory Setting	3-5
21			3.1.2	Environmental Setting	3-6
22			3.1.3	Discussion of Checklist Responses	3-13
23		3.2	Agricu	ıltural Resources	3-17
24			3.2.1	Regulatory Setting	3-17
25			3.2.2	Environmental Setting	
26			3.2.3	Discussion of Checklist Responses	
27		3.3	Air Qu	uality	
28			3.3.1	Regulatory Setting	
29			3.3.2	Environmental Setting	
30			3.3.3	Discussion of Checklist Responses	
31		3.4		gical Resources	
32			3.4.1	Environmental Setting	
33			3.4.2	Discussion of Checklist Responses	
34		3.5		ral Resources	
35		0.0	3.5.1	Environmental Setting	
36			3.5.2	Discussion of Checklist Responses	
37		3.6		IV	

i

1		3.6.1	Regulatory Setting	3-39
2		3.6.2	Environmental Setting	3-40
3		3.6.3	Discussion of Checklist Responses	3-41
4	3.7	Geolo	gy, Soils, and Seismicity	3-43
5		3.7.1	Regulatory Setting	3-44
6		3.7.2	Environmental Setting	3-45
7		3.7.3	Discussion of Checklist Responses	3-47
8	3.8	Green	house Gas Emissions	3-51
9		3.8.1	Regulatory Setting	3-51
10		3.8.2	Environmental Setting	3-52
11		3.8.3	Discussion of Checklist Responses	3-53
12	3.9	Hazar	ds and Hazardous Materials	3-55
13		3.9.1	Regulatory Setting	3-55
14		3.9.2	Environmental Setting	3-60
15		3.9.3	Discussion of Checklist Responses	3-61
16	3.10	Hydro	logy and Water Quality	3-67
17		3.10.1	Regulatory Setting	3-68
18		3.10.2	Environmental Setting	3-70
19		3.10.3	Discussion of Checklist Responses	3-72
20	3.11	Land l	Jse and Planning	3-77
21		3.11.1	Regulatory Setting	3-77
22		3.11.2	Environmental Setting	3-78
23		3.11.3	Discussion of Checklist Responses	3-79
24	3.12	Minera	al Resources	3-81
25		3.12.1	Regulatory Setting	3-81
26		3.12.2	Environmental Setting	3-82
27		3.12.3	Discussion of Checklist Responses	3-82
28	3.13	Noise.		3-85
29		3.13.1	Overview of Noise and Vibration Concepts and	
30			Terminology	
31			Regulatory Setting	
32			Environmental Setting	
33			Discussion of Checklist Reponses	
34	3.14	Popula	ation and Housing	3-93
35		3.14.1	Regulatory Setting	3-93
36		3.14.2	Environmental Setting	3-93
37		3.14.3	Discussion of Checklist Responses	3-94
38	3.15	Public	Services	3-97
39		3.15.1	Regulatory Setting	3-97
40		3.15.2	Environmental Setting	3-98
41		3.15.3	Discussion of Checklist Responses	3-100
42	3.16	Recre	ation	3-103
43		3.16.1	Regulatory Setting	3-103

1		3.16.2 Environmental Setting	3-103
2		3.16.3 Discussion of Checklist Responses	
3	3.1	7 Transportation	3-107
4		3.17.1 Traffic and Transportation Terminology	3-107
5		3.17.2 Regulatory Setting	3-109
6		3.17.3 Environmental Setting	3-109
7		3.17.4 Impact Analysis	3-112
8		3.17.5 Discussion of Checklist Responses	3-114
9	3.1	8 Tribal Cultural Resources	3-115
10		3.18.1 Regulatory Setting	3-115
11		3.18.2 Environmental Setting	3-117
12		3.18.3 Discussion of Checklist Responses	3-117
13	3.1	9 Utilities and Service Systems	3-119
14		3.19.1 Regulatory Setting	3-119
15		3.19.2 Environmental Setting	3-121
16		3.19.3 Discussion of Checklist Responses	3-124
17	3.2	0 Wildfire	3-127
18		3.20.1 Regulatory Setting	3-127
19		3.20.2 Environmental Setting	3-127
20		3.20.3 Discussion of Checklist Responses	3-128
21	3.2	1 Mandatory Findings of Significance	3-129
22		3.21.1 Discussion of Checklist Responses	3-129
23	Chapter 4 Refe	rences	4-1
24	Chapter 5 Repo	ort Preparation	5-1
25			
26	Appendices		
27	Appendix A.	Biological Resources Supporting Data	
28	List of Tables		
29	Table 2-1.	Local Utility Agencies in the Project Area	2-11
30	Table 2-2.	Comparison of Staffing Levels at Existing Santa Fe	
31 32		Springs Area Office, and Proposed Santa Fe Springs Area Office	2.1/
	Table 2-3.	Applicable Permit and Regulatory Requirements	
33			2-10
34 35	Table AQ-1.	Air Quality Significance Thresholds for Project Construction and Operations	3-22
36	Table ERG-1.	Summary of Energy Sources for SCE	
37	Table GEO-1.	Proximity of the Project Site to Regional Faults	
38	Table NOI-1.	Examples of Common Noise Levels	
			• .

1 2	Table NOI-2.	State Land Use Compatibility Standards for Community Noise Environment	3-89
3	Table PH-1.	Community Facts for the Cities of Norwalk and Santa Fe Springs	3-94
5 6	Table REC-1.	Parks and Recreational Facilities in the Vicinity of the Proposed Project	3-104
7	Table TR-1.	Level of Service Definitions for Intersections	
8	Table TR-2.	Project Trip Rates	
9	Table TR-3.	Project Generated Trips	
10	Table TR-4.	Project Trip Distribution Percentages	
11	Table TCR-1.	Native American Consultation	
12 13	Table UTL-1.	Golden State Water Company's Norwalk System Actual 2015 and Projected Potable and Raw Water Demands	
14		(in acre-feet)	3-122
15	List of Figures		
16	Figure 2-1.	Project Vicinity	2-4
17	Figure 2-2.	Project Site	2-5
18	Figure 2-3.	Conceptual Project Overview	2-6
19	Figure 2-4.	Conceptual Building Design	2-7
20	Figure AES-1.	Views Surrounding Project Site	3-9
21	Figure AES-2.	Existing Views from KOPs 1 and 2	3-10
22	Figure AES-3.	Existing Views from KOPs 3 and 4	3-11
23	Figure AES-4.	Existing Views from KOP 5	3-12
24 25	Figure BIO-1.	CNDDB Occurrences of Special-status Plants within 5 miles of the Proposed Project	3-29
26 27	Figure BIO-2.	CNDDB Occurrences of Special-status Animals within 5 miles of the Proposed Project	3-30
28	Figure BIO-3.	Critical Habitat	3-31
29	Figure TR-1.	Proposed Study Locations and Trip Distribution	3-111
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Santa Fe Springs Area Office Replacement Project Initial Study

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Acronyms and Abbreviations

AB Assembly Bill ACI ACI International ACI ACI International ADA Americans with Disabilities Act AFY acre-feet per year amplitude pressure level or energy content ANSI American National Standards Institute ANST above-ground storage tank Avocet Avocet Environmental, Inc. B B B B B B B B B B B B B B B B B B	2	Α	
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41 CNDDB California Natural Diversity Database 42 CNEL Community Noise Equivalent Level	39	CIWMB	California Integrated Waste Management Board
42 CNEL Community Noise Equivalent Level	40	CMP	Congestion Management Program
, ,	41	CNDDB	California Natural Diversity Database
43 CNPS California Native Plant Society	42	CNEL	Community Noise Equivalent Level
	43	CNPS	California Native Plant Society

1	СО	carbon monoxide
2	CO ₂	carbon dioxide
3	CO ₂ e	carbon dioxide equivalents
4	CRHR	California Register of Historical Resources
5	CRPR	California Rare Plant Rank
6	CUPA	Certified Unified Program Agency
7	CWA	Clean Water Act
8	CWA	Clean Water Act
9		cubic yards
	су	cubic yards
10	D	
11	dB	decibel
12	dBA	A-weighted decibel
13	DGS	California Department of General Services
14	DPM	diesel particulate matter
15	DSH	Department of State Hospitals
16	DTSC	California Department of Toxic Substances Control
17	DWR	California Department of Water Resources
18	E	
19	EA	environmental assessment
20	eBird	eBird.org
21	EIA	U.S. Energy Information Administration
22	EIR	Environmental Impact Report
23	EO	Executive Order
24	F	
25	FAA	Federal Aviation Administration
26	Farmland	Prime Farmland, Unique Farmland, or Farmland of Statewide Importance
27	FCC	Federal Communications Commission
28	FEMA	Federal Emergency Management Agency
29	FMMP	Farmland Mapping and Monitoring Program
30	frequency	rate of oscillation of sound waves
31	ft	feet
32	ft2	square feet
33	FTA	Federal Transit Administration
34	G	
35	General Permit	State's General Permit for Storm Water Discharges Associated with
36	Construction Acti	vity
37	GHG	greenhouse gas
38	GSP	groundwater sustainability plan
39	GSWC	Golden State Water Company
40	GWR	Ground Water Recharge
41	н	
42	HCM	Highway Capacity Manual

1	Hz	Hertz
2	I	
3	ICU	Intersection Capacity Utilization
4	IEEE	Institute of Electrical and Electronics Engineers
5	in/sec	inches per second
6	IND	Industrial Service Supply
7	IS	initial study
8	J	
9	JRP	JRP Historical Consulting
10	K	
11	KOP	key observation point
12	KW	kilowatt
13	L	
14	LACoFD	Los Angeles County Fire Department
15	LACSD	Los Angeles County Sanitation District
16	LADPR	Los Angeles Department of Parks and Recreation
17	LARWQCB	Los Angeles RWQCB
18	LASD	Los Angeles County Sheriff's Department
19	L_{dn}	energy average of the A weighted sound levels occurring during a 24-hour
20	period	
21	LEED	Leadership in Energy & Environmental Design
22	L_{eq}	equivalent steady-state sound level
23	L_{max}	maximum sound level measured during a given measurement period
24	L_{min}	minimum sound level measured during a given measurement period
25	LOS	level of service
26	LUST	leaking underground storage tank
27	L_{xx}	sound level exceeded x percent of a specific time period
28	M	
29	MCL	maximum contaminant level
30	Metropolitan	Metropolitan Water District of Southern California
31	MGD	million gallons per day
32	MMT CO₂e	million metric tons of carbon dioxide equivalents
33	mph	miles per hour
34	MRZ	Mineral Resource Zone
35	MS4	municipal separate storm sewer system
36	msl	mean sea level
37	MT CO₂e/yr	metric tons of carbon dioxide equivalents per year
38	MUN	municipal water supply
39	N	
40	NAAQS	National Ambient Air Quality Standards
41	NAHC	Native American Heritage Commission
42	NCCP	natural community conservation plan

1	NEHRP	National Earthquake Hazards Reduction Program
2	NFA	no further action
3	NHPA	National Historic Preservation Act
4	NHTSA	National Highway Traffic Safety Administration
5	NO ₂	nitrogen dioxide
6	NOP	Notice of Preparation
7	NOx	oxides of nitrogen
8	NPDES	National Pollutant Discharge Elimination System
9	NRCS	Natural Resource Conservation Service
10	NRHP	National Register of Historic Places
11	NSF	National Science Foundation
12	NSHHD	Norwalk State Hospital Historic District
13	0	
14	OEHHA	[California] Office of Environmental Health Hazard Assessment
15	OSHA	Occupational Safety and Health Administration
16	P	
17	PM10	particulate matter of aerodynamic radius of 10 micrometers or less
18	PM2.5	particulate matter of aerodynamic radius of 2.5 micrometers or less
19	Porter–Cologne A	Act Porter–Cologne Water Quality Control Act
20	PPV	peak particle velocity
21	PROC	Industrial Process Supply
22	Proposed Project	: Santa Fe Springs Area Office Replacement Project
23	Pub. Res. Code	Public Resources Code
24	R	
25	RARE	Rare, Threatened, or Endangered Species
26	RCRA	Resource Conservation and Recovery Act of 1976
27	REC1	Water Contact Recreation
28	REC2	Non-contact Water Recreation
29	RF	radio frequency
30	RMP	risk management plan
31	ROG	reactive organic gases
32	RPS	Renewables Portfolio Standard
33	RWQCB	Regional Water Quality Control Board
34	S	
35	SB	Senate Bill
36	SCAB	South Coast Air Basin
37	SCAQMD	South Coast Air Quality Management District
38	SCE	Southern California Edison
39	SGA	Groundwater Sustainability Agency
40	SMARA	Surface Mining and Reclamation Act of 1975
41	SMGA	Sustainable Groundwater Management Act
42	SoCalGas	Southern California Gas Company
43	SOx	Sulfur oxide

1 2 2	SPCC SR	Spill Prevention, Control, and Countermeasure State Route
3	SRA	State Responsibility Area
4	SWPPP	stormwater pollution prevention plan
5	SWRCB	State Water Resources Control Board
6	Т	
7	TAC	toxic air contaminant
8	TCP	traditional cultural properties
9	TCR	tribal cultural resource
10	TDS	total dissolved solids
11	TMDL	total maximum daily load
12	TPH	total petroleum hydrocarbons
13	U	
14	U.S.	United States of America
15	USC	U.S. Code
16	USEPA	U.S. Environmental Protection Agency
17	USFWS	U.S. Fish and Wildlife Service
18	USGBC	U.S. Green Building Council
19	USGS	U.S. Geological Survey
20	UST	underground storage tank
21	UWMP	urban water management plan
22	V	
23	V/C	volume-to-capacity
24	VdB	vibration decibel
25	VEC	vapor encroachment condition
26	VMT	Vehicle Miles Traveled
27	VOC	volatile organic compound
28	w	
29	Williamson Act	California Land Conservation Act of 1965
30	WLA	waste load allocation
31	WRP	Los Coyotes Water Reclamation Plant
32	Symbols	
33	ºF	degrees Fahrenheit
34	§	section

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Chapter 1 INTRODUCTION

The California Highway Patrol (CHP), with assistance from the Department of General Services –Real Estate Services Division (DGS), has prepared this Initial Study (IS) to provide the public, responsible agencies, and trustee agencies with information about the potential environmental effects of construction and operation of the proposed CHP Santa Fe Springs Area Office Replacement Project (Proposed Project). The Proposed Project and its location are described in depth in Chapter 2, *Project Description*. This document was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) of 1970 (as amended) and the CEQA Guidelines (14 California Code of Regulations [CCR] § 15000 *et seq.*).

1.1 Intent and Scope of this Document

This IS has been prepared in accordance with CEQA, under which the Proposed Project is evaluated at a project level (CEQA Guidelines § 15378). CHP, as the lead agency under CEQA, has determined that the Proposed Project would have the potential to result in significant environmental effects. Accordingly, CHP will also be preparing an EIR for the Proposed Project (CEQA Guidelines §15064). This IS is an informational document to be used in the planning and decision-making process for the Proposed Project and does not recommend approval or denial of the Proposed Project.

The site plans for the Proposed Project included in this IS are conceptual. CHP anticipates that the final design for the Proposed Project would include some modifications to these conceptual plans, and the environmental analysis has been developed with conservative assumptions to accommodate some level of modification.

This IS describes the Proposed Project; its environmental setting, including existing conditions and regulatory setting, as necessary; and the potential environmental impacts of the Proposed Project on or with regard to the topics listed below. If a resource topic has the potential to result in significant environmental impacts, it will be further discussed in the EIR and is not listed below:

Aesthetics Population and Housing

Agriculture/Forestry Resources Public Services
Geology, Soils, and Seismicity Recreation

Hydrology/Water Quality Utilities and Service Systems

Land Use and Planning Wildfire

Mineral Resources

1.2 Public Involvement Process

Public disclosure and dialogue are priorities under CEQA. CEQA Guidelines Section (§) 15073 and § 15105(b) require that the lead agency designate a period during the IS process when the public and other agencies can provide comments on the potential impacts of the Proposed Project. CHP has prepared a Notice of Preparation (NOP) for the Proposed Project. Accordingly, CHP is now circulating this document for a 30-day scoping review period.

To provide input on this project, please send comments to the following contact:

Jennifer Parson, Senior Environmental Planner
State of California Department of General Services
Real Estate Services Division, Project Management & Development Branch
Energy & Environmental Section
707 Third Street, 4th Floor, MS 509
West Sacramento, CA 95605
Email: santa-fe-springs-comments@chp-cega.com

During its deliberations on whether to approve the Proposed Project, CHP will consider all comments received before 5:00 p.m. on the date identified in the NOP for closure of the public comment period.

1.3 Organization of this Document

This IS contains the following components:

Chapter 1, *Introduction*, provides a brief description of the intent and scope of this IS, the public involvement process under CEQA, and the organization of and terminology used in this IS.

Chapter 2, *Project Description*, describes the Proposed Project including its purpose and goals, the site where the Proposed Project would be constructed, the construction approach and activities, operation-related activities, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the CEQA Guidelines. This chapter also includes a brief environmental setting description for each resource topic and identifies the Proposed Project's anticipated environmental impacts.

Chapter 4, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this IS.

Appendices

Appendix A. Biological Resources Supporting Data

1.4 Impact Terminology

This IS uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of *no impact* is made when the analysis concludes that the Proposed Project would not affect the particular environmental resource or issue.
- An impact is considered less than significant if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered *less than significant with mitigation* if the analysis concludes that no substantial adverse change in the environment would result with the inclusion of the mitigation measures described.
- An impact is considered *significant or potentially significant* if the analysis concludes that a substantial adverse effect on the environment could result.
- Mitigation refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.
- A cumulative impact refers to one that can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this IS focuses on whether the Proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.
- Because the term "significant" has a specific usage in evaluating the impacts under CEQA, it is used to describe only the significance of impacts and is not used in other contexts within this document. Synonyms such as "substantial" are used when not discussing the significance of an environmental impact.

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2.1 Background and Need for the Project

The California Highway Patrol (CHP) is the statewide law enforcement agency responsible for enforcing vehicular and traffic laws on state highways and freeways; regulating the transport of goods, including hazardous waste; and serving as emergency responders to incidents on the state's highway system. CHP's mission is to provide "the highest level of Safety, Service, and Security" (CHP 2018). To fulfill this mission, CHP has the following objectives:

- protect life and property;
- provide superior service to the public and assistance to allied agencies;
- enhance public trust through community outreach and partnerships;
- invest in our people; and
- identify and respond to evolving law enforcement needs.

CHP law enforcement services are currently provided to southeastern Los Angeles County, which includes the cities of Artesia, Bellflower, Cerritos, Downey, Hawaiian Gardens, La Habra Heights, La Mirada, Lakewood, Norwalk, Paramount, Pico Rivera, Santa Fe Springs and Whittier, through the CHP Santa Fe Springs Area Office located at 10051 Orr and Day Road, Santa Fe Springs, California. An increasing number of CHP employees have been assigned to the Santa Fe Springs Area Office, and the existing facilities' primary building and support service structures are inadequate to house the number of employees and related equipment, record storage, reference library, evidence rooms, lockers, and other officer support needs. Therefore, a new CHP facility is needed to serve the areas currently served by the Santa Fe Springs Area Office.

2.2 Project Purpose and Objectives

The CHP Santa Fe Springs Area Office Replacement Project (Proposed Project) is being constructed as part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the Proposed Project is to relocate the existing Santa Fe Springs Area Office into a new facility that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office (146 combined current employees, increasing to 159 employees over 10 years).

- Specific project objectives are as follows:
 - construct a facility that meets CHP's statewide programming requirements (e.g., provision of a citation clearance area and additional/separate locker rooms for female employees);

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- construct a facility in a location capable of serving the Santa Fe Springs Area
 Office's service area and that provides efficient access to the highway system,
 - develop a CHP facility that is accredited under the U.S. Green Building Council's (USGBC) Leadership in Energy & Environmental Design (LEED) program at the "Silver" or better level of certification, as required by state law;
 - meet the California Essential Services Buildings Seismic Safety Act requirements by designing and constructing a facility capable of providing essential services to the public after a disaster; and
 - construct a facility that meets the standards of the Americans with Disabilities Act
 (ADA), and Title 24 requirements, including the California Green Building
 Standards Code and the California Energy Code.

2.3 Project Location and Setting

The Proposed Project site will be a 6-acre parcel that will be sectioned from the existing 165acre campus of the Department of State Hospitals-Metropolitan (formally known as Metropolitan State Hospital), located at 11401 Bloomfield Avenue in the City of Norwalk, located west of Bloomfield Avenue and south of Lakeland Road in Norwalk, California (see Figure 2-1). This location is situated approximately 0.7 mile north of Imperial Highway, 1.3 miles east of Interstate 5, and 2 miles east of Interstate 605. As shown in Figure 2-1, the Proposed Project site is situated approximately 2 miles southeast of CHP's existing Santa Fe Springs Office. The site is located inside the northeast corner of the hospital, which occupies Assessor Parcel Number 8025-003-902. The parcel is roughly rectangular in shape on its southern portion, then angles straight to the north on its eastern axis as it parallels Bloomfield Avenue. It angles and curves on its western axis as it follows and borders Elm Street. Where Elm Street ends into a square-shaped paved area, the parcel borders the paved area west to Cedar Street. The parcel then angles south along Cedar Street to an existing building and then angles east, bordering an existing paved parking lot. Continuing to border the parking lot, the parcel angles south to South Circle road and then northeast to Bloomfield Avenue.

The site itself is currently on property owned by the Department of State Hospitals (DSH), located immediately south of the existing main entrance to the hospital. The site is relatively flat and contains a mowed lawn area with shrubs and trees. Existing structures on the site include a baseball field, basketball court, greenhouse and plant nursery, two currently vacant staff cottages and a garage. The Proposed Project site includes a portion of South Circle that extends towards Bloomfield Avenue but currently does not provide vehicle access between the two roadways due to a security fence across South Circle and an incomplete paved connection.

Adjacent land uses to the Proposed Project site include the DSH-Metropolitan facilities to the north, south, and west, and commercial/industrial uses to the east. Active facilities associated with the hospital and within approximately 500 feet (ft) of the project site include: residences, treatment wards, an assembly hall (James Hall), a social gathering facility (the Oasis building), offices, a religious center, and a library. In addition, the site is adjacent to Homes for Life, a transitional, state-licensed 38-bed residential facility for homeless adults who have mental illnesses, that is located along Elm Street (a long driveway) within the hospital campus. Bloomfield Avenue parallels the project site to the east. Industrial/

commercial buildings are located further to the east: ACI International (ACI), a shoe warehouse, is located to the northeast of the site at 11320 Bloomfield Avenue; Fleetwash, a commercial truck wash facility, is located east of the site at 11520 Bloomfield Avenue, and; Kelly Pipe Company is located east of the project site at 11680 Bloomfield Avenue. **Figure 2-2** shows the Project site and surrounding area.

2.4 Proposed Project Characteristics

The Proposed Project involves the construction and operation of a replacement CHP Area Office and associated improvements. The conceptual site plans and building design for the proposed CHP Santa Fe Springs Area Office are shown in **Figure 2-3** and **Figure 2-4**, respectively. Note: the plans shown on Figures 2-3 and 2-4 are conceptual; CHP anticipates that the final design for the Proposed Project would include modifications to these plans.

The Proposed Project would develop approximately 5.2 acres (approximately 228,000 square feet [ft²]) within the approximate 6-acre site. Approximately 178,000 ft² (4 acres) of this would be impervious surfaces; the remainder of the site would be unpaved, such as for landscaping and stormwater management. Additionally, the Proposed Project would involve re-surfacing of approximately 20,000 ft² of roadway and approximately 5,000 ft² of sidewalks along South Circle and Elm Street adjacent to the Project site. These area quantities are subject to change pending final design.

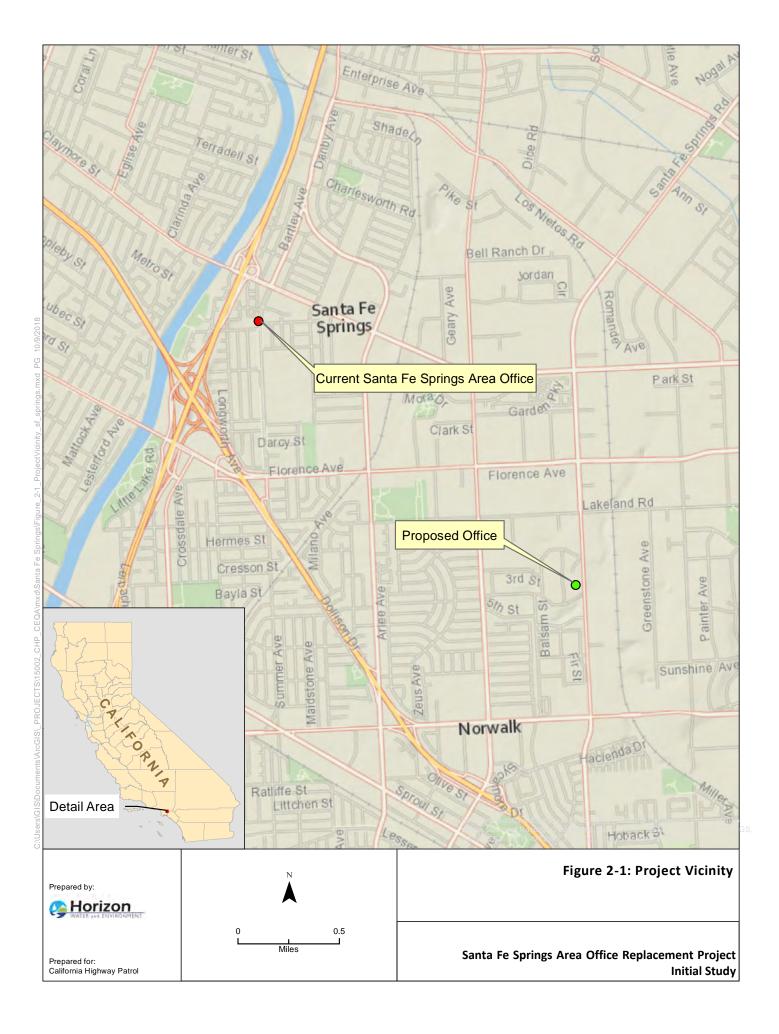
This section continues with a discussion of the Project facilities, construction activities, and operational activities that would be part of the Proposed Project. The section also discusses the proposed changes from the existing CHP Santa Fe Springs Area Office operations, to the extent they are relevant to the environmental analysis.

2.4.1 Project Facilities

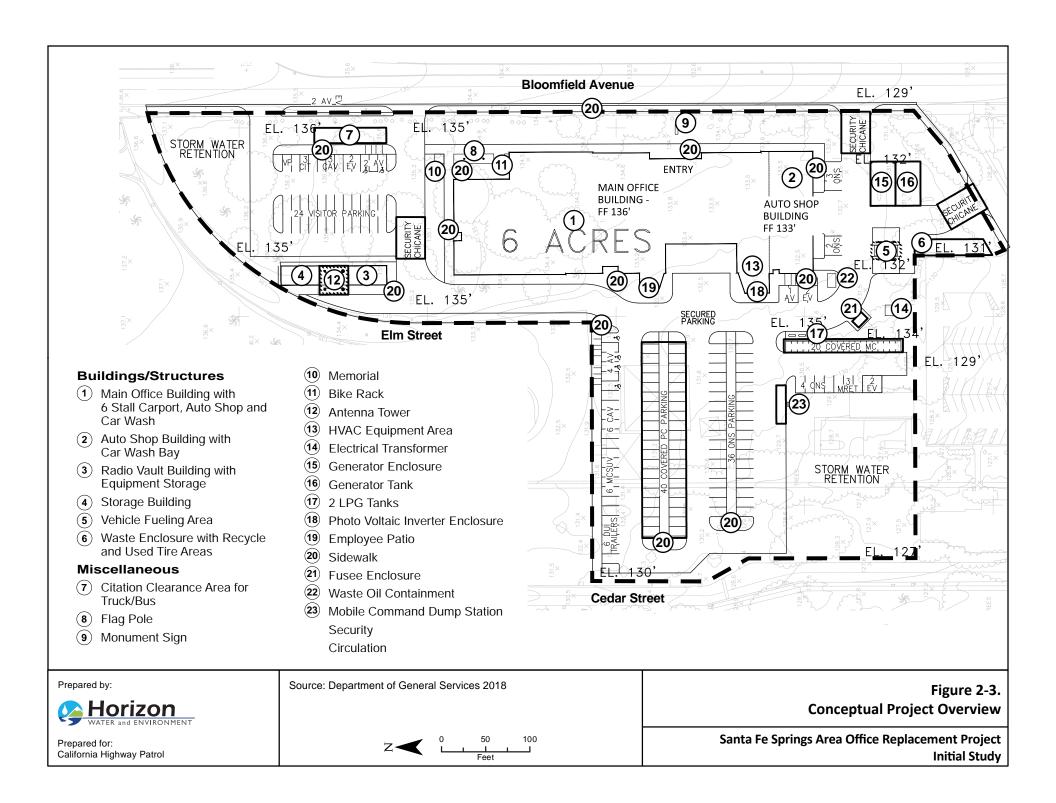
The Proposed Project would include occupied structures, a radio tower, secured and visitor parking areas, enclosures and storage areas, a fuel island with above-ground fuel tank, utility improvements and other ancillary improvements. Descriptions of these facilities follow. Conceptual locations of Project facilities are indicated on Figure 2-3.

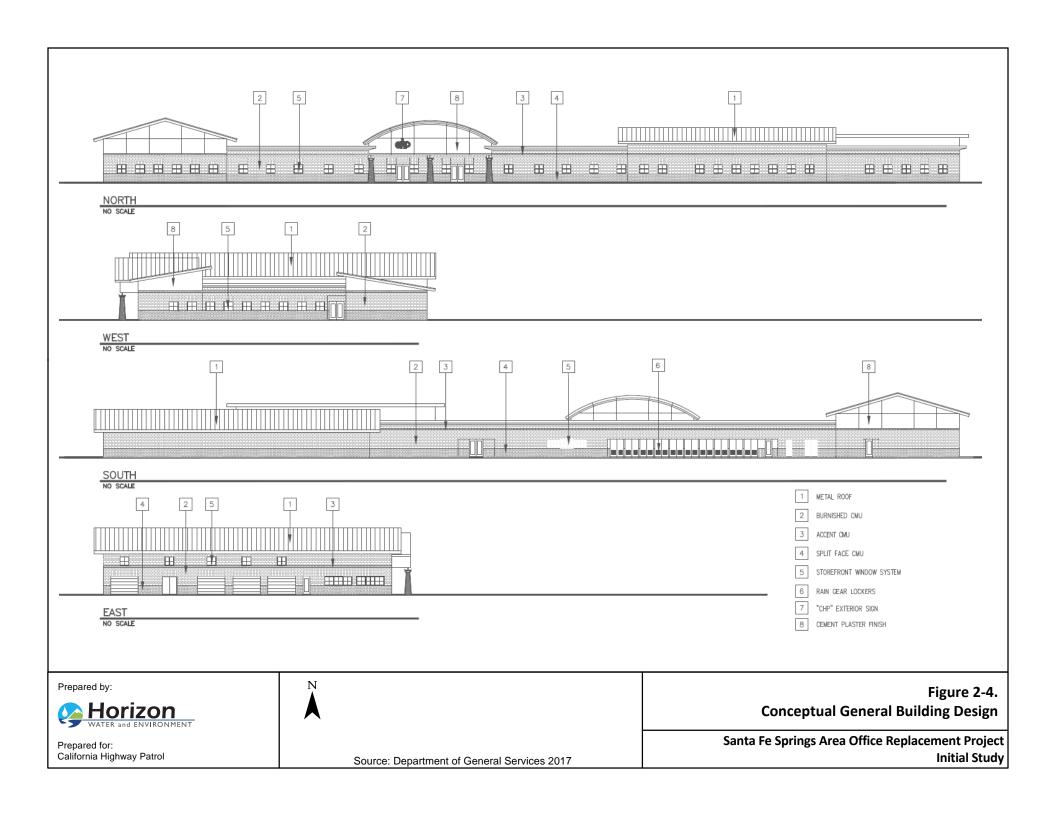
Structures

Structures that would be part of the Proposed Project include a main office building, an automobile service building, a radio vault building, and a property storage building. A general description of each structure is provided below. Details of the site preparation work are provided in Section 2.4.2, "Construction."









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Main Office Building: The main office building would be a single-story building of approximately 37,000 ft². The facility would be built to meet Title 24 requirements, including the California Green Building Standards Code and the California Energy Code, and achieve a USGBC LEED Silver or higher accreditation. The USGBC grants LEED certification based on a scoring system related to a number of different impact categories (e.g., energy, water, waste, materials, location and transportation, etc.) (USGBC 2018).

- The building would include:
 - offices and work stations;
 - break room/conference room;
- interview rooms:
 - briefing/training room;
- 12 armory;
 - gun cleaning room with gun cleaners/solvents and materials storage;
- 14 issue room (for officer patrol equipment and storage);
 - evidence processing, logging, and storage areas;
 - men's/women's restrooms, locker rooms, and showers:
 - "physical means of arrest" training room and storage;
- 18 lactation room:
 - rain gear lockers;
 - voice/data room; and
 - janitorial, mechanical, and electrical rooms.

Automobile Service Building: The automobile service building would be a single-story building totaling approximately 7,000 ft² that would include offices, three auto service bays, a car wash bay, a vehicle equipment area, tire storage area, vehicle parts storage room, restroom, and an air compressor room. This structure may be attached or in very close proximity to the main office building. One approximately 275-gallon waste oil storage tank would be stored in or adjacent to the automobile service building. The automobile service bays would have vehicle lifts for servicing and maintaining CHP vehicles.

- Radio Vault Building: The one-story radio vault building would be approximately 750 ft² and would include a radio vault room and an equipment storage space.
- **Property Storage Building:** The one-story property storage building would include a bulk evidence and property storage area, and a secured storage area. The total size of the building would be approximately 750 ft². This use could be combined with the Radio Vault Building.
 - Miscellaneous Site Elements
- **Vehicle Fueling Area:** The vehicle fueling area would include an approximately 12,000gallon aboveground fuel storage tank with two mechanized dispensers, a canopy over the fueling area, and parking for a fuel tanker truck, covering an area of approximately 3,500 ft².

The fuel storage tank would have self-integrated secondary containment. Gasoline stored in the fuel tank would be used to supply CHP vehicles.

Radio Tower: The radio tower would consist of a 120-foot steel lattice communications tower supporting a 20-foot tall mast and 8-foot lightning rod: comprising a total height of 148 ft. The radio tower would provide for communications between the new facility, CHP personnel in the field, local dispatch facilities, and state-wide during emergencies. The base of the radio tower would be approximately 900 ft². No tower lighting or markings are required by the Federal Aviation Administration at this time.

Waste Enclosure: A waste enclosure would be constructed on the Project site. The enclosure would contain covered areas for two trash dumpsters, used-tire racks, and recycling bins. The waste enclosure would be approximately 1,200 ft².

Waste Oil Containment: Up to a 275-gallon waste oil tank would be located in an area of approximately 120 ft² near the automobile service building.

Heating, Ventilation, and Air Conditioning Equipment Area: The heating, ventilation, and air conditioning (HVAC) system equipment area would be approximately 700 ft². The HVAC system would provide fully automated and continuous space heating, ventilation, and cooling, to all areas of the office building and automobile service building that would be designed for occupancy.

Generator and Tank Yard: The walled generator yard would contain an emergency generator, exhaust system, cooling system, diesel fuel supply and storage systems, engine control system, and miscellaneous cables and equipment to support the generator's operation. The emergency generator's capacity would be approximately 500 kilowatts (kW). Aboveground diesel fuel tanks would hold a minimum of 96 hours of fuel supply for continuous full-load operation, which would equate to approximately 4,000 gallons. The emergency generator would be used as a power source for the Area Office facilities, as necessary, if primary power sources were to fail. The total area of the generator and tank yard would be approximately 2,240 ft².

Fusee Enclosure: Fusees (flares) would be stored within a steel container inside this enclosure (approximately 200 ft²).

Parking and Citation Clearance Areas

Parking Areas: The Proposed Project would have a visitor parking area and a secured parking area for CHP vehicles and equipment. The visitor area would have approximately 25 regular spaces, two spaces for handicapped-accessible parking (including one for van parking), two electric charging stations, three spaces for clean air vehicles, and three spaces for automobiles associated with the citation clearance area described below, for a total of 35 spaces. The secured parking area would have approximately 136 total spaces, including spaces for various specialized vehicles such as motorcycles, evidence vehicles, a mobile command center, and accessible vehicles. In total, the visitor and secured parking areas would provide approximately 171 parking spaces, for a total net area of approximately 55,520 ft². The parking spaces would generally be located adjacent to the main office building and auto shop building, and would be surfaced with asphalt concrete and/or reinforced concrete paving.

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1 **Citation Clearance Area:** Citation clearance areas would be provided for verifying 2 correction of citations and processing for standard passenger vehicles as well as larger 3 commercial vehicles, such as buses. Citations issued to passenger and commercial vehicles 4 may include violations for outdated registration tags, missing license plates, missing mirrors, 5 malfunctioning engine or exhaust systems, and other vehicle violations ("fix-it tickets"). The 6 purpose of the citation clearance areas at the CHP Santa Fe Springs Area Office is to provide 7 space in which officers can safely evaluate vehicles to determine whether violations have 8 been addressed. For citation clearance checks involving passenger vehicles, the driver parks 9 in the appropriate designated citation clearance parking area and requests a verification of 10 citation correction from an officer on-duty. These verifications occur throughout the day and typically take less than 5 minutes. Following a satisfactory verification, the citation is cleared 11 12 and the driver leaves the site. For citation clearance checks involving commercial vehicles, an 13 appointment with the CHP Commercial Unit officer is required. The commercial vehicle parks 14 in the larger designated citation clearing area for the inspection. Commercial vehicle 15 inspections are scheduled several times per week; they take more time than passenger 16 vehicle checks and may require multiple engine shut-downs and periods of engine idling.

Ancillary Improvements

Fencing: The Proposed Project's secured areas would be surrounded by 6-foot-tall concrete-block masonry fence with 2-foot metal pickets. Metal rolling gates would be installed at the authorized vehicle entrances/exits to/from the secured parking area. Associated with each of the rolling vehicle access gates would be a metal man-gate with access control measures.

Fire Hydrants: Fire hydrants would be installed in accordance with applicable requirements of the Office of the State Fire Marshal and local fire department.

Landscape and Irrigation: Drought-tolerant landscaping requiring minimal maintenance and an automatic irrigation system would be installed on the Project site. Plants would be selected that are tolerant of the local climate.

Exterior Lighting: Exterior lighting would be installed throughout the site for security purposes; lighting would be located along the site perimeter, but it would be directed downward and shielded to reduce light dispersion. Lighting must meet CHP safety protocols, which require 24-hour lighting of the facility. Entrances would have brighter lighting than the parking areas and office building. Flagpoles would have lighting which may be directed upward or downward, pending final design.

Flagpoles and Monument: Three metal flagpoles, each 25 ft high, would likely be installed in front of the CHP office building near the visitor parking area. A CHP monument sign would also be installed likely near the visitor parking area.

Sidewalk and Street Improvements: The existing sidewalk, curb and gutter along Bloomfield Avenue would be removed and replaced. The Proposed Project would include resurfacing portions of asphalt pavement along Elm Street and South Circle along the length of the property line. It is estimated these potential improvements would cover up to approximately 20,000 ft² (0.5 acres). South Circle would be connected to Bloomfield Avenue to make it a useable access point for the users of the DSH – Metropolitan campus and the proposed CHP facility. In addition, approximately 5,000 ft² of sidewalks would be constructed

along South Circle and Elm Street adjacent to the Project site. These area quantities are subject to change pending final design.

Utilities and Stormwater Drainage

Utilities: The Project site has immediate access to utilities, including water, sewer, electricity, natural gas, and communications infrastructure. **Table 2-1** lists anticipated utility service agencies that would serve the Proposed Project.

Table 2-1. Local Utility Agencies in the Project Area

Utility Service	Utility Agency
Water Supply	Golden State Water
Sanitary Sewer	City of Norwalk
Stormwater Management	City of Norwalk
Electrical Service	Southern California Edison
Natural Gas Service	SOCAL Gas (Sempra)
Data and Phone Service	Frontier Communications, AT&T
Fire Protection Service	Los Angeles County Fire Department

Stormwater Drainage: Site runoff would be managed and discharged according to the Municipal Regional Stormwater Permit for the Los Angeles Region (Los Angeles RWQCB Order No. R4-2012-0175, as amended by State Water Board Order WQ 2015-0075). There are existing catchbasins along Bloomfield Avenue (owned/maintained by the City of Norwalk and Los Angeles County Public Works), which convey stormwater to the Los Angeles County storm water infrastructure system. The Proposed Project's stormwater system would be designed in coordination with the City of Norwalk and Los Angeles County. A stormwater retention pond may be included on the project site to manage runoff generated on-site.

2.4.2 Construction

Construction Methods

Site Preparation and Earthwork: As detailed in the *Jurisdiction Transfer of Project Site and Decommissioning of Existing Facilities* section below, much of the project site's existing facilities (a baseball field, basketball and tennis courts, two shelters) would be removed by Metropolitan State Hospital prior to initiation of CHP's construction activities for the Proposed Project. Thus, it is anticipated that the Proposed Project's site preparation activities would be limited to those described herein.

Site preparation would include removing the existing parking lot and fencing, clearing and grubbing, grading, excavation, importing and placing fill, and compacting the fill and other materials. The existing greenhouse, netting, overhang, and other miscellaneous structures on the project site (totaling approximately $14,000~\rm{ft}^2$), the existing paved areas (totaling approximately $10,300~\rm{ft}^2$), and the existing perimeter fencing along Bloomfield Avenue would

 be demolished and removed from the project site. It is estimated that approximately 300 cubic yards (cy) of asphalt and 500 cy of base aggregate material would need to be removed from the existing site. Clearing and grubbing of the site, including the potential removal of all onsite vegetation and trees, would be conducted using bulldozers, standard excavators, and hand labor. All demolished material and debris would be disposed of off-site at an appropriate location selected by the construction contractor. For the purposes of this analysis, the disposal site is presumed to be located within 1 hour of travel time from the Project site.

To the extent feasible, excavated soil would be reused on site. It is anticipated that approximately 3,000 cy of engineered fill would be imported to develop the site. Fill would be delivered to the Project site by conventional haul trucks (approximately 15 cy per load). Fill material would be placed with an excavator and compacted with a compactor/roller. The anticipated number of potential worker and construction-related trips for the Proposed Project's various construction phases will be finalized and provided as part of the Environmental Impact Report (EIR) for the Proposed Project.

Buildings and Structures: Construction of buildings and structures would include the following activities:

- delivery of tilt-up walls and/or concrete delivery, forming, and placement, and rebar placement;
- structural steel work (assembly and welding);
- installation of electrical/instrumentation work;
- masonry or tilt-up concrete wall construction; and
- installation of mechanical equipment and piping installation.

Pipelines and Underground Utility Equipment: Drainage, water supply, and wastewater pipelines and underground utilities would be installed in open trenches, typically using conventional cut-and-cover construction techniques. The first step in the construction process would be surface preparation, including removing any structures, pavement, or vegetation from the surface of the trench area using jackhammers, graders, pavement saws, mowing equipment, bulldozers, front-end loaders, and/or trucks. A backhoe, track-mounted excavator, or similar equipment would then be used to dig trenches for pipelines or installation of underground utility equipment. The width of the trench would generally vary between 3 and 5 ft and the depth would be approximately three times the pipeline diameter. The diameter of pipelines would vary by service flow requirements, material type and purpose.

In most locations, trenches would most likely have vertical sidewalls to minimize the amount of soil excavated and the area needed for the construction easement. Soil excavated from the trench would be stockpiled alongside the trench or in staging areas for later reuse in backfilling the trench or for fill at other on-site locations, if appropriate. Native soil would be reused for backfill to the greatest extent possible; however, it may not have the properties necessary for compaction and stability. If not reusable, the soil would be hauled off site for disposal at an appropriate disposal site.

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The final step in the installation process would be to restore the ground surface. Site restoration would generally involve paving, installing landscaping, or installing erosion controls, as necessary. This phase would include sidewalk and street resurfacing improvements along the project site.

Construction Equipment

- The main pieces of equipment that might be used are as follows:
 - track-mounted excavator
 - small crane
 - end dump truck
 - 10-wheel dump truck
 - paving equipment
 - flat-bed delivery truck
 - concrete truck
 - grader
 - bulldozer

- backhoe
- compactor
- front-end loader
- water truck
- forklift
- compressor/jack hammer
- boom truck
- mowing equipment (e.g., weedeater, commercial lawnmower)

Construction Fencing

- 8 The construction area would be fenced for safety and security.
- 9 Jurisdiction Transfer of Project Site and Decommissioning the Existing
- 10 Facilities
 - To support implementation of the Proposed Project, Metropolitan State Hospital would transfer jurisdiction of the Proposed Project site on the eastern side of 11401 Bloomfield Avenue to the CHP. As part of this change of jurisdiction, prior to Metropolitan State Hospital vacating the project site, Metropolitan State Hospital would remove all manmade material that is unaffixed to the project site, including existing structures, equipment, litter, and debris.
 - Construction Schedule
- Construction of the Proposed Project is anticipated to last for approximately 24 months, and may begin in 2020 and end in 2022. Within this timeframe, the majority of construction work that involves the use of operating equipment would be performed within a 15-month period. Construction activities would typically be performed Monday through Friday between 7 a.m. and 6 p.m. After-hours work and work on Saturdays, Sundays, and State holidays would be permitted at the discretion of the State of California.

2.4.3 Existing and Proposed Operations

Existing Operations

The existing CHP Santa Fe Springs Area Office at 10051 Orr and Day Road includes an 8,125-square-foot office building with the vehicle maintenance area incorporated and the communications tower on the roof, a small storage building and several storage containers, 75 stalls for secured and visitor parking, and fuel island and storage tank, comprising a total of approximately 1.2 acres (approximately 50,000 ft²). The site includes an emergency generator that operates approximately 100 hours annually.

As shown in **Table 2-2**, the CHP Santa Fe Springs Area Office has 122 uniformed CHP officers and 24 non-uniformed support personnel, and is operated 7 days per week, 24 hours per day by shift employees. Shifts generally run from 6 a.m. to early afternoon, early afternoon to 10 p.m., and 10 p.m. to 6 a.m. Most non-uniformed staff are present from 8 a.m. to 5 p.m., Monday through Friday.

Proposed Project Operations

Employees and Vehicle Equipment Use

To fulfill its law enforcement and public safety activities at all times, the proposed CHP facility would be staffed 7 days a week, 24 hours a day by shift employees, with shifts similar to those of the existing area offices.

The Proposed Project is projected to have 159 employees comprising 30 civilian support staff members and 129 uniformed CHP personnel over the next 10 years. The average vehicle miles traveled by each CHP staff person at the Project site would remain approximately the same as that for the existing area office. Overall, average vehicle miles traveled to and from the new office would increase incrementally based on the increased number of personnel who would be employed at the new office. Table 2-2 compares the number of employees associated with the existing and proposed facilities.

Table 2-2. Comparison of Staffing Levels at Existing Santa Fe Springs Area Office, and Proposed Santa Fe Springs Area Office

	Existing CHP Santa Fe Springs Area Office	Proposed CHP Area Office (10-year projection)
Employees (Total)	146	159
Uniformed Officers (Total)	122	129
Other Staff	24	30

Facility Operation

Operation of the CHP Santa Fe Springs Area Office would require periodic deliveries of automotive service equipment and materials (e.g., oil, lubricants, tires, etc.), fuel, office supplies and other equipment. Fuel would be delivered approximately monthly. Hazardous materials stored on site (e.g., used oil and used tires) would be transported approximately quarterly to an appropriate local hazardous waste facility for disposal or recycling. Fuel would be delivered approximately monthly. Other hazardous material (e.g., oil) would generally be delivered quarterly, or as needed.

Similar to the existing CHP Santa Fe Springs Area Office operations, the Proposed Project operations would include periodic office building alarm tests and vehicle siren tests during daily shift changes. Shift change tests are a mandatory practice that involves testing sirens, vehicle lights, and the vehicle camera. In general, as shifts change, CHP vehicle sirens would be tested briefly to ensure functionality before vehicles leave the project site. The office building alarm would be part of the fire protection system for the facility and would always be active. The alarm would be tested every 6 months and emit a loud alert typically lasting 30 seconds.

2.5 Permits and Approvals

The permits and regulatory compliance requirements, along with the responsible or permitting agency, are described for the Proposed Project in **Table 2-3**.

Table 2-3. Applicable Permit and Regulatory Requirements

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
Los Angeles Regional Water Quality Control Board	Clean Water Act Section 402 Porter Cologne Water Quality Control Act	National Pollutant Discharge Elimination System (NPDES) program regulates discharges of pollutants	Notification under NPDES General Construction Permit Compliance with NPDES Regional Municipal Stormwater Permit
South Coast Area Air Quality Management District	Regulation 10	Stationary Source Permits for emergency generator, refueling station, storage tanks	Permit to Construct and Permit to Operate
California Department of Transportation (Caltrans) – District 7	Section 660 of the California Streets and Highways Code	Potential encroachment into Caltrans right-of-way	Encroachment permit, if necessary
Southern California Edison (SCE)	SCE Policies and Requirements	Establish compliance with company policies	Encroachment permit and electric connection approval

Regulatory Agency	Law/Regulation	Purpose	Permit/ Authorization Type
Southern California Gas (SCG)	SCG Policies and Requirements	Establish compliance with gas company policies	Encroachment permit and gas connection approval
City of Norwalk	Storm water connection	Confirm stormwater infrastructure design requirements	Coordination with the City
Los Angeles County Fire Department	New water supply, fire hydrants, and sewer line connections	Establish water supply, fire hydrant, and sewer connections at the Project site	Conditional Water and Sewer Use and Connection Permits Coordinate with City

1.	Project Title	CHP Santa Fe Springs Area Office Replacement Project
2.	Lead Agency Name and Address	California Highway Patrol 601 N. Seventh Street, Building Sacramento, California 95811
3.	Contact Person, Phone Number and Email	Chuck King, Asst. Chief santa-fe-springs-comments@chp-ceqa.com
4.	Project Location and Assessor's parcel number (APN)	The project is located at 11401 Bloomfield Avenue in Norwalk, California. The project would develop one parcel totaling 6 acres (off of the existing APN 8025-003-902).
5.	Property Owner(s)	State of California
6.	General Plan Designation	Institutional
7.	Zoning	Institutional
8.	Description of Project	See Chapter 2, Project Description
9.	Surrounding Land Uses and Setting	The land that the Project site will be constructed on is currently owned and used by the Department of State Hospitals (DSH) and contains recreational facilities (landscaped lawn area, baseball field, basketball court, greenhouse, and a plant nursery) for residents of the hospital. Surrounding land uses include DSH-Metropolitan facilities to the north, south, and west of the Project site. Bloomfield Avenue borders the site on the east, and commercial/industrial buildings (ACI International, Fleetwash, and Kelly Pipe Company) are located further to the east.
10.	Other Public Agencies whose Approval or Input May Be Needed	Los Angeles Regional Water Quality Control Board (RWQCB), South Coast Air Quality Management District, (SCAQMD) Southern California Edison (SCE), Southern California Gas Company (SoCalGas), City of

Norwalk.

11. Hazards or Hazardous

Materials

The Project site is not located on the lists enumerated under Section 65962.5 of the Government Code, including, but not limited to, lists of hazardous waste facilities.

12. Native American Consultation

No Native American tribes traditionally and culturally affiliated with the project area have requested consultation pursuant to Public Resources Code section 21080.3.1 for the Proposed Project.

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This chapter of the Initial Study assesses the environmental impacts of the California Highway Patrol (CHP) Santa Fe Springs Area Office Replacement Project (Proposed Project) based on the environmental checklist provided in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual subsections below. Each section (3.1 through 3.20) provides a brief overview of the existing environmental conditions for that resource to help the reader understand the conditions that could be affected by the Proposed Project. In addition, each section includes a discussion of the rationale used to determine the significance level of the Proposed Project's environmental impact for each checklist question. For environmental impacts that have the potential to be significant, impacts will be further evaluated in an environmental impact report (EIR).

☐ Mandatory Findings of Significance

1 Environmental Factors Potentially Affected

2 The environmental factors checked below would potentially be affected by the Proposed 3 Project, as indicated by the checklist on the following pages. \square Aesthetics ☐ Land Use/Planning ☐ Agriculture and Forestry Resources ☐ Mineral Resources □ Air Quality ■ Noise ⊠ Biological Resources ☐ Population/Housing ⊠ Cultural Resources ☐ Public Services ☐ Recreation ☐ Geology/Soils ⊠ Greenhouse Gas Emissions ⊠ Tribal Cultural Resources ☐ Hazards and Hazardous Materials ☐ Utilities/Service Systems ☐ Hydrology/Water Quality ☐ Wildfire

Determination

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The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. They are based on a review of sources of information cited in this document, and the comments received, conversations with knowledgeable individuals; the preparer's personal knowledge of the area; and, where necessary, a visit to the site.

7 On the basis of this initial evaluation:

- ☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

3-8-17 Date

Date

Name: Chuck King, Asst. Chief

California Highway Patrol

3.1 **AESTHETICS**

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		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the project:				
a.	Have a substantial adverse effect on a scenic vista?				
b.	Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?				
C.	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d.	Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?				

3 3.1.1 **Regulatory Setting**

Federal Laws, Regulations, and Policies

5 No federal regulations are applicable to aesthetics in relation to the Proposed Project.

State Laws, Regulations, and Policies 6

In 1963, the California State Legislature established the California Scenic Highway Program, a provision of the Streets and Highways Code, to preserve and enhance the natural beauty of California (California Department of Transportation [Caltrans] 2018a). The state highway system includes designated scenic highways and those that are eligible for designation as scenic highways.

12 There are no designated or eligible scenic highways within the Project vicinity; the nearest eligible state scenic highway is State Route (SR) 57 located approximately 11 miles east of the Project site (Caltrans 2018b).

3.1.2 Environmental Setting

The Project site is located in northeastern City of Norwalk, California on a parcel adjacent to Bloomfield Avenue to the east (see Figure 2-1). The Project site is relatively flat and is within the northeastern corner of the DSH-Metropolitan hospital campus. The existing site contains a mowed lawn area with shrubs and mature trees and is occupied by a baseball field, basketball court, greenhouse and plant nursery, and a covered overhang. The Project site is characterized by the hospital facilities to the north, south, and west as well as commercial/industrial uses to the east of Bloomfield Avenue.

Hospital facilities located closest to the Project site include residences, treatment wards, an assembly hall (James Hall), a social gathering facility (the Oasis building), offices, a religious center, and a library. A transitional, state-licensed residential facility for adults who have mental illnesses, called Homes for Life, is also just north of the Project site along Elm Street. Figure 2-2 shows the Project site and surrounding area. The following sections provide further detail on the Project site's existing visual setting and sensitive receptors near the Project site.

Visual Character and Quality of the Site

As described above, the Project site is characterized by the hospital campus which is comprised of a combination of a grassy lawn area, landscaping, recreational facilities, and a greenhouse and nursery. The visual character is also influenced by the adjacent hospital facilities including residences, office buildings, the Oasis building, religious center and library. While the Project site is characterized by the hospital campus, the area surrounding the Project site to the east has an urban character marked by the industrial and commercial structures. The visual quality of the site is moderate and characteristic of surrounding hospital campus uses to the west.

Light and Glare

Nighttime lighting is necessary to provide and maintain safe environments. Light that falls beyond the intended area of illumination is referred to as "light trespass." The most common cause of light trespass is spillover light, which occurs when a lighting source illuminates surfaces beyond the intended area, such as when building security lighting or parking lot lights shine onto neighboring properties. Spillover light can adversely affect light-sensitive uses, such as residences, at night. Both light intensity and fixtures can affect the amount of light spillover. Modern, energy-efficient fixtures that face downward, such as shielded light fixtures, are typically less obtrusive than older, upward-facing light fixtures.

Glare is caused by light reflections from pavement, vehicles, and building materials, such as reflective glass, polished surfaces, or metallic architectural features. During daylight hours, the amount of glare depends on the intensity and direction of sunlight.

The most notable sources of lighting in the Project vicinity are from street lights on the surrounding roads, adjacent buildings on the hospital campus, lighting at the nearby industrial and commercial uses, and lighting at residential homes to the north and south. Vehicles traveling on Bloomfield Avenue are another source of lighting, particularly during nighttime hours.

Scenic Highways and Corridors

There are no officially designated or eligible to be designated state scenic highways within the vicinity of the Project site (Caltrans 2018b).

Viewer Sensitivity

Viewer sensitivity is another consideration in assessing the effects of visual change. Sensitivity is a function of factors such as the visibility of resources in the landscape, proximity of viewers to the visual resource, elevation of viewers relative to the visual resource, frequency and duration of views, number of viewers, and types and expectations of individuals and viewer groups.

Existing views of the Project site were captured from five key observation points (KOPs), as shown on **Figure AES-1**. These photographs have been selected as being representative of the types of visual resources that are present in each area.

Views of the Project site and vicinity from each of these KOPs are described as follows:

- **KOP 1**: This KOP shows a typical view of the southeastern corner of the Project site from Bloomfield Avenue and South Circle. This KOP captures a typical view from the perspective of motorists traveling north along Bloomfield Avenue. As shown in the photo, prominent features in the foreground include the road itself, mature trees, metal fencing, and overhead power lines and wooden utility poles. From this viewpoint, the baseball field, lawn area, and hospital facilities are also visible. In general, this viewpoint is urban in character marked by the road, fencing, landscaped trees, and power lines and poles.
- **KOP 2**: This KOP shows a typical view of the northeastern portion of the Project site from Bloomfield Ave and North Circle. This shows a typical view from the perspective of pedestrians and employees working at the commercial/industrial building to the east of this intersection. From this KOP, views include mature trees, flag poles, overhead utility poles and electric lines, grassy lawn area, paved sidewalks, and two-story hospital facilities can be seen. This viewpoint is urban in character marked by the road, utility poles, manicured lawn, and existing buildings.
- **KOP 3**: This KOP shows a view from an unoccupied residential cottage located immediately south of the Project site along South Circle, on the DSH-Metropolitan campus. From this KOP, a parking lot, the baseball field, mature trees, lawn area, and other hospital facilities can be seen. This viewpoint is urban and recreational in character marked by the mixed uses within and surrounding the site including the baseball field, manicured lawn, and hospital facilities.
- **KOP 4**: This KOP shows a view of the western portion of the Project site from James Hall, an assembly hall remodeled in 1992, situated west of the Project site on the DSH-Metropolitan campus. From this viewpoint, a paved driveway, grassy lawn, and mature trees are visible. The Elm Street Homes for Life is also partially visible as well.
- **KOP 5**: This KOP shows a typical view from Elm Street Homes for Life, which is located near the northwestern side of the Project site along Elm Street. This view

includes a parking lot, basketball court, lawn area, mature trees, and fencing. This viewpoint is urban and recreational in character marked by the basketball court, lawn, and parking lot.

Viewer Groups

Viewer groups in the vicinity of the Project site and their sensitivity to visual changes are described below. Viewer groups with visual access to the Project site are divided into the categories of hospital staff and patients, motorists, patrons and staff of nearby businesses, and residents.

Hospital Staff and Patients

As stated above, the Project site is surrounded by hospital facilities to the north, west and south. Patrons of these facilities primarily include hospital staff and patients. While staff may have a higher sensitivity due to their frequency and duration of views, staff are expected to be focused on job duties (e.g., attending to patients) and less so on views of the surrounding area. Viewer sensitivity of patients is moderate as they are typically at the hospital for health care purposes and their typical stay at a hospital is short-term. In addition, views looking out toward the Project site from nearby hospital buildings would be limited due to the number of windows exposed to the Project site. KOP 4 represents a typical view from James Hall, an assembly hall remodeled in 1992 on the hospital campus, which may be seen by hospital staff and patients.

Motorists

Motorists traveling on Bloomfield Avenue have views of the Project site (KOPs 1 and 2). Motorists' views would be temporary, and they would have limited expectations of the setting. This road is not considered to be a scenic vista or byway. As such, the sensitivity of motorists' views is considered low.

Patrons and Staff of Nearby Businesses

Industrial and commercial businesses are located to the east of the Project site along Bloomfield Avenue. Patrons of these establishments likely visit on an infrequent and temporary basis, with limited expectations of the surrounding setting. Employees would have a higher sensitivity due to their frequency and duration of views. However, nearby buildings are partially screened by landscaping trees, fencing, and utility poles along Bloomfield Avenue. Employees working at adjacent industrial and commercial businesses also have limited viewing expectations as the majority of their job functions are conducted indoors. As such, employees and patrons of nearby commercial/industrial businesses would have a reduced sensitivity.

Residential

As described above, Elm Street Homes for Life (transitional residential facility for homeless adults with mental illness) is located within the hospital campus immediately to the north of the Project site. Two other Homes for Life residences may have partial views of the Project site: Cedar Street Homes, along Cedar Street behind Elm Street Homes, and Birch Grove Homes, along North Circle Drive west of Cedar Street. Residents generally have a higher visual sensitivity due to their frequency and longer duration views of the Project site.





KOP 1: Existing view looking northwest towards the southern portion of the Project site from Bloomfield Avenue.



KOP 2: Existing view looking west towards the northern portion of the Project site from Bloomfield Avenue.

Prepared by:



Prepared for: California Highway Patrol Figure AES-2. Existing Views from KOPs 1 and 2

Santa Fe Springs Area Office Replacement Project Initial Study



KOP 3: Existing view looking north towards the southern portion of the Project site from an unoccupied residential cottage located immediately south of the Project site along South Circle.



KOP 4: Existing view looking east towards the Project site from James Hall, which is situated west of the Project site on the DSH-Metropolitan campus.

Prepared by:



Prepared for: California Highway Patrol Figure AES-3. Existing Views from KOPs 3 and 4

Santa Fe Springs Area Office Replacement Project Initial Study



KOP 5: Existing view looking southeast towards the Project site from Elm Street Homes for Life on the DSH-Metropolitan campus.

Prepared by:



Prepared for: California Highway Patrol Figure AES-4. Existing View from KOP 5

3.1.3 Discussion of Checklist Responses

a. Adverse effects on scenic vistas—Less than Significant

A scenic vista is generally considered a view of an area that has remarkable scenery or a natural or cultural resource that is indigenous to the area. No scenic vistas have been officially designated for the Project site or vicinity in the City's General Plan. The Project site is in an urban area surrounded by hospital campus facilities and industrial and commercial uses.

Construction activities associated with the Proposed Project would cause some temporary visual changes in the Project site. A variety of construction equipment, as listed in Section 2.4.2, "Construction," would be present during construction. The temporary presence of this equipment and associated construction activities would be out of character for the area as the site is within a hospital campus. No equipment would be present on the Project site after completion of the construction phase of the Proposed Project. Because construction would be temporary and the site is not located within a scenic vista, construction impacts would be less than significant.

The Proposed Project would result in aboveground physical changes to the Project area, including the presence of:

- buildings and enclosures,
- aboveground tanks,
- parking areas,
- 6-foot-tall concrete-block masonry fence with 2-foot metal pickets along with metal rolling gates,
- 24-hour exterior lighting meeting CHP safety protocols,
- three metal flagpoles, each 25 feet (ft) high,
 - CHP monument sign near the visitor parking area,
- vehicle fueling area that would include a canopy over the fueling area, and
 - 148-foot tall steel lattice communications tower.

Figure 2-3 shows the Project's conceptual site plan, and Figure 2-4 shows conceptual cross-section views of the replacement CHP Area Office. The Proposed Project would result in a visual change as the site is mostly undeveloped consisting of a mowed lawn area, shrubs and mature trees, a baseball field, basketball court, and a greenhouse and plant nursery. Motorists traveling on Bloomfield Avenue would have clear but fleeting views of the CHP Area Office. Employees working at the commercial and industrial buildings located along Bloomfield Avenue would also have views of the CHP Area Office, though their sensitivity is somewhat reduced as their views would be limited by the number of windows exposed toward the Project site and are expected to be focused on their work. Residents, patients and hospital

employees to the north and west of the CHP Area Office would potentially have clear views of the main office building and the communications tower (see KOPs 4 and 5).

The 148-foot-tall communications tower would be the most prominent visual feature on the Project site. The specific tower location on the Project site is unknown at this time and will be identified during final design but, due to the tower's height, it would likely be visible from all KOPs. The tower would be the tallest structure in the Project area and would likely be seen from a wide area around the Project site. It would be most prominent to viewers on the hospital campus including residents, employees, and patients. However, as stated above, the tower is not projected to block or alter any scenic vistas. As discussed above, patients and staff working at the hospital have a somewhat reduced sensitivity to the surrounding viewshed due to the limited number of windows exposed to the Project site. Hospital staff are also expected to be focused on their job functions and patients are expected to be at the hospital for health care purposes, not for viewing pleasure. Thus, both viewer groups are thought to have limited expectations for scenic views.

Although the CHP Area Office would be visible to facilities associated with the hospital, passerby motorists, and patrons/businesses to the east of the Project site, these changes would be generally consistent with the current urban visual character of the area and would not substantially degrade the quality of views for these viewer groups. The CHP Area Office would substantially alter views from Elm Street Homes for Life. The CHP Area Office would also be partially visible to residents of Birch Grove Homes, located along North Circle Drive west of Cedar Street, and Cedar Grove Homes located along Cedar Street behind Elm Street Homes for Life, though such views are partially obscured by mature trees. While the Project would result in a permanent visual change, there are no designated scenic vistas in the Project area that would be affected by the Proposed Project.

Therefore, overall, this impact would be **less than significant**.

b. Damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway—No Impact

The Project site is not visible from any officially designated or eligible to be designated state scenic highway. Therefore, the Proposed Project would not adversely affect views from a state scenic highway. **No impact** would occur.

c. Changes to existing visual character or quality in non-urbanized areas or conflict with applicable zoning and other regulations governing scenic quality in urbanized areas—Less than Significant

The nature of the Project site's existing visual character is urban, represented primarily by the hospital campus buildings nearby, recreational facilities, and industrial and commercial buildings to the east of Bloomfield Avenue. The Project site itself is flat with a grassy lawn, a baseball field, basketball court, a covered overhang, and a greenhouse and nursery.

Construction activities associated with the Proposed Project could result in temporary changes to the visual character of the area due to the presence of construction crews and

heavy equipment. However, the duration of construction would be temporary (anticipated to last for approximately 2 years) and the scale of changes in views would be limited to the surrounding businesses, hospital employees and patients, passerby motorists, and some residents. Therefore, during construction, this impact would be less than significant.

Figure 2-3 and Figure 2-4 show conceptual site plans and cross-sectional views of the replacement CHP Area Office. As described in impact discussion a., structures that would be most prominent include the exterior concrete wall surrounding the parking lot, the main office building, and the communications tower. The main area office building and communications tower would introduce a greater degree of development on the Project site when compared to the existing hospital buildings, which are at a more human scale¹. However, the proposed facilities would be compatible in scale and type with other surrounding development including the industrial and commercial buildings to the east of the Project site and would be consistent with the urban nature of the Project vicinity. Landscaping would also be installed on the Project site, which would improve the aesthetic conditions at the Project site. Therefore, this impact would be **less than significant**.

d. New sources of light or glare—Less than Significant

Several existing sources of light and glare are present in the area surrounding the Project site. Street lights are located on roads surrounding the Project site and outside nearby hospital campus buildings. The industrial and commercial buildings to the east of the Project site have parking lot lighting as well. As a result, nighttime lighting is already present in the area. During the day, the most notable source of glare is from sunlight reflecting off passing vehicles as well as the rooftops and sides of the surrounding buildings.

Operation of the Proposed Project would include use of nighttime security lighting throughout the site. This would include lighting dispersed throughout the facilities, as well as in the parking area, illuminating three on-site flag poles and illuminating the CHP monument sign (see Figure 2-3 in Chapter 2, *Project Description*). Aside from the flag pole lighting, all exterior lighting would be directed downward to reduce light dispersion. The flag poles require specialized lighting because of their height. However, flagpoles are typically located near the front of the office building within the interior of the site, so the upward-aimed lighting would not spill over onto adjacent properties, and would not create a substantial visual contrast with the night sky.

Nighttime lighting at the Project site could be visible to motorists driving by. However, all lighting except for the flagpole lighting would be directed downward and thereby prevent light from falling onto surrounding properties.

¹ Human scale is an architectural and planning term that refers to a type of building design that uses familiar forms and elements interpreted in human dimensions, such that larger buildings do not dwarf pedestrians. Examples could include articulating the number of floors in a building, dividing buildings horizontally, using changes in building mass, or direction, or a distinct pattern of divisions on surfaces, windows, and small scale lighting. (ChangeLab 2019).

The windows and buildings of the new structures and steel material of the communications tower could create new sources of glare. Daytime glare can cause an annoyance for viewers and a potential safety hazard for motorists. However, the proposed buildings and ancillary structures would not significantly affect viewers or motorists because they would be located away from roadways behind the perimeter wall and fencing and would not generate substantial glare. The communications tower is not anticipated to represent a source of glare that would be substantial enough to create annoyance relative to existing conditions. As a result, the impacts related to glare and nighttime lighting would be **less than significant**.

3.2 AGRICULTURAL RESOURCES

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the Project:				
a.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to nonagricultural use?				
b.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d.	Result in the loss of forest land or conversion of forest land to non-forest use in a manner that will significantly affect timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, or other public benefits?				
e.	Involve other changes in the existing environment that, because of their location or nature, could result in a conversion of Farmland to a nonagricultural use?				

3.2.1 Regulatory Setting

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4 Federal Laws, Regulations, and Policies

No federal regulations are applicable to agricultural resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

Farmland Mapping and Monitoring Program

The Farmland Mapping and Monitoring Program (FMMP), administered by the California Department of Conservation (CDOC), produces maps and statistical data for use in analyzing impacts on California's agricultural resources (CDOC 2016a). FMMP rates and classifies agricultural land according to soil quality, irrigation status, and other criteria. Important Farmland categories are as follows (CDOC 2016a):

Prime Farmland: Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. These lands have the soil quality, growing season, and moisture supply needed to produce sustained high yields. Prime Farmland must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Farmland of Statewide Importance: Farmland similar to Prime Farmland, but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Farmland of Statewide Importance must have been used for irrigated agricultural production at some time during the 4 years before the FMMP's mapping date.

Unique Farmland: Farmland of lesser quality soils used for the production of the state's leading agricultural crops. These lands are usually irrigated but might include non-irrigated orchards or vineyards, as found in some climatic zones. Unique Farmland must have been cropped at some time during the 4 years before the FMMP's mapping date.

Farmland of Local Importance: Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act of 1965 (commonly referred to as the Williamson Act) allows local governments to enter into contracts with private landowners for the purpose of preventing conversion of agricultural land to non-agricultural uses (CDOC 2016b). In exchange for restricting their property to agricultural or related open space use, landowners who enroll in Williamson Act contracts receive property tax assessments that are substantially lower than the market rate.

3.2.2 Environmental Setting

The Proposed Project is located in a developed area in the City of Norwalk. There are no agricultural operations immediately surrounding the Project site. Apart from recreational, storage, and a greenhouse/nursery structures on the 6-acre Project site, the majority of the site is a mowed lawn area with shrubs and trees. The greenhouse/nursery structures on the Project site are actively used as patient treatment space. The site is zoned as "industrial" by the City of Norwalk – a designation for land uses that provide public services, not agriculture (City of Norwalk General Plan 2014). The City of Norwalk Zoning Ordinance does not contain an Agriculture Zone, and therefore no land within the City limits is zoned for agriculture (City of Norwalk General Plan 1996). Historically, according to hospital staff, the hospital land

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including the Project site, were agricultural prior to hospital construction (before 1926), but historical maps did not indicate signs of agricultural uses (Avocet Environmental, Inc [Avocet] 2018). Following the construction and early operation of the hospital, the Project site has had patient units, grassed and landscaped areas and a small stream channel around 1928. No Prime Farmland or Farmland of Statewide or Local Importance is designated in the City of Norwalk or surrounding area, including the Project site by the California Department of Conservation (CDOC 2016c). The Project site has not been surveyed for agricultural land in FMMP maps; however, if the Natural Resource Conservation Service (NRCS) classifies land use capability as class I or class II it may also be considered "prime agricultural land" (Government Code 51201). The soil in the Project site is Urban land-Thums-Pierview complex (1134), which has a land capability classification of 3e (NRCS 2018). This classification is not considered prime agricultural land. However, the NRCS farmland classification of this soil is "prime farmland if irrigated" (NRCS 2018). The minimal mapping unit for farmland mapping categories is 10 acres, making the 6-acre project area too small to be designated as prime farmland by the CDOC (CDOC 2016a). Therefore, it would likely be incorporated into the surrounding map classifications as "urban and built up land" (CDOC 2016a). No land under Williamson Act contract is located on or near the Project site (CDOC 2016d).

3.2.3 Discussion of Checklist Responses

a, e. Convert farmland to non-agriculture use, or result in conflicts with or loss of agricultural or forest lands—*Less than Significant*

As described above, some trees in the lawn area, a greenhouse, and small plant nursery are present on the Project site. No land within or adjacent to the Project area is classified as farmland by the FMMP, however the NRCS classified the soil on the Project site as "prime farmland if irrigated". Even with the "prime farmland if irrigated" soil designation, the parcel is not well suited for farming due to its incompatible land use designation, conflicting surrounding urban and industrial land uses, and its relatively small size. The construction of the Proposed Project would result in the removal of the existing greenhouse and plant nursery and would result in a minor reduction of area available for agricultural activities, but would not result in significant conversion of agricultural land to non-agricultural use. Operation of the Proposed Project would not affect agricultural or forest lands in the area. Likewise, no agricultural or forestry activity is present on the existing CHP Santa Fe Springs facility property; therefore, decommissioning and transferring these existing facilities would not result in the conversion of farmland to non-agricultural use. This impact would be **less than significant**.

b-c. Conflict with existing zoning for agriculture use, Williamson Act Contract, or forest land or timber land—*No Impact*

The site is zoned for institutional use and not for agricultural use by the City of Norwalk. Existing land uses in the vicinity of the Project site are institutional, low-density residential, industrial and commercial. There are currently actively-used greenhouse and plant nursery structures on site; no other agricultural activity is immediately surrounding the Project site and no land on or immediately surrounding the site is enrolled in a Williamson Act contract. There are also no forest or timber lands. Therefore, the Proposed Project would not conflict

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1	with existing zoning for agriculture use or forest land, or with Williamson Act contracts.
2	There would be no impact .

d. Result in the loss of forest land or conversion of forest land to non-forest use—No Impact

No forestry resources currently exist in the Project site. The unpaved portions of the Project site primarily consist of mowed lawn areas with shrubs and trees, while others have ruderal vegetation and bare ground. Construction and operation of the Proposed Project would not affect forest land. **No impact** would occur.

3.3 AIR QUALITY

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		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
esta mar dist	en available, the significance criteria blished by the applicable air quality hagement district or air pollution control rict may be relied upon to make the following erminations. Would the project:				
a.	Conflict with or obstruct implementation of the applicable air quality plan?				
b.	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?				
C.	Expose sensitive receptors to substantial pollutant concentrations?				
d.	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

2 3.3.1 Regulatory Setting

The Clean Air Act is implemented by the United States (U.S.) Environmental Protection Agency (USEPA) and sets ambient air limits, the National Ambient Air Quality Standards (NAAQS), for six criteria pollutants: particulate matter of aerodynamic radius of 10 micrometers or less (PM10), particulate matter of aerodynamic radius of 2.5 micrometers or less (PM2.5), carbon monoxide (CO), nitrogen dioxide (NO₂), ground-level ozone, and lead. Of these criteria pollutants, particulate matter and ground-level ozone pose the greatest threats to human health.

The California Air Resources Board (CARB) sets standards for criteria pollutants in California that are more stringent than the NAAQS and include the following additional contaminants: visibility-reducing particles, hydrogen sulfide, sulfates, and vinyl chloride.

The Proposed Project is located in Southern Los Angeles County, which is within the South Coast Air Basin (SCAB or Basin). The SCAQMD manages air quality in the basin for attainment and permitting purposes. The Basin is currently in nonattainment of state ambient air quality standards for ozone, PM10, and PM2.5. For federal ambient air quality standards, the SCAB is

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in nonattainment for ozone, PM2.5, and lead². All other contaminants are in attainment or unclassified for state and federal ambient air quality standards (CARB 2018, USEPA 2018a, USEPA 2018b, SCAQMD 2016).

The SCAQMD has established guidelines for determining significance for air quality analyses (SCAQMD 2015), which are shown in **Table AQ-1**. Projects below these mass emission thresholds would not have a significant impact on air quality. The *Final 2016 Air Quality Management Plan* (SCAQMD 2017a) presents the District's plan for attaining federal air quality standards, particularly for ozone and PM2.5. A project must be consistent with the AQMP in order to be considered to have no significant adverse impact on air quality. Appendix IV-A (SCAQMD 2017b) contains SCAQMD's proposed stationary and mobile source control measures, including some that may be applicable to the Proposed Project.

Table AQ-1. Air Quality Significance Thresholds for Project Construction and Operations

	Mass Daily Thresholds					
Pollutant	Construction Operation tant Pounds/Day Pounds/Day					
NOx	100	55				
ROG	75	55				
PM10	150	150				
PM2.5	55 55					
SOx	150 150					
со	550 550					
Lead	3 3					
	Toxic Air Contaminants (TACs), Odo	r, and GHG Thresholds				
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)					
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402					

NOx = oxides of nitrogen, ROG = reactive organic gases, PM10 = particulate matter of aerodynamic radius of 10 micrometers or less, PM2.5 = particulate matter of aerodynamic radius of 2.5 micrometers or less, SOx = sulfur oxide, CO = carbon monoxide

Source: SCAQMD 2015.

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² The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. On December 31, 2010, the Los Angeles County portion of the SCAB was designated as nonattainment for the 2008 lead NAAQS due to exceedances measured near a large lead-acid battery recycling facility.

3.3.2 Environmental Setting

As noted above, the Project site is located in the City of Norwalk in southern Los Angeles County in the SCAB. The SCAB is California's largest metropolitan region. The area includes the southern two-thirds of Los Angeles County, all of Orange County, and the western urbanized portions of Riverside and San Bernardino counties. It covers a total of 6,480 square miles and is home to nearly 17 million people (CARB 2011).

The Basin is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The topography and climate of Southern California combine to make the Basin an area of high air pollution potential. A warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer, which traps the pollutants near the ground. Light winds can further limit ventilation. Additionally, abundant sunlight triggers the photochemical reactions which produce ozone and the majority of the particulate matter (SCAQMD 2017a). The average temperature in the Norwalk area is 67 degrees Fahrenheit (°F) and it receives an average of 13 inches of rain per year (World Climate 2018).

The portion of Los Angeles County that contains the Project site, within the Basin, is designated as a federal and state non-attainment area for ozone and PM2.5 and federal nonattainment for lead. For PM10, it is in state non-attainment and federal maintenance. It is in attainment or unclassified for all other federal and state criteria air pollutants. Major sources of air pollution in the Basin include: on- and off-road vehicles, fuel combustion, architectural coating and consumer products, and watercraft (SCAOMD 2017a). Major sources of lead in Los Angeles County include industrial sites, aircraft, trains, and construction equipment (SCAQMD 2012). The Trojan Battery Company, which designs and manufactures deep cycle batteries, is located in Santa Fe Springs (approximately 1.9 miles northeast of the Project site). The battery company has a source-oriented monitoring station located 100 meters southwest of the facility. This monitor has demonstrated that the facility is typically below the ambient air quality standard for lead. However, elevated outdoor levels of lead were detected in 2018 and the SCAQMD issued a Notice of Violation to the facility and later the SCAQMD Hearing Board adopted an Order of Abatement requiring Trojan Battery Company to take a number of steps to reduce lead emissions (SCAOMD 2012 Lead SIP, SCAOMD 2018). The remaining areas of non-attainment for lead in Los Angeles County are near the Exide Technology Facilities and Quemetco Inc. Facility in Vernon, Commerce, and City of Industry.

Sensitive receptors are those segments of the population most susceptible to poor air quality: children, the elderly, and individuals with pre-existing serious health problems affected by air quality (e.g., asthma) (CARB 2005). Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. The Project site is on land sectioned off from the existing DSH-Metropolitan campus. Medical, residential, industrial, and office land uses are located near the Project site. DSH-Metropolitan has multiple buildings within 600 ft of the project area. The DSH-Metropolitan site has long-term care facilities and transitional housing which would make exposure to potential air pollutants at some of these facilities similar to residential exposure for adults. Similarly, Homes for Life, which is located approximately 20 ft from the edge of the Project site on the DSH-Metropolitan campus, has transitional housing that would have similar residential exposure for adults. The nearest private residences are located on Volunteer Avenue beginning 1,060 ft to the southwest. Plaza de la Raza Child Development

Services is 825 ft to the north and Vickies Kids Family Daycare is 1,775 to the southwest. Lakeland Elementary School is 3,250 ft northwest, while the nearest middle school and high school are located more than a mile away from the Project site. Kaiser Medical Clinic is 2,800 ft south of the Project site. Interstate 5 is located 1 mile southwest of the Project site.

3.3.3 Discussion of Checklist Responses

a. Conflict with or obstruct implementation of the applicable air quality plan—Less than Significant

A project is deemed inconsistent with air quality plans if it would result in population and/or employment growth that exceeds growth estimates included in the applicable air quality plan, which, in turn, would generate emissions not accounted for in the applicable air quality plan emissions budget. Therefore, projects need to be evaluated to determine whether they would generate population and employment growth and, if so, whether that growth would exceed the growth rates included in the relevant air quality plans. The Proposed Project's plans include increasing the number of existing employees by 10 over a decade. The SCAQMD's Final 2016 Air Quality Management Plan presents the District's plan for attaining federal air quality standards, particularly for ozone and PM2.5 (SCAQMD 2017a). Since the air quality plan applicable to the Proposed Project includes population growth projections of roughly 1 million additional people each decade (SCAQMD 2017a), the Proposed Project would not result in growth exceeding estimates and is therefore consistent with the air quality plan.

The Proposed Project would follow all federal, state, and local regulations related to stationary and area sources of air pollutants, and in particular, the chemical storage tanks, refueling pumps, and emergency generator. In addition, construction will follow local air district rules and regulations for fugitive dust. Therefore, because the Proposed Project would be consistent with the applicable general plan policies and would comply with all applicable regulations for sources of air pollutants, the Proposed Project would have a **less-than-significant impact** and would not obstruct or conflict with applicable air quality plan.

b. Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area—*Potentially Significant*

During construction of the Proposed Project, the combustion of fossil fuels for operation of fossil-fueled construction equipment, material hauling, and worker trips would result in construction-related criteria air pollutant emissions. These emissions will primarily include fugitive dust emissions of PM10 and PM2.5 as well as ozone precursor emissions of oxides of nitrogen (NOx). As shown in Table AQ-1, the Project site is in a region that is designated in non-attainment for ozone, lead, PM10, and PM2.5. It is assumed that projects that conform to the General Plan and do not have mass emissions exceeding the screening level significance thresholds would not create a cumulatively considerable net increase in emissions. The Proposed Project would comply with the SCAQMD's Rule 403, Fugitive Dust, which would minimize particulate matter emissions during the project's construction. As discussed above, during construction, PM10, PM2.5, and NOx emissions, which are an ozone precursor, could exceed the daily significance threshold. Depending on the specific construction schedule and

construction equipment that will be used for the project construction, these emissions could be **potentially significant**. These emissions will be quantified and further analyzed in the EIR.

Operational criteria air pollutant emissions would be generated by fossil-fueled equipment and motor vehicles, building energy use, and an on-site refueling pump. These emissions will primarily result in fugitive dust emissions of PM10 and PM2.5. While the operational emissions will be significantly lower than the construction emissions, these emissions will be fully quantified in the EIR and may be **potentially significant** depending on the amount of fugitive dust emissions from driving on roads.

c. Expose sensitive receptors to substantial pollutant concentrations — *Potentially Significant*

Construction

During project construction, diesel particulate matter (DPM) and gasoline fuel combustion emissions that are classified as toxic air contaminants (TACs) could be emitted from construction equipment. The construction period for the proposed CHP area office facility is short in duration (approximately 24 months). Due to the variable nature of construction activities, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically operating within an influential distance that could result in the exposure of sensitive receptors to substantial concentrations. These emissions could expose sensitive receptors to substantial pollutant concentrations and will be investigated further in the EIR and therefore is **potentially significant**.

Operation

During Proposed Project operations, DPM could be emitted from the diesel-powered emergency generators. In addition, various gasoline-related TACs would be emitted by the refueling pump station and vehicles idling in the parking lots. TACs could include such chemicals as benzene, toluene, ethylbenzene, 1,3-butadiene, acrolein, and xylenes.

Residential and long-term medical care sensitive receptors are present in the project area. The Proposed Project's emissions associated with testing of the diesel-powered emergency generator, refueling pump station, and vehicle idling could emit TACs that could expose sensitive receptors to substantial air pollutant concentrations and will be quantified and evaluated for health impacts in the EIR. Thus, this impact is **potentially significant**.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people—*Less than Significant*

The Proposed Project's construction- and operation-related activities would emit the criteria pollutants discussed above as well as potentially odor-causing emissions. Diesel exhaust from construction activities may temporarily generate odors while construction of the Proposed Project is underway. Once construction activities have been completed, these odors would cease. Operational activities would also generate odors, mainly associated with gasoline and diesel fuel and exhaust and other oils and lubricants used for automobile repair; these odors

would be short-lived and would occur intermittently. Odors from gasoline refueling would be minimized with the use of required vapor recovery systems. Vehicle idling at the site would be minimized to the extent feasible and so would not be likely to cause odor issues for nearby sensitive receptors. Based on observations of odorous evidence at another CHP facility visited by the document authors in March 2015, odors from evidence would not be detectible outside of the evidence storage area. The land uses associated with this project are not ones that are typically odorous and are not routinely subject to SCAQMD Rule 402. Impacts related to potential other emissions adversely affecting a substantial number of people are thus expected to be **less than significant**.

3.4 BIOLOGICAL RESOURCES

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld the Project:				
a.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?				
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS?				
C.	Have a substantial adverse effect on state or federally protected wetlands (including marshes, vernal pools, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means?				
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e.	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f.	Conflict with the provisions of an adopted habitat conservation plan (HCP); natural community conservation plan; or other approved local, regional, or state HCP?				

3.4.1 Environmental Setting

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The Project site is located on a relatively flat 6-acre parcel that will be carved out of the existing 165-acre campus on the existing DSH property. Existing structures on the site include a baseball field, greenhouse, and plant nursery. A walking path is located within the site on

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- the west side, beginning at North Circle Drive and extending south to South Circle Drive.

 Surrounding land uses include DSH's facilities, Bloomfield Avenue, and commercial/industrial uses.
- The Project site contains a maintained turf grass area with shrubs and trees. No native vegetation communities occur on the site. The various existing structures and trees on the Project site provide suitable habitat for nesting birds and roosting bats.
 - No USFWS-designated critical habitat is located within or adjacent to the Project site.

Special-Status Species

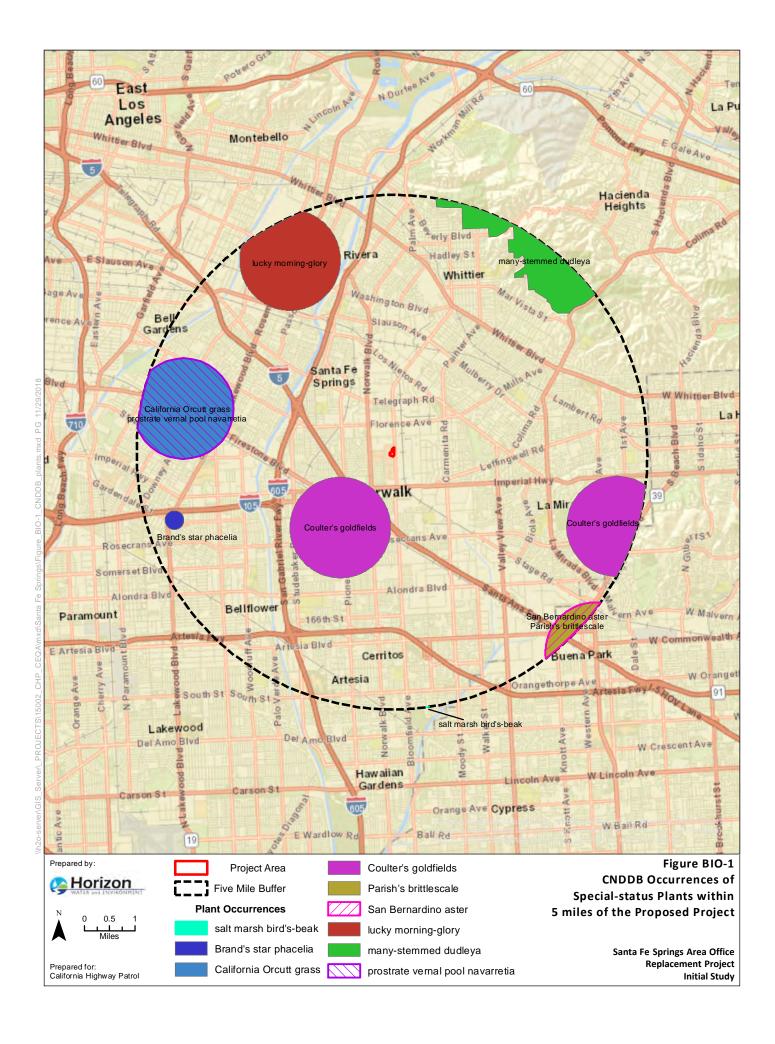
Special-status Plants. Thirty-nine sensitive plant species were identified in database searches associated with the Project (CDFW 2018, USFWS 2018a, CNPS 2018). Appendix A: Special-Status Species List discusses special-status plants and their potential to occur within the Project site. **Figure BIO-1** also provides locations of these species that occur within a 5-mile radius of the Project site. No special-status plants were observed within the Project site. Special-status plants are protected by state and federal regulations.

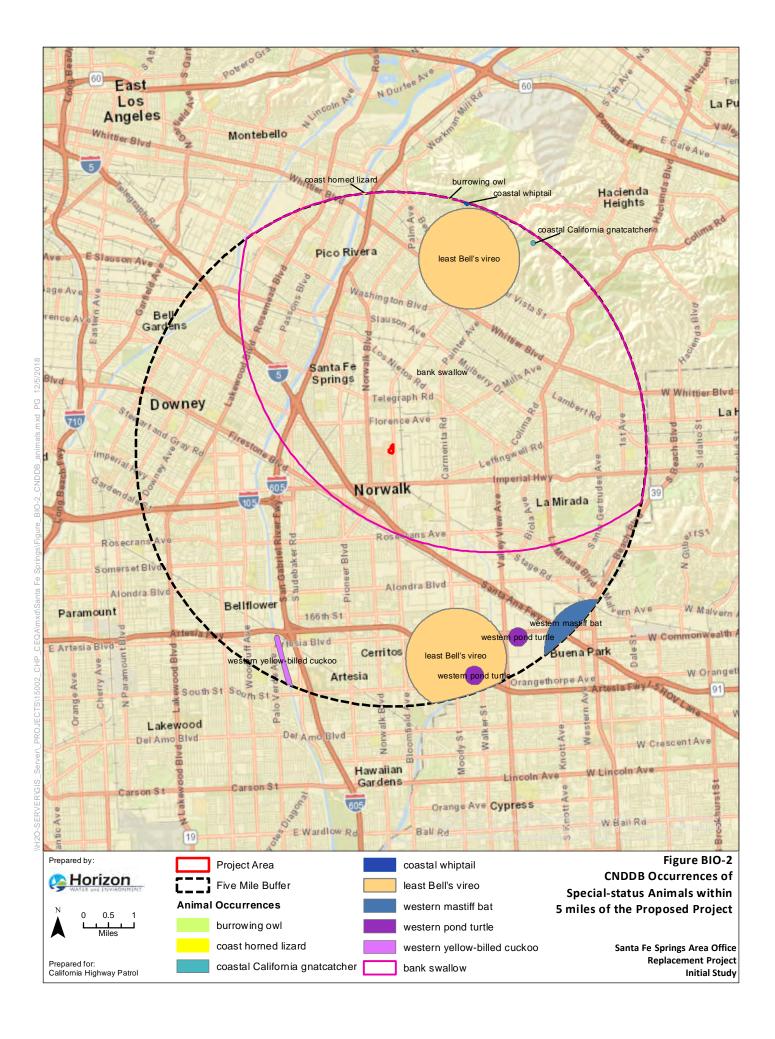
Special-status Wildlife. Thirty-three special-status wildlife species (including one amphibian, six reptiles, 18 birds, seven mammals, and one fish species) were identified in database searches associated with the Project (CDFW 2018, USFWS 2018a). Appendix A: Special-Status Species List discusses special-status wildlife and their potential to occur within the Project site. **Figure BIO-2** also provides locations of these species that occur within a 5-mile radius of the Project site. Of the 39 species identified, only two wildlife species (Cooper's hawk and burrowing owl) have a potential to occur on site due to the presence of suitable and marginally suitable habitat. The Project site is not within Critical Habitat for any wildlife species (**Figure BIO-3**). Special-status wildlife are protected by state and federal regulations.

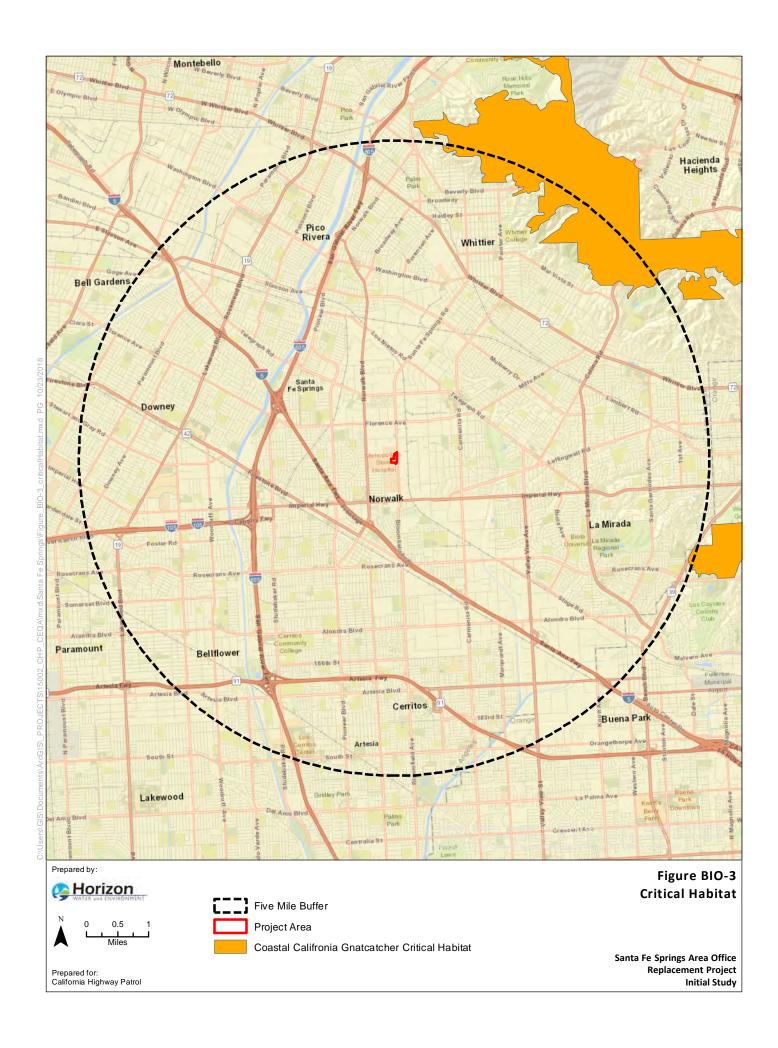
For the purposes of this assessment, special-status species are those that are listed as rare, species of concern, candidate, threatened, or endangered by USFWS or the CDFW. Special-status plant and animal species with the potential to occur in the Proposed Project area were identified through a review of the following resources:

- USFWS Information for Planning and Consultation Report (USWFS 2018a);
- California Natural Diversity Database (CNDDB) queries for the nine USGS 7.5-minute quadrangles containing and surrounding the Project site, Los Angeles, El Monte, Baldwin Park, South Gate, Whittier, La Habra, Long Beach, Los Alamitos and Anaheim (CDFW 2018);
- California Native Plant Society's (CNPS's) Inventory of Rare and Endangered Plants of California query for the nine U.S. Geological Survey (USGS) 7.5-minute quadrangles containing and surrounding the Project site (CNPS 2018); and
- eBird.org (eBird 2018).

Special-status species with the potential to occur in the Proposed Project area are provided in Appendix A.







3.4.2 Discussion of Checklist Responses

a. Substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species—*Potentially Significant*

Based on searches of the CNDDB, USFWS Information for Planning and Consultation Report, and the CNPS Inventory of Rare and Endangered Plants, 39 sensitive plant species and 33 special-status wildlife species were identified as historically occurring within 5 miles of the Project site or have potential to occur in the Project site vicinity (CDFW 2018, USFWS 2018a, CNPS 2018). Appendix A lists all of these special-status plant and wildlife species. Impacts to special-status species could be *potentially significant* and will be further evaluated in the EIR.

b. Substantial adverse effect on any riparian habitat or other sensitive natural community—*No Impact*

Landscaped and ruderal/disturbed vegetation communities occur on the Project site. No riparian habitat or other sensitive natural community is present at the site. Therefore, no impact to riparian habitat or other sensitive natural community would occur.

c. Substantial adverse effects on federally protected wetlands—No Impact

A search of the USFWS National Wetlands Inventory revealed no wetlands on or adjacent to the Project site. Furthermore, no wetland features or waters of the U.S. were observed on the Project site during the November 1, 2018, reconnaissance site visit. Therefore, the Project site does not support any federally protected wetlands or waters of the U.S. as defined by Section 404 of the Clean Water Act (CWA); therefore, the project would result in **no impact** on federally protected wetlands.

d. Substantial interference with wildlife movement, established wildlife corridors, or the use of native wildlife nursery sites—*Potentially Significant*

The Proposed Project would not interfere with the movement of any native or migratory wildlife species because the Project site serves limited to no value as a wildlife movement corridor; however, nesting birds could potentially use the ground squirrel burrows, shrubs, and trees within and immediately adjacent to the site. If birds nest within the Project site, this could be considered as a native wildlife nursery site. Thus, the Proposed Project's impacts to nesting birds would be **potentially significant**; therefore, these impacts will be further analyzed in the EIR.

e. Conflict with local policies or ordinances protecting biological resources—No Impact

The Proposed Project would not conflict with the City of Norwalk's Conservation Element (1996) (or any other local policies and ordinances) protecting biological resources (see

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- Appendix A). Therefore, implementation of the Project would result in **no impact** arising from conflicts with local ordinances and policies protecting biological resources.
 - f. Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan, or other approved local, regional, or state HCP—No Impact

No adopted regional HCPs or natural community conservation plans (NCCPs) exist for the City of Norwalk (USFWS 2018b). The Project site is not located within the planning area nor is it under the jurisdiction of an adopted HCP or a NCCP. Therefore, implementation of the Proposed Project would not conflict with the provisions of any adopted HCP, NCCP, or any other approved local, regional, or state HCP, and there would be **no impact.**

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Chapter 3. Environmental Checklist

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3.5 CULTURAL RESOURCES

		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Wo	uld the project:				
a.	Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?				
b.	Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?				
c.	Disturb any human remains, including those interred outside of formal cemeteries?	\boxtimes			

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3.5.1 Environmental Setting

The following text, derived from the cultural resources study for the Proposed Project (Horizon 2019), briefly summarizes the Environmental Setting for the Project region and site. A more detailed review will be provided in the EIR analysis.

Prehistory

Research indicates that people have been living in the area now known as Los Angeles County for at least 11,000 years. The first inhabitants were nomadic hunters of large game, who moved westward into the Los Angeles Basin when the great interior Pleistocene lakes began to dry up. As the big game species died out, people became more dependent on plants and small animals for sustenance; on the coast, shellfish and fish, were important foods. By around 7,000 years ago, populations appear to become more sedentary, both inland and along the coast. Seeds and plants become increasingly important, as evidenced by the large number of milling stones that appear around this time. Spears, along with the dart and atlatl, were replaced with the bow and arrow when they were introduced to the region around 2,000 years ago. This was about the same time that the Gabrielino moved into the area, likely pushing out ancestral Chumash peoples. Settlement patterns shifted from small semipermanent villages, to large permanent residential communities surrounded by smaller residential encampments. The Gabrielino inhabited the San Fernando Valley and the Los Angeles Basin, including much of present-day Orange County, when the Spanish first arrived in the region. They also occupied the off-coast islands of San Nicolas, Santa Barbara, Santa Catalina, and San Clemente. Because the population was quickly conscripted by the Spanish missionaries, little detail has been recorded about the Gabrielino lifeways prior to the mission period. However, they have been described as the "wealthiest, most populous and most powerful ethnic nationality in aboriginal southern California, their influence spreading as far north as the San Joaquin Valley Yokuts, as far east as the Colorado River, and south into Baja

1 California" (Bean and Smith 1978). Only the Chumash, their neighbors directly to the north, held a similar status.

The Spanish arrived in Southern California in 1769, where they established a mission in modern-day San Diego. Soon thereafter, in 1771, they built Mission San Gabriel Arcangel near the Rio Hondo, about 13 miles north of the Project site.

The Spanish quickly established themselves in the region and conscripted the local Native American population to work at the missions and numerous pueblos that were settled in the late 1700s to support the missions. Land grants were also made to private citizens by the Spanish, and then Mexican governments. The Project site is within the boundaries of Rancho Santa Gertrudes (Kyle et al. 2002).

Like the fate of many ranchos after California became part of the United States in 1848, the lands of Rancho Santa Gertrudes were subdivided and sold at auction. The property that was to become the City of Norwalk changed hands many times, but the city was mapped in 1974 and it was officially named Norwalk in 1877 (City of Norwalk 2018).

Department of State Hospitals-Metropolitan Campus

The Project site is located at the east edge of the DSH-Metropolitan (formerly known as Metropolitan State Hospital) campus adjacent to Bloomfield Avenue in the City of Norwalk. Originally known as DSH-Metropolitan, the facility was constructed on 300 acres in 1915 as a state hospital devoted to the treatment of California's mentally ill residents.

Norwalk was the sixth mental institution in California, and was intended to accommodate up to 2,000 patients to alleviate overcrowding in the system. Its actual development, however, was gradual, and when it opened in 1916, Norwalk had only 105 residents (all male) and 21 employees on site.

Development of DSH-Metropolitan accelerated during the 1920s, when some of the largest and most important buildings on the site were constructed. Although the pace of development slowed in the 1930s, by the last years of the decade DSH-Metropolitan had 47 buildings, a fully developed system of walking paths and paved road, and mature trees set within manicured lawns. By 1940, the facility had 2,292 live-in patients, which was more than twenty-five per cent over capacity (JRP Historical Consulting [JRP] 2017).

The Depression and World War II on its heels meant that there was little expansion at the institution between 1932 and 1947, but in about 1948, the state began adding more new buildings. Beginning in the early 1950s, large multi-story treatment wards were constructed outside the ring road on the edges of the original institution. Norwalk's patient population reached 4,140 in 1962, after which a decrease in institutionalization and other social changes brought a gradual decline in numbers (JRP 2017).

Cultural Resources Studies

Cultural resources include prehistoric archaeological sites; historic-era archaeological sites; tribal cultural resources (TCRs); and historic buildings, structures, landscapes, districts, and linear features. TCRs are addressed in Section 3.18, "Tribal Cultural Resources".

Archival Search

A records search was conducted by the South Central Coastal Information Center of the California Historical Resources Information System at California State University, Fullerton. The purpose of the record search was to identify the presence of any previously recorded cultural resources within the Project site, and to determine whether any portions of the Project site had been surveyed for cultural resources. The record search (Records Search File No.:19557.5511) indicated that the Project area had not previously been surveyed for archaeological resources.

The record search also indicated that the Proposed Project is within the boundaries of the National Register of Historic Places (NRHP)- and California Register of Historical Resources (CRHR)-eligible Norwalk State Hospital Historic District (NSHHD). The NSHHD was first identified as a historic district in 1980, but a formal evaluation for NRHP/CRHR eligibility did not take place at that time. A second study was conducted in 2004, in which some of the buildings on the campus were investigated (JRP 2017). The NSHHD was not fully documented and evaluated for NRHP/CRHR eligibility until 2017, when the California Department of General Services (DGS) and California DSH requested a full evaluation. In addition to being determined eligible for listing on the NRHP and CRHR, the NSHHD was found to be eligible as a California Historical Landmark (JRP 2017). The State Historic Preservation Officer concurred with these determinations in a letter to DGS dated October 20, 2017.

Native American Consultation

An email request was made to the Native American Heritage Commission (NAHC) on September 28, 2018, to review its files for the presence of recorded sacred sites on the Project site. The NAHC responded on October 10, 2018, stating that no significant resources were identified in the Project area as a result of a search of their files. The NAHC also provided a list of six tribes and tribal contacts with a traditional and cultural affiliation with the Project area for notification pursuant to California Public Resources Code (Pub. Res. Code) Section (§) 21080.3.1 (Assembly Bill [AB] 52). Coordination with tribes is described in Section 3.18, "Tribal Cultural Resources." None of the tribes who were contacted requested consultation on the Project.

Archaeological Survey and Results

An archaeological survey of the Project location was conducted on November 1, 2018 by a Horizon archaeologist who meets the U.S. Secretary of the Interior's Professional Standards. Systematic pedestrian survey transects were walked at intervals of no greater than 50 ft. No archaeological materials were observed during the survey, including the areas within the Project footprint that were once occupied by buildings associated with the DSH-Metropolitan.

Built Environment Resources

As noted above, the Project is located within the boundaries of the NRHP/CRHR-eligible NSHHD, which is comprised of a portion of the DSH-Metropolitan campus. JRP prepared a *Historical Resources Inventory and Evaluation Report for Metropolitan (Norwalk) State Hospital* for DGS, evaluating the state-owned property as a historic district under NRHP and CRHR criteria, and as a California State Landmark. The study found the NSHHD eligible as a historic district under Criterion A/1 (history) for "the important role it played in the evolution of public institutional mental health care as the first state hospital campus to be

organized entirely around the Cottage Plan model" (JRP 2017). The NSHHD was also determined eligible under Criterion C/3 (architecture) as a relatively intact example of Cottage Plan institutional design, which opened during the peak of the concept's popularity and on which its principles were fully realized. In addition, JRP recommended the property eligible as a California Historical Landmark because of its status as the first fully realized, most significant, and last surviving Cottage Plan institution in California (JRP 2017).

3.5.2 Discussion of Checklist Responses

a. Adverse change in the significance of a historical resource—*Potentially Significant*

The proposed Project is located within the boundaries of the NSHHD, which has been determined eligible for listing on the NRHP and CRHR, and as a State Historical Landmark. As a result, construction of the new CHP facility could have a potentially significant impact on the historic district. Therefore, this impact would be **potentially significant** and will be further analyzed in the EIR.

b. Adverse change in the significance of an archaeological resource— *Potentially Significant*

No archaeological resources were identified during the archaeological survey of the Project area. However, archaeological remains may be buried with no surface manifestation. Excavation for site preparation and any buried utilities would occur in areas where buildings, structures, and utilities are to be located. Such excavation activities could uncover buried archaeological materials that may be eligible for the NRHP/CRHR and, therefore, could have a potentially significant impact on an archaeological resource. Therefore, this impact would be **potentially significant** and will be further analyzed in the EIR.

c. Disturbance of any human remains, including those interred outside of formal cemeteries—*Potentially Significant*

No evidence of human remains was observed within the Project study area. Human remains are not known to exist in or near the Project site; however, human remains may be buried with no surface manifestation. Excavations associated with construction, particularly trenching, have the potential to uncover such remains, if they are present. Impacts on accidentally discovered human remains would be considered a potentially significant impact. Therefore, this impact would be **potentially significant** and will be further analyzed in the EIR.

3.6 ENERGY

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	uld the project:				
a.	Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?				
b.	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

3.6.1 Regulatory Setting

This section describes the federal, state, and local regulations related to energy resources. Section 3.8, "Greenhouse Gas Emissions," contains additional discussions of Greenhouse Gas (GHG)-related regulations that may also be relevant to energy resources.

At the federal level, the USEPA and the National Highway Traffic Safety Administration (NHTSA) have developed regulations to improve the efficiency of cars, and light-, medium-, and heavy-duty vehicles. These regulations are discussed in greater detail in Section 3.8, "Greenhouse Gas Emissions.

Energy resource-related regulations, policies, and plans at the state level, require the regular analysis of energy data and developing recommendations to reduce statewide energy use, and setting requirements on the use of renewable energy sources. Senate Bill (SB) 1389, passed in 2002, requires the California Energy Commission (CEC) to prepare an *Integrated Energy Policy Report* for the governor and legislature every 2 years (CEC 2019a). The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research (CEC 2019a). The 2018 *Integrated Energy Policy Report Update* includes policy recommendations such as addressing the vulnerability of California's energy infrastructure to extreme events related to climate change, including sea-level rise and coastal flooding (CEC 2018a).

In addition, since 2002, California has established a Renewables Portfolio Standard (RPS) program, through multiple senate bills (SB 1078, SB 107, SB X1-2, SB 350, SB 100) and executive orders (S-14-08, B-55-18), that requires increasingly higher targets of electricity retail sales be served by eligible renewable resources. The established eligible renewable source targets include 20 percent of electricity retail sales by 2010, 33 percent of electricity retail sales by 2020, 50 percent by 2030, and 100 percent zero-carbon electricity for the state and statewide carbon neutrality by 2045 (CEC 2019b, CEC 2019c).

Section 3.8, "Greenhouse Gas Emissions," provides additional details on California's 2017 Climate Change Scoping Plan, which details the state's strategy for achieving the state's GHG targets, including energy-related goals and policies. It contains measures and actions that may pertain to the proposed Project relating to vehicle efficiency and transitioning to alternatively powered vehicles.

The California Highway Patrol 2015-2019 Strategic Plan contains the following Objectives and Performance Measures relating to Energy that may apply to the Proposed Project:

- 2H. Enhance environmentally sustainable practices within our fleet, operations, and facilities
- By 2017, increase the number of plug-in electric hybrid vehicles and battery electric vehicles within the departmental pool vehicle fleet by 10 percent from 2014 levels.
- By 2018, ensure all CHP facilities are 20 percent more energy efficient from 2003 levels.

3.6.2 Environmental Setting

Energy Resources and Consumption

California has extensive energy resources, including an abundant supply of crude oil, high production of conventional hydroelectric power, and leads the nation in electricity generation from renewable resources (solar, geothermal, and biomass resources) (U.S. Energy Information Administration (EIA) 2019). California has the second highest total energy consumption in the United States but one of the lowest energy consumption rates per capita (48th in 2016) due to its mild climate and energy efficiency programs (EIA 2019). A comparison of California's energy consuming end-use sectors indicates that the transportation sector is the greatest energy consumer, by approximately two to three times compared to the other end-use sectors (Industrial, Commercial, and Residential, which are listed in order of greatest to least consumption) (EIA 2019). California is the largest consumer of motor gasoline and jet fuel in the United States (EIA 2019).

SCE and the SoCalGas provide power and natural gas, respectively, to the proposed Project area. **Table ERG-1** provides a more detailed breakdown of SCE's energy resources. Approximately 23 percent of the power provided by SCE comes from solar and wind renewable sources, while the remaining 77 percent comes from a mixture of other eligible renewable sources, nuclear, large hydroelectric, natural gas, and unspecified sources of power. As mentioned in Section 3.8 "Greenhouse Gas Emissions" California's RPS requires electricity suppliers to increase the amount of electricity generated from renewable sources to 33 percent by 2020, to 50 percent by 2026, and 100 percent by 2045.

1 **Table ERG-1.** Summary of Energy Sources for SCE

	Utility Power Mix (%)				
Energy Resources	SCE (2017)	California Power Mix (2017)**			
Eligible Renewable	32	29			
Coal	0	4			
Large Hydroelectric	8	15			
Natural Gas	20	34			
Nuclear	6	9			
Unspecified Power*	34	9			
Total	100	100			

^{* &}quot;Unspecified sources of power" is defined as electricity from transactions that are not traceable to specific generation sources.

Sources: CEC 2018b

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3.6.3 Discussion of Checklist Responses

a, b. Result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation or conflict with or obstruct a state or local plan for renewable energy or energy efficiency — Potentially Significant

The Proposed Project would follow all federal, state, and local regulations related to energy efficiency and use. While local plans, policies and regulations do not apply to the state, assessments of the Proposed Project's impacts on Air Quality, Greenhouse Gas Emissions, and Transportation, which inform the impact analysis for Energy, will be further evaluated in the EIR. For these reasons, the Proposed Project's impact could be **potentially significant** and will be further evaluated in the EIR.

^{**} Percentages are estimated annually by the California Energy Commission based on the electricity sold to California consumers during the identified year.

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Chapter 3. Environmental Checklist

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3.7 GEOLOGY, SOILS, AND SEISMICITY

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would	d the	Project:				
a.	sub	ose people or structures to potential stantial adverse effects, including the risk oss, injury, or death involving:				
	i.	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
	ii.	Strong seismic ground shaking?			\boxtimes	
	iii.	Seismic-related ground failure, including liquefaction?				
	iv.	Landslides?			\boxtimes	
b.		ult in substantial soil erosion or the loss of soil?				
C.	uns resu an o spre	located on a geologic unit or soil that is table or that would become unstable as a ult of the project and potentially result in on-site or off-site landslide, lateral eading, subsidence, liquefaction, or apse?				
d.	Tab (19	ocated on expansive soil, as defined in le 18-1-B of the Uniform Building Code 94), creating substantial risks to life or perty?				
e.	the was sew	re soils incapable of adequately supporting use of septic tanks or alternative stewater disposal systems in areas where vers are not available for the disposal of stewater?				
f.	pale	ectly or indirectly destroy a unique eontological resource or site or unique logic feature?				

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3.7.1 Regulatory Setting

Federal Laws, Regulations, and Policies

3 Section 402 of the Clean Water Act/National Pollutant Discharge Elimination System

The CWA is discussed in detail in Section 3.10, "Hydrology and Water Quality." Since Section 402 of CWA is directly relevant to earthwork, additional information is provided here.

The 1987 amendments to CWA added Section 402(p), which establishes a framework for regulating municipal and industrial stormwater discharges under the National Pollutant Discharge Elimination System (NPDES) program. As described in Section 3.10, the USEPA has delegated authority to the State Water Resources Control Board (SWRCB) for administration of the NPDES program in California, where it is implemented by the State's nine RWQCBs. Under the NPDES Phase II Rule, any construction activity disturbing 1 acre or more must obtain coverage under the State's General Permit for Storm Water Discharges Associated with Construction Activity (General Permit). General Permit applicants are required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) that describes the best management practices (BMPs) that will be implemented to avoid adverse effects on receiving water quality as a result of construction activities, including earthwork.

National Earthquake Hazards Reduction Act

The National Earthquake Hazards Reduction Act of 1977 (Public Law 95-124) established the National Earthquake Hazards Reduction Program (NEHRP), which is a long-term earthquake risk reduction program to better understand, predict, and mitigate risks associated with seismic events. The following four federal agencies are responsible for coordinating activities under NEHRP:

- 1. U.S. Geological Survey (USGS);
- 2. National Science Foundation (NSF):
- 3. Federal Emergency Management Agency (FEMA); and
- 4. National Institute of Standards and Technology.

Since its inception, NEHRP has shifted its focus from earthquake prediction to hazard reduction. The current program objectives (NEHRP 2017) are as follows:

- 1. Develop effective measures to reduce earthquake hazards and accelerate their implementation;
- 2. Improve techniques for reducing earthquake vulnerabilities of facilities and systems;
- 3. Improve earthquake hazards identification and risk assessment methods and their use; and
- 4. Improve the understanding of earthquakes and their effects.

Implementation of NEHRP objectives is accomplished primarily through original research, publications, and recommendations and guidelines for state, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

State Laws, Regulations, and Policies

Alquist—Priolo Earthquake Fault Zoning Act

The Alquist–Priolo Earthquake Fault Zoning Act (Public Resources Code § 2621 *et seq.*) was passed to reduce the risk to life and property from surface faulting in California. The Alquist–Priolo Act prohibits construction of most types of structures intended for human occupancy on the surface traces of active faults and strictly regulates construction in the corridors along active faults (earthquake fault zones). It also defines criteria for identifying active faults, giving legal weight to terms such as "active," and establishes a process for reviewing building proposals situated in and adjacent to earthquake fault zones. Under the Alquist–Priolo Act, faults are zoned, and construction along or across them is strictly regulated if they are "sufficiently active" and "well defined." Before a project can be permitted, cities and counties require completion of a geologic investigation to demonstrate that the proposed buildings would not be constructed across active faults.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act of 1990 (Public Resources Code §§ 2690–2699.6) establishes statewide minimum public safety standards for mitigation of earthquake hazards. While the Alquist–Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist–Priolo Act. The state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other seismic hazards; cities and counties are required to regulate development within mapped seismic hazard zones. In addition, the act addresses not only seismically-induced hazards but also expansive soils, settlement, and slope stability. Under the Seismic Hazards Mapping Act, cities and counties may withhold the development permits for a site within seismic hazard zones until appropriate site-specific geologic and/or geotechnical investigations have been carried out and measures to reduce potential damage have been incorporated into the development plans.

California Building Standards Code

Title 24 California Code of Regulations (CCR), also known as the California Building Standards Code (CBC), specifies standards for geologic and seismic hazards other than surface faulting. These codes are administered and updated by the California Building Standards Commission. CBC specifies criteria for open excavation, seismic design, and load-bearing capacity directly related to construction in California.

3.7.2 Environmental Setting

The Project lies within the Santa Fe Springs Plain of the Los Angeles Basin complex (USGS 1971). The Project site is roughly 13 miles east of the Pacific Coast and 4 miles southwest of the Puente Hills, at approximately 135 ft above mean sea level (msl). The Santa Fe Springs Plain is characterized by Pleistocene aged alluvial deposits associated with the Coyote Hills, Puente Hills, and Montebello Hills, with Holocene aged alluvial fan deposits and channel

deposits from the alluvial fans of the Los Angeles River, Rio Hondo, San Gabriel River, and Santa Ana River (USGS 1971). The area surrounding the Project site is relatively flat and gradually sloped south-southwest.

Geology

The Project site is underlain by deep, old alluvial fan deposits (Late to Middle Pleistocene surficial deposits) of the Lakewood Formation. This material consists predominantly of alternating beds of medium-dense to very-dense sand, clay, and silt (CDOC 1998).

Soils

The Project site is underlain by Urban land-Thums-Pierview complex, 0 to 5 percent slopes (NRCS 2019). Soil texture may range from clay loam to clay. This unit is well drained with moderate to low runoff potential.

Exploratory borings taken during a preliminary geotechnical investigation (Earth Systems Pacific 2018) encountered artificial fill soils between 2 and 7 ft below ground surface (bgs). These fill soils were found to consist predominantly of medium dense to very dense clayey sand, medium stiff to hard silty clay, and hard sandy silt. Native soils below the fill soils were found to consist predominantly of medium dense to very dense silty sand and medium dense to very dense poorly graded sand. These upper soils exhibited low expansion potential during geotechnical analysis (Earth Systems Pacific 2018).

Seismicity

Alquist-Priolo Fault Zones and Faults

No Alquist-Priolo Fault Zones or known faults exist within the Project site. The nearest Alquist-Priolo Fault Zone is located northwest of the City of Whittier, approximately 5.4 miles northeast of the Project site (California Geological Survey [CGS] 2010).

The nearest known fault is the Norwalk fault, part of the Puente Hills blind thrust fault system, located approximately 1.4 miles southwest of the Project site. No surface faulting has been recorded with this fault and is considered a historic fault with the last known major displacement occurring during the past 700,000 years (CGS 2010). Several other active faults are located in the region, as presented below in **Table GEO-1**.

Table GEO-1. Proximity of the Project Site to Regional Faults

Fault	Approximate Distance from Proposed Project	Last Known Major Displacement
Norwalk Fault, Puente Hills blind thrust system	1.4 miles southwest	During past 700,000 years
Whittier Fault Zone	5.4 miles northeast	1910, Elsinore earthquake, M _L 6.0
Los Alamitos Fault	6.9 miles southwest	During past 700,000 years
Newport-Inglewood Fault Zone	10.5 miles southwest	1933, Long Beach earthquake, M _W 6.4

M_W = moment magnitude, M_L = Local Magnitude

Sources: CGS 2010; Southern California Earthquake Data Center 2019.

Ground Shaking

The severity of ground shaking experienced at a specific location depends on a variety of factors, such as the magnitude and duration of the seismic event, fault type associated with the event, distance from the epicenter, and physical properties of the underlying geology and soils. The Santa Fe Springs area lies in a very active seismic region of southern California where the level of earthquake ground shaking frequency and severity is considered high to very high (CDOC 2008).

<u>Liquefaction and Differential Settlement</u>

Liquefaction can occur when water-saturated, loose sandy soils lose cohesion during seismic shaking. The primary factor that triggers liquefaction is moderate to strong ground shaking. Physical properties that increase susceptibility to liquefaction are relatively clean/loose granular soils, and a shallow depth to groundwater and/or saturated conditions. The Project site is not within a designated earthquake hazard zone (CDOC 1999). The older Quaternary sedimentary deposits underlying the Project site generally consist of dense to very dense sand, silt, and clay and are considered to have low liquefaction susceptibility (CDOC 1998).

Landslide, Slope Failure, and Lateral Spreading

The Project site is relatively flat, sloping gradually from the northeast to south-southwest. Similarly, local topography adjacent to the Project site is mostly flat with less than a 2.0 percent grade (USGS 2018).

3.7.3 Discussion of Checklist Responses

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Seismic-related rupture of a known earthquake fault—No Impact

Ground surface ruptures occur along earthquake fault lines. The Project site is not located within an Alquist-Priolo Fault Zone. The probability of ground rupture of a known earthquake fault at the Project site is negligible; therefore, there would be **no impact**.

ii. Strong seismic ground shaking—Less than Significant

As discussed in Section 3.6.2 above, under "Seismicity," the probability of strong seismic ground shaking in the greater Los Angeles area and the Project site is considered high to very high. The Proposed Project includes the construction of a number of structures that could conceivably fail if on-site seismic or geologic conditions are inadequately addressed during design or construction, posing a risk to property or human life.

The current CBC (2016) takes seismically induced stresses into consideration for new construction. The building standards outlined under Title 24, Part 2 of the CBC are specifically tailored to meet regional requirements for increased seismic stability. Adherence to building codes would reduce the potential for adverse effects from earthquakes and ground shaking on the Project site by ensuring the stability of new structures and public safety. With adherence to the current CBC standards, any potential for structural damage associated with seismic ground shaking would be low. Therefore, effects of seismic ground shaking would be less than significant.

iii, iv. Seismic-related ground failure, including liquefaction and landslides—Less than Significant

The Project site and adjacent properties are relatively flat and not susceptible to landslides. During construction activities and installation of building foundations, there is some potential for open excavation areas to fail during a seismic event. However, with proper safety procedures, required inspections, and adherence to current CBC standards, the risk of collapse caused by shallow landslide or excavation activities would be **less than significant**.

As discussed in Section 3.6.2 above, the Project site is underlain by artificial fill soils and alluvium that may be susceptible to differential settling under certain conditions. A preliminary geotechnical investigation (Earth Systems Pacific 2018) assessed soil conditions to support the Project design and site preparation. It is anticipated that approximately 3,000 cubic yards (cy) of engineered fill would be imported to replace existing fill soils to develop the site. Incorporation of these design and construction recommendations and adherence to current CBC standards would reduce potential seismic-related hazards, including ground failure, liquefaction, and landslides, to a level considered **less than significant**.

b. Substantial soil erosion or the loss of topsoil—Less than Significant

The Proposed Project would include ground-disturbing construction activities that could increase the risk of erosion or sediment transport. In addition, upon completion of construction, the Proposed Project would include structures, asphalt driveways, parking areas, and walkways creating approximately 4 acres of impervious surfaces. This conversion from mostly vacant land to impervious surface area could result in increased runoff and soil erosion.

The Proposed Project would minimize the potential for increased runoff and soil erosion through dedicated stormwater retention via on-site capture and filtration of runoff generated at the Project site. The Proposed Project would direct excess stormwater runoff to existing stormwater infrastructure via an underground drainage system and/or dedicated drainage

swales. Site drainage would be designed so as not to have greater than a 4.5 percent slope at any point on the Project site, unless approved by the State.

As discussed in Section 3.10, "Hydrology and Water Quality," implementation of BMPs included as part of the SWPPP would further reduce surface erosion and mitigate any loss of topsoil during construction-related activities. With implementation of SWPPP requirements, this impact would be **less than significant**.

c. Location on a geologic unit or soil that is unstable or that would become unstable as a result of the Proposed Project and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse—Less than Significant

The Project site and adjacent properties are relatively flat with no exposed slopes and is not susceptible to landslides or lateral spreading. The Proposed Project does not include subsurface resource extraction or other related activities, and no increase in potential subsidence would be expected.

The Project site is underlain by old alluvial fan deposits and artificial fill soils of varying strength and stability. During construction activities, excavation and trenching for building foundations could temporarily destabilize steeply excavated slopes and increase the potential for slope failure and damage structures or injure workers.

As described in item 3.6.3(a)(iii, iv) above, the Project design incorporates findings and recommendations from geotechnical investigations. It is anticipated that approximately 3,000 cy of engineered fill would be imported to replace existing fill soils to develop the site. In addition, CBC standards would be applied to Project design and construction specifications to ensure that building foundations are designed and installed to address seismic-related or soil stability issues and minimize the potential risk of structural failure. Following adherence to current CBC standards, potential hazards from landslide, lateral spreading, liquefaction, or collapse would be **less than significant**.

d. Location on expansive soil, creating substantial risks to life or property—Less than Significant

Expansive soils are predominantly composed of clays and can undergo substantial volume change in response to changes in moisture content. During wetting and drying cycles, expansive soils may shrink and swell, creating differential ground movements. This uneven movement can fracture concrete foundations and footings, resulting in potential damage or failure of infrastructure. Geotechnical investigations (Earth Systems Pacific 2018) observed artificial fill soils and native soils below the fill soils predominantly medium dense to very dense silty sand and medium dense to very dense poorly graded sand. Further analysis of the physical characteristics of these soils found these soils to exhibit low expansion potential. Furthermore, adherence to CBC building standards as outlined in item 3.6.3(a)(ii) above would minimize the potential for expansive soils to create substantial risk to life or property. Therefore, risk to life or property from development of the Proposed Project would be **less than significant**.

 e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater—*No Impact*

The Proposed Project would tie into existing City wastewater disposal systems. Septic tanks or other alternative wastewater disposal systems would not be necessary; therefore, the Proposed Project would have **no impact**.

f. Destruction of a unique paleontological resource or site or unique geological feature—Less than Significant

Subsurface soil investigations observed artificial fill soils from 2 to 7 ft bgs (Earth Systems Pacific 2018). These soils would not contain paleontological resources due to the recent age and thorough processing during placement. Native soils and geologic units below the fill soils consist of Middle to Late Pleistocene alluvial fan deposits of the Lakewood Formation. Significant paleontological resources have not been observed in this formation (University of California Museum of Paleontology 2019) and this geologic unit is considered to have a low probability for paleontological resources due to their relatively recent age, and high-energy formation/depositional environment. In addition, most foundations for most structures would be slab on grade with the exception of relatively shallow excavation for building foundations and tower footings. Therefore, impacts on paleontological resources during development of the Proposed Project would be **less than significant**.

3.8 Greenhouse Gas Emissions

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the Project:				
a.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

3.8.1 Regulatory Setting

At the federal level, USEPA has developed regulations to reduce GHG emissions from motor vehicles and has developed permitting requirements for large stationary emitters of GHGs. On April 1, 2010, USEPA and the NHTSA established a program to reduce GHG emissions and improve fuel economy standards for new model year 2012–2016 cars and light trucks. On August 9, 2011, USEPA and the NHTSA announced standards to reduce GHG emissions and improve fuel efficiency for heavy-duty trucks and buses. In August 2016, USEPA and the NHTSA jointly finalized Phase 2 Heavy-Duty National Program standards to reduce GHG emissions and improve fuel efficiency of medium- and heavy-duty vehicles for model year 2018 and beyond (USEPA 2017). However, some of these standards have been stayed by a court order and EPA has proposed repealing certain Phase 2 emissions standards (Center for Climate and Energy Solutions 2018).

In recent years, California has enacted a number of policies and plans to address GHG emissions and climate change. In 2006, the California State Legislature enacted Assembly Bill (AB) 32, the Global Warming Solutions Act, which set the overall goals for reducing California's GHG emissions to 1990 levels by 2020. SB 32 codified an overall goal for reducing California's GHG emissions to 40 percent below 1990 levels by 2030. Executive Orders (EOs) S-3-05 and B-16-2012 further extend this goal to 80 percent below 1990 levels by 2050. The CARB has completed rulemaking to implement several GHG emission reduction regulations and continues to investigate the feasibility of implementing additional GHG emission reduction regulations. These include the low carbon fuel standard, which reduces GHG emissions associated with fuel usage, and the RPS, which requires electricity suppliers to increase the amount of electricity generated from renewable sources to certain thresholds by various deadlines. In 2018, SB 100 updated the RPS to require 50% renewable resources by the end of 2026, 60% by the end of 2030, and 100% renewable energy and zero carbon resources by 2045. EO B-55–18 signed by Gov. Brown set a goal of statewide carbon neutrality by 2045 and net negative emissions thereafter.

The California Building Code (Title 24) governs construction of buildings in California. Parts 6 and 11 of Title 24 are relevant for energy use and green building standards, which reduce the amount of indirect GHG emissions associated with buildings.

CARB approved the First Update to the AB 32 Scoping Plan on May 22, 2014 (CARB 2014). This update defines climate change priorities for the next 5 years and also sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. The update also highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals and evaluates how to align the State's longer term GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released and adopted a 2017 Scoping Plan Update (CARB 2018) to reflect the 2030 target set by Executive Order B-30-15 and codified by SB 32 (CARB 2017a, CARB 2017b, CARB 2018).

SCAQMD has only established a numerical threshold for industrial sources of 10,000 metric tons of carbon dioxide equivalents per year (MT CO2e/yr) and has not established a numerical threshold for residential, commercial, retail or government building projects. SCAQMD recommends agencies to consider how the project meets the objectives of AB 32 and SB 32, and if the project is consistent with other climate change goals and regulations (SCAQMD 2008). They also suggest that projects establish mitigation measures to ensure that prescriptive measures are being considered to ensure reduction of GHG emissions and projects designed to ensure that the goals for climate change are achieved.

3.8.2 Environmental Setting

Climate change results from the accumulation in the atmosphere of GHGs, which are produced primarily by the burning of fossil fuels for energy. Because GHGs (carbon dioxide $[CO_2]$, methane, and nitrous oxide) persist and mix in the atmosphere, emissions anywhere in the world affect the climate everywhere in the world. GHG emissions are typically reported in terms of carbon dioxide equivalents (CO_2e) which converts all GHGs to an equivalent basis taking into account their global warming potential compared to CO_2 .

Anthropogenic (human-caused) emissions of GHGs are widely accepted in the scientific community as contributing to global warming. Temperature increases associated with climate change are expected to adversely affect plant and animal species, cause ocean acidification and sea level rise, affect water supplies, affect agriculture, and harm public health.

Global climate change is already affecting ecosystems and societies throughout the world. Climate change adaptation refers to the efforts undertaken by societies and ecosystems to adjust to and prepare for current and future climate change, thereby reducing vulnerability to those changes. Human adaptation has occurred naturally over history; people move to more suitable living locations, adjust food sources, and more recently, change energy sources. Similarly, plant and animal species also adapt over time to changing conditions; they migrate or alter behaviors in accordance with changing climates, food sources, and predators.

Many national, as well as local and regional, governments are implementing adaptive practices to address changes in climate, as well as planning for expected future impacts from climate change. Some examples of adaptations that are already in practice or under consideration include conserving water and minimizing runoff with climate-appropriate landscaping, capturing excess rainfall to minimize flooding and maintain a constant water supply through dry spells and droughts, protecting valuable resources and infrastructure from flood damage and sea level rise, and using water-efficient appliances.

 In 2016, total California GHG emissions from routine emitting activities were 429.4 million metric tons of carbon dioxide equivalents (MMT CO_2e) (CARB 2018). This represents a decrease from 2015 and a 14 percent reduction compared to peak levels reached in 2004. Declining emissions from the electricity sector were responsible for much of the reduction due to growing zero-GHG energy generation sources. In 2016, the transportation sector of the California economy was the largest source of emissions, accounting for approximately 41 percent of the total emissions (CARB 2018).

3.8.3 Discussion of Checklist Responses

a. Generate a net increase in greenhouse gas emissions which may have a significant impact on the environment—*Potentially Significant*

The Proposed Project would generate GHG emissions during construction and operation. Construction-related GHG emissions would result from the combustion of fossil-fueled construction equipment, material hauling, and worker trips.

Operational GHG emissions would result from fossil-fueled equipment and motor vehicles, building energy use, water use, and solid waste. Operational emissions of the new CHP facility would be partially offset by eliminating emissions from the existing CHP facility. In addition, the new facility would be constructed consistent with current California building codes, which substantially reduce the energy and water use for new buildings compared to the standards in effect when the existing CHP Santa Fe Springs Area Office was constructed. The resulting net increase would be attributable to the increase in the number of employees and larger size of the facility partially offset by the more efficient building design.

The net project emissions when amortized construction emissions are included could be **potentially significant** and may result in a significant impact to global climate change or impede the goals of AB 32 or SB 32. These will be evaluated further in the EIR to quantify the emissions.

b. Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases—*Potentially Significant*

The State of California has implemented AB 32, SB 32, and multiple Executive Orders to reduce GHG emissions. Emissions generated by the Proposed Project could have a substantial contribution to the ongoing impact on global climate change and need to be further evaluated to ensure that they are consistent with their fair share of reductions and prescriptive measures to ensure progress to obtain the GHG emission reductions outlined by AB 32, SB 32 and the applicable executive orders. While local plans, policies and regulations do not apply to the state, the location of the Project site is in line with local general plan policies regarding land use, transportation, air quality planning goals, and local Greenhouse Gas Reduction plans. For these reasons, the Proposed Project's impact could be **potentially significant** and will be further evaluated in the EIR.

Chapter 3. Environmental Checklist

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3.9 HAZARDS AND HAZARDOUS MATERIALS

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the Project:				
a.	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b.	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c.	Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d.	Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?				
e.	Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport and result in a safety hazard for people residing or working in the study area?				
f.	Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the study area?				
g.	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h.	Expose people or structures either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires?				

3.9.1 Regulatory Setting

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Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations to protect public health and the environment. These regulations provide

definitions of hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations are USEPA and the Occupational Safety and Health Administration (OSHA); California Department of Toxic Substances Control (DTSC); California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA); California Governor's Office of Emergency Services (Cal OES); SWRCB; Los Angeles RWQCB; and SCAQMD.

Federal Laws, Regulations, and Policies

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also called the Superfund Act; 42 U.S. Code [USC] § 9601 *et seq.*) is intended to protect the public and the environment from the effects of past hazardous waste disposal activities and new hazardous material spills. Under CERCLA, USEPA has the authority to seek the parties responsible for hazardous materials releases and to ensure their cooperation in site remediation. CERCLA also provides federal funding (through the "Superfund") for the remediation of hazardous materials contamination. The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499) amends some provisions of CERCLA and provides for a Community Right-to-Know program.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act of 1976 (RCRA; 42 USC § 6901 *et seq.*), as amended by the Hazardous and Solid Waste Amendments of 1984, is the primary federal law for the regulation of solid waste and hazardous waste in the United States. These laws provide for the "cradle-to-grave" regulation of hazardous wastes, including generation, transportation, treatment, storage, and disposal. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed of.

USEPA has primary responsibility for implementing RCRA, but individual states are encouraged to seek authorization to implement some or all RCRA provisions. California received authority to implement the RCRA program in August 1992. DTSC is responsible for implementing the RCRA program in addition to California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law.

Energy Policy Act of 2005

Title XV, Subtitle B of the Energy Policy Act of 2005 (the Underground Storage Tank Compliance Act of 2005) contains amendments to Subtitle I of the Solid Waste Disposal Act, the original legislation that created the Underground Storage Tank (UST) Program. As defined by law, a UST is "any one or combination of tanks, including pipes connected thereto, that is used for the storage of hazardous substances and that is substantially or totally beneath the surface of the ground." In cooperation with USEPA, SWRCB oversees the UST Program. The intent is to protect public health and safety and the environment from releases of petroleum and other hazardous substances from tanks. The four primary program elements include leak prevention (implemented by Certified Unified Program Agencies

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[CUPAs], described in more detail below), cleanup of leaking tanks, enforcement of UST requirements, and tank integrity testing.

Spill Prevention, Control, and Countermeasure Rule

USEPA's Spill Prevention, Control, and Countermeasure (SPCC) Rule (40 Code of Federal Regulations [CFR], Part 112) apply to facilities with a single above-ground storage tank (AST) with a storage capacity greater than 660 gallons, or multiple tanks with a combined capacity greater than 1,320 gallons. The rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans.

Occupational Safety and Health Administration

OSHA is responsible at the federal level for ensuring worker safety. OSHA sets federal standards for implementation of workplace training, exposure limits, and safety procedures for the handling of hazardous substances (as well as other hazards). OSHA also establishes criteria by which each state can implement its own health and safety program.

Federal Communications Commission Requirements

There is no federally mandated radio frequency (RF) exposure standard; however, pursuant to the Telecommunications Act of 1996 (47 USC § 224), the Federal Communications Commission (FCC) established guidelines for dealing with RF exposure. The exposure limits are specified in 47 CFR § 1.1310 in terms of frequency, field strength, power density, and averaging time. Facilities and transmitters licensed and authorized by FCC must either comply with these limits or an applicant must file an environmental assessment (EA) with FCC to evaluate whether the proposed facilities could result in a significant environmental effect.

Code of Federal Regulations (14 CFR) Part 77

Air safety and the efficient use of navigable airspace is covered by 14 CFR Part 77.9. Implementation of the code is administered by the Federal Aviation Administration (FAA). If an organization plans to sponsor any construction or alterations that might affect navigable airspace, a Notice of Proposed Construction or Alteration (FAA Form 7460-1) must be filed. The code provides specific guidance regarding FAA notification requirements when:

- any construction or alteration exceeding 200 ft above ground level;
- any construction or alteration:
 - within 20,000 ft of a public use or military airport which exceeds a 100:1 surface from any point on the runway of each airport with its longest runway more than 3.200 ft:
 - within 10,000 ft of a public use or military airport which exceeds a 50:1 surface from any point on the runway of each airport with its longest runway no more than 3,200 ft;
 - within 5,000 ft of a public use heliport which exceeds a 25:1 surface;
- any highway, railroad or other traverse way whose prescribed adjusted height would exceed the above noted standards;

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- when requested by the FAA; and
 - any construction or alteration located on a public use airport or heliport regardless of height or location.
- 4 The Proposed Project includes construction of a 148-foot communications tower.

State Laws, Regulations, and Policies

Safe Drinking Water and Toxic Enforcement Act of 1986 – Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986, more commonly known as Proposition 65, protects the state's drinking water sources from contamination with chemicals known to cause cancer, birth defects, or other reproductive harm. Proposition 65 also requires businesses to inform the public of exposure to such chemicals in the products they purchase, in their homes or workplaces, or that are released into the environment. In accordance with Proposition 65, the California Governor's Office publishes, at least annually, a list of such chemicals. California Office of Environmental Health Hazard Assessment, an agency under the California Environmental Protection Agency (CalEPA), is the lead agency for implementation of the Proposition 65 program. Proposition 65 is enforced through the California Attorney General's Office; however, district and city attorneys and any individual acting in the public interest may also file a lawsuit against a business alleged to be in violation of Proposition 65 regulations.

The Unified Program

The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of six environmental and emergency response programs. CalEPA and other state agencies set the standards for their programs, while local governments (CUPAs) implement the standards. For each county, the CUPA regulates/oversees the following:

- Hazardous materials business plans;
- California accidental release prevention plans or federal risk management plans;
- The operation of USTs and ASTs;
- Universal waste and hazardous waste generators and handlers;
- On-site hazardous waste treatment;
- Inspections, permitting, and enforcement;
- Proposition 65 reporting; and
- Emergency response.

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Hazardous Materials Business Plans

Hazardous materials business plans are required for businesses that handle hazardous materials in quantities greater than or equal to 55 gallons of a liquid, 500 pounds of a solid, or 200 cubic feet of compressed gas, or extremely hazardous substances above the threshold planning quantity (40 CFR, Part 355, Appendix A) (Cal OES 2018). Business plans are required to include an inventory of the hazardous materials used/stored by the business, a

site map, an emergency plan, and a training program for employees (Cal OES 2018). In addition, business plan information is provided electronically to a statewide information management system, verified by the applicable CUPA, and transmitted to agencies responsible for the protection of public health and safety (i.e., local fire department, hazardous material response team, and local environmental regulatory groups) (Cal OES 2018).

California Occupational Safety and Health Administration

Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA regulations pertaining to the use of hazardous materials in the workplace (CCR Title 8) include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about exposure to hazardous substances, and preparation of emergency action and fire prevention plans. Hazard communication program regulations that are enforced by Cal/OSHA require workplaces to maintain procedures for identifying and labeling hazardous substances, inform workers about the hazards associated with hazardous substances and their handling, and prepare health and safety plans to protect workers at hazardous waste sites. Employers must also make material safety data sheets available to employees and document employee information and training programs. In addition, Cal/OSHA has established maximum permissible RF radiation exposure limits for workers (Title 8 CCR § 5085[b]), and requires warning signs where RF radiation might exceed the specified limits (Title 8 CCR § 5085 [c]).

California Accidental Release Prevention

The purpose of the California Accidental Release Prevention (CalARP) program is to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. In accordance with this program, businesses that handle more than a threshold quantity of regulated substance(s) are required to develop a risk management plan (RMP). This RMP must provide a detailed analysis of potential risk factors and associated mitigation measures that can be implemented to reduce accident potential. CUPAs implement the CalARP program through review of RMPs, facility inspections, and public access to information that is not confidential or a trade secret.

California Department of Forestry and Fire Protection Wildland Fire Management

The Office of the State Fire Marshal and the California Department of Forestry and Fire Protection (CAL FIRE) administer state policies regarding wildland fire safety. Construction contractors must comply with the following requirements in the Public Resources Code during construction activities at any sites with forest-, brush-, or grass-covered land:

- Earthmoving and portable equipment with internal combustion engines must be equipped with a spark arrestor to reduce the potential for igniting a wildland fire (Public Resources Code § 4442).
- Appropriate fire-suppression equipment must be maintained from April 1 to December 1, the highest-danger period for fires (Public Resources Code § 4428).
- On days when a burning permit is required, flammable materials must be removed to a distance of 10 ft from any equipment that could produce a spark, fire, or flame, and

- the construction contractor must maintain the appropriate fire-suppression equipment (Public Resources Code § 4427).
 - On days when a burning permit is required, portable tools powered by gasoline-fueled internal combustion engines must not be used within 25 ft of any flammable materials (Public Resources Code § 4431).

California Highway Patrol

CHP, along with Caltrans, enforce and monitor hazardous materials and waste transportation laws and regulations in California. These agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads. All motor carriers and drivers involved in transportation of hazardous materials must apply for and obtain a hazardous materials transportation license from CHP.

3.9.2 Environmental Setting

Existing Hazards and Hazardous Materials

In October 2018, Avocet prepared a Phase I Environmental Site Assessment evaluating the history and current condition of the Project site and surrounding properties and the potential for hazardous chemicals or wastes to have adversely impacted the underlying soil and groundwater (Avocet 2018a). Due to the proximity of several actual and potential contaminant sources identified in the Phase I Environmental Site Assessment, a subsequent Phase II Investigation was conducted to assess the possible presence of methane and volatile organic compounds (VOCs) in soil vapor, and total petroleum hydrocarbons (TPH), VOCs, and metals in shallow soil. (Avocet 2018b). Potential hazards and findings from the Phase II Investigation related to those hazards are presented below:

- Groundwater Impacts from Offsite Sources. The site is located hydraulically downgradient of the former Powerine refinery and several other properties at which oil and/or oil field wastes were stored, processed, and/or disposed. Free product and dissolved-phase hydrocarbons attributed to releases at the former Powerine refinery have migrated beneath the hospital property. In particular, dissolved-phase VOCs have been detected in groundwater beneath the site. In addition, the site is located in relatively close proximity to commingled plumes of chlorinated VOCs attributed to releases from the former Omega Superfund site and several other industrial facilities to the north. However, soil and soil vapor samples tested for TPH, metals, and VOCs revealed de minimis concentrations of these analytes. Although the soil and soil vapor impacts do not pose a significant threat to current or future receptors, the groundwater contamination concerns are ongoing and will be addressed by other responsible parties.
- Potential for Methane Gas. The northern portion of the site is within the administrative boundary of the Santa Fe Springs oil field, and, as such, a survey for methane gas might be required prior to redevelopment pursuant to Los Angeles County Department of Public Works. To determine whether the site is subject to a significant methane flux, eight soil vapor samples from four locations were analyzed for methane and fixed gases. Methane was not detected in any of the samples.
- **VECs.** Vapor encroachment conditions (VECs) at the Project site. A VEC can occur if VOCs from an offsite source migrate beneath a property in the vapor phase. Low

1 concentrations of VOCs were detected in five of the eight soil vapor samples. 2 However, applying the DTSC default residential attenuation factor to the maximum 3 VOC concentrations in soil vapor indicates that VOCs are not likely to accumulate 4 inside future structures at concentrations in excess of conservative residential 5 indoor air screening levels. 6 **Airports** 7 No airports are located within a 2-mile radius of the Proposed Project. The nearest airport is 8 the Fullerton Municipal Airport approximately 5.9 miles southeast of the Project site. Wildfire Hazards 9 10 The Project site is located in urban, developed area. The nearest open space area is the Puente 11 Hills approximately 4.2 miles northeast of the site. Local fires would be managed by Los 12 Angeles County Fire Department #20, at 12110 Adoree Street in Norwalk, 1.2 road miles southwest of the Project site. 13 Sensitive Receptors 14 15 The Project site is on DSH land. Medical, residential, industrial, and office land uses are 16 located near the Project site. Nearby sensitive receptors include: 17 Elm Street Apartments (on DSH grounds): approximately 20 ft west of the Project 18 site; 19 DSH-Metropolitan – multiple buildings within 600 ft of the site; Plaza de la Raza Child Development Services – 825 ft north; 20 21 Private residences on Volunteer Avenue – beginning 1,060 ft southwest; 22 Vickies Kids Family Daycare – 1,775 ft southwest; 23 Kaiser Medical Clinic - 2.800 ft: and 24 Lakeland Elementary School – 3,250 ft northwest. 25 3.9.3 **Discussion of Checklist Responses** 26 a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials—Less than 27 **Significant** 28 **Construction Activities** 29 30 Construction activities for the Proposed Project would require handling of hazardous materials, such as fuels, lubricating fluids, and solvents for use with construction equipment 31 32 on-site. Accidental spills or improper use, storage, transport, or disposal of these hazardous 33 materials could result in a public hazard or the transport of hazardous materials (particularly

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during storm events) to the underlying soils and groundwater.

Although these hazardous materials could pose a hazard as described above, Proposed Project activities would be required to comply with extensive regulations so that substantial risks would not result. Examples of compliance with these regulations would include preparation of a hazardous materials business plan, as described above, which would include a training program for employees, an inventory of hazardous materials, and an emergency plan (Cal OES 2018). All storage, handling, and disposal of these materials would be done in accordance with regulations established by DTSC, USEPA, OSHA, Cal OES, CUPA, and Cal/OSHA. As described in Section 3.10, "Hydrology and Water Quality," the Proposed Project would prepare a SWPPP as part of its compliance with applicable NPDES permits. To ensure the SWPPP includes appropriate spill prevention and other construction BMPs. These BMPs would protect the environment (water quality) from hazardous materials, and may include, but not be limited to, developing and implementing a spill prevention and emergency response plan, minimizing use or storage of hazardous materials, and other measures.

As a result of compliance with the applicable regulations as described above and implementation of applicable BMPs, no significant risks would result to construction workers, the public, or the environment from the construction-related transport, use, storage, or disposal of hazardous materials. Therefore, this impact would be **less than significant**.

Operations

Operation of the Proposed Project would necessitate the use and storage of several hazardous items and materials. Items and materials that would be on-site and could pose a risk to human health and safety and the environment include the following:

- One approximately 275-gallon waste oil storage tank for collecting used oil from the automobile service station;
- Miscellaneous lubricants from the automobile service station;
- One 12,000-gallon above-ground tank of gasoline for vehicle refueling;
- Storage area for tires;
- One above-ground tank of diesel fuel to power the emergency generator;
- Gun cleaning materials, including various solvents;
- Flares and ammunition;
 - Propane tanks to supply natural gas; and
- Communications tower.

Hazardous materials would be stored on-site and used or disposed of at regular intervals. Accidental spills or improper use, storage, transport, or disposal of these hazardous materials could result in a public hazard or the transport of hazardous materials (particularly during storm events) to the underlying soils and groundwater.

However, all hazardous materials would be either contained within the buildings (e.g., solvents used for cleaning guns) or have appropriate containment measures.

Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment, and additionally would be equipped with safe wells downstream of the containers that would capture any leaks or spills in the event of a failure and allow for appropriate treatment and disposal. All storage, handling, and disposal of these

materials would comply with the applicable regulations of DTSC, USEPA, OSHA, Cal OES, and Cal/OSHA to ensure that no significant risks would result to workers, the public, or the environment from the operation-related transport, use, storage, or disposal of hazardous materials.

Finally, the Proposed Project would include the installation and use of a communications tower. Compliance with existing FCC regulations regarding RF radiation (see Section 3.9.1) above) would reduce potential for any adverse effects to human health or the environment associated with RF exposure from the communications tower proposed as part of the Proposed Project. Therefore, this impact would be **less than significant**.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment—Less than Significant

Several sensitive receptors are located within a 1-mile radius of the Project site, including multiple DSH-Metropolitan buildings within 600 ft of the site.

Construction activities associated with the Proposed Project, including clearing, grubbing, and soil excavation, have the potential to come into contact with existing sources of contamination if any are present. However, as described above in Section 3.8.2, trace amounts of TPH, metals, and VOCs were detected at the Project site at levels far below residential and commercial/industrial U.S. EPA and DTSC risk screening levels (Avocet 2018b). In addition, arsenic was detected in soil samples but at concentrations representative of regional background levels (Avocet 2018b). Therefore, soil excavation activities would have a low potential to expose construction workers or nearby sensitive receptors to existing on-site hazardous materials, and would not create a significant hazard through upset or accident conditions involving excavated materials.

The Proposed Project's construction would require the use, transport, and disposal of hazardous materials; however, as detailed above, compliance with the applicable regulations and implementation of SWPPP and permit BMPs would ensure that no significant risks would result to construction workers, the public, or the environment from reasonably foreseeable upset or accident conditions involving the use of hazardous materials for the Proposed Project's construction activities.

Operations associated with the Proposed Project would include the use of hazardous and/or flammable materials, such as ammunition, tires, fuels, and flares. These materials would pose a potential health and safety risk to employees on-site and to individuals nearby in foreseeable upset and/or accident (e.g., fire) conditions. However, as discussed above, all hazardous materials would be either contained within the buildings (e.g., solvents and ammunition), or have appropriate containment measures. For example, flares would be stored in a fusee enclosure that is designed to allow flares to burn until all flames are extinguished. Cement-block walls surrounding the fusee enclosure on three sides would further minimize the potential for risk to humans or the environment from a potential accident/fire risk. In addition, implementation of the applicable provisions of USEPA, OSHA, Cal/OSHA, CalEPA, Cal OES, CAL FIRE, and CUPA permitting processes would fully address potential risks associated with all hazardous or flammable materials used during the

- Proposed Project's operation. Storage and use of these materials would not be significantly different from their use at the existing CHP Southern Division Santa Fe Springs Area Office.
- Therefore, with compliance with the applicable regulations and implementation of applicable BMPs, this impact would be **less than significant**.
 - c. Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school—*No Impact*
- No existing or proposed schools are located within ¼ mile of the Project site. Therefore, there would be **no impact**.
 - d. Located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, create a significant hazard to the public or the environment—Less than Significant
 - The Proposed Project is a listed Historic Cortese site due to a leaking underground storage tank (LUST) reported on September 11, 1989 (Avocet 2018a). The contaminants of concern included gasoline that potentially impacted an aquifer used for drinking water supply. The exact location of the gasoline release is unknown. SWRCB declared the site cleanup completed and cased the case as of November 20, 1996.
 - Another release was reported to the Los Angeles RWQCB in a letter dated August 15, 1996. The waste discharge report describes a bioremediation cell in which soil impacted by bunker fuel was treated. RWQCB determined that soil in the treatment cell had been satisfactorily bioremediated, could be reused as backfill in the excavation area, and that no further action (NFA) was required (LARWQCB, August 15, 1996 as cited in Avocet 2018a). Hospital personnel recalled that the release was from a former 3,000-gallon underground storage tank that stored No. 6 bunker fuel oil west of the boiler house, approximately 765 ft west of the Project site.
 - A Phase II Investigation (Avocet 2018b) assessed other potential hazardous materials releases from adjacent sites and the potential impacts to the Project site, including: groundwater impacts from offsite sources; potential for methane gas; and VOCs migration to the Project site from offsite sources. Field investigations revealed *de minimis* concentrations of TPH, metals, and VOCs of these analytes not likely to accumulate inside future structures at concentrations in excess of conservative residential indoor air screening levels. Moreover, methane was not detected during site investigations and the site is not located within 300 ft of an oil/gas well or within 1,000 ft of a methane-producing landfill.
 - Therefore, the Proposed Project would not create a significant hazard to the public or the environment as a result of past onsite hazardous releases and this impact would be **less than significant**.

- e, f. Located within an airport land use plan area or, where such a plan has not been adopted, be within 2 miles of a private airport or public airport and result in a safety hazard for people residing or working in the study area—Less than Significant
- No airports or airstrips are located within 2 miles of the Project site. The nearest airport is the Fullerton Municipal Airport approximately 5.9 miles southeast of the Project site.
 - A proposed 148-foot communications tower would be constructed as part of the Proposed Project. The tower would not affect the flight path of aircraft but could pose a potential risk to the assurance of navigation signal reception for aircraft flying to and from local airports.
 - CHP would comply with the rules and regulations of CFR Title 47, Telecommunication, regarding the location and construction of the communications tower, registering the communications tower with FCC, and marking and lighting of the communications tower. The Proposed Project would submit applicable forms upon completion of tower construction. Therefore, this impact would be **less than significant**.
 - g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan—*Potentially Significant*
 - Construction-related employee vehicle trips and truck trips for the Proposed Project would potentially increase traffic to on Bloomfield Avenue and cause slowdowns as construction vehicles enter and exit the Project site over the duration of the 24-month construction period. An increase in traffic could impair emergency responders. In addition, Proposed Project operations would result in an increase in trips to the Project site. These impacts may be considered **potentially significant** and this will be further evaluated in the EIR.
 - h. Expose People or Structures either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires—*No Impact*
 - The Proposed Project is located in an urban, developed area. The Project site is encircled by asphalt streets and walkways and includes a baseball field, greenhouse, plant nursery, and irrigated turf grass and landscaped areas. Surrounding land uses consists of other developed, commercial/industrial uses. The nearest open space area is the Puente Hills approximately 4.2 miles northeast of the site. No wildlands exist in the vicinity of the Project site; therefore, the Proposed Project would have **no impact**.

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Chapter 3. Environmental Checklist

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3.10 HYDROLOGY AND WATER QUALITY

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

3.10.1 Regulatory Setting

Federal Laws, Regulations, and Policies

3 Clean Water Act

CWA is the primary federal law that protects the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands. Key sections pertaining to water quality regulation for the hydrology and water quality impact evaluation are CWA § 303 and § 402.

Section 303(d) — Listing of Impaired Water Bodies

Under CWA § 303(d), states are required to identify "impaired water bodies" (i.e., those not meeting established water quality standards), identify the pollutants causing the impairment, establish priority rankings for waters on the list, and develop a schedule for the development of control plans to improve water quality. USEPA then approves the State's recommended list of impaired waters or adds and/or removes waterbodies.

Section 402—NPDES Permits for Stormwater Discharge

CWA § 402 regulates stormwater discharges to surface waters through the NPDES, which is officially administered by USEPA. In California, USEPA has delegated its authority to the SWRCB, which, in turn, delegates implementation responsibility to the nine RWQCB, as discussed below in reference to the Porter-Cologne Water Quality Control Act (known as the Porter-Cologne Act).

The NPDES program provides for both general (those that cover a number of similar or related activities) and individual (activity- or project-specific) permits.

General Permit for Construction Activities: Most construction projects that disturb 1.0 or more acre of land are required to obtain coverage under the SWRCB's General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order 2009-0009-DWQ as amended by 2010-0014-DWQ and 2012-0006-DWQ). The general permit requires that the applicant file a public notice of intent to discharge stormwater and prepare and implement a SWPPP. The SWPPP must include a site map and a description of the proposed construction activities, demonstrate compliance with relevant local ordinances and regulations, and present a list of BMPs that will be implemented to prevent soil erosion and protect against discharge of sediment and other construction-related pollutants to surface waters. Permittees are further required to monitor construction activities and report compliance to ensure that BMPs are correctly implemented and are effective in controlling the discharge of construction-related pollutants.

Municipal Stormwater Permitting Program: SWRCB regulates stormwater discharges from municipal separate storm sewer systems (MS4s) through its Municipal Storm Water Permitting Program (SWRCB 2013). Permits are issued under two phases depending on the size of the urbanized area/municipality. Phase I MS4 permits are issued for medium (population between 100,000 and 250,000 people) and large (population of 250,000 or more people) municipalities, and are often issued to a group of co-permittees within a metropolitan area. Phase I permits have been issued since 1990. Beginning in 2003, SWRCB began issuing Phase II MS4 permits for smaller municipalities (population less than 100,000).

The City of Norwalk is a co-permittee under the Phase I MS4 permit (Order No. R4-2012-0175, NPDES No. CAS004001, amended by Order WQ 2015-0075) issued to the Los Angeles County Flood Control District, the Los Angeles County, and 84 incorporated cities within the coastal watersheds of Los Angeles County with the exception of the City of Long Beach. This permit includes Total Maximum Daily Load (TMDL) provisions designed to ensure that permittees achieve waste load allocations (WLAs) and meet other requirements of TMDLs covering receiving waters impacted by the permittees' MS4 discharges. Among the TMDL provisions are applicable water quality-based effluent limitations for trash, compliance options that permittees may use to achieve compliance with the effluent limitations for trash, and monitoring and reporting requirements related to the effluent limitations for trash. (Los Angeles RWQCB 2016).

Federal Emergency Management Agency

FEMA produces flood insurance rate maps that identify special flood hazard areas. The maps further classify these areas into "zones" that broadly characterize the potential risk of an area being inundated by a 100-year or 500-year flood in any given year.

State Laws, Regulations, and Policies

Porter-Cologne Water Quality Control Act

The Porter–Cologne Act, passed in 1969, dovetails with CWA (see discussion of the CWA above). It established SWRCB and divided the state into nine regions, each overseen by a RWQCB. The SWRCB is the primary State agency responsible for protecting the quality of the state's surface water and groundwater supplies; however, much of the SWRCB's daily implementation authority is delegated to the nine RWQCBs, which are responsible for implementing CWA §§ 401, 402, and 303[d]. In general, SWRCB manages water rights and regulates statewide water quality, whereas RWQCBs focus on water quality within their respective regions.

The Porter-Cologne Act requires RWQCBs to develop water quality control plans (also known as basin plans) that designate beneficial uses of California's major surface-water bodies and groundwater basins and establish specific narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a waterbody (i.e., the reasons that the waterbody is considered valuable). Water quality objectives reflect the standards necessary to protect and support those beneficial uses. Basin plan standards are primarily implemented by regulating waste discharges so that water quality objectives are met.

The Project site is located in the San Gabriel Hydrologic Unit, Coyote Creek Sub-Area, and is under the jurisdiction of the Los Angeles RWQCB. The Water Quality Control Plan for the Los Angeles Region establishes the following beneficial uses of the Lower San Gabriel River (Reach 2 – Whittier Narrows Dam to Firestone Blvd): municipal water supply (MUN), Industrial Service Supply (IND), Industrial Process Supply (PROC), Ground Water Recharge (GWR), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Water Contact Recreation (REC1), and Non-contact Water Recreation (REC2). Beneficial uses established for the North Fork of the Coyote Creek include (MUN), Industrial Service Supply (IND), Industrial Process Supply (PROC), Warm Freshwater Habitat (WARM), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE),

Water Contact Recreation (REC1), and Non-contact Water Recreation (REC2). (Los Angeles RWQCB 2014)

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), passed in 2014, became law in 2015 and created a legal and policy framework to locally manage groundwater sustainably. SGMA allows local agencies to customize groundwater sustainability plans to their regional economic and environmental conditions and needs, and establish new governance structures, known as Groundwater Sustainability Agencies (GSAs). SGMA requires that a groundwater sustainability plan (GSP) be adopted for high and medium priority groundwater basins in California by 2020 for basins with critical overdraft. Low and very low priority basins are not required to adopt GSPs. GSPs are intended to facilitate the use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results (e.g., chronic lowering of groundwater levels).

The Coastal Plain of Los Angeles Basin – Central Subbasin, within which the Proposed Project is located, is designated as a very low priority basin under SGMA (California Department of Water Resources [DWR] 2018). Therefore, a GSP is not required for this basin.

3.10.2 Environmental Setting

Regional Setting and Climate

The Project site is located in the South Coast Hydrologic Region, specifically within the Coastal Plain of the Los Angeles Basin, at an elevation of approximately 138 feet above mean sea level. The Coastal Plain of Los Angeles is bounded by the Santa Monica Mountains to the north; the Puente Hills, Chino Hills, and the Santa Ana Mountains to the east; and the San Joaquin Hills to the south; and the Pacific Ocean to the west (Avocet 2018). Major mountain ranges within the Los Angeles Region include the San Gabriel Mountains, Santa Monica Mountains, Santa Susana Mountains, Simi Hills, and Santa Ynez Mountains (Los Angeles RWQCB 2014).

The climate of the South Coast region is characterized by mild, wet winters and warm, dry summers. Most of the region's precipitation falls between December and March (DWR 2013). In the Norwalk area, the lowest average monthly temperature is approximately 47 °F in the winter. The highest average monthly temperature reaches approximately 90°F in the summer (Golden State Water Company [GSWC] 2016). This area receives an average of 9.18 inches of precipitation during the winter months (Western Regional Climate Center 2012).

Surface Water Hydrology and Quality

No surface water features are located in immediate proximity to the Project site. The nearest surface water features include engineered, concrete-lined channels: the North Fork of the Coyote Creek (also known as Cañada Verde Creek, approximately 1.6 miles east), and the San Gabriel River (Reach 2, from Whittier Narrows Dam to Firestone Blvd, approximately 2.2 miles northwest). Of these water bodies, the North Fork of the Coyote Creek is listed on the CWA 303(d) list of impaired water body segments for indicator bacteria and selenium (SWRCB 2017). Reach 2 of the San Gabriel River is listed as impaired for cyanide, lead, and water temperature (SWRCB 2017). The North Fork of Coyote Creek is a tributary to the San Gabriel River, which drains to the San Gabriel Estuary, which is impaired for various

1 contaminants, including copper, dioxin, indicator bacteria, nickel, and dissolved oxygen (SWRCB 2017).

Stormwater

The Project site is relatively flat and comprised primarily of pervious surfaces (i.e., a maintained lawn area). Impervious surfaces on the Project site are approximately 24,300 square feet. Stormwater generated on the Project site either infiltrates into the soil or sheetflows toward the south (Earth Systems Pacific 2018).

Stormwater infrastructure and maintenance in the Project vicinity is generally provided by Los Angeles County Public Works (LA County Public Works), with additional connecting infrastructure (i.e., catchbasins) maintained by the City of Norwalk. Directly east of the site, the Bloomfield Drain reinforced concrete pipe runs along Bloomfield Avenue. Two stormwater laterals connecting catch basins to underground gravity mains are also located along Bloomfield Avenue: one just north of where it intersects with North Circle Drive and a second midway between North Circle Drive and South Circle Drive. Additionally, approximately six catch basins maintained by the County or City of Norwalk run along Bloomfield Avenue that span the project extent or are immediately south of the Project site. (LA County Public Works 2018).

Groundwater Levels, Flows, and Quality

The Project site lies above the Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin (Groundwater Basin No. 4-11.04). The Central Subbasin occupies a large portion of the southeastern part of the Coastal Plain of the Los Angeles Groundwater Basin and contains many aquifers of permeable sands and gravels separated by semi-permeable to impermeable sandy clay to clay (DWR 2004). Historic groundwater levels in the basin have varied between five and ten feet below mean sea level over the last twenty years, with wells indicating the upper levels of that range in recent years (DWR 2004).

Groundwater flow direction may be affected by surface topography, hydrology, hydrogeology, soil conditions, and nearby wells. In general, groundwater flow in the Central subbasin has been from recharge areas in the northeast part of the subbasin to the south-southeast, towards the Pacific Ocean (Avocet 2018). Groundwater flow directions indicate that groundwater beneath the Project site generally follows this flow pattern. Based on investigations in the general site vicinity, groundwater beneath the site is expected to occur between 107 and 130 feet bgs (Avocet 2018).

Groundwater in the lower aquifers of the Central Subbasin is generally of good quality. However, the upper aquifers are degraded by organic and inorganic pollutants from a variety of sources, including leaking tanks, sewer lines, and illegal discharges. Groundwater quality in the deeper production aquifers is threatened by migration of pollutants from the upper aquifers (DWR 2013). Groundwater with high total dissolved solids (TDS) also occurs in the subbasin, with ranges from 200 to 2,500 mg/l, averaging 453 mg/l for the 293 wells tested (DWR 2004).

Floodplains and Tsunamis

The Project site is located within a FEMA designated area of minimal flood hazard; however, it is adjacent to a designated Zone X area with a 0.2% Annual Chance Flood Hazard or 500-year flood plain (FEMA 2008). Additionally, the Project site is outside of any tsunami inundation areas (CAL OES 2018). While the majority of the City of Norwalk would be subject to inundation from dam failure from the Whittier Narrows Dam (City of Norwalk 1996), the Project site is outside, and approximately 2,800 feet east, of the area of anticipated dam inundation (Earth Systems Pacific 2018).

3.10.3 Discussion of Checklist Responses

a. Violate any water quality standards, waste discharge requirements or otherwise substantially degrade surface or ground water quality—Less than Significant

Construction

Construction of the Proposed Project would involve ground disturbance that could result in sediments being transported into local storm drainage systems, thereby degrading the quality of receiving waters. Construction would also include the potential storage, use, transport, and/or disposal of hazardous materials (e.g., fuels, oils, solvents) used for construction equipment. Accidental spills of these materials or improper material disposal could pose a risk to the groundwater underlying the spill or disposal area if the materials seep into the soil or groundwater. In addition, ground-disturbing activities (such as trenching) during Project construction could potentially expose groundwater, thereby providing a direct pathway by which hazardous materials could enter groundwater and potentially impair its quality. Improper disposal of dewatering effluent could also pose a potential threat to surface water or groundwater quality if the dewatered groundwater was polluted and transported to surface waters or groundwater. Hazardous materials spills on the Project site could affect surface water if they enter the existing stormwater system near the Project site and ultimately were transported to the stormwater system's receiving waterbodies.

As discussed further in Section 3.9, "Hazards and Hazardous Materials," storage or use of hazardous materials for Project construction activities would be limited and would be performed in compliance with all applicable federal, state, and local hazardous materials and hazardous waste regulations. No chemical processing or storage or stockpiling of substantial quantities of hazardous materials would take place at the Project site other than what would be necessary for standard construction activities. Furthermore, CHP and/or its contractor would dispose of hazardous materials at an appropriate hazardous materials disposal facility or landfill in accordance with all applicable federal, state, and local hazardous materials and hazardous waste regulations.

The Proposed Project also would be required to comply with applicable NPDES permits such as the NPDES General Permit for Construction Activities. As part of its compliance with this permit, CHP and/or its contractor would prepare a SWPPP and prevent polluted dewatered groundwater from being discharged to surface waters or groundwater. Compliance with these measures would prevent substantial impacts to surface or groundwater quality from occurring. Therefore, this impact would be **less than significant**.

Operation

As detailed in Chapter 2, *Project Description*, and Section 3.9, "Hazards and Hazardous Materials," operation of the Proposed Project would include the use and storage of hazardous materials, including fuel and oils, and would generate hazardous wastes from vehicle maintenance activities. These hazardous materials and wastes could result in an impact on water quality if transported to downstream surface waters (through the stormwater infrastructure) or into soils or groundwater; however, all hazardous materials would be either contained within the buildings (e.g., solvents used for cleaning of guns) or have appropriate containment measures. Specifically, hazardous materials stored outdoors would be kept in containers that have secondary or tertiary containment. With implementation of the above protocols, this impact would be **less than significant**.

In conclusion, given compliance with existing regulations, groundwater and surface water quality would be protected during construction and operation of the Proposed Project. Therefore, this impact would be **less than significant**.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge, such that the project may impede sustainable groundwater management of the basin—*Less than Significant*

The Proposed Project would develop 5.2 acres within the 6-acre site. Approximately 4 acres of this would be impervious surfaces; the remainder of the site would be unpaved, such as for landscaping and stormwater management. Additionally, the Proposed Project would involve re-surfacing of approximately 20,000 ft² of roadway and approximately 5,000 ft² of sidewalks along South Circle and Elm Street adjacent to the Project site. These area quantities are subject to change pending final design. Addition of impervious surfaces can reduce groundwater recharge by preventing water falling on the site as precipitation from infiltrating into the soil and groundwater below.

As described in Section 3.10.2 above, recharge in the Central subbasin occurs through recharge areas in the northeast part of the subbasin. As such, while the additional 4 acres of impervious surface that would result from the Proposed Project could reduce groundwater recharge to some degree, it would not substantially affect overall rates of recharge in the subbasin since it is not in a principle recharge area. Additionally, water falling on landscaped areas of the Project site would still have the opportunity to infiltrate into soil and groundwater. Furthermore, because the proposed project would not involve the installation of a well or pumping from an existing well on the site, the project would not directly remove any groundwater, and would therefore not conflict with sustainable groundwater management of the Central subbasin.

Finally, given that depth to groundwater at the site is likely in the range of 107 to 130 feet bgs. Project construction activities are unlikely to encounter substantial quantities of groundwater or require substantial dewatering, so groundwater supplies are unlikely to decrease in this way. Construction-related water demands for dust control over the anticipated 24-month construction period would be met using water trucks. While the source of water provided by the water trucks could derive from groundwater, the amount of water

used during construction would not be sufficient to substantially affect regional groundwater supplies.

Project water demands during operation would be met using the City's municipal water supplies, which are derived from groundwater and surface water, as described in Section 3.19, "Utilities and Service Systems." As discussed in Section 3.11, "Land Use and Planning," however, the Proposed Project would use water-efficient Leadership in Energy & Environmental Design (LEED) practices and technologies, and would be consistent with applicable land use designations and general plan policies. Therefore, Project water demands would not substantially impact groundwater water supplies or exceed the City's anticipated water demands from planned development.

Overall, the Proposed Project would not substantially decrease groundwater supplies such that the project may impede sustainable groundwater management of the basin. As a result, this impact would be **less than significant**.

c (i-iv). Substantially alter the existing drainage pattern through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation; increase the rate or amount of surface runoff resulting in flooding; create or contribute runoff water which would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows—Less than Significant

Development of the Proposed Project would involve ground-disturbing construction activities and the creation of impermeable surfaces, both of which would alter the existing drainage pattern of the site. During construction, clearing, vegetation removal, grading, and other ground-disturbing activities would expose soils within the Project site and alter the onsite drainage patterns, thereby potentially increasing on-site susceptibility to erosion. As described in Section 3.10.3 item (a) above, however, the Project would be subject to the NPDES General Construction Permit, which would require preparation and implementation of a SWPPP, including measures to prevent erosion and siltation. As such, impacts associated with erosion and siltation from construction site stormwater discharges would be avoided or minimized.

Although no streams or other surface waters are present within the Project site, the Proposed Project would include construction-related grading activities and the development of impermeable surfaces that would alter the Project site's existing drainage patterns; however, the Proposed Project's stormwater infrastructure would ensure that the rate or amount of surface runoff from the Project site would be reduced before discharge to the existing stormwater infrastructure. Thus, the Proposed Project would not result in flooding on- or off-site, and would not impede or redirect flows.

The Proposed Project would create 4 acres of impermeable surfaces, which could alter or increase the Project site's runoff flow patterns and quantities. In addition, during Project operation, vehicular use of the Project's parking areas could result in the transfer of

pollutants (such as fuels and oils) onto the parking area surface, which could potentially be flushed into local stormwater drainages and, ultimately, into surface waters.

The design of the Proposed Project would include infrastructure to capture on-site runoff flows to avoid the potential for flooding and provide water quality treatment before discharging captured runoff into the existing City's stormwater system and ultimately into the receiving surface waters. The Proposed Project's stormwater infrastructure is anticipated to include, but would not be limited to, a stormwater detention basin as well as stormwater retention swales on the Project site. In addition, applicable state water quality regulations would require implementation of BMPs and other post-construction measures to minimize the discharge of pollutants into the Los Angeles County's MS4 system, as described in the Phase I NPDES MS4 Permit. BMPs applicable to the Proposed Project would include source control; low-impact development; and structural and non-structural BMPs, as defined in the Phase I NPDES MS4 Permit (Order No. R4-2012-0175, NPDES No. CAS004001, amended by Order WQ 2015- 0075). Inclusion of these features would avoid or minimize the potential impacts described above.

Therefore, the proposed project would not substantially alter the existing drainage pattern through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: result in substantial erosion or siltation; increase the rate or amount of surface runoff resulting in flooding; create or contribute runoff water which would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff; or impede or redirect flood flows. As a result, this impact would be **less than significant**.

d. In flood hazard or, tsunami, or seiche zones, risk release of pollutants due to project inundation—*Less than Significant*

As mentioned above, the Project site is located within a FEMA designated area of minimal flood hazard; however, it is adjacent to a designated Zone X area with a 0.2% Annual Chance Flood Hazard, located in the City of Santa Fe Springs (across Bloomfield Avenue). The Project site is not downstream of any large standing bodies of water in which a seiche could occur, and is not within a tsunami-inundation area. Therefore, the potential to risk release of pollutants due to project inundation is low to nonexistent. As such, the impact would be **less than significant**.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan—*No Impact*

The Proposed Project involves the construction and operation of a replacement CHP Area Office and associated improvements. It would not obstruct implementation of the Los Angeles RWQCB's Water Quality Control Plan (Basin Plan) nor would it conflict with any sustainable groundwater management plan under the Los Angeles Groundwater Sustainability Agency. As stated above, the Proposed Project would not contribute substantial sources of polluted runoff and would not substantially decrease groundwater supplies. Furthermore, the Proposed Project would be required to obtain LEED silver certification and would feature water-efficient fittings and fixtures to conserve water. In this regard, the new facility would likely be more water-efficient than the existing CHP facility in Santa Fe Springs. Therefore, **no impact** would occur.

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3.11 LAND USE AND PLANNING

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
W	ould the Project:				
a.	Physically divide an established community?				\boxtimes
b.	Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				
3.1	Development activities on state-owned land policies. However, such laws, regulations, and	•			-

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not located on the Project site (e.g., connections to infrastructure within the public right-ofway). Local laws, regulations, and policies applicable to the Proposed Project are provided below.

Los Angeles County General Plan. Los Angeles County's General Plan (2015) contains the following goals and policies related to land use that are relevant to the Proposed Project:

Goal LU 7: Compatible land uses that complement neighborhood character and the natural environment.

Policy LU 7.1: Reduce and mitigate the impacts of incompatible land uses, where feasible, using buffers and other design techniques.

Goal LU 10: Well-designed and healthy places that support a diversity of built environments.

Policy LU 10.1: Encourage community outreach and stakeholder agency input early and often in the design of projects.

Policy LU 10.3: Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles,

Chapter 3. Environmental Checklist

and reflect appropriate features such as massing, materials, color, detailing or ornament.

Policy LU 10.4: Promote environmentally-sensitive and sustainable design.

Policy LU 10.5: Encourage the use of distinctive landscaping, signage and other features to define the unique character of districts, neighborhoods or communities, and engender community identity, pride and community interaction.

City of Norwalk General Plan. The City's General Plan (1996) contains the following goal, policy and objective related to land use that are relevant to the Proposed Project:

Goal: To create a well-balanced community by careful land use and urban design policies which provide for the housing, employment, social, economic, recreational, cultural, health, safety, educational, and service needs of its residents an which maintain and enhance a high quality of life.

Policy: Encourage developments to be well located and functionally integrated with adjacent transit facilities.

Objective: To provide for upgraded infrastructure and services to support the City's physical and economic growth and development.

3.11.2 Environmental Setting

According to the City of Norwalk's General Plan land use map, the Project site is designated as Institutional (City of Norwalk 2016). This designation is intended for land uses which provide public services, including City Hall, the County Superior Courthouse, and other government buildings (City of Norwalk 1996). The land that the Project site will be constructed on is currently owned and used by the DSH and contains recreational facilities (landscaped lawn area, baseball field, basketball court, greenhouse, and a plant nursery) for residents of the hospital. Surrounding land uses include DSH-Metropolitan facilities to the north, south, and west of the Project site. Bloomfield Avenue borders the site on the east, and commercial/industrial buildings (ACI International, Fleetwash, and Kelly Pipe Company) are located further to the east.

The Project site is zoned as I (Institutional). Section 17.08.180 of the Norwalk Municipal Code states that the purpose and intent of the I zone is to implement the General Plan Institutional land use designation, and to permit public uses that support the function and purposes of other land uses, as well as the functions of City government and other government entities. According to Section 17.08.190, the following uses are permitted in the I zone: (1) government facilities including a City Hall, corporate yard, courthouse, fire station, fueling station, hospital, police or sheriff station, public library, and other similar uses, approved in accordance with the procedures in Section 17.02.270; (2) uses that provide economic development opportunities promoting employment, education, and business training resources or services to the public, as determined by the City of Norwalk; and (3) wireless telecommunications facilities, as provided by Chapter 17.04, Article IV.

3.11.3 Discussion of Checklist Responses

a. Divide an established community—No Impact

The proposed CHP facility would be compatible with surrounding land uses. The Project site is designated for Institutional uses, which includes public services. Government facilities, including police and sheriff stations, are public services that are permitted on land designated and zoned as Institutional in the City of Norwalk. The Project site is compatible with surrounding land uses as DSH-Metropolitan is also considered a public service. In addition, as described in Chapter 2, *Project Description*, the Proposed Project would include road improvements to Elm Street and South Circle, including the connection of South Circle to Bloomfield Avenue, which would allow for increased connectivity between the DSH-Metropolitan site and Bloomfield Avenue. The proposed CHP facility would not divide an established community. Therefore, there would be **no impact**.

b. Cause a significant environmental impact due to a conflict with land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect —Less than Significant

As described in Chapter 2, *Project Description*, DSH-Metropolitan would transfer jurisdiction of the Project site to CHP and would thus remain a State-owned property. Because the Project site is owned by the State, the County does not have jurisdiction over the site, and thus the City's land use plans and policies only apply to Proposed Project activities that would occur off-site (e.g., infrastructure tie-ins). Off-site activities would be conducted consistent with local requirements. This impact would be **less than significant**.

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Chapter 3. Environmental Checklist

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3.12 MINERAL RESOURCES

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Project:				
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?				
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?				

2 3.12.1 Regulatory Setting

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3 Federal Laws, Regulations, and Policies

4 No federal regulations are applicable to mineral resources in relation to the Proposed Project.

State Laws, Regulations, and Policies

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA) requires that the State Mining and Geology Board identify, map, and classify aggregate resources throughout California that contain mineral resources of regional significance. The main objective of the SMARA classification-designation process is to ensure that mineral resources will be available when needed. Local jurisdictions are required to enact planning procedures to guide mineral conservation and extraction at particular sites and to incorporate mineral resource management policies into their general plans.

There are four Mineral Resource Zone (MRZ) classification-designations used in SMARA. These MRZ's are defined below (CDOC 1996):

- MRZ 1: Areas where adequate geologic information indicates no presence of significant mineral deposits, or where it is determined that there is little likelihood of the existence of these deposits.
- MRZ 2: Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. This zone shall be applied to known mineral deposits or where well developed lines of reasoning, based upon economic, geologic principles and adequate data demonstrate that the likelihood for occurrence of significant mineral deposits is high.

- MRZ 3: Areas containing mineral deposits, the significance of which cannot be evaluated from available data.
 - MRZ 4: Areas where available information is inadequate for assignment to any other MRZ zone.

3.12.2 Environmental Setting

No mineral resources are located within the City of Norwalk (CDOC 1982a, 2010a). The closest active mining operation is Durbin (Mine ID #91-19-0023) in the Irwindale Production Area, approximately 10.0 miles northeast (CDOC 2016). This site produces sand and gravel. No present or prospective mining sites are located within 9 miles of the Project site. There are no mining operations located on the Project site, nor are there any known wells or oil and gas resources (CDOC 2010b).

The Proposed Project is located in an area designated as MRZ-1 in the central portion of the San Gabriel Valley P-C Region (CDOC 1982a). As described in Section 3.12.1 above, this MRZ classification indicates that there is no presence of significant mineral resources, or there is little likelihood for the presence of such resources. One of the most significant sand and gravel deposits in the Los Angeles area is the San Gabriel Alluvial Fan, located in the north San Gabriel Valley P-C Region (CDOC 1982c). Most deposits suitable as a source of aggregate are confined to the northern part of the valley and consist of sand and gravel resources. In 1984, 2,402 million tons of designated resources (including reserves) were identified in the San Gabriel Valley P-C Region, but no active aggregate operations or land classified as MRZ-2 was located in the City of Norwalk (CDOC 2010a, 1982c). The City of Norwalk is located on alluvium and terrace deposits. The San Gabriel Valley P-C Region's sand and gravel deposits are located north of the City of Norwalk.

3.12.3 Discussion of Checklist Responses

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 – *Less than Significant*

The Proposed Project would develop the 6-acre site currently containing minimal impervious surfaces. Such development would limit the ability for mineral resource development and extraction at this site, but would not permanently affect any mineral resources that underlie the site. There are no known mineral resources underlying the Project site. The Project site is located in the City's urban limits and construction activities associated with the Proposed Project would not occur within areas identified for potential mineral recovery. Additionally, present land uses in the project area are incompatible with mining due to urbanization and impervious land surfaces. Therefore, this impact would be **less than significant**.

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b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan – *No Impact*

The Project site is not identified as a locally important mineral recovery site. The Project site is within the City's urban limits where land use is incompatible with mining. The City of Norwalk General Plan does not analyze any mineral resources, nor provide policies and goals regarding the preservation of mineral resources within the City (City of Norwalk 1996). Additionally, the Los Angeles County General Plan did not identify any locally important mineral resource in the Project area and the Project would not interfere with the County's Mineral Resource Zone Protection Policies (Policy C/NR 10.1-10.6) (Los Angeles 2015a, b). Therefore, the Proposed Project would have **no impact** on the availability or recovery of a locally important mineral resource.

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Chapter 3. Environmental Checklist

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3.13 Noise

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		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the Project result in:				
a.	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?				
b.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				
c.	For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?				

2 3.13.1 Overview of Noise and Vibration Concepts and Terminology

3 **Noise**

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In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by various parameters, including the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level is the most common descriptor used to characterize the loudness of an ambient sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity. Because sound pressure can vary enormously within the range of human hearing, a logarithmic scale is used to keep sound intensity numbers at a convenient and manageable level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise measurements are weighted more heavily for frequencies to which humans are sensitive, creating the A-weighted decibel (dBA) scale.

Different types of measurements are used to characterize the time-varying nature of sound. Below are brief definitions of these measurements and other terminology used in this chapter.

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- 1 **Decibel (dB)** is a measure of sound on a logarithmic scale that indicates the squared 2 ratio of sound pressure amplitude to a reference sound pressure amplitude. The 3 reference pressure is 20 micro-pascals. 4 **A-weighted decibel (dBA)** is an overall frequency-weighted sound level in decibels 5 that approximates the frequency response of the human ear. 6 **Maximum sound level (Lmax)** is the maximum sound level measured during a given 7 measurement period. 8 **Minimum sound level (L_{min})** is the minimum sound level measured during a given 9 measurement period. 10 **Equivalent sound level (L_{eq})** is the equivalent steady-state sound level that, in a given period, would contain the same acoustical energy as a time-varying sound 11 level during that same period. 12 13 **Percentile-exceeded sound level (L**_{xx}) is the sound level exceeded during x14 percent of a given measurement period. For example, L_{10} is the sound level exceeded 15 10 percent of the measurement period.
 - **Day-night sound level (L**_{dn}) is the energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels during the period from 10:00 p.m. to 7:00 a.m. (typical sleeping hours). This weighting adjustment reflects the elevated sensitivity of individuals to ambient sound during nighttime hours.
 - Community noise equivalent level (CNEL) is the energy average of the A-weighted sound levels during a 24-hour period, with 5 dB added to the A-weighted sound levels between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels between 10:00 p.m. and 7:00 a.m.

In general, human sound perception is such that a change in sound level of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level. **Table NOI-1** presents approximate noise levels for common noise sources, measured adjacent to the source.

Table NOI-1. Examples of Common Noise Levels

Common Outdoor Activities	Noise Level (dBA)
Jet flyover at 1,000 ft	110
Gas lawnmower at 3 ft	100
Diesel truck at 50 ft traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 ft, commercial area	70
Heavy traffic at 300 ft	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

Source: Caltrans 2009

Vibration

Ground-borne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a composite, or "spectrum," of many frequencies. The normal frequency range of most ground-borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz. Vibration information for this analysis has been described in terms of the peak particle velocity (PPV), measured in inches per second, or of the vibration level measured with respect to root-mean-square vibration velocity in decibels (VdB), with a reference quantity of 1 micro-inch per second.

Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. High-frequency vibrations reduce much more rapidly than do those characterized by low frequencies, so that in a far-field zone distant from a source, the vibrations with lower frequency amplitudes tend to dominate. Soil properties also affect the propagation of vibration. When ground-borne vibration interacts with a building, a ground-to-foundation coupling loss usually results but the vibration also can be amplified by the structural resonances of the walls and floors. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. In some cases, the vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as ground-borne noise.

Ground-borne vibration is generally limited to areas within a few hundred ft of certain types of industrial operations and construction/demolition activities, such as pile driving. Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human

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annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes.

3.13.2 Regulatory Setting

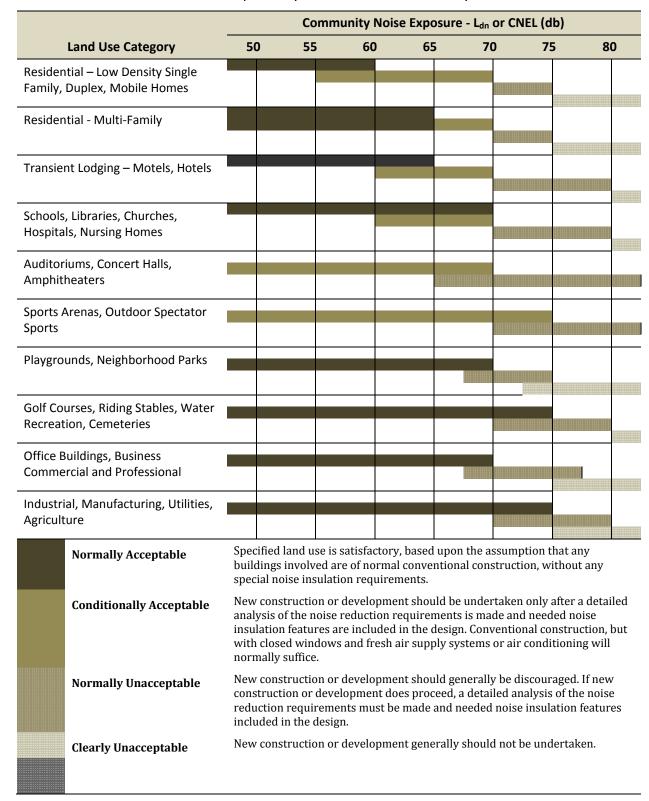
Federal Laws, Regulations, and Policies

- No federal laws, regulations, or policies for construction-related noise and vibration that apply to the Proposed Project. However, the Federal Transit Administration (FTA) Guidelines for Construction Vibration in Transit Noise and Vibration Impact Assessment state that for evaluating daytime construction noise impacts in outdoor areas, a noise threshold of 90 dBA $L_{\rm eq}$ and 100 dBA $L_{\rm eq}$ should be used for residential and commercial/industrial areas, respectively (FTA 2018).
- For construction vibration impacts, the FTA guidelines use an annoyance threshold of 80 VdB for infrequent events (fewer than 30 vibration events per day) and a damage threshold of 0.12 inches per second (in/sec) PPV for buildings susceptible to vibration damage (FTA 2018).

State Laws, Regulations, and Policies

California requires each local government entity to implement a noise element as part of its general plan. California Administrative Code, Title 4, presents guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. The state land use compatibility guidelines are listed in **Table NOI-2**.

1 Table NOI-2. State Land Use Compatibility Standards for Community Noise Environment



2 Source: California Governor's Office of Planning and Research 2017

3.13.3 Environmental Setting

Sensitive receptors are those segments of the population most susceptible to loud noises: children, the elderly, and individuals with pre-existing serious health problems affected by loud noises. Examples of locations that contain sensitive receptors are residences, schools and school yards, parks and playgrounds, daycare centers, nursing homes, and medical facilities. The Project site is immediately adjacent to the DSH-Metropolitan campus. With respect to groups that could be exposed to noise generated by the Proposed Project, medical, residential, industrial, and office land uses are located near the Project site. The approximate distance to nearby sensitive receptors was determined from the center of the Project site, as recommended by the FTA (2018).

DSH-Metropolitan is adjacent to the Project site and has multiple buildings within 600 ft of the project area. Homes for Life are approximately 20 ft from the edge of the Project site and roughly 270 ft from the project's center. The nearest residences offsite of the hospital campus are located 1,475 ft to the southwest on Volunteer Avenue. Plaza de la Raza Child Development Services facility is 1,350 ft to the north and Vickies Kids Family Daycare is 2,175 ft to the southwest of the Project site's center. Lakeland Elementary School is 3,500 ft northwest, while the nearest middle school and high school are located more than a mile away. Kaiser Medical Clinic is 3,200 ft south of the center of the Project site.

The area is subject to noise emanating from vehicular traffic, in particular from Bloomfield Avenue. Other sources of transportation noise in the area include a railroad line approximately 1,000 feet to the east and Interstate 5, which is located approximately one mile to the southwest. The project is located approximately 4,200 feet northeast of the Norwalk Sheriff Station Heliport, which is the nearest aircraft facility. The nearest public airport, Fullerton Municipal, is roughly six miles from the Project site. Ambient noise in the Project site is also influenced by the nearby industrial, medical, office, and residential activities (i.e., landscape maintenance, delivery vehicles, people talking, parking lot vehicle movements, and car doors closing). The project area is located entirely within the City of Norwalk; however, since the Project site is adjacent to Bloomfield Avenue, which is the boundary between the City of Norwalk and the City of Santa Fe Springs, the analysis below utilizes regulations from both municipalities.

3.13.4 Discussion of Checklist Reponses

a. Substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state or federal standards—*Potentially Significant*

The Proposed Project would generate noises associated with construction activities including construction equipment, and operation of motor vehicles to travel to the Project site, which would be temporary and cease once construction is complete. Operational noise sources would include vehicle traffic from CHP staff, visitors, and delivery vehicles, short testing of vehicle sirens as CHP vehicles are taken on shift, and noise from automobile maintenance repair activities. Periodic noises would be associated with operation of the emergency generator during power outages, and testing of building sirens associated with CHP operations.

Activities on the state-owned land would be exempt from local noise standards. Regardless, the City of Norwalk Noise Ordinance and City of Santa Fe Springs Noise Ordinance are informative as they indicate what is typically considered appropriate for construction-related noise and public safety sirens in the project vicinity. The Proposed Project would be consistent with the City of Norwalk and City of Santa Fe Springs Noise Ordinances, which place limits on construction hours (City of Norwalk 2018, City of Santa Fe Springs 2018). Horns and signaling devices used as a danger warning or as required by law, are exempt from regulation.

The City of Santa Fe Springs Noise Ordinance establishes an absolute maximum noise limit of 70 dBA at residential receptors with declining limits based on cumulative duration in a 1hour period. The City of Norwalk Noise Ordinance limits noise to 60 dB for residential receptors during the daytime (5 dB above ambient) and the City of Norwalk General Plan contains a policy of achieving and maintaining an exterior noise level of 65 dBA at multifamily residential land uses; however, the nearest residential facilities are adjacent to the Project site and, like much of the Project site, are located within the 65 and 70 CNEL noise contours provided in the Norwalk General Plan due to noise from I-5, Bloomfield Avenue, and the railroad. Therefore, the Proposed Project should ensure that the proposed uses do not result in a noise increase greater than 5.0 dBA above existing background levels. Specific trip levels are not yet known but will be determined for the EIR, at which time the Proposed Project's generated noise levels will be evaluated to determine if they are above a 5.0 dBA increase. Since detailed information is needed to ensure that the Proposed Project's generated noise levels are below appropriate thresholds and do not result in a noise increase greater than 5.0 dBA, a detailed noise evaluation will be conducted in the EIR and the impact is **potentially** significant.

b. Generation of excessive groundborne vibration or groundborne noise levels—*Potentially Significant*

Vibration thresholds for buildings occur at a PPV of 0.12 in/sec for buildings extremely susceptible to vibration damage. The human perception and annoyance thresholds are at 65 and 80 VdB respectively. Detailed calculations of vibration damage and perception require detailed information regarding the Proposed Project's potential construction equipment that will be used at the Project site. At this time, the construction equipment is not fully refined to estimate the extent of vibration that would impact the list of potential buildings susceptible to vibration damage and will be further evaluated in the EIR. Given the close proximity of buildings to the Project site and long-term medical care individuals and potentially vibration sensitive equipment in nearby land uses, this impact could be **potentially significant**. This impact will be further analyzed in the EIR.

c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels—Less than Significant

There are no public airports within 2 miles of the Proposed Project. The nearest private airstrip or helipad within 2 miles of the Project site is the Norwalk Sheriff Station Heliport, which is located 4,200 feet to the southwest of the Proposed Project. With capacity for one

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helicopter, the amount of potential noise associated with the heliport is limited. Infrequent helicopter traffic in the vicinity of the Proposed Project wouldn't substantially increase noise levels experienced by people working inside the proposed facility. In addition, the Proposed Project would be designed to ensure that indoor noise levels do not impact people working inside the project buildings. Therefore, the Proposed Project would not expose people working in the Project site to excessive noise levels from private or public airstrips. This impact would be **less than significant**.

3.14 Population and Housing

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
W	ould the Project:				
a.	Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				
b.	Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?				

2 3.14.1 Regulatory Setting

3 Federal Laws, Regulations, and Policies

4 No federal regulations are applicable to population and housing in relation to the Proposed

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6 State Laws, Regulations, and Policies

No state regulations are applicable to population and housing in relation to the Proposed Project.

9 3.14.2 Environmental Setting

The Project site falls within the City of Norwalk, but borders the City of Santa Fe Springs; thus, the environmental setting as it relates to the Proposed Project is described for both Norwalk and Santa Fe Springs. The City of Norwalk's population is currently estimated at 106,084 (U.S. Census Bureau 2018a). The City of Santa Fe Springs' population is currently estimated at 16,223 (U.S. Census Bureau 2018b). Additional community facts related to housing are listed in **Table PH-1** below. The combined homeowner and renter vacancy rate for the cities of Norwalk and Santa Fe Springs is 4.9 and 2.9 percent, respectively.

Table PH-1. Community Facts for the Cities of Norwalk and Santa Fe Springs

Demographic	Norwalk	Santa Fe Springs	
Total housing units	28,528	5,360	
Occupied housing Units 27,286		5,130	
Combined homeowner and renter vacancy rate 4.9%		2.9%	
Predominant Occupation industries 1. Educational services, health care, and social assistance 2. Manufacturing 3. Retail trade		 Educational services, health care, and social assistance Manufacturing Professional, scientific, management and administration and waste management 	

^{*} Data from U.S. Census Bureau 2018c, U.S. Census Bureau 2018d, U.S. Census Bureau 2018f

The majority of jobs in Norwalk and Santa Fe Springs are in the education sector, and health care and social assistance industry, which together accounted for 20 and 24 percent of the workforce in 2016³, respectively (U.S. Census Bureau 2017d and 2017e citing 2016 American Community Survey). Other large industries in both cities include manufacturing; retail trade; and professional, scientific, and management, and administrative and waste management services.

The Project site does not contain any housing structures. On the DSH--Metropolitan campus, there are numerous vacated residential facilities in proximity to the project to the west and south. One actively used residential site north of the Project site is Homes for Life, a transitional, state-licensed 38-bed residential facility for homeless adults with mental illness, that is located along Elm Street (a long driveway) within the hospital campus. Bloomfield Avenue is directly to the east of the Project site followed by commercial/industrial uses.

3.14.3 Discussion of Checklist Responses

a. Induce unplanned population growth—Less than Significant

The Proposed Project would support a total of 159 employees over the next 10 years, which is an increase of 13 over the 146 employees who currently work out of the CHP Santa Fe Springs existing office. Given that the existing Santa Fe Springs office is only 3.0 road miles from the Project site, many of the relocated employees may not need to move their personal residences. However, if a portion of the 146 relocated employees were to move to Norwalk, in addition to the new employees that may be hired over the next 10 years, this could result in a minor increase in the local population. Based on the information presented in Section 3.14.2, sufficient housing is available in Norwalk and Santa Fe Springs to support such a population increase.

³ Note: 2016 was the last year for which data was available.

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The Proposed Project would not involve any activities that would increase the population indirectly, such as by removing an obstacle to growth. It is expected that the current Santa Fe Springs CHP office would be decommissioned and auctioned as part of the State surplus. This action would not be expected to result in substantial population growth at the location of the existing office in Santa Fe Springs.

It is expected that the regional labor force would be sufficient to meet the construction workforce demand associated with the Proposed Project. While some workers may temporarily relocate from other areas, the resulting population increase would be minor and temporary. As a result, this impact would be **less than significant.**

b. Displace a substantial number of existing housing or people—No Impact

The Project site is vacant of active housing units and would not displace any existing housing units or people. The Proposed Project would not require construction of any replacement housing. Furthermore, all of the Proposed Project facilities would be constructed within the 6-acre parcel. As a result, **no impact** would occur.

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Chapter 3. Environmental Checklist

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California Highway Patrol

3.15 Public Services 1 Less than Significant Potentially with Less-than-Significant Mitigation Significant Impact Incorporated Impact No Impact Would the Project: a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a 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 following public services: i. Fire protection? \boxtimes ii. Police protection? X iii. Schools? \boxtimes iv. Parks? \boxtimes v. Other public facilities? \boxtimes 3.15.1 Regulatory Setting 2 3 Federal Laws, Regulations, and Policies 4 No federal laws, regulations, or policies apply to public services and the Proposed Project. State Laws, Regulations, and Policies 5 6 California Fire Code 7 The California Fire Code (Title 24 CCR, Part 9) establishes minimum requirements to 8 safeguard public health, safety, and general welfare from the hazards of fire, explosion, or

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11 12 dangerous conditions in new and existing buildings. Chapter 33 of CCR contains

3304.4 Spontaneous ignition. Materials susceptible to spontaneous ignition, such

requirements for fire safety during construction and demolition as follows:

as oily rags, shall be stored in a listed disposal container.

1 **3304.5 Fire watch.** When required by the fire code official for building demolition. 2 or building construction during working hours that is hazardous in nature, qualified 3 personnel shall be provided with at least one approved means for notification of the fire department and their sole duty shall be to perform constant patrols and watch 4 5 for the occurrence of fire. 6 **3308.1 Program superintendent.** The owner shall designate a person to be the 7 fire prevention program superintendent who shall be responsible for the fire 8 prevention program and ensure that it is carried out through completion of the 9 project. The fire prevention program superintendent shall have the authority to 10 enforce the provisions of this chapter and other provisions as necessary to secure the intent of this chapter. Where guard service is provided, the superintendent shall 11 12 be responsible for the guard service. 13 **3308.2 Prefire plans.** The fire prevention program superintendent shall develop 14 and maintain an approved prefire plan in cooperation with the fire chief. The fire 15 chief and the fire code official shall be notified of changes affecting the utilization of information contained in such prefire plans. 16 17 **3310.1 Required access.** Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 18 19 100 feet of temporary or permanent fire department connections. Vehicle access 20 shall be provided by either temporary or permanent roads, capable of support 21 vehicle loading under all weather conditions. Vehicle access shall be maintained 22 until permanent fire apparatus access roads are available. 23 **3316.1 Conditions of use.** Internal combustion–powered construction equipment 24 shall be used in accordance with all of the following conditions: 25 1. Equipment shall be located so that exhausts do not discharge against combustible material. 26 27 2. Exhausts shall be piped to the outside of the building. 28 3. Equipment shall not be refueled while in operation. 29 4. Fuel for equipment shall be stored in an approved area outside of the building.

3.15.2 Environmental Setting

Fire Protection

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Fire protection services for the city of Norwalk are provided by the Los Angeles County Fire Department (LACoFD). LACoFD is one of the largest emergency service agencies in the world and services nearly 4.1 million residents of Los Angeles County, including 59 cities and over 2,300 square miles of unincorporated area within the County (LACoFD 2018a). The LACoFD includes personnel of 4,670, with 174 fire stations and 22 battalions. With regard to emergency operations, LACoFD has 210 engine companies, 29 truck companies, and 109 paramedic units. Additionally, it has the following reserve equipment (LACoFD 2018b):

- 1 58 engines;
- 2 10 trucks/quints;
 - 31 squads;
 - 21 Battalion SUVs

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In 2017, LACoFD recorded over 395,000 incidents (i.e., fire, hazardous materials, false alarms, etc.) and made over 324,000 emergency medical responses (LACoFD 2018b). The LACoFD Division IV (Battalions 8, 9 and 21) provides service to the City of Norwalk and eleven other cities. Station 20, located at 12110 E. Adoree St. Norwalk, CA, would service the Project site and is approximately 1.2 miles southwest of the Project site (LACoPD 2018c).

Police Protection

Law enforcement services at the Project site are provided by the Los Angeles County Sheriff's Department (LASD) and the Metropolitan Hospital Police Department, which is the DSH-Metropolitan campus' own law enforcement. The LASD's Norwalk Station serves the DSH-Metropolitan campus, the Project site, the City of Mirada and portions of Whittier (LASD 2018). The County's Norwalk station is located approximately 1.1 miles south of the Project (12335 Civic Center Drive in Norwalk) and has over 220 personnel (DSH 2019). The Metropolitan Hospital Police Department is located on the hospital campus and provides primary incident response responsibility (DSH 2019). The DSH-Metropolitan Hospital Police currently has approximately 83 officers working 3 shifts (DSH 2019). Within the City of Norwalk, LASD serves a population of 106,084 (U.S. Census Bureau 2017). The City of Norwalk also has a Department of Public Safety, which is located at 12700 Norwalk Blvd. The Department was developed to find solutions to neighborhood concerns of crime, vandalism, gang activity, juvenile delinquency, narcotics activity, and quality of life issues. Public Safety Officers regularly resolve issues before they require a law enforcement response, and respond to requests for safety services and information, municipal code enforcement, parking enforcement, high-visibility patrols of the City's parks, facilities, neighborhoods, and the commercial and business areas. (City of Norwalk 2018).

Schools

The City of Norwalk is served by four school districts: Norwalk-La Mirada Unified School District, ABC Unified School District, Whittier Union High School District, and Little Lake City School District. Within these school districts, there are a total of 28 active public schools, including 1 pre-school, 17 elementary schools, 6 middle schools, and 4 high schools. Additionally, there are 9 private schools within the City (California Department of Education [CDOE] 2018a). In 2017-2018, the 28 public schools had a total enrollment of 18,439 students (CDOE 2018b). The nearest schools to the Project site are Lakeland Elementary School (1.4 miles northwest) and Paddison Elementary School (1.7 miles southwest).

Parks

The City of Norwalk contains 15 public parks, varying in size from 1.19 acres to 17.27 acres, encompassing a total of 113.2 acres (LADPR 2016a). The nearest parks to the Project site include Amelia Mayberry Park (0.78 miles northeast) and Little Lake Park (0.8 miles northwest), in the cities of Whittier and Santa Fe Springs, respectively. The closest park

within the City of Norwalk is Zimmerman Park (0.9 miles southeast). Please see Section 3.16, "Recreation," for additional information on parks.

Other Public Facilities

The Project site is located approximately 1.2 miles north of Norwalk Public Library and approximately 1.4 miles north of Norwalk City Hall. The Project site will be located on a 6-acre parcel that will be sectioned from the existing 165-acre campus of the DSH-Metropolitan. The next closest medical facility is the Norwalk Community Hospital, approximately 1.3 miles south of the Project site.

3.15.3 Discussion of Checklist Responses

a. Result in adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities

The Proposed Project is replacement of the existing Santa Fe Springs CHP area office located in Santa Fe Springs. The physical environmental impacts of this new facility are discussed throughout this IS and are therefore not discussed here. The Proposed Project would not require closure of any public facilities during construction. However, because the replacement CHP Area Office would support 159 employees, an increase of 13 from the existing facility that supports 146 employees, the Proposed Project could marginally increase the demand on public services. Potential impacts from the Proposed Project on specific public services are discussed below.

The Proposed Project's construction process has been evaluated for its potential to impede public services as a result of truck trips, construction activities on/adjacent to the surface streets, and construction-related traffic in Section 3.17, "Transportation."

i. Fire protection—Less than Significant

Construction activities on the Project site would take place on a site that primarily consists of mowed lawn areas with shrubs and trees, limited structures, and limited areas of ruderal vegetation and bare ground. Operation of power tools and equipment during project construction could potentially provide an ignition source and increase fire risk in the area. Storage of flammable materials (e.g., fuel) during project construction could also increase fire risk. However, project construction activities would follow the requirements for fire safety during construction contained in the California Fire Code (see Section 3.15.1). Adherence to the requirements of the California Fire Code would reduce the potential increase in fire risk during project construction to a less-than-significant level.

As described in Chapter 2, *Project Description*, and in Section 3.9, "Hazards and Hazardous Materials," the Proposed Project would include storage of flammable materials on-site. One liquefied petroleum gas tank would store 12,000 gallons of fuel (gasoline) for CHP vehicle and equipment use. An enclosure would store flares. The facility also would include an armory to store guns and ammunition. Storage of these materials could potentially increase the demand on fire protection services in the event of an upset; however, storage and containment facilities would follow all applicable safety regulations, which would reduce the

potential for, and minimize the effects of, an accidental fire or hazardous materials release. Additionally, storage of these materials at the new CHP facility would not differ substantially from storage at the existing facility.

The replacement facility would be equipped with a sprinkler system and would be constructed in accordance with the California Fire Code. The additional employees associated with the Proposed Project would not generate substantial demand for fire protection, significantly affect average response times or other performance metrics, such as to require provision of new fire protection facilities. This impact would be **less than significant**.

ii. Police protection—No Impact

The Proposed Project would provide police protection services to southeastern Los Angeles County, which includes the cities of Artesia, Bellflower, Cerritos, Downey, Hawaiian Gardens, La Habra Heights, La Mirada, Lakewood, Norwalk, Paramount, Pico Rivera, Santa Fe Springs and Whittier. CHP is responsible for enforcing vehicular and traffic laws on state highways and freeways, and the Proposed Project would replace the existing CHP area office facility in Santa Fe Springs. The additional officers at the new facility and improved and expanded facilities would most likely improve police protection services in the area. This may marginally decrease average response times or improve other service performance objectives. The Proposed Project would not affect the operations or services of the DSH-Metropolitan Police Department or the LASD. Overall, the Proposed Project's impact on police protection service would be beneficial; therefore, there would be **no impact**.

iii. Schools—Less than Significant

The small increase in employment associated with the Proposed Project may result in some population growth (i.e., from new CHP personnel moving to the area), and related school enrollment. However, this increase would not be substantial and would not be expected to require construction of any new school facilities. Therefore, the impact on schools from the Proposed Project would be **less than significant**.

iv. Parks—Less than Significant

The Proposed Project would not involve construction of any parks or recreational facilities. However, the Proposed Project would displace a lawn area, a baseball field, a covered overhang, and basketball court, which are available for use by staff, patients, and any other users of the DSH-Metropolitan campus facilities. These facilities are generally infrequently used. The removal of these facilities would not require replacement within the DSH-Metropolitan campus or any other offsite locations. Project construction would not require the temporary closure of any nearby parks or recreational facilities, or otherwise affect the access or use of such facilities. The small potential increase in population resulting from the Proposed Project could marginally increase the demand for parks, but would not require construction of new parks or recreational facilities. As a result, this impact would be **less than significant**.

v. Other public facilities—Less than Significant.

- 2 The relatively small population increase that would result from the Proposed Project would
- 3 not require provision of any new public facilities, such as hospitals or libraries. This impact
- 4 would be **less than significant**.

3.16 RECREATION

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
W	ould the Project:				
a.	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?				
b.	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				

2 3.16.1 Regulatory Setting

- 3 Federal Laws, Regulations, and Policies
- 4 No federal regulations are applicable to recreation in relation to the Proposed Project.
- 5 State Laws, Regulations, and Policies
- 6 No state regulations are applicable to recreation in relation to the Proposed Project.

7 3.16.2 Environmental Setting

- The City of Norwalk has about 113 park acres within its city boundaries (LADPR 2016a). A total of 23 recreation spaces are administered by the City of Norwalk Recreation and Park Services Department (City of Norwalk 2018). The adjacent City of Santa Fe Springs has approximately 102 park acres (LADPR 2016b).
- There are 4 parks and recreation facilities within 1 mile of the Project site (City of Norwalk 2018, LADPR 2016a and 2016b). Parks include Amelia Mayberry Park (0.78 miles east), Little Lake Park (0.88 miles northwest) and John Zimmerman Park (0.95 miles southeast) located in the cities of Whittier, Norwalk, and Santa Fe Springs, respectively. **Table REC-1** lists parks in proximity to the Project.

Table REC-1. Parks and Recreational Facilities in the Vicinity of the Proposed Project

Park/Facility Name	Ownership	Approximate Distance and Direction from Project Site (aerial miles)	Features
Norwalk City Hall	City of Norwalk	0.71 southwest	open lawn area
Amelia Mayberry Park	Los Angeles County Parks and Recreation	0.78 east	basketball courts, baseball fields, multipurpose fields, fitness zone, picnic shelter, playground, splash pad, gymnasium, senior center, and restrooms
Little Lake Park	City of Santa Fe Springs	0.88 northwest	open lawn area, basketball courts, baseball fields, picnic shelter, swimming pool, community/rec center, restrooms
John Zimmerman Park	City of Norwalk	0.95 southeast	open lawn area, basketball court, baseball fields, playground, and restrooms

Source: City of Norwalk 2018, Los Angeles County Department of Parks & Recreation 2016a and 2016b

Recreational Facilities on DSH-Metropolitan Campus

The DSH-Metropolitan campus has onsite recreational amenities for residents. Onsite amenities and facilities include: a social gathering facility (the Oasis building), a library, an assembly hall (James Hall), a religious center, a baseball field, a basketball court, and a greenhouse and nursery. Use of the baseball field and basketball court are infrequent. The greenhouse and nursery are currently used for therapy services.

3.16.3 Discussion of Checklist Responses

a. Increase use of existing parks or recreational facilities—*Less than Significant*

The Project site is located on a 6-acre parcel that will be sectioned from the DSH-Metropolitan property. Existing recreational facilities on the site include a baseball field, basketball court, a greenhouse and a plant nursery. These facilities will be removed as a result of construction of the project. The closest park is the Amelia Mayberry Park, which is approximately 0.78 miles east of the Project site. As noted in Section 3.15, "Population and Housing," the Proposed Project would not result in substantial population growth and, therefore, would not substantially increase demand for parks and recreational facilities in the area. The 13 additional CHP employees that would be supported by the Proposed Project over 10 years could marginally increase use of existing parks (e.g., if they or their family were to use nearby recreational facilities during their free time), but these effects would not be substantial and would not require or result in the construction of new or expanded parks or recreational facilities. As a result, this impact would be **less than significant**.

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b. Creation of new or altered recreational facilities—Less than Significant

The Proposed Project would remove the recreational baseball field and basketball court as well as the greenhouse and nursery that are located on the Project site. The future need for the baseball field and basketball court facilities is not anticipated. Therefore, the removal of these recreational facilities would not require the construction of other recreational facilities within the DSH-Metropolitan campus or elsewhere. It is anticipated that the greenhouse and nursery would be relocated or replaced at an alternate location on the hospital campus. The Project would not introduce substantial numbers of people to the area or otherwise cause the need to construct new or altered recreational facilities. As a result, this impact would be **less than significant**.

Chapter 3. Environmental Checklist

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3.17 Transportation

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the Project:				
a.	Conflict with an applicable plan, ordinance or policy addressing the circulation system, transit, roadways, bicycle, and pedestrian facilities?				
b.	Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				
c.	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d.	Result in inadequate emergency access?	\boxtimes			

2 3.17.1 Traffic and Transportation Terminology

The following are definitions of key traffic and transportation terms used in this section and based on materials published by the Transportation Research Board (2000, 2010).

Level of Service. Level of service (LOS) is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort, and convenience. LOS is defined according to methods presented in the Highway Capacity Manual (HCM). Using the Highway Capacity Manual procedures, the quality of traffic operation is graded into one of six service levels, LOS A through F (see **Table TR-1**).

Intersection Capacity Utilization (ICU). This methodology was used to determine the intersection volume-to-capacity (V/C) ratio and corresponding LOS for all study intersections. Table TR-1 below contains the standards for the six service levels used in the City of Norwalk for both signalized and unsignalized intersections.

Table TR-1. Level of Service Definitions for Intersections

Level of Service	Description	Volume/ Capacity Ratio
А	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	0.000-0.600
В	Free-flow speeds are maintained. The ability to maneuver within the traffic stream is only slightly restricted.	0.601-0.700
С	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	0.701-0.800
D	Speeds decline slightly with increasing flows. Freedom to maneuver within the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	0.801-0.900
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	0.901-1.000
F	Represents a breakdown in flow.	> 1.000

Source: Transportation Research Board, 1980 and 2010

Volume/Capacity Ratio (V/C). The ratio between the existing or projected volume of traffic using a transportation facility and the capacity of that facility. The capacity is defined as the maximum hourly rate at which persons or vehicles can reasonably be expected to traverse a point or uniform section of a lane or roadway during a given time period under prevailing roadway, traffic and control conditions.

Freeway. The function of a freeway is to provide for inter-regional and intra-regional travel. Freeways serve high speed traffic and are fully access-controlled with no at-grade crossings interrupting the flow of traffic. Vehicle speeds and daily traffic volumes are very high. Interchanges typically connect to major or minor arterials.

Arterial roads. Arterial roads provide for mobility within the county and its cities, carrying through-traffic on continuous routes and joining major traffic generators, freeways, expressways, super arterials, and other arterials. Access to abutting private property and intersecting local streets is generally restricted.

Local roads. Local roads provide direct access to abutting property and connect with other local roads, collectors, arterials, super arterials, and expressways. Local roads are typically developed as 2-lane, undivided roadways and provide access to abutting private property and intersecting streets.

3.17.2 Regulatory Setting

Although the Project site and its related projects occur in the City of Norwalk, Bloomfield Avenue bisects the city boundaries of Norwalk and Santa Fe Springs. Thus, significance criteria for both cities may be applicable. The City of Norwalk and the City of Santa Fe Springs both use significance impact criteria established in the Los Angeles County Traffic Impact Analysis Guidelines (Los Angeles County 1997) to evaluate potential project impacts at intersections within the cities. The City of Norwalk's General Plan (City of Norwalk 1996) establishes LOS D as the threshold standard for peak hour intersection operations. The City's target is LOS C. The Los Angeles Congestion Management Program (CMP) guidelines were also used to determine arterial monitoring intersections, where a proposed project adds 50 or more trips during either the AM or PM weekday peak hours (Los Angeles County 2010).

3.17.3 Environmental Setting

The existing CHP facility is located at 10051 Orr and Day Road, Santa Fe Springs. The Project site for the replacement facility is located at the DSH-Metropolitan site in Norwalk, California along Bloomfield Avenue. It is approximately 3 miles southeast of the existing CHP Santa Fe Springs Area Office. The following subsections describe regional and local access to the project area.

Existing Vehicle Access

The project is located west of Bloomfield Avenue between Elm Street and South Circle on the DSH-Metropolitan campus. Access to the Project site is provided by Bloomfield Avenue and is served by a network of freeways, arterial roads, and local roads. The following text provides a brief discussion of the major components of the study area roadway network. The location of these roadways in relation to the Project site is shown in **Figure TR-1**.

Interstate 5 (I-5) is a major north-south Interstate Highway running through California, Oregon, and Washington, and serves several large cities on the West Coast including San Diego, Los Angeles, Sacramento, Portland, and Seattle. Within the vicinity of the Project site, I-5 provides four lanes in each direction. Access to the Project site from I-5 is provided at Rosecrans Avenue, San Antonio Drive, Imperial Highway and Florence Avenue.

Interstate 605 (I-605) is a major north-south Interstate Highway in Southern California, running for about 27 miles. It is also known as the San Gabriel Freeway. Between Telegraph Road and Florence Avenue, it provides four general purpose lanes and one HOV lane in each direction. Access to the Project site from I-605 is provided from Telegraph Road, Florence Avenue, Firestone Boulevard and Imperial Highway.

<u>Telegraph Road</u> is an east-west arterial that provides access to the Project site. It provides three lanes in each direction between Norwalk Boulevard and Bloomfield Avenue. The posted speed limit is 40 miles per hour (mph). Telegraph road serves as a major access route to the Project site from I-605. On-street parking is not permitted on either side of the roadway within the vicinity of the Project site.

<u>Bloomfield Avenue</u> is a north-south roadway that provides two travel lanes between Imperial Highway and Telegraph Road. The posted speed limit along Bloomfield varies between 40 mph and 45 mph. It serves as a major arterial within the vicinity of the Project

site. On-street parking is not permitted on either side of the roadway within the vicinity of the Project site.

<u>Imperial Avenue</u> is an east-west roadway that provides three lanes in each direction between Norwalk Boulevard and Bloomfield Avenue. The posted speed limit is 50 mph. Onstreet parking is not permitted on either side of the roadway within the vicinity of the Project site.

<u>Florence Avenue</u> is an east-west roadway that provides two lanes of travel between Norwalk Boulevard and Bloomfield Avenue. The posted speed limit is 40 mph. On-street parking is not permitted on either side of the roadway within the vicinity of the Project site.

Existing Bicycle and Pedestrian Facilities

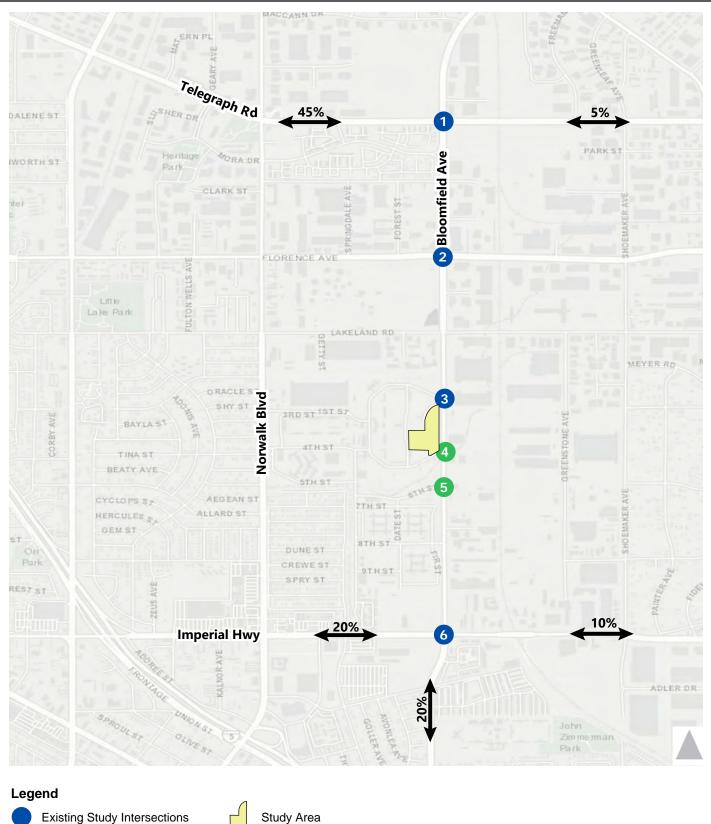
Within the vicinity of the Project site, Class II bike lanes exist on Bloomfield Avenue between Imperial Highway and Telegraph Road. There are gaps in sidewalk connectivity along Bloomfield Avenue. Between Imperial Highway and Elm Street/Project Access, there are no sidewalks on Bloomfield Avenue in the Southbound direction. Sidewalks are present on both sides of the road from Lakeland Road to Telegraph Road. At the signalized intersections in the area, crosswalks and pedestrian push-button actuated signals are provided.

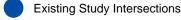
Existing Transit Service

Route 7 of Norwalk Transit runs between the Norwalk Green Line Station to El Monte Bus Station. Bus stops along this route within the study area are located at the following: Bloomfield/Imperial and Bloomfield/Telegraph. On weekdays, service in the Northbound direction runs from 4:07 AM to 8:42 PM, and from 5:21 AM to 9:11 PM in the Southbound direction with headways⁴ varying between 35 minutes to 65 minutes for both directions. The Saturday schedule starts at 5:49 AM and ends at 7:37 PM in the Northbound direction and runs from 6:35 AM to 7:57 PM in the Southbound direction with one-hour headways for both directions. (Norwalk Transit System 2017).

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⁴ Headway is a distance or time between vehicles in a transit system.





Future Study Intersections



Trip Distribution

Prepared by:



Prepared for: California Highway Patrol Source: Fehr and Peers 2018

Figure TR-1. Proposed Study **Locations and Trip Distribution**

Santa Fe Springs Area Office Replacement Project **Initial Study**

Existing Commute Trips

The existing CHP Santa Fe Springs Area Office accommodates 146 employees. To fulfill its law enforcement and public safety activities at all times, the existing office is staffed 7 days a week, 24 hours a day by shift employees. Uniformed employee shifts run generally from early morning (around 6:00 a.m.) to mid-afternoon, mid-afternoon to evening, and evening to early morning (6:00 a.m.). Non-uniformed employee (civilian support staff) shifts run from 8:00 a.m. to 5:00 p.m.

The total number of trips to and from the existing CHP Santa Fe Springs Area Office by all employees (including uniformed officers and other staff) was determined through a 24-hour driveway counting exercise. Cameras collected data on the two driveways serving the existing CHP facility, to count the daily number of trips generated by the facility. Eighteen (18) inbound trips and 14 outbound trips occurred during the a.m. peak hour (8:00-9:00 a.m.) for a total of 32 trips. The total number of trips generated by employees during the p.m. peak hour (4:00-5:00 p.m.) was 42 composed of 18 inbound trips and 24 outbound trips.

3.17.4 Impact Analysis

Study Intersections

Bloomfield Avenue is the primary arterial that serves the Project site. The intersections along Bloomfield Avenue are most likely be affected by the Proposed Project and were selected for analysis. These were identified through consultation with the City of Norwalk. The selected intersections are as follows:

- 1. Telegraph Road/Bloomfield Avenue
- 2. Florence Avenue/Bloomfield Avenue
 - 3. North Circle/Bloomfield Avenue/Project Access
- 4. South Circle/Bloomfield Avenue
- 5. 6th Street/Bloomfield Avenue
- 6. Imperial Highway/Bloomfield Avenue

Note that intersections of South Circle/Bloomfield Avenue and 6th Street/Bloomfield do not currently exist and are gated from Bloomfield. No turning movements are allowed at these two intersections. The six selected study intersections are located in two different jurisdictions. Florence Avenue/Bloomfield Avenue and Telegraph Avenue/Bloomfield Avenue are located in the City of Santa Fe Springs; the remaining are found in the City of Norwalk.

Traffic Count Data

Turning movement volumes, including pedestrian and bicycle volumes, were collected at six intersections nearby the proposed CHP facility location during the peak travel periods in the morning and evening. Morning (7:00 to 9:00 a.m.) and evening (4:00 to 6:00 p.m.) peak hour traffic counts were collected on January 24, 2019. Driveway counts were also collected for a

24-hour period at the existing Santa Fe Springs CHP facility entrance/exits on October 25, 2018.

Trip Generation

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Trip generation rates were derived using the driveway counts collected at the existing CHP Santa Fe Springs Area Office and the current number of employees (146). This is shown in **Table TR-2** below. These rates were then used to project the number of trips expected for the project given a 10-year staffing population of 159 **(Table TR-3)**.

Table TR-2. Project Trip Rates

			AM Peak Hour			PM Peak Hour			
Land Use	Rate	Daily	In	Out	Total	In	Out	Total	
Driveway Counts	146 employees	541	16	13	29	17	22	39	
Site Specific Trip Rates [a]	per	2 71	55%	45%	0.20	44%	F.C.0/	0.27	
California Highway Patrol	employee	3.71	33%	45%	0.20	44%	56%	0.27	

Note: Rates are developed based on driveway counts collected at existing CHP Santa Fe Springs Area Office in October 2018.

11 Source: Fehr and Peers, 2018

Table TR–3. Project Generated Trips

	Projected 10-year	Daily	AM Pe	eak Hou	r Trips	PM Pe	ak Houi	r Trips
Land Use	Staffing	Trips	In	Out	Total	In	Out	Total
Proposed Project	150	589	10	1.4	32	18	2.4	42
California Highway Patrol	Patrol 159		18	14	32	18	24	42

Note: Daily trips are based on the maximum number of employees (159) at the new CHP Santa Fe Springs Area Office.

15 Source: Fehr and Peers, 2018

Trip Distribution

A critical component of the transportation analysis is the trip distribution of the Proposed Project. This was determined based on employees' residence zip code data provided by the CHP Santa Fe Springs Area Office, existing travel patterns in the area, and the location of complementary land uses. The resulting trip distribution percentages are shown on Figure TR-1 and summarized in **Table TR-4**.

1 **Table TR-4.** Project Trip Distribution Percentages

Roadway	Percent of Trips to/from Project Site
Telegraph Road west of Bloomfield Avenue	45%
Telegraph Road east of Bloomfield Avenue	5%
Imperial Highway west of Bloomfield Avenue	20%
Imperial Highway east of Bloomfield Avenue	10%
Bloomfield Avenue south of Imperial Highway	20%
Total	100%

Source: Fehr & Peers, 2018

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3.17.5 Discussion of Checklist Responses

a. Conflict with programs, plan ordinances, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities—*Potentially Significant*

The project generates less than 50 trips in both the AM and PM peak hours and therefore will not warrant a CMP analysis. However, the addition of new project trips may conflict with the Los Angeles County Traffic Impact Guidelines and criteria for level of significance established in the City of Norwalk's General Plan. Thus, these impacts may be **potentially significant**. These impacts will be quantified and further analyzed in the EIR.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)—Potentially Significant

The addition of new trips associated with the Proposed Project or due to the construction of the Proposed Project could contribute to an increase in Vehicle Miles Traveled (VMT). This impact may be **potentially significant** and will be further analyzed in the EIR.

c. Increased hazards resulting from geometric design features— *Potentially Significant*

The Proposed Project would include new vehicular access driveways to the Project site that, if not properly designed and constructed, could potentially result in safety hazards. This impact may be **potentially significant** and will be further analyzed in the EIR.

d. Inadequate emergency access—Potentially Significant

During project construction, emergency access could be temporarily restricted from the presence of slow-moving trucks on local roads. This impact may be **potentially significant** and will be further analyzed in the EIR.

3.18 TRIBAL CULTURAL RESOURCES

			Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Would the Proposed Project:						
a.	sig de: 21 lar ter sac	use a substantial adverse change in the gnificance of a tribal cultural resource, fined in Public Resources Code Section 074 as either a site, feature, place, cultural adscape that is geographically defined in rms of the size and scope of the landscape, cred place, or object with cultural value to a lifornia Native American tribe, and that is:				
	i.	Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?				
	ii.	A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

3.18.1 Regulatory Setting

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Federal Laws, Regulations, and Policies

Federal law does not address TCRs, as these resources are defined in the California Pub. Res. Code. However, similar resources, called Traditional Cultural Properties (TCPs), fall under the purview of Section 106 of the National Historic Preservation Act (NHPA), which was referenced in Section 3.5, "Cultural Resources." TCPs are locations of cultural value that are historic properties. A place of cultural value is eligible as a TCP "because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community" (Parker and King 1990, rev. 1998). A TCP must be a tangible property, meaning that it must be a place with a referenced location, and it must have been continually a part of the community's cultural practices and beliefs for the past 50 years or more. Unlike TCRs,

TCPs can be associated with communities other than Native American tribes, although the resources are usually associated with tribes. By definition, TCPs are historic properties; that is, they meet the eligibility criteria as a historic property for listing in the NRHP. Therefore, as historic properties, TCPs must be treated according to the implementing regulations found under Title 36 CFR §800, as amended in 2001.

State Laws, Regulations, and Policies

CEQA and CEQA Guidelines

AB 52, which was approved in September 2014 and which went into effect on January 1, 2015, requires that state lead agencies consult with any California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project, if so requested by the tribe. The bill, chaptered in Pub. Res. Code § 21084.2, also specifies that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment.

Defined in Pub. Res. Code § 21074(a) Pub. Res., TCRs are:

- (1) Sites, features, places, cultural landscapes, sacred places and objects with cultural value to a California Native American tribe that are either of the following:
 - (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources; or
 - (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Pub. Res. Code § 21074 as follows:

- (b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms with the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to newly chaptered § 21080.3.2, or according to § 21084.3. Section 21084.3 identifies mitigation measures than include avoidance and preservation of TCRs and treating TRCs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

1 3.18.2 Environmental Setting

As discussed in Section 3.5, "Cultural Resources", the Proposed Project is in the traditional ancestral territory of the Gabrielino. No tribes with a traditional and cultural affiliation to the Project area have requested consultation with CHP on department projects pursuant to Pub. Res. Code § 21080.3.1. However, in the spirit of Pub. Res. Code § 21080.3.1, DGS, on behalf of CHP, notified local tribes who were identified by the NAHC as having a traditional and cultural association with the Project area about the Project via letters dated November 5, 2018. DGS did not receive any tribal requests for consultation on the Project. **Table TCR-1** lists all those contacted and summarizes the results of the consultation. All correspondence between the NAHC, Native American Tribes, and the State is provided in **Appendix E**.

Table TCR-1. Native American Consultation

Organization/Tribe	Name of Contact	Letter Date	Tribal Response
Gabrieleno Band of Mission Indians – Kizh Nation	Andrew Salas, Chairperson	11/05/2018	No response.
Gabrieleno/Tongva Band of Mission Indians	Anthony Morales, Chairperson	11/05/2018	No response.
Gabrielino/Tongva Nation	Sandonne Goad, Chairperson	11/05/2018	No response.
Gabrielino Tongva Indians of California Tribal Council	Robert F. Dorame, Chairperson	11/05/2018	No response.
Gabrielino-Tongva Tribe	Linda Candelaria, Chairperson	11/05/2018	No response.
Gabrielino-Tongva Tribe	Charles Alvarez, Council member	11/05/2018	Letter not picked up at the post office

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3.18.3 Discussion of Checklist Responses

a. Cause a Substantial Adverse Change to Tribal Cultural Resources

i. Listed, or Eligible for Listing in the California Register of Historical Resources or a Local Register of Historical Resources—*No Impact*

No TCRs that are listed or eligible for listing in the CRHR or a local register of historical resources have been identified within the project area. Therefore, there would be **no impact** to TCRs that are listed or eligible for listing in the CRHR or a local register.

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ii. Cause a Substantial Adverse Change to Tribal Cultural Resources Determined by the Lead Agency to Be Significant—Potentially Significant

As mentioned above, although DGS notified tribes with a traditional and cultural affiliation with the area about the Proposed Project, none of the tribes contacted identified TCRs in the Project area. Furthermore, no TCRs determined by the lead agency, in its discretion and supported by substantial evidence, to be significant are known to be located in the project vicinity. As a result, it appears that there would be no impact to TCRs. However, it is possible that Native American archaeological remains or Native American human remains that could be determined to be TCRs could be discovered during the course of construction. Therefore, this impact would be considered **potentially significant**, and will be further analyzed in the EIR.

3.19 UTILITIES AND SERVICE SYSTEMS

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
Wo	ould the Project:				
a.	Require or result in the relocation or construction of new water or wastewater treatment facilities or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?				
b.	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?				
c.	Result in a determination by the wastewater treatment provider that serves or may serve the Project that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?				
d.	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?				
e.	Comply with federal, state, and local statutes and regulations related to solid waste?				

2 3.19.1 Regulatory Setting

3 Federal Laws, Regulations, and Policies

4 <u>Energy Policy Act of 2005</u>

The Energy Policy Act of 2005 provides loan guarantees or tax credits for entities that develop or use fuel-efficient and/or energy-efficient technologies (USEPA 2017). The act also increases the amount of biofuel that must be mixed with gasoline sold in the United States

8 (USEPA 2017).

State Laws, Regulations, and Policies

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30) requires all California cities and counties to implement programs to reduce, recycle, and compost wastes by at least 50 percent by 2000 (Pub. Res. Code § 41780). The state, acting through the California Integrated Waste Management Board (CIWMB), determines compliance with this mandate. Per-capita disposal rates are used to determine whether a jurisdiction's efforts are meeting the intent of the act.

California Solid Waste Reuse and Recycling Access Act of 1991

The California Solid Waste Reuse and Recycling Access Act of 1991 (Pub. Res. Code §§ 42900-42911) requires that all development projects applying for building permits include adequate, accessible areas for collecting and loading recyclable materials.

California Integrated Energy Policy

Senate Bill 1389, passed in 2002, requires the CEC to prepare an Integrated Energy Policy Report for the governor and legislature every 2 years. The report analyzes data and provides policy recommendations on trends and issues concerning electricity and natural gas, transportation, energy efficiency, renewable energy, and public interest energy research. The 2017 Integrated Energy Policy Report Update includes policy recommendations, such as increasing resiliency in the electricity sector and development and implementation of distributed energy resource technologies (CEC 2018).

Title 24-Building Energy Efficiency Standards

Title 24 Building Energy Efficiency Standards of the California Building Code are intended to ensure that building construction, system design, and installation achieve energy efficiency and preserve outdoor and indoor environmental quality (CEC 2016). The standards are updated on an approximately 3-year cycle. The 2016 standards went into effect on January 1, 2016.

<u>Urban Water Management Planning Act</u>

California Water Code §§ 10610 et seq. requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acrefeet per year (AFY), prepare an urban water management plan (UWMP).

Other Standards and Guidelines

<u>Leadership in Energy & Environmental Design</u>

LEED is a green building certification program, operated by the U.S. Green Building Council (USGBC), which recognizes energy-efficient and/or environmentally friendly (green) components of building design (USGBC 2018a). To receive LEED certification, a building project must satisfy prerequisites and earn points related to different aspects of green building and environmental design. The four levels of LEED certification are related to the number of points a project earns (USGBC 2016):

- 1 (40-49 points);
 2 Silver (50-59 points)
 3 Gold (60-79 points);
- 4 4) Platinum (80+ points).

Points or credits may be obtained for various criteria, such as indoor and outdoor water use reduction, and construction and demolition (C&D) waste management planning. Indoor water use reduction entails reducing consumption of building fixtures and fittings by at least 20 percent from the calculated baseline and requires all newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling to be WaterSense labeled (USGBC 2017a). Outdoor water use reduction may be achieved by showing that the landscape does not require a permanent irrigation system beyond a maximum 2-year establishment period, or by reducing the project's landscape water requirement by at least 30 percent from the calculated baseline for the site's peak watering month (USGBC 2017b). C&D waste management points may be obtained by diverting at least 50 percent of C&D material and three material streams, diverting at least 75% of C&D material and four material streams, or generating less than 2.5 pounds of construction waste per square foot of the building's floor area (USGBC 2018b). CHP, as a state agency, is required at a minimum to meet LEED silver requirement for new facilities.

3.19.2 Environmental Setting

Water

The City of Norwalk is served water by five retail water agencies, including the Norwalk Municipal Water System (NMWS), Liberty Utilities, Golden State Water Company, City of Santa Fe Springs, and the City of Cerritos (City of Norwalk 2017). Water service is provided to the Project site by GSWC. GSWC's current sources of water supply for the Norwalk System are imported water, groundwater, and recycled water. Imported water and recycled water are purchased from the Central Basin Municipal Water District (CBMWD), which obtains this supply from the Metropolitan Water District of Southern California (Metropolitan). (GSWC 2016).

Groundwater in the Norwalk System is supplied by eight active GSWC-owned wells in the Coastal Plain of Los Angeles Groundwater Basin, Central Subbasin (Groundwater Basin No. 4-11.04). The wells are located within the adjudicated Central Basin Watermaster Service Area, which overlies approximately 227 square miles of the southeastern area of the Central Basin. While, the groundwater wells in the system meet all current California Title 22 drinking water standards, the Norwalk System is impacted by VOC contamination. Six of the eight active wells have levels of VOCs at or above maximum contaminant levels (MCLs). (GSWC 2016).

The GSWC's Norwalk System serves most residents in the City of Norwalk, a portion of the City of Santa Fe Springs, a portion of the City of La Mirada, a portion of the City of Downey, and an unincorporated area of Los Angeles County. The service area is primarily

characterized by residential land use, with some commercial and industrial land use. (GSWC 2016).

Total potable and raw water demand (combined) in the Norwalk System service area was 4,251 acre-feet (AF) in 2015, the most recent year with available data. This demand is projected to increase to 5,313 AF by 2040. The present Norwalk System can meet water demands during normal, single dry, and multiple dry years over the next 25 years (GSWC 2016). **Table UTL-1** shows actual and projected potable and raw water demands within the Norwalk System.

Table UTL-1. Golden State Water Company's Norwalk System Actual 2015 and Projected Potable and Raw Water Demands (in acre-feet)

Water Use Type	2015	2020	2025	2030	2035	2040
Single Family	2,326	2,887	2,898	2,908	2,919	2,930
Multi-Family	600	671	675	679	683	688
Commercial	421	486	496	505	515	525
Industrial	57	63	64	66	68	70
Institutional/ Governmental	385	604	620	636	652	668
Landscape	185	178	181	185	189	193
Losses	276	232	234	236	238	240
Total	4,251	5,119	5,168	5,216	5,264	5,313

Source: GWSC 2016

Sewer

The City of Norwalk provides sewer service to a population of approximately 106,000, including the Project site. The existing sewer collection system consists of about 865,000 feet (164 miles) of gravity sewers ranging in size from 6-inches to 18-inches in diameter, including 16 siphons. The City also owns three lift stations with approximately 162 feet of force main (City of Norwalk 2014). The City operates and maintains the local sewer collection pipes that feed into the Los Angeles County Sanitation District's (LACSD) trunk sewer system, which conveys water to the Los Coyotes Water Reclamation Plant, where it is treated, recycled and/or disposed. At times, the City of Norwalk's wastewater, which may include wastewater from the Proposed Project, is sent to the Joint Water Pollution Control Plant in Carson where it undergoes treatment for disposal (City of Norwalk 2017). Existing sewer lines in the project area include clay pipes along Bloomfield Avenue (Los Angeles County Public Works 2017).

The Los Coyotes Water Reclamation Plant (WRP) has a treatment capacity of 37.5 million gallons per day (MGD) and includes primary, secondary and tertiary treatment; however, average daily flows were approximately 20.99 MGD in 2017 (LACSD 2018a). Water that is not beneficially reused from the Los Coyotes WRP is discharged to the San Gabriel River (City of Norwalk 2017). Los Coyotes WRP provides wastewater treatment services to over 370,000 residents from 27 cities, including Norwalk, and Santa Fe Springs (Los Angeles RWQCB 2002;

GSWC 2016). The Joint Water Pollution Control Plant provides primary and secondary treatment for 400 MGD of wastewater, serves over 3.5 million people throughout Los Angeles County, and discharges through a network of outfalls off the Palos Verdes Peninsula (City of Norwalk 2017; LACSD 2018b).

Stormwater

Stormwater infrastructure in the vicinity of the Proposed Project is owned either by the City of Norwalk or the County. The City is a co-permittee under the Los Angeles County MS4 permit and manages stormwater in the project area (see Section 3.10, "Hydrology and Water Quality"). Directly east of the site, the Bloomfield Drain, a 96-inch reinforced concrete pipe, runs along Bloomfield Avenue. Two stormwater laterals are also located along Bloomfield Avenue: one just north of where it intersects with North Circle Drive and a second midway between North Circle Drive and South Circle Drive (LA County Public Works 2017).

The Project site is relatively flat, with site drainage directed toward the south via sheetflow (Earth Systems Pacific 2018). Approximately six catch basins run along Bloomfield Avenue that span the project extent or are immediately south of the Project site. (LA County Public Works 2017).

Solid Waste

Solid waste collection and disposal within the City of Norwalk is performed by Athens Services, which transports waste that cannot be recycled or composted to Los Angeles County approved landfill(s) (City of Norwalk 2018). Los Angeles County anticipates adequate solid waste disposal capacity within the County's landfills through 2031 (LA County Public Works 2018). Los Angeles County also has a least 5 landfills that process green waste for composting (LA County Public Works 2018).

Three fully-permitted, Class I landfills exist in California for disposal of hazardous waste: Chemical Waste Management's facility in Kettleman City, Clean Harbors' facility in Buttonwillow, and Clean Harbors' facility in Westmorland (DTSC No Date). The nearest of these to the Project site is Clean Harbors' Buttonwillow facility, which is approximately 150 miles northwest of the Project site.

Electricity and Natural Gas

The SCE provides electrical service in the City of Norwalk. SoCalGas provides natural gas service in the City.

Communications

Frontier Communications and AT&T provide data and phone services in the City of Norwalk.

3.19.3 Discussion of Checklist Responses

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities—*Less than Significant*

The Proposed Project would require limited volumes of water for employee and visitor handwashing, toilet flushing, landscape irrigation, and other miscellaneous activities. In accordance with LEED standards, the Proposed Project would have water-efficient fittings and fixtures and would feature limited and drought-tolerant landscaping. In this respect, the Proposed Project would be more water-efficient than the existing CHP facility in Santa Fe Springs. While water service for the Proposed Project would be provided by a different supplier (i.e., Golden State Water Company) than that for the existing CHP area office, the Proposed Project's water demand would still be a small fraction of the City of Norwalk's total water demand and would not in itself require construction of any new water treatment facilities or expansion of existing facilities. During Project construction, water would be supplied by a water truck and sanitary portable restrooms would be used. The Project would generate limited volumes of wastewater during operation, which would be within the capacity of the Los Coyotes WRP.

The Proposed Project would create an additional 4 acres of impervious surface, which could generate additional stormwater runoff compared to existing conditions. However, the Proposed Project would include drainage infrastructure and a stormwater retention pond to capture runoff on-site; these elements are considered part of the Proposed Project and their potential environmental impacts are evaluated throughout this document. See Section 3.10, "Hydrology and Water Quality," for additional discussion of stormwater.

Finally, the Proposed Project would also require construction of connections to the City's water and sewer systems. These connections are considered part of the Proposed Project, and the potential environmental effects of their construction are discussed throughout this document.

Overall, the Proposed Project would not require or result in the construction or expansion of new water, wastewater treatment or stormwater drainage (apart from those included as part of the project). The Proposed Project would also not require or result in new or expanded electric power, natural gas or telecommunications facilities. Therefore, this impact would be **less than significant**.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years—Less than Significant

Construction activities for the Proposed Project would rely on water trucks to meet water supply needs (e.g., for dust control, equipment cleaning, and fill conditioning). During operation, the Project site would obtain water from GSWC. As described above, the GSWC currently provides treated water from the CBMWD and from the eight active GSWC-owned wells in the Central Subbasin of the Coastal Plain of Los Angeles County Groundwater Basin. The GSWC's Norwalk System is expected to meet water demands during normal, single dry,

and multiple dry years over the next 25 years (GSCW 2016). As noted above under "a," as a State facility, the Proposed Project would be required to obtain LEED silver certification and would feature water-efficient fittings and fixtures to conserve water. In this regard, the new facility would likely be more water-efficient than the existing CHP facility in Santa Fe Springs. Overall, Santa Fe Springs Water Utility Authority would have sufficient water supplies available to serve the Proposed Project. Therefore, this impact would be **less than significant**.

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments—Less than Significant

As described under "a" above, the Proposed Project would not generate municipal wastewater during construction because sanitary portable restrooms would be used. During operation, employees and visitors on the Project site would generate wastewater from toilet flushing, hand washing, and other related activities. The limited volume of wastewater that may be generated by the Proposed Project would not be expected to materially affect the remaining capacity at the Los Coyotes WRP. As noted under Section 3.18.2 above, this treatment plant has capacity to treat 37.5 MGD; however, average daily flows were approximately 20.99 MGD in 2017 (LACSD 2018a). Therefore, the wastewater treatment provider would have sufficient capacity to serve the Proposed Project. As a result, this impact would be **less than significant**.

d-e. Generate solid waste in excess of State or local standards, the capacity of local infrastructure, or impair solid waste reduction goals / Comply with all applicable management and reduction regulations related to solid waste—Less than Significant

During construction, the Proposed Project would generate some construction debris associated with removal of the existing pavement, soil and other materials on the site. During operation, the Proposed Project would generate typical domestic solid waste (e.g., employees' trash) as well as hazardous wastes (e.g., fuel, oil, and other automotive fluids) from automobile servicing. Hazardous wastes generated by the Proposed Project would be stored on-site and transported approximately quarterly to an appropriate hazardous waste facility for disposal or recycling.

The Proposed Project would be LEED silver-certified and would have recycling bins on-site. In accordance with the Integrated Waste Management Act, the Proposed Project would seek to divert at least 50 percent of its solid waste. The Project site is served by Athens Services and non-recyclable solid waste generated by the Proposed Project would be taken to an approved landfill located in Los Angeles County. As described in Section 3.18.2, Los Angeles County anticipates adequate solid waste disposal capacity within the County's landfills through 2031 (LA County Public Works 2018). The relatively minimal amounts of solid waste that would be generated by the Proposed Project would be similar to the volume generated at the current CHP facility, and would not meaningfully affect the County's landfill disposal capacity.

As such, the Proposed Project would not generate solid waste in excess of State or local
standards, in excess of the capacity of local infrastructure, or impair the attainment of any
solid waste goals. Additionally, it would comply with applicable management and reduction
regulations related to solid. Therefore, this impact would be less than significant .

3.20 WILDFIRE

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

2 3.20.1 Regulatory Setting

3 Federal Laws, Regulations, and Policies

4 No federal regulations are applicable to wildfire in relation to the Proposed Project.

State Laws, Regulations, and Policies

Please see Section 3.15, "Public Services," for state laws, regulations, and policies that are applicable to wildfire in relation to the Proposed Project.

3.20.2 Environmental Setting

The Project site is located in an urban, developed area. The nearest State Responsibility Area (SRA) area is the Puente Hills, approximately 4.2 miles northeast of the site. This SRA has a very high fire hazard severity zone. Fire protection services in the Project area are provided by the Los Angeles County Fire Department. Section 3.15, "Public Services," further describes fire protection services for the Project site.

3.20.3 Discussion of Checklist Responses

a-d. Substantially impair an adopted emergency response plan or emergency evacuation plan; exacerbate wildfire risks; require the installation or maintenance of associated infrastructure that may exacerbate fire risk; or expose people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes—No Impact

As described above, the Proposed Project would be located in an urban, developed area that does not contain wildland areas. The Proposed Project is not located in, nor is it near, SRAs identified by Cal Fire as very high fire hazard severity zones (Cal Fire 2007). Since the Proposed Project is not within or near an SRA, or lands classified as very high fire hazard severity zones, the Proposed Project would not interfere with an adopted emergency response plan or emergency evacuation plan, nor would wildfire risks be exacerbated. No installation of or maintenance of infrastructure would be required and people or structures would not be exposed to any downslope or downstream flooding or landslides. There will be **no impacts.**

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3.21 MANDATORY FINDINGS OF SIGNIFICANCE

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than- Significant Impact	No Impact
a.	Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
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 that will cause substantial adverse effects on human beings, either directly or indirectly?				

3.21.1 Discussion of Checklist Responses

a. Effects on environmental quality, fish or wildlife, and historic resources

Wildlife Habitat and Populations; Rare and Endangered Species

The Project site is located on a 6-acre parcel that will be sectioned off from the grounds of the existing DSH's property. The site contains various existing structures, including sports fields, and a greenhouse. As described in Section 3.4, "Biological Resources," the potential exists for significant impacts on special-status plants and wildlife and on nesting birds. Therefore, this impact will be **potentially significant** and will be further evaluated in the EIR.

California History and Prehistory

As described in Section 3.5, "Cultural Resources," the Proposed Project is located within the boundaries of the NSHHD, which has been determined eligible for listing on the NRHP and CRHR, and as a State Historical Landmark. As a result, construction of the new CHP facility could have a significant adverse impact on the historic district. In addition, the Proposed

Project has the potential for significant impacts related to unknown archaeological resources, human remains, and tribal cultural resources. Therefore, this impact would be **potentially significant** and will be further evaluated in the EIR.

b. Cumulative impacts

A cumulative impact refers to the combined effect of "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines § 15355). Cumulative impacts reflect "the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines § 15355[b]).

Detailed analysis of a project's contribution to cumulative impacts is required when (1) a cumulative impact to which a project may contribute is expected to be significant, and (2) the project's contribution to the cumulative impact is expected to be cumulatively considerable, or significant in the context of the overall (cumulative) level of effect. As described in Sections 3.1 through 3.20 of this environmental checklist, the Proposed Project has the potential for significant impacts on various environmental resources; these potential impacts will be evaluated in the EIR. Therefore, it is possible that the Proposed Project would make a substantial contribution to one or more cumulative impacts, and that contribution may be cumulatively considerable. Therefore, cumulative impacts of the Proposed Project would be **potentially significant** and will be further evaluated in the EIR.

c. Have a substantial adverse effect on human beings, either directly or indirectly

Sections 3.1 through 3.20 of this environmental checklist indicate that the Proposed Project has the potential for significant impacts on various environmental resources that could result in a substantial adverse effect on human beings. Therefore, this impact would be **potentially significant** and will be further evaluated in the EIR.

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None.

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SECTION 3.21, MANDATORY FINDINGS OF SIGNIFICANCE

None.

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Appendix A. Biological Resources Supporting Data

Table A-1
Special-Status Wildlife and Plant Species in the Known Vicinity of the CHP Santa Fe Springs Area Office Replacement Project Footprint

Consider	Status			11.1.9	Potential for Occurrence
Species	Fed	State	CRPR	Habitat	in Project Area
Plants					
Abronia villosa var. aurita Chaparral sand-verbena			1B.1	Chaparral, coastal scrub, desert dunes. Sandy areas. Found at elevations of 60- 1,570 meters. Blooms March through September.	None. Suitable chaparral, coastal scrub or desert dune habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Atriplex coulteri Coulter's saltbush			1B.2	Coastal bluff scrub and dunes, valley and foothill grassland. Alkaline or clay soils. Found at 3-460 meters. Blooms March through October.	None. Suitable coastal and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Atriplex parishii Parish's brittlescale			1B.1	Shadscale shrub, alkali sink, freshwater wetlands, wetland-riparian. Playas and vernal pools. Alkaline or clay soils. Found at 25-1900 meters. Blooms June through October.	None. Suitable shadscale shrub, alkali sink, wetland and riparian habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.
Atriplex serenana var. davidsonii Davidson's saltscale		-	1B.2	Coastal bluff scrub, coastal scrub. Alkaline soil. Found at elevations of 0- 460 meters. Blooms April through October.	None. Suitable coastal scrub habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Berberis nevinii Nevin's barberry	FE	CE	1B.1	Chaparral, cismontane woodland, coastal scrub, riparian scrub. On steep, N-facing slopes or in low grade sandy washes. Sandy to gravelly soils. Found at elevations of 290-1,575 meters. Blooms March through June.	None. Suitable chaparral, woodland and scrub habitat is absent from the project site. No CNDDB records within 5 miles of the project site.

Charles		Status		Habitat	Potential for Occurrence
Species	Fed	State	CRPR	Habitat	in Project Area
Calochortus catalinae Catalina mariposa lily			4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Found at elevations of 15-700 meters. Blooms February through June.	None. Suitable chaparral, woodland, scrub and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Calochortus plummerae Plummer's mariposa-lily			4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. Found at elevations of 60-2,500 meters. Blooms May through July.	None. Suitable scrub, grassland, woodland and forest habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Calochortus weedii var. intermedius Intermediate mariposa-lily			1B.2	Chaparral, valley grassland, coastal sage scrub. Dry, rocky, open slopes. Found at elevations of 105-855 meters. Blooms May through July.	None. Suitable chaparral, grassland and scrub habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Calystegia felix Lucky morning-glory			1B.1	Meadows and seeps, riparian scrub. Possibly silty loam and alkaline soils. Found at elevations of 30-215 meters. Blooms March through September.	None. Suitable meadow, seep and riparian scrub habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.
Camissoniopsis lewisii Lewis' evening-primrose			3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland. Sandy or clay soils. Found at elevations of 0-300 meters. Blooms March through June.	None. Suitable scrub, woodland, dune and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.

Species	Status			Habitat	Potential for Occurrence
Species	Fed	State	CRPR	Парісас	in Project Area
Centromadia parryi ssp. australis southern tarplant			1B.1	Valley and foothill grasslands that are seasonally flooded, along estuary edges. Alkaline soils, sometimes described as heavy white clay. Found at elevations of 0-230 meters. Blooms May-October (November).	None. Suitable flooded valley and foothill grassland and estuary habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Chloropyron maritimum ssp. maritimum Salt marsh bird's-beak	FE	CE	1B.2	Marsh and swamp, salt marsh, wetland. Sandy soil. Found at elevations of 0-115 meters. Blooms June-October.	None. Suitable marsh, swamp, salt marsh and wetland habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.
Clinopodium mimuloides Monkey-flower savory			4.2	Chaparral, North Coast coniferous forest. Streambanks, mesic. Found at elevations of 305-1800 meters. Blooms June through October.	None. Suitable chaparral and North Coast coniferous forest is absent from the project site. No CNDDB records within 5 miles of the project site.
Convolvulus simulans Small-flowered morning-glory			4.2	Openings in chaparral, coastal scrub, valley and foothill grassland. Found at elevations of 30-740 meters. Blooms March through July.	None. Suitable chaparral, scrub and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Cuscuta obtusiflora var. glandulosa Peruvian dodder			2B.2	Marshes and swamps (freshwater). Found at elevations of 15-280 meters. Blooms July through October.	None. Suitable marsh and swamp habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Dudleya multicaulis Many-stemmed dudleya			1B.2	Chaparral, coastal scrub, valley and foothill grassland. Heavy clay soils. Found at 1-910 meters. Blooms April through July.	None. Suitable chaparral, scrub and grassland habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.

Species	Status			- Habitat	Potential for Occurrence
Species	Fed	State	CRPR	Habitat	in Project Area
Helianthus nuttallii ssp. parishii Los Angeles sunflower			1A	Marshes and swamps (coastal salt and freshwater). Found at elevations of 10-1,525 meters. Blooms August through October.	None. Suitable marsh and swamp habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Hordeum intercedens Vernal barley			1A	Coastal dunes, coastal scrub, valley and foothill grassland (saline flats and depressions), vernal pools. Found at elevations of 5-1000 meters. Blooms March through June.	None. Suitable dune, scrub, grassland and vernal pool habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Horkelia cuneata var. Puberula Mesa horkelia			1B.1	Closed-cone coniferous forest, chaparral, coastal dunes, coastal scrub. Sandy or gravelly openings. Found at elevations of 10-200 meters. Blooms April-September.	None. Suitable forest, chaparral, dune and scrub habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Isocoma menziesii var. decumbens Decumbent goldenbush			1B.2	Chaparral, coastal scrub, landward side of dunes, hillsides, arroyos. Sandy soil. Found at elevations of 10-135 meters. Blooms April through November.	None. Suitable chaparral, coastal scrub, dune, hillside and arroyo habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Juglans californica Southern California black walnut			4.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Alluvial. Found at elevations of 50-900 meters. Blooms March through August.	None. Suitable chaparral, woodland and scrub habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Lasthenia glabrata ssp. coulteri Coulter's goldfields			1B.1	Coastal salt marshes, playas, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. Found at elevations of 1-1,375 meters. Blooms February through June.	None. Suitable marsh, playa and vernal pool habitat is absent from the project site. Two CNDDB-recorded occurrences are approximately 1.75 and 4.7 miles from the project site.

Smoothe		Status		Habitat	Potential for Occurrence
Species	Fed	State	CRPR	Habitat	in Project Area
Lepidium virginicum var. robinsonii Robinson's pepper-grass			4.3	Chaparral, coastal scrub. Dry soils, shrubland. Found at elevations of 4-1,435 meters. Blooms January through July.	None. Suitable chaparral and scrub habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Nasturtium gambelii Gambel's watercress	FE	СТ	1B.1	Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Found at elevations of 5-330 meters. Blooms April through October.	None. Suitable marsh and swamp habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Navarretia prostrata Prostrate vernal pool navarretia			1B.1	Coastal scrub, meadows and seeps, valley and foothill grassland (alkaline), vernal pools. Mesic soils. Found at elevations of 3-1,210 meters. Blooms April through July.	None. Suitable scrub, meadow and seep, grassland and vernal habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 4.2 miles from the project site.
Nemacaulis denudata var. denudata Coast woollyheads			1B.2	Coastal dunes and beaches. Found at elevations of 0-100 meters. Blooms April through September.	None. Suitable dune habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Orcuttia californica California orcutt grass	FE	CE	1B.1	Vernal pools. Found at elevations of 15-660 meters. Blooms April through August.	None. Suitable vernal pool habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 4.2 miles from the project site.
Pentachaeta Iyonii Lyon's pentachaeta	FE	CE	1B.1	Openings in chaparral, coastal scrub, valley and foothill grassland. Rocky and clay soils of volcanic origin. Found at elevations of 30-690 meters. Blooms February through August.	None. Suitable chaparral, scrub and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.

Species	Status			Habitat	Potential for Occurrence
Species	Fed	State	CRPR	Habitat	in Project Area
Phacelia cicutaria var. hubbyi Hubby's phacelia			4.2	Chaparral, coastal scrub, valley and foothill grassland. Gravelly, rocky and talus soils. Found at elevations of 0-1000 meters. Blooms April through July.	None. Suitable chaparral, scrub and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Phacelia ramosissima var. austrolitoralis South coast branching phacelia			3.2	Chaparral, coastal dunes, coastal scrub, marshes and swamps (coastal salt). Sandy, sometimes rocky soil. Found at elevations of 5-300 meters. Blooms March through August.	None. Suitable chaparral, dune, scrub, marsh and swamp habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Phacelia stellaris Brand's star phacelia			1B.1	Coastal dunes, coastal scrub. Sandy soil. Found at elevations of 1-400 meters. Blooms March through June.	None. Suitable dune and scrub habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 4.2 miles from the project site.
Pseudognaphalium leucocephalum White rabbit-tobacco			2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy and gravelly soils. Found at elevations of 0-2100 meters. Blooms July through December.	None. Suitable chaparral, woodland and scrub is absent from the project site. No CNDDB records within 5 miles of the project site.
Quercus engelmannii Engelmann Oak			4.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Found at elevations of 50-1300 meters. Blooms March through June.	None. Suitable chaparral, woodland and grassland habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Ribes divaricatum var. parishii Parish's gooseberry			1A	Riparian woodland. Found at elevations of 65-300 meters. Blooms February through April.	None. Suitable riparian woodland is absent from the project site. No CNDDB records within 5 miles of the project site.

Cunning	Status			Hobitot	Potential for Occurrence
Species	Fed	State	CRPR	Habitat	in Project Area
Scutellaria bolanderi ssp. austromontana Southern mountains skullcap			1B.2	Chaparral, cismontane woodland, lower montane coniferous forest. Mesic soil. Found at 425-2000 meters. Blooms June through August.	None. Suitable chaparral, woodland and forest habitat is absent from the project site. No CNDDB records within 5 miles of the project site.
Sidalcea neomexicana Salt spring checkerbloom			2B.2	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub. Alkali springs and marshes. Found at elevations of 0-1,530 meters. Blooms March through June.	None. Suitable playa, chaparral, scrub and forest habitat is absent at the project site. No CNDDB records within 5 miles of the project site.
Suaeda esteroa estuary seablite			1B.2	Marshes and swamps. Found at elevations of 0-15 meters. Blooms July-October.	None. Suitable marsh and swamp habitat is absent at the project site. No CNDDB records within 5 miles of the project site.
Symphyotrichum defoliatum San Bernardino aster			1B.2	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. Occurs at elevations of 2-2,040 meters. Blooms July through November.	None. Suitable meadow, seep, woodland scrub, forest marsh, swamp, and grassland habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.
Symphyotrichum greatae Greata's aster			1B.3	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. Mesic soils. Occurs at elevations of 300-2010 meters. Blooms June through October.	None. Suitable forest, chaparral and woodland habitat is absent at the project site. No CNDDB records within 5 miles of the project site.

Constan		Status		Habita.	Potential for Occurrence
Species	Fed	State	CRPR	- Habitat	in Project Area
Amphibians					
Spea hammondii Western spadefoot		SSC	N/A	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	None. Suitable upland grassland and woodland habitat and vernal pool breeding habitat is absent at the project site. No CNDDB records within 5 miles of the project site.
Reptiles					
Anniella stebbinsi Southern California legless lizard		SSC	N/A	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	None. Suitable moist, loose soils and adequate leaf litter layers are absent at the project site. No CNDDB records within 5 miles of the project site.
Arizona elegans occidentalis California glossy snake		SSC	N/A	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Inhabits arid scrub, rocky washes, grasslands, chaparral. Prefers open areas and areas with loose soils for burrowing.	None. Suitable scrub, washes, grasslands and chaparral habitat is absent at the project site. No CNDDB records within 5 miles of the project site.
Aspidoscelis tigris stejnegeri Coastal whiptail		SSC	N/A	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	None. Suitable desert, woodland and riparian habitat is absent at the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.

Cuasias		Status		Habitat	Potential for Occurrence
Species	Fed	State	CRPR		in Project Area
Chelonia mydas Green turtle	FT		N/A	Aquatic. Lives in the ocean, comes to shore to bask. Inhabits shallow waters of lagoons, bays, estuaries, mangroves, eelgrass and seaweed beds.	None. Suitable aquatic habitat is absent at the project site. No CNDDB records within 5 miles of the project site.
Emys marmorata Western pond turtle		SSC	N/A	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	None. Suitable aquatic and upland habitat is absent at the project site. Two CNDDB-recorded occurrences are approximately 4.5 and 4.8 miles from the project site.
Phrynosoma blainvillii Coast horned lizard Birds		SSC	N/A	Typically found in open sandy wash areas in deserts, chaparral and grasslands. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	None. Suitable sandy wash, desert, chaparral and grassland habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site.
Accipiter cooperii Cooper's hawk		WL	N/A	Breeds in extensive forests and smaller woodlots of deciduous, coniferous, and mixed pine-hardwoods, as well as in pine plantations, in both suburban and urban habitats.	Possible. This species may forage and nest in project site; trees on the site provide suitable nesting habitat. No CNDDB records within 5 miles of the project site.

Constan	Status			Habitara	Potential for Occurrence	
Species	Fed	State	CRPR	- Habitat	in Project Area	
Agelaius tricolor Tricolored blackbird		Candidate Endangered /SSC	N/A	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	None. Suitable open water and desired nesting substrate habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 2 miles from the project site.	
Aimophila ruficeps canescens Southern California rufous- crowned sparrow		WL	N/A	Found on moderate to steep, dry, rocky slopes. Prefers low cover of scattered shrubs with patches of grasses, forbs and bare ground. Nests on the ground in hollow rocks or under clumps of grass or low bushes. Prefers coastal sage scrub, coastal bluff scrub, chaparral.	None. Suitable sage, scrub, chaparral and rocky slope habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest ebird sighting was documented approximately 4.5 miles from the project site.	
Ammodramus savannarum Grasshopper sparrow		SSC	N/A	Prefers moderately open grasslands with shrub cover and no trees. Nests on the ground at the base of weed, shrub or clump of grass.	None. Suitable open grassland habitat lacking trees is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 6.3 miles from the project site.	
Athene cunicularia Burrowing owl		SSC	N/A	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Possible. Suitable nesting and foraging habitat exists in the ground squirrel burrow complexes on the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site. The nearest e-bird sighting was documented approximately 2.8 miles from the project site.	

Species	Status			Habitat	Potential for Occurrence	
Species	Fed	State	CRPR	- Habitat	in Project Area	
Buteo regalis Ferruginous hawk		WL	N/A	Prefers open-country, grasslands, sagebrush, shrublands, periphery of forests, canyon areas, cliffs, outcrops, deserts. Nests in trees, on cliffs, transmission towers.	None. Suitable grassland, sagebrush, shrubland, forest, canyon, cliff, outcrop and desert nesting and foraging habitat is absent at the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 3.8 miles from the project site.	
Buteo swainsoni Swainson's hawk		СТ	N/A	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	None. Suitable grassland and agricultural habitat is absent at the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 2 miles from the project site.	
Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren		SSC	N/A	Requires native scrub vegetation with mature cholla or prickly-pear. Cactus patches for nesting.	None. Suitable scrub and cactus habitat is absent at the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 5.5 miles from the project site; however, this sighting was Campylorhynchus brunneicapillus.	
Coccyzus americanus occidentalis Western yellow-billed cuckoo	FE	CE	N/A	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	None. Suitable riparian habitat is absent at the project site. One CNDDB-recorded occurrence is approximately 4.6 miles from the project site. The nearest e-bird sighting was documented approximately 7.3 miles from the project site.	

Cuasias		Status		Habitat	Potential for Occurrence	
Species	Fed	State	CRPR	- Habitat	in Project Area	
Empidonax traillii extimus Southwestern willow flycatcher	FE	CE	N/A	Prefers moist shrubby areas, thickets of willows near streams, canyon bottoms, mountainside seepages, margins of lakes and ponds, riparian woodlands.	None. Suitable riparian habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 7.3 miles from the project site.	
Icteria virens Yellow-breasted chat		SSC	N/A	Inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	None. Suitable riparian and brushy tangle habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 4 miles from the project site.	
Laterallus jamaicensis coturniculus California black rail		СТ	N/A	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	None. Suitable marsh and meadow habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting is over 20 miles away from the project site.	
Passerculus sandwichensis beldingi Belding's savannah sparrow		CE	N/A	Agricultural fields, meadows, marshes, coastal grasslands, tundra.	None. Suitable field, meadow, marsh, coastal grassland and tundra habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 7.7 miles from the project site.	

Smaring	Status			- Habitat	Potential for Occurrence	
Species	Fed	State	CRPR	Парісас	in Project Area	
Pelecanus occidentalis californicus California brown pelican	Deliste d	Delisted/FP	N/A	Coastal marine and estuaries. Roosts onshore at night; sandbars, pilings, jetties, breakwaters, offshore rocks and islands.	None. Suitable marine and estuary habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 7.7 miles from the project site.	
Polioptila californica californica Coastal California gnatcatcher	FT	SSC	N/A	Obligate, permanent resident of coastal sage scrub below 2,500 feet in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	None. Suitable coastal sage scrub habitat is absent from the project site. One CNDDB-recorded occurrence is approximately 5 miles from the project site. The nearest e-bird sighting was documented approximately 3.5 miles from the project site.	
Riparia riparia bank swallow		СТ	N/A	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	None. Suitable riparian, cliff, and other aquatic habitat is absent from the project site. One CNDDB record encompasses the City of Norwalk. The nearest e-bird sighting was documented approximately 3.5 miles from the project site.	
Sternula antillarum browni California least tern	FE	CE	N/A	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	None. Suitable coastal habitat is absent from the project site. No CNDDB records within 5 miles of the project site. The nearest e-bird sighting was documented approximately 7.5 miles from the project site.	

Cuasias		Status		Habitat	Potential for Occurrence	
Species	Fed	State	CRPR	Habitat	in Project Area	
Vireo bellii pusillus Least Bell's vireo	FE	CE	N/A	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>Baccharis</i> , mesquite.	None. Suitable riparian habitat is absent from the project site. Two CNDDB-recorded occurrences are approximately 3 and 3.5 miles from the project site. The nearest e-bird sighting was documented approximately 5.5 miles from the project site.	
Mammals						
Antrozous pallidus pallid bat		SSC	N/A	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging. Very sensitive to disturbance of roosting sites.	None. Suitable desert, grassland, shrubland, woodland and forest habitat for foraging and roosting is absent from the project site. No CNDDB records within 5 miles of the project site.	
Eumops perotis californicus western mastiff bat		SSC	N/A	Many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Not Expected. Suitable open or semi-arid habitat for foraging is absent from the project site; marginal roosting habitat exists in buildings and trees. One CNDDB-recorded occurrence is approximately 5 miles from the project site.	
Lasiurus xanthinus Western yellow bat		SSC	N/A	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	None. Suitable foraging and roosting habitat is absent from the project area. No CNDDB records within 5 miles of the project site.	

Cursina	Status			- Habitat	Potential for Occurrence	
Species	Fed	State	CRPR	Habitat	in Project Area	
Lepus californicus bennettii San Diego black-tailed jackrabbit		SSC	N/A	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges. Coastal sage scrub habitats in Southern California.	None. Suitable shrub, scrub and herbaceous habitat is absent from the project site. No CNDDB records within 5 miles of the project site.	
Nyctinomops femorosaccus Pocketed free-tailed bat		SSC	N/A	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	None. Suitable arid, woodland, scrub, palm oasis, desert wash and desert riparian habitat is absent from the project site. No CNDDB records within 5 miles of the project site.	
Perognathus longimembris pacificus Pacific pocket mouse	FE	SSC	N/A	Occurs on fine-grain, sandy substrates in open coastal sage scrub, coastal strand, coastal dune and river alluvium habitats near the Pacific Ocean.	None. Suitable coastal habitat is absent from the project site. No CNDDB records within 5 miles of the project site.	
Taxidea taxus American badger		SSC	N/A	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	None . Suitable open habitat is absent from the project site. No CNDDB records within 5 miles of the project site.	
Oncorhynchus mykiss irideus pop. 10 steelhead -southern California coast DPS	FE		N/A	Watersheds with clean, stable spawning gravels, rivers, estuaries, ocean.	None. Suitable aquatic habitat is absent from the project site. No CNDDB records within 5 miles of the project site.	

U.S. Fish and Wildlife Service (USFWS) Federal Listing Categories (used above):

California Department of Fish and Wildlife (CDFW) State Listing Categories (used above):

FE Federally Listed as Endangered

CE State listed as Endangered

FT	Federally listed as Threatened	СТ	State listed as Threatened
-	No Listing	SSC	California Species of Special Concern
		FP	Fully Protected Species
		WL	California Watch List
		-	No Listing
California	Native Plant Society (CNPS) Listing Categories		
1A	Presumed extirpated or extinct in California	2B.3	Rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California
1B.1	Rare, threatened, or endangered in California and elsewhere; seriously threatened in California	3.2	Plants about which we need more information, fairly threatened in California
1B.2	Rare, threatened, or endangered in California and elsewhere; fairly threatened in California	3.3	Plants about which we need more information, not very threatened in California
2B.1	Rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California	4.2	Plants of limited distribution; fairly threatened in California
2B.2	Rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California		

Special-status Species Potential to Occur Criteria

None	Indicates that the area contains a complete lack of suitable habitat, the local range for the species is restricted, and/or the species is extirpated in this region.
Not Expected	Indicates situations where suitable habitat or key habitat elements may be present but may be of poor quality or isolated from the nearest extant occurrences. Habitat suitability refers to factors such as elevation, soil chemistry and type, vegetation communities, microhabitats, and degraded/substantially altered habitats.
Possible Present	Indicates the presence of suitable habitat or key habitat elements that potentially support the species. Indicates that either the target species was observed directly or its presence was confirmed by diagnostic signs during field investigations or in previous studies in the area.



Appendix B

Local Laws, Regulations, and Policies

Appendix B

LOCAL LAWS, REGULATIONS, AND POLICIES

Law, Regulation, or Policy

Overview

AIR QUALITY

South Coast Air Quality Management District Regulations

The South Coast Air Quality Management District (SCAQMD) manages air quality within the urban portions of San Bernardino, Riverside, and Los Angeles counties for attainment and permitting purposes and has implemented several regulations to control air emissions. These regulations would apply to the Proposed Project during construction and operation, in particular to the gasoline refueling station and emergency generator located on-site. The portion of Los Angeles County that contains the project site is designated as a federal and state non-attainment area for ozone and PM_{2.5} and state non-attainment for PM₁₀ (California Air Resources Board [CARB] 2018, U.S. Environmental Protection Agency [USEPA] 2018, USEPA 2019, SCAQMD 2016).

The SCAQMD has also established the following rules and regulations that may pertain to the Proposed Project (SCAQMD 2018):

- Rule 201 Permit to Construct requires that an operator obtain a permit to construct from the SCAQMD prior to installing any new or relocated equipment, or prior to modifying any existing equipment.
- Rule 203 Permit to Operate requires that an operator obtain a permit to operate from the SCAQMD for installed, modified, and/or operated equipment.
- **Rule 401 Visible Emissions** places limits on emissions of any air contaminants darker than a specified shade.
- Rule 402 Nuisance prohibits emissions "which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property".
- Rule 403 Fugitive Dust requires actions be taken "to prevent, reduce, or mitigate fugitive dust emissions".
- Rules 404 & 405 Deal with particulate matter and place limits on PM emissions based on concentration and process weight.
- Rules 53 Sulfur Compounds Concentration places limits on the discharge of sulfur compounds from any source.
- Rule 461 Gasoline Transfer and Dispensing applies to the storage, transfer, and dispensing of gasoline.

Overview

- **Rule 470 Asphalt Air Blowing** places limits on air blowing of asphalt.
- Rule 474 Fuel Burning Equipment Oxides of Nitrogen limits NO₂ emissions from stationary equipment operated on gas, liquid, or solid fuel.
- Rule 481 Spray Coating Operations Limits the VOC content of any coating used within the District.
- Rule 1113 Architectural Coatings Limits the VOC content of any coating applied within the District.
- Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines – Describes fuel use and emissions requirements for generators and other stationary engines.
- Regulation XIII New Source Review Establishes pre-construction review requirements for new, modified, or relocated facilities, to ensure that the operation of such facilities does not interfere with progress in attainment of the national ambient air quality standards.
- Regulation XIV Toxics and Other Non-criteria Pollutants –
 Establishes review requirements and emission limits for sources of toxic air contaminants.

SCAQMD Air Quality Management Plan

The Final 2016 Air Quality Management Plan (SCAQMD 2017a) presents the District's plan for attaining federal air quality standards, particularly for ozone and PM2.5.

A project must be consistent with the AQMP in order to be considered to have no significant adverse impact on air quality.

Appendix IV-A (SCAQMD 2017b) contains SCAQMD's proposed stationary and mobile source control measures, including the following that may be applicable to the Proposed Project:

CMB-01: Transition To Zero And Near-Zero Emission Technologies For Stationary Sources [NOx, VOC] reduces emissions from sources including backup diesel generators by replacing older equipment with zero and near-zero emissions technologies.

SCAQMD CEQA Guidelines

The SCAQMD has established guidelines for determining significance for air quality analyses (SCAQMD 2015) which are shown in **Table A-AQ-1**. Projects below these mass emission thresholds do not have a significant impact on air quality.

Overview

Table A-AQ-1. Air Quality Significance Thresholds for Project Operations

	Mass Daily Thresholds						
	Construction	Operation					
Pollutant	Pounds/Day	Pounds/Day					
NO _X	100	55					
VOC	75	55					
PM ₁₀	150	150					
PM _{2.5}	55	55					
SO _X	150	150					
СО	550	550					
Lead	3	3					
Toxic	Air Contaminants (TACs), Od	or, and GHG Thresholds					
TACs	Maximum Incremental Cancer Risk ≥ 10 in 1 million						
	Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million)						
	Chronic & Acute Hazard Index ≥ 1.0 (project increment)						
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402						
GHG	10,000 MT/yr CO2	2eq for industrial facilities					

Source: SCAQMD 2015.

City of Norwalk General Plan

The following air quality-related objectives and policies from the City of Norwalk General Plan Conservation Element (1996) may apply to the Proposed Project:

Objectives

- To encourage efforts to reduce pollution.
- To encourage efforts to clean up contaminated earth, air, and water resources.

Policies

 Minimize the amount of paved surfaces in new development to reduce the "urban heat island" effect, where temperatures in urban areas are increased due to reflection of heat.

Overview

BIOLOGICAL RESOURCES

City of Norwalk General Plan

The Conservation Element of the City of Norwalk General Plan (1996) contains three policies and corresponding implementation programs related to the protection of biological resources and which are considered applicable to the Proposed Project. The following policies and implementation programs in the City of Norwalk general plan are applicable relevant to the Proposed Project:

- Prohibit discharge of pollutants into the San Gabriel River Flood Control Channel.
- Promote public awareness of water pollution and means of prevention.
- Implement provisions of the State of California Environmental Quality Act.

Implementation Programs

- Establish programs to discourage waste disposal in City storm drain systems.
- Develop a public awareness program regarding storm water pollution.
- Inform developers of projects about possible need for an NPDES Permit.

CULTURAL RESOURCES

City of Norwalk General Plan

The City of Norwalk General Plan (1996) addresses cultural resources under the Educational and Cultural Resources element. It contains five objectives that largely focus on education, with a nod to "encourage cultural and social diversity and the preservation of the cultural heritage of the City of Norwalk."

There are also nine policies to support the objectives. Again, virtually all pertain primarily to education and cultural diversity. Only one is relevant to cultural resources: Develop and maintain the appropriate environment to preserve historically or culturally important buildings, structures, sites, or neighborhoods.

GREENHOUSE GAS EMISSIONS AND ENERGY

SCAQMD Interim GHG Significance Threshold

In their board letter, "Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans", the SCAQMD (2008) Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 metric tons of CO_2 eq for industrial projects where the SCAQMD is the lead agency.

Overview

HAZARDS AND HAZARDOUS MATERIALS

City of Norwalk General Plan

The Safety section of the City of Norwalk General Plan (1996) contains several goals and policies related to hazards and hazardous materials. In particular, the General Plan has an objective to avoid unnecessary exposure to hazards and continue operation of critical facilities after an emergency, which would be relevant to the Proposed Project.

Noise

City of Norwalk Noise Regulations

The City's Noise Regulations contains the following policies applicable to the Proposed Project with regard to noise:

9.04.140 General noise regulations.

- A. Use Restricted. Notwithstanding any other provision of this article and in addition to this article, it is unlawful for any person to wilfully make or continue, or cause to be made or continued, any loud, unnecessary or unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.
- B. Prima Facie Violation. An average noise level reading measured pursuant to Section 9.04.130 which exceeds the ambient noise level at the property line of any residential land (or if a condominium or apartment house, within any adjoining apartment) by more than five decibels shall be deemed to be prima fade evidence of a violation of the provisions of this article. (Prior code § 5-17.5)

9.04.150 Particular acts.

In addition to the provisions of Section 9.04.140, the following specific acts are declared to be unlawful:

- B. Horns, Signaling Devices, Etc. The sounding of any horn or signaling device on any vehicle on any street or public place except as a danger warning, or as required by law, or by safe driving practices; the creation by means of any such horn or signaling device of any unreasonably loud or prolonged or harsh sound; the use of any horn or signaling device operated by means other than by hand or electricity;
- D. Exhausts. The discharge into the open air of the exhaust of any steam engine, stationary internal combustion engine, motor boat

Overview

or motor vehicle, except through a muffler or other device which effectively prevents loud or explosive noises;

- E. Construction or Repairing of Buildings. The erection (including excavation), demolition, alteration, construction or repair of any building other than between the hours of seven a.m. and six p.m. or sunset, whichever is later, except in the case of urgent necessity in the interest of public health and safety, and then only with a permit from the Director of Building and Safety, which permit may be granted for a period not to exceed three days while the emergency condition continues, and which permit may be renewed for periods of three days or less while the emergency continues; if the Director of Building and Safety should determine that public health, safety, comfort and convenience will not be impaired by the erection, demolition, alteration or repair of any building or the excavation of sites other than streets and highways within the hours of six p.m. or sunset, whichever is later, and seven a.m., or any part, and that substantial loss or inconvenience would result to any party in interest denied permission to do so, he or she may grant permission for such work, or any part, to be done, within the hours of six p.m. or sunset, whichever is later, and seven a.m., or any day, or at such times within such hours as he or she shall fix in accordance with such determination:
- G. Pile Drivers, Hammers, Etc. The operation between the hours of six p.m. or sunset, whichever is later, and seven a.m. of any pile driver, steam shovel, pneumatic hammer, derrick, hoist, or other appliances, the use of which is attended by loud or unusual noise, unless the Director of Building and Safety grants permission pursuant to the standards provided in subsection E of this section;
- H. Engines and Motors. The operation of any electric motor or engine, the starting or running of which is attended by sudden, loud or unusual noise, unless such motor is enclosed within a sound-insulated structure so as to prevent such noise from being plainly audible at a distance of fifty (50) feet from such structure, or within ten (10) feet of any residence;

City of Santa Fe Springs Noise Regulations

The City's Noise Regulations contains the following policies applicable to the Proposed Project with regard to noise:

§ 155.422 EXEMPTIONS FROM NOISE CONTROL PROVISIONS.

The following activities shall be exempt from noise control provisions of this subchapter:

(C) Any mechanical device, apparatus or equipment when used, related to or connected with emergency work.

Overview

(D) Any activity to the extent regulation thereof has been preempted by state or federal law.

§ 155.425 SPECIAL NOISE SOURCES.

(B) Construction of buildings and projects. It shall be unlawful for any person within a residential zone, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 7:00 p.m. of one day and 7:00 a.m. of the next day.

§ 155.426 PROPOSED DEVELOPMENT PROJECT.

If at any time the Director of Planning and Development has reason to believe that a new development project, addition, modification, or any other changes thereto may not conform with the permitted noise level standards of this chapter, the Director of Planning and Development may require as a "condition of approval" an acoustical analysis (noise study) as part of the building permit process or other approval procedures.

§ 155.428 VIBRATIONS.

Every use shall be so operated that the ground vibration generated by said use is not harmful or injurious to the use or development of surrounding properties. No vibration shall be permitted which is perceptible without instruments at any use alone the property line on which said use is located. For the purpose of this determination, the boundary of any lease agreement

or operating unit or properties operating as a unit shall be considered the same as the property line.

City of Norwalk General Plan

The Noise Element of the City of Norwalk General Plan (1996) contains the following noise-related goals, objectives, policies and implementation program:

Goals:

- To ensure that all areas of the City are free from excessive noise.
- To reduce the number of people exposed to excessive noise and minimize the future effect of noise in the City.
- To ensure that land uses are compatible with existing and future noise levels.

Overview

Objectives:

 To have noise levels in all areas of the City meet the minimum standards of land use compatibility established in the Noise Element, especially adjacent to noise sensitive uses.

Policies:

- Discourage truck traffic from using local residential streets.
- Ensure that proposed noise sources are reduced below a level of significance and properly muffled to prevent noise impacts on neighboring properties.

Implementation Programs

- Require noise study reports to be prepared for new projects that are not clearly compatible with the future noise level at the site, and identify measures necessary to reduce noise levels to meet the City standard.
- Implement the mitigation measures identified by noise study reports through imposing appropriate conditions of approval on development proposals and Building Permits.
- Condition discretionary actions for projects adjacent to any property designated, developed, or occupied by noise sensitive land uses. Developer may be required to submit a construction noise mitigation plan to the City Engineer for review and approval prior to the issuance of a grading or building permit. The plan must show how the noise from construction would be mitigated, through the use of such methods as:
 - Time of operation
 - Temporary noise attenuation fences
 - Location of construction equipment
 - Use of current technology and noise suppression equipment
- Continue to include in the City's codes, restrictions on the hours of operation of construction equipment, site maintenance equipment (leaf blowers, power mowers, etc.), trash collection, and truck deliveries.

TRANSPORTATION

City of Norwalk General Plan

The City of Norwalk General Plan (1996) addresses transportation through policies aimed at requiring the installation and preservation of existing pedestrian and bicycle facilities, and encourage development that minimizes vehicle miles traveled.

Law, Regulation,

or Policy Overview

TRIBAL CULTURAL RESOURCES

City of Norwalk General Plan The City of Norwalk General Plan does not address tribal cultural resources.

ACRONYMS AND ABBREVIATIONS

AQMP air quality management plan
CARB California Are Resources Board
CEQA California Environmental Quality Act

CO carbon monoxide

GHG greenhouse gas emissions

MT Metric Tons

NO_X oxides of nitrogen

NPDES National Pollutant Discharge Elimination System

 O_3 ozone

PM_{2.5} particulate matter of aerodynamic radius of 2.5 micrometers or

less

PM₁₀ particulate matter of aerodynamic radius of 10 micrometers or less

SCAQMD South Coast Air Quality Management District

SO_X oxides of sulfate

TAC toxic Air Contaminants

USEPA U.S. Environmental Protection Agency

VOC volatile organic compounds

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Appendix C

Air Quality and Greenhouse Gas Emissions Calculations

Table 1: Construction Emissions
Santa Fe Springs CHP Facility

					Fugitive	Exhaust	Fugitive	Exhaust	
	ROG	NOx	СО	SO ₂	PM ₁₀	PM ₁₀	PM _{2.5}	PM _{2.5}	CO₂e
				To	tal Constru	uction Emis	sions		
Construction Emissions					tons				Metric tons
2022	0.277	2.64	2.45	0.006	0.306	0.108	0.123	0.101	530
2023	0.349	0.71	0.81	0.002	0.035	0.03	0.009	0.028	154
Total	0.626	3.35	3.260	0.008	0.341	0.138	0.132	0.129	684
				Peak	Daily Emis	sions (poun	ds/day)		
Maximum Daily	26.6	40.3	32.4	0.069	18.8	1.6	10.1	1.5	6632

Notes

1. Emissions are based on CalEEMod defaults for a 5.2 acre site with 1.75 additional acres of road & sidewalk paving.

Table 2: Operational Emissions Santa Fe Springs CHP Facility

					Fugitive		Fugitive	Exhaust	
	ROG	NOx	СО	SO ₂	PM ₁₀	Exhaust PM ₁₀	PM _{2.5}	PM _{2.5}	CO₂e
Operational Source				tor	ns/year				Metric tons/year
Area	0.223	4.00E-05	4.54E-03			2.00E-05		2.00E-05	0.009
Electricity									210.3
Natural Gas	2.97E-03	0.027	0.0227	1.60E-04	-	2.05E-03		2.05E-03	29.5
Mobile	0.2348	1.25	4.27	1.96E-02	1.864	0.0137	0.5	0.0128	1,812
Vehicle Idling	0.012952	0.018595	0.047113			4.74E-05		0.00135	85
Refueling Pump	0.11651								
Emergency Generator	3.18E-03	0.014	0.1186	2.60E-04		4.30E-04		4.30E-04	26
Solid Waste									31
Water & Wastewater									73.1
Total	0.59	1.31	4.46	0.02	1.86	1.62E-02	0.50	0.02	2,267

					Fugitive		Fugitive	Exhaust
	ROG	NOx	СО	SO ₂	PM ₁₀	Exhaust PM ₁₀	PM _{2.5}	PM _{2.5}
Operational Source				Maximum	Pounds pe	r Day		
Area	1.2236	3.30E-04	0.0363	0		1.30E-04		1.30E-04
Electricity								
Natural Gas	1.63E-02	0.1477	0.1241	8.90E-04		1.12E-02		1.12E-02
Mobile	1.3611	6.724	22.9158	0.1061	10.43	0.0755	2.791	0.070
Vehicle Idling	0.07	0.26	1.16	-		0.01		0.01
Refueling Pump	0.638408							
Emergency Generator	0.0636	0.2804	2.3722	5.28E-03		8.63E-03		8.63E-03
Solid Waste								
Water & Wastewater								
Total	3.37	7.41	26.61	0.11	10.43	0.10	2.79	0.10

Table 3: Refueling Pump Emissions Santa Fe Springs CHP Facility

Emission Factors

Annual Emissions

Emission Source Category	ROG	Benzene	Ethyl Benzene	Toulene	Xylene	ROG	Benzene	Ethyl Benzene	Toulene	Xylene
		pound	s/1000gallon					pounds		
Loading	0.42	0.00126				64.26	0.19278			
Breathing	0.053	0.000159				8.109	0.024327			
Refueling	0.63	0.00189				96.39	0.28917			
Spillage	0.42	0.0042	0.00672	0.0336	0.01	64.26	0.6426	1.02816	5.1408	1.54224

Notes

- 1. The tanks are assumed to be Above Ground Storage Tanks with Phase II vapor recovery systems.
- 2. Emission factors are based on CAPCOA 1997.
- 3. The liquid percentage of benzene was 1.0, ethyl benzene 1.6, toluene 8.0, xylene 2.4 based on CAPCOA 1997. MTBE is no longer in gasoline.
- 4. The vapor percentage of benzene was 0.3 based on CAPCOA 1997.
- 5. Throughput for Santa Fe Springs was assumed to be 153,000 gallons per year.

Source

CAPCOA. 1997. Gasoline Service Station Industrywide Risk Assessment Guidelines.

Table 4: Vehicle Idling Emissions Santa Fe Springs CHP Facility

							Fugitive	Exhaust	Fugitive			
		ROG	TOG	NOx	СО	SO_2	PM ₁₀	PM ₁₀	PM _{2.5}	Exhaust PM _{2.5}	CO₂e	
			grams/hour									
	CHP vehicle	0.621399453	0.90674462	0.96757593	10.701311			0.075126		0.069075229	4559.038839	
Emission Factors	Trucks	2.364436992	2.69173153	70.6538737	13.9614512			0.042725	1	0.040877058	14616.46394	
			tons/year M									
	CHP vehicle	0.012	0.018	0.019	0.207			0.00003		0.001	79.874	
	Trucks	0.001	0.001	0.028	0.006			0.00002		0.000	5.335	
			pounds/day									
	CHP vehicle	0.07	0.10	0.10	1.13			0.01		0.01	482.45	
Vehicle Emissions	Trucks	0.01	0.01	0.16	0.03			0.00		0.00	32.22	

Notes:

- 1. Based on EMFAC 2014 Emission Rates to be consistent with CalEEMod emission factors.
- 2. It was assumed 2 worker vehicles idling 24 hours per day. It was conservatively assumed that this was equivalent to a LDT1.
- 3. It was assumed that HHDT would idle for up to 1 hour per day.
- 4. Emissions for SO2 and lead are neglible given fuel regulations limiting the content of sulfur and lead.

			2		Cancer Potency
Toxic Air	EMFAC TOG	Emission Rate	Acute REL ²	Chronic REL ²	Factor ²
Components	Speciation ¹	(pounds/hr)	(m³/ug)	(m³/ug)	(kg-day/mg)
Acetaldehyde	0.0028	6.9233E-07	470	140	1.00E-02
Acrolein	0.0013	3.21439E-07	2.5	0.35	
Benzene	0.0247	6.10734E-06	27	3	1.00E-01
1,3-Butadiene	0.0055	1.35993E-06		20	6.00E-01
Ethylbenzene	0.0105	2.59624E-06		2000	8.70E-03
Formaldehyde	0.0158	3.90672E-06	55	9	2.10E-02
Hexane	0.016	3.95617E-06		7000	
Methanol	0.0012	2.96713E-07	28000	4000	
Methyl Ethyl Ketone	0.0002	4.94521E-08	13000		
Naphthalene	0.0005	1.2363E-07		9	1.20E-01
Propylene	0.0306	7.56618E-06		3000	
Styrene	0.0012	2.96713E-07	21000	900	
Toluene	0.0576	1.42422E-05	37000	300	
Xylenes	0.048	1.18685E-05	22000	700	

Notes:

- 1. TOG Speciation from BAAQMD 2012.
- 2. Toxicity factors are based on the latest values published by OEHHA.

Sources:

BAAQMD. 2012. Recommended Methods for Screening and Modeling Local Risks and Hazards.

OEHHA. 2014. All OEHHA Acute, 8-hour and Chronic Reference Exposure Levels (chRELs) as of June 2014.

OEHHA. 2009. Hot Spots Unit Risk and Cancer Potency Values.

Operational Emissions Existing Santa Fe Springs CHP Facility

					Fugitive		Fugitive		
	ROG	NOx	СО	SO ₂	PM ₁₀	Exhaust PM ₁₀	PM _{2.5}	Exhaust PM _{2.5}	CO₂e
Operational Source				t	ons/year				Metric tons/year
Area	0.0332	0	1.00E-04	0		0		0	2.00E-04
Electricity									39.6
Natural Gas	5.50E-04	4.96E-03	4.16E-03	3.00E-05		3.80E-04	-	3.80E-04	5.4
Mobile	0.3464	2.2379	6.1918	2.17E-02	1.7359	0.0249	0.4652	0.0234	1,993.60
Vehicle Idling	0.012952	0.018594516	0.047113			4.74166E-05		0.001350463	91
Refueling Pump	0.11651								
Emergency Generator			-				-		
Solid Waste									3.8019
Water & Wastewater									12.4398
Total	0.51	2.26	6.24	0.02	1.74	2.53E-02	0.47	0.03	2,146

					Fugitive		Fugitive	
	ROG	NOx	СО	SO ₂	PM ₁₀	Exhaust PM ₁₀	PM _{2.5}	Exhaust PM _{2.5}
Operational Source				Maximum	Pounds pe	er Day		
Area	0.1817	1.00E-05	8.40E-04	0		0		0
Electricity								
Natural Gas	2.99E-03	0.03	0.02	1.60E-04		2.06E-03		2.06E-03
Mobile	1.9551	11.9281	36.31	0.124	9.73	0.1365	2.6038	0.129
Vehicle Idling	0.07	0.26	1.16			0.01		0.01
Refueling Pump	0.638408							
Emergency Generator								
Solid Waste								
Water & Wastewater								
Total	2.85	12.21	37.50	0.12	10	0.15	2.60	0.14

Fuel Consumption Summary

Construction Fuel Consumption	Gasoline	Diesel
Construction On-Road Vehicles	12,831	14,991
Construction Off-Road Equipment		45,188
Total For Construction	12,831	60,179
Annual Project Fuel Consumption	Gasoline	Diesel
On-Road Vehicles	159,329	36,481
Off-Road Equipment and Stationary Sources		2,525
Total for Annual Operation	159,329	39,006
	Electricity kWhr	Natural Gas Kbtu
Building Energy Use	657,630	550019
Water Use	187,785	

	Fuel Consumption Sur	nmary							Gaso	oline	Die	sel
									Weighted Fuel	Fuel	Weighted Fuel	Fuel
			Construction			Miles Per			Economy	Consumption	Economy	Consumption
	Phase	Vehicle Type	Phase Days	Trips Per Day	Total Trips	Trip	Total Miles	Fuel Type	(miles/gallon)	(gallons)	(miles/gallon)	(gallons)
		Worker	20		300	14.7	4,410	LDA,LDT1, LD	28.37294101	154.34	39.02047444	0.79
		Vendor	20	0	0	6.9	-	HHDT, MHDT			5.845364997	-
	Demolition	Hauling			36	20		HHDT			6.717234637	
		Worker	10		180	14.7	2,646	LDA,LDT1, LD	28.37294101	92.61	39.02047444	0.47
		Vendor	10	0	0	6.9	-	HHDT, MHDT			5.845364997	-
	Site Preparation	Hauling			302	20	- ,	HHDT			6.717234637	899
		Worker	20			14.7	4,410	LDA,LDT1, LD	28.37294101	154.34	39.02047444	
		Vendor	20	0		6.9	-	HHDT, MHDT			5.845364997	
	Grading	Hauling			845	20	,	HHDT			6.717234637	2,516
		Worker	230	102		14.7	,	LDA,LDT1, LD	28.37294101	12,069.52	39.02047444	61.87
		Vendor	230	42	9660	6.9	66,654	HHDT, MHDT			5.845364997	11,403
	Building Construction	Hauling			0	20	-	HHDT			6.717234637	-
		Worker	14		420	14.7						
		Vendor	14	0	0	6.9						
	Trenching	Hauling			0	20						
		Worker	20		300	14.7	4,410	LDA,LDT1, LD	28.37294101	154.34	39.02047444	0.79
		Vendor	20	0	0	6.9	-	HHDT, MHDT			5.845364997	-
	Paving	Hauling			0	20	-	HHDT			6.717234637	
Construction		Worker	20		400	14.7	5,880	LDA,LDT1, LD	28.37294101	205.79	39.02047444	1.05
On-Road		Vendor	20	0	0	6.9	-	HHDT, MHDT			5.845364997	-
Vehicles	Architectural Coating	Hauling			0	20	-	HHDT			6.717234637	-
							Tota	al Fuel Consum	ption (Gallons)	12,830.94		14,990.93

Notes:

1. Fuel Consumption is total miles multiplied by the percent gasoline or diesel respectively and then divided by fuel economy. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a mix of gasoline and diesel as ratioed by their VMT.

LDA.LDT1.LDT2 MHDT HHDT

	LDA,LD11,LD12	MHDI F	HDI
Gasoline %	99.30%	0	0
Diesel %	0.70%	1	1

							Fuel	
Fuel Consumption				Usage	Horse		Consumption	Diesel Fuel Consumption
Summary	Offroad Equipment Type	Amount	Days in Phase	Hours	Power	Load Factor	Rate lb/hp-hr	(gallons)
Demolition	Concrete/Industrial Saws	1	20	8	81	0.73	0.408	543
Demolition	Excavators	3	20	8	158	0.38	0.367	1,488
Demolition	Rubber Tired Dozers	2	20	8	247	0.4	0.367	1,632
Site Preparation	Rubber Tired Dozers	3	10	8	247	0.4	0.367	1,224
Site Preparation	Tractors/Loaders/Backhoes	4	10	8	97	0.37	0.408	659
Grading	Excavators	1	20	8	158	0.38	0.367	496
Grading	Graders	1	20	8	187	0.41	0.367	633
Grading	Rubber Tired Dozers	1	20	8	247	0.4	0.367	816
Grading	Tractors/Loaders/Backhoes	3	20	8	97	0.37	0.408	989
Building	Cranes	1	230	7	231	0.29	0.367	5,568
Building	Forklifts	3	230	8	89	0.2	0.408	5,639
Building	Generator Sets	1	230	8	84	0.74	0.408	6,564
Building	Tractors/Loaders/Backhoes	3	230	7	97	0.37	0.408	9,949
Building	Welders	1	230	8	46	0.45	0.408	2,186
Trenching	Air Compressors	1	14	8	78	0.48	0.408	241
Trenching	Generator Sets	1	14	8	84	0.74	0.408	400
Trenching	Graders	1	14	8	187	0.41	0.367	443
Trenching	Plate Compactors	1	14	8	8	0.43	0.408	22
Trenching	Pumps	1	14	8	84	0.74	0.408	400
Trenching	Rough Terrain Forklifts	1	14	8	100	0.4	0.367	231
Trenching	Scrapers	2	14	8	367	0.48	0.367	2,037
Trenching	Signal Boards	2	14	8	6	0.82	0.408	63
Trenching	Tractors/Loaders/Backhoes	2	14	8	97	0.37	0.408	461
Paving	Pavers	2	20	8	130	0.42	0.367	902
Paving	Paving Equipment	2	20	8	132	0.36	0.367	785
Paving	Rollers	2	20	8	80	0.38	0.408	558
Architectural Coating	Air Compressor	1	20	6	78	0.48	0.408	258
Total Diesel Fuel Use from Construction Off-Road								

^{1.} Equipment list is from CalEEMod.

^{2.} Fuel Consumption is 0.408 for less than 100 hp and .367 if greater than or equal to 100 hp based on CARB Off-Road Diesel Engine Emission Factors 3. To convert to gallons the conversion factor of 7.1089 lb/gallon is used

^{4.} Fuel consumption is amount multiplied by usage hours, days in phase, horsepower, loadfactor, and fuel consumption rate divided by conversion factor.

Operational On-road Fuel Consumption

	12	15	18	25	20	22	29	10	31	35	24	33	27	<u> </u>
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHDT	OBUS	UBUS	MCY	SBUS	MH	
Fleet Mix	0.55136	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825	
Gaoline VMT	253,145,343	28,711,777	86,303,467	55,349,776	6,082,106	1,023,279	1,355,597	9,006	237,698	90,836	2,156,493	121,823	324,473	
Diesel VMT	2,656,428	7,371	722,151	1,564,638	5,304,569	2,061,806	8,444,866	14,172,365	349,834	776	0	213,319	127,692	
Gasoline Fuel Consumption	7,565.47	1,005.88	3,161.43	2,511.05	557.36	107.90	256.00	2.01	45.04	16.68	59.60	12.97	60.25	
Diesel Fuel Consumption	50.50	0.31	18.68	52.73	235.15	101.27	732.01	1,921.33	38.78	0.14	0.00	27.07	11.65	
Gasoline Fuel Economy	33.46	28.54	27.30	22.04	10.91	9.48	5.30	4.48	5.28	5.45	36.18	9.39	5.39	
Diesel Fuel Economy	52.61	23.70	38.65	29.68	22.56	20.36	11.54	7.38	9.02	5.73	0.01	7.88	10.96	
Gasoline %	98.96%	99.97%	99.17%	97.25%	53.41%	33.17%	13.83%	0.06%	40.46%	99.15%	100.00%	36.35%	71.76%	
Diesel %	1.04%	0.03%	0.83%	2.75%	46.59%	66.83%	86.17%	99.94%	59.54%	0.85%	0.00%	63.65%	28.24%	
Gasoline Annual Project Miles	2,677,628	206,797	994,047	546,361	37,062	9,413	14,848	111	4,255	8,155	24,041	1,272	2,905	
Diesel Annual Project Miles	28,098	53	8,318	15,445	32,324	18,966	92,500	175,062	6,262	70	0	2,227	1,143	Total
Project Gasoline Consumption	80,023	7,245	36,413	24,787	3,396	993	2,804	25	806	1,498	664	135	539	159,329
Project Diesel Consumption	534	2	215	520	1,433	932	8,018	23,733	694	12	0	283	104	36,481

Notes:

- 1. The fleet mix was the default for the area from CalEEMod.
- 2. The VMT is the total VMT in miles from EMFAC and the Fuel Consumption is the total Fuel Consumption from EMFAC in 1000 gallons.

 3. Fuel Economy is the Total VMT divided Fuel Consumption and 100 unit conversion and is miles per gallon.

 4. The total Project VMT per year as estimated in CalEEMod is:

 4,907,368 miles.

				Weighting				Fuel Economy				Weighted Fuel Economy			
			LDA	LD	T1	LDT2	MHDT	HHD	Т	LDA	LDT1	LDT2	MHDT	HHDT	Miles per Gallon
	Worker	LDA, LDT1,LDT2		0.5	0.25	0.25	5	0	0	31.15621	26.56284	24.61651			28.37294101
	Vendor	HHDT,MHDT		0	0	()	0.5	0.5						0
Gasoline	Hauling	HHDT		0	0	()	0	1						0
	Worker	LDA, LDT1,LDT2		0.5	0.25	0.25	5	0	0	48.59176	23.04888	35.8495	4.973495	6.717235	39.02047444
	Vendor	HHDT,MHDT		0	0	()	0.5	0.5				4.973495	6.717235	5.845364997
Diesel	Hauling	HHDT		0	0	()	0	1				4.973495	6.717235	6.717234637

- Notes:

 1. It was assumed all MHDT and HHDT are diesel. LDA, LDT1, and LDT2 were assumed to be a mix of gasoline and diesel as ratioed by their VMT.

 2. EMFAC 2017 was used to estimate fuel economy based on VMT and fuel consumption.

Water Land Use SubType	Water Land Use Size Metric	Indoor Water	Outdoor Water Use Rate	Electricity Intensity Factor To Supply
Automobile Care Center	1000sqft	470405.5		9727
	•			
General Office Building	1000sqft	8741026		9727
Other Asphalt Surfaces	1000sqft	0	0	9727
Parking Lot	Space	0	0	9727
Unrefrigerated Warehouse-No Rail	1000sqft	393125	0	9727

Notes

1. Table is from CalEEMod tblWater input file.

2. Electricity Rate for Indoor	13,021	kWhr/Mgal
3. Electricity Rate for Outdoor	11,110	kWhr/Mgal
4. Total Indoor Water use	9,604,557	gallons
5. Total Outoor Water Use	5,645,716	gallons
6. Total Electricity Use from Water	187.785	kWhr

Electricity	Electricity	Electricity				
Intensity	Intensity	Intensity Factor	Septic		Anaerobicand	Ana Digest
Factor To	Factor To	For Wastewater	Tank	Aerobic	Facultative Lagoons	Comb Digest
Treat	Distribute	Treatment	Percent	Percent	Percent	Gas Percent
111	1272	1911	10.33	87.46	2.21	100
111	1272	1911	10.33	87.46	2.21	100
111	1272	1911	10.33	87.46	2.21	100
111	1272	1911	10.33	87.46	2.21	100
111	1272	1911	10.33	87.46	2.21	100

AnaDigest Cogen Comb Digest Gas Percent

						Fuel	Diesel Fuel
Fuel Consumption		Days in	Usage	Horse	Load	Consumption	Consumption
Summary	Amount	Phase	Hours	Power	Factor	Rate lb/hp-hr	(gallons)
Emergency Generator	1	100	1	670	0.73	0.367	2,525
Total Diesel Fuel Use fro	m Equipme	ent					2,525

- 1. Equipment list is from CalEEMod.
- 2. Fuel Consumption is 0.408 for less than 100 hp and .367 if greater than or equal to 100 hp based on CARB Off-Road Diesel Engine Emission Factors
- 3. To convert to gallons the conversion factor of 7.1089 lb/gallon is used
- 4. Fuel consumption is amount multiplied by usage hours, days in phase, horsepower, loadfactor, and fuel consumption rate divided by conversion factor.

tblVehicleTrips

Proposed Facility Vehicle Trips

	Vehicle Trips Land										
Vehicle Trips Land Use Sub Type	Use Size Metric	WD_TR	ST_TR	SU_TR	HW_TL H	HS_TL	HO_TL(CC_TL	CW_TL	CNW_TL F	PR_TP
Automobile Care Center	1000sqft	0	0	0	0	0	0	7.3	9.5	7.3	21
Government Office Building	1000sqft	13.386	13.386	13.386	0	0	0	7.3	42.445	7.3	100
Other Asphalt Surfaces	1000sqft	0	0	0	0	0	0	7.3	9.5	7.3	0
Parking Lot	Space	0	0	0	0	0	0	7.3	9.5	7.3	0
Unrefrigerated Warehouse-No Rail	1000sqft	0	0	0	0	0	0	7.3	9.5	7.3	92

13.386 Building Sq. Ft. / 1,000 44

Existing Facility Vehicle Trips

	Vehicle Trips Land										
Vehicle Trips Land Use Sub Type	Use Size Metric	WD_TR	ST_TR	SU_TR	HW_TL	HS_TL	HO_TL	CC_TL	CW_TL	CNW_TL	PR_TP
Automobile Care Center	1000sqft	0	0	0	0	0	0	7.3	9.5	7.3	21
Government Office Building	1000sqft	66.544	66.544	66.544	0	0	0	7.3	42.432	7.3	100
Other Asphalt Surfaces	1000sqft	0	0	0	0	0	0	7.3	9.5	7.3	0
Parking Lot	Space	0	0	0	0	0	0	7.3	9.5	7.3	0
Unrefrigerated Warehouse-No Rail	1000sqft	0	0	0	0	0	0	7.3	9.5	7.3	92

66.544

Building Sq. Ft. / 1,000 8.13

tbl Vehicle Trips

Proposed Facility Vehicle Trips

	Vehicle Trips Land								
Vehicle Trips Land Use Sub Type	Use Size Metric	DV_TP	PB_TP	HW_TTP	HS_TTP	HO_TTP	CC_TTP	CW_TTP	CNW_TTP
Automobile Care Center	1000sqft	51	28	0	0	0	48	33	19
Government Office Building	1000sqft	0	0	0	0	0	47.00	43	10
Other Asphalt Surfaces	1000sqft	0	0	0	0	0	0	0	0
Parking Lot	Space	0	0	0	0	0	0	0	0
Unrefrigerated Warehouse-No Rail	1000sqft	5	3	0	0	0	0	59	41

100

Existing Facility Vehicle Trips

	Vehicle Trips Land								
Vehicle Trips Land Use Sub Type	Use Size Metric	DV_TP F	PB_TP H	HW_TTP H	S_TTP HO	_TTP(CC_TTP	CW_TTP	CNW_TTP
Automobile Care Center	1000sqft	51	28	0	0	0	48	33	19
Government Office Building	1000sqft	0	0	0	0	0	47.00	44.2877	8.7123288
Other Asphalt Surfaces	1000sqft	0	0	0	0	0	0	0	0
Parking Lot	Space	0	0	0	0	0	0	0	0
Unrefrigerated Warehouse-No Rail	1000sqft	5	3	0	0	0	0	59	41

100

Santa Fe Springs Operations Trip Calculations - New Facility

	Trip Generation							
	Inbound	Outbound	Total					
Annual Average Daily Trips for CHP								
station (worker + nonworker)	-	-	589					
Percentage of AADT that are								
nonworker trips	47%	47%	47%					

(Assumed from other CHP offices)

Assumptions and Calculations:

Santa Fe Spring	s Total Employees	Uniformed	Non - uniformed
	159	129	30
	Fraction of Total:	0.81	0.19

Nonworker Trips	Worker Trips		
276.83	312		

	Uniform	Non-uniform
	253	59
Total Worker Miles/Day	10750.000	
Worker Miles/Day	42.445	
Trips (Fraction of Total)	0.430	0.100

Santa Fe Springs Operations Trip Calculations - Existing Facility

	Trip Generation			
	Inbound Outbound To			
Annual Average Daily Trips for CHP				
station (worker + nonworker)	-	-	541	
Percentage of AADT that are				
nonworker trips	47%	47%	47%	

(Assumed from other CHP offices)

Assumptions and Calculations:

Existing Santa Fe Springs	Total Employees	Uniformed	Non - uniformed
	146	122	24
	Fraction of Total:	0.84	0.16

Nonworker Trips	Worker Trips	
254.27	287	

	Uniform	Non-uniform
	240	47
Total Worker Miles/Day	10166.667	
Worker Miles/Day	42.432	
Trips (Fraction of Total)	0.443	0.087

Assumption: 300 feet of trenching per day

Total Length of Trenching Required for All Utilities: 4,110

Days for Trenching Phase: 14

Gas Reroute	440
Gas (Bloomfield)	60
Communication	90
Electrical	90
Sanitary Sewer	70
Storm Sewer	60
Water line	3,300

Paving Areas for roads, sidewalks, curbs and gutter

Sidewalks	5,000
South Circle	3,800
Utilities	67,400

Import Volumes

Engineered Fill	4,800
sand bedding	690
agg. Base	370
concrete	80
asphalt	820

Export Volumes

asphalt & concrete	760
base agg.	670
soil	930
curb and gutter	60

<u>Demo Sq. Ft.</u> 7,900

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

CHP Santa Fe Springs South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	44.00	1000sqft	2.16	44,000.00	0
Unrefrigerated Warehouse-No Rail	1.70	1000sqft	0.04	1,700.00	0
Other Asphalt Surfaces	58.90	1000sqft	1.35	58,900.00	0
Other Asphalt Surfaces	76.20	1000sqft	1.75	76,200.00	0
Parking Lot	171.00	Space	1.54	68,400.00	0
Automobile Care Center	5.00	1000sqft	0.11	5,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)31Climate Zone9Operational Year2025

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - Unrefrig.warehouse = storage, evidence bldgs. Parking spaces from PD. 1st Other Asphalt = impervious - other bldg & parking sq ft. Total ac. for project (5.2ac) reached by adding to Govt Office. 2nd other asphalt is sidewalks & streets

Construction Phase - Added 14 day trenching phase based on assumption of 300 ft/day and 4,110 ft of trenching for utilities

Trips and VMT -

Demolition -

Grading - Exported material represents removal of existing pavement, soil, and aggregate base. Import is engineered fill, sand bedding, aggregate base, and asphalt.

Vehicle Trips - Updated with values from Trip Table for Air Study

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - Updated to reflect Tier 4 Final values

Off-road Equipment - Equipment assumptions based on modeled CHP Baldwin Park trenching equipment

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	4/24/2023	5/12/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	4/14/2023
tblConstructionPhase	PhaseStartDate	3/28/2023	4/15/2023
tblConstructionPhase	PhaseStartDate	2/28/2023	3/18/2023
tblGrading	MaterialExported	0.00	2,420.00
tblGrading	MaterialImported	0.00	6,760.00
tblLandUse	LotAcreage	1.01	2.16
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.48

Page 3 of 40

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	2.20
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.26
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	1.3000e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	670.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	303.00	302.00
tblVehicleTrips	CC_TTP	62.00	47.00
tblVehicleTrips	CNW_TTP	5.00	10.00
tblVehicleTrips	CW_TL	16.60	42.44
tblVehicleTrips	CW_TTP	33.00	43.00
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00

Page 4 of 40

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	0.00	13.39
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	0.00	13.39
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	68.93	13.39
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2022	0.2769	2.6412	2.4485	5.8800e- 003	0.3055	0.1082	0.4137	0.1232	0.1013	0.2246	0.0000	527.8439	527.8439	0.0870	0.0000	530.0197
2023	0.3493	0.7135	0.8128	1.7400e- 003	0.0345	0.0302	0.0647	9.2900e- 003	0.0284	0.0377	0.0000	153.7311	153.7311	0.0295	0.0000	154.4683
Maximum	0.3493	2.6412	2.4485	5.8800e- 003	0.3055	0.1082	0.4137	0.1232	0.1013	0.2246	0.0000	527.8439	527.8439	0.0870	0.0000	530.0197

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year		tons/yr									MT/yr					
2022	0.2769	2.6412	2.4485	5.8800e- 003	0.3055	0.1082	0.4137	0.1232	0.1013	0.2246	0.0000	527.8436	527.8436	0.0870	0.0000	530.0193
2020	0.3493	0.7135	0.8128	1.7400e- 003	0.0345	0.0302	0.0647	9.2900e- 003	0.0284	0.0377	0.0000	153.7309	153.7309	0.0295	0.0000	154.4681
Maximum	0.3493	2.6412	2.4485	5.8800e- 003	0.3055	0.1082	0.4137	0.1232	0.1013	0.2246	0.0000	527.8436	527.8436	0.0870	0.0000	530.0193
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Page 6 of 40

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-1-2022	4-30-2022	0.9876	0.9876
2	5-1-2022	7-31-2022	0.7192	0.7192
3	8-1-2022	10-31-2022	0.7198	0.7198
4	11-1-2022	1-31-2023	0.6947	0.6947
5	2-1-2023	4-30-2023	0.7089	0.7089
6	5-1-2023	7-31-2023	0.1198	0.1198
		Highest	0.9876	0.9876

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					ton	s/yr					MT/yr					
Area	0.2231	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003
Energy	2.9700e- 003	0.0270	0.0227	1.6000e- 004		2.0500e- 003	2.0500e- 003	1 	2.0500e- 003	2.0500e- 003	0.0000	238.8861	238.8861	9.2100e- 003	2.3300e- 003	239.8102
Mobile	0.2348	1.2456	4.2712	0.0196	1.8643	0.0137	1.8780	0.4995	0.0128	0.5122	0.0000	1,810.515 6	1,810.515 6	0.0724	0.0000	1,812.324 5
Stationary	3.1800e- 003	0.0140	0.1186	2.6000e- 004		4.3000e- 004	4.3000e- 004	1 	4.3000e- 004	4.3000e- 004	0.0000	25.5134	25.5134	3.5800e- 003	0.0000	25.6028
Waste	F;		, , , ,			0.0000	0.0000	1 	0.0000	0.0000	12.5083	0.0000	12.5083	0.7392	0.0000	30.9888
Water	F;		1 1 1 1			0.0000	0.0000	1 	0.0000	0.0000	3.0471	59.8323	62.8794	0.3154	7.9000e- 003	73.1197
Total	0.4641	1.2866	4.4170	0.0200	1.8643	0.0162	1.8805	0.4995	0.0153	0.5147	15.5554	2,134.756 2	2,150.311 6	1.1398	0.0102	2,181.855 4

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

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
				ton	is/yr							MT	/yr		
0.2231	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003
2.9700e- 003	0.0270	0.0227	1.6000e- 004	,	2.0500e- 003	2.0500e- 003		2.0500e- 003	2.0500e- 003	0.0000	238.8861	238.8861	9.2100e- 003	2.3300e- 003	239.8102
0.2348	1.2456	4.2712	0.0196	1.8643	0.0137	1.8780	0.4995	0.0128	0.5122	0.0000	1,810.515 6	1,810.515 6	0.0724	0.0000	1,812.324 5
3.1800e- 003	0.0140	0.1186	2.6000e- 004		4.3000e- 004	4.3000e- 004		4.3000e- 004	4.3000e- 004	0.0000	25.5134	25.5134	3.5800e- 003	0.0000	25.6028
	,]	,	0.0000	0.0000		0.0000	0.0000	12.5083	0.0000	12.5083	0.7392	0.0000	30.9888
·		i !	J ?	i i	0.0000	0.0000	,	0.0000	0.0000	3.0471	59.8323	62.8794	0.3154	7.9000e- 003	73.1197
0.4641	1.2866	4.4170	0.0200	1.8643	0.0162	1.8805	0.4995	0.0153	0.5147	15.5554	2,134.756 2	2,150.311 6	1.1398	0.0102	2,181.85 4
	0.2231 2.9700e- 003 0.2348 3.1800e- 003	0.2231	0.2231	0.2231 4.0000e- 005 4.5400e- 003 0.0000 2.9700e- 003 0.0270 0.0227 1.6000e- 004 0.2348 1.2456 4.2712 0.0196 3.1800e- 003 0.0140 0.1186 2.6000e- 004	0.2231 4.0000e- 005 4.5400e- 003 0.0000 2.9700e- 003 0.0270 0.0227 1.6000e- 004 0.2348 1.2456 4.2712 0.0196 1.8643 3.1800e- 003 0.0140 0.1186 2.6000e- 004	PM10 tons/yr 0.2231 4.0000e- 003 0.0000 2.0000e- 005 2.0500e- 003 0.2348 1.2456 4.2712 0.0196 1.8643 0.0137 3.1800e- 003 0.0140 0.1186 2.6000e- 004 4.3000e- 004 003 0.0000 0.0000 0.0000	PM10 PM10 PM10 Total tons/yr tons/yr tons/yr 0.2231 4.0000e-005 0.0000 2.0000e-005 2.0000e-005 2.9700e-003 0.0270 0.0227 1.6000e-004 2.0500e-003 2.0500e-003 0.2348 1.2456 4.2712 0.0196 1.8643 0.0137 1.8780 3.1800e-003 0.0140 0.1186 2.6000e-004 4.3000e-004 4.3000e-004 003 0.0000 0.0000 0.0000 0.0000	Name	No. PM10 PM10 Total PM2.5 PM2.5	No. PM10 PM10 Total PM2.5 PM2.5 Total	PM10	No. PM10 PM10 Total PM2.5 PM2.5 PM2.5 Total PM2.5 PM2.5 PM2.5 PM2.5 Total PM2.5 PM2.5	No. PM10	Name	Name

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Percent 0.00 0.00 0.00 0.00 Reduction

3.0 Construction Detail

Construction Phase

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

Page 8 of 40

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	2/28/2022	5	20	
2	Site Preparation	Site Preparation	3/1/2022	3/14/2022	5	10	
3	Grading	Grading	3/15/2022	4/11/2022	5	20	
4	Building Construction	Building Construction	4/12/2022	2/27/2023	5	230	
5	Trenching	Trenching	2/28/2023	3/17/2023	5	14	
6	Paving	Paving	3/18/2023	4/14/2023	5	20	
7	Architectural Coating	Architectural Coating	4/15/2023	5/12/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 76,050; Non-Residential Outdoor: 25,350; Striped Parking Area: 12,210 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

Page 9 of 40

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Trenching	Air Compressors	1 !	8.00	78	0.48
Trenching	Generator Sets	1	8.00	84	0.74
Trenching	Graders	1	8.00	187	0.41
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Pumps	1	8.00	84	0.74
Trenching	Rough Terrain Forklifts	1	8.00	100	0.40
Trenching	Scrapers	2	8.00	367	0.48
Trenching	Signal Boards	2	8.00	6	0.82
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	36.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	302.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	845.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2022**

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	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					3.8900e- 003	0.0000	3.8900e- 003	5.9000e- 004	0.0000	5.9000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124	 	0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e- 004	3.8900e- 003	0.0124	0.0163	5.9000e- 004	0.0116	0.0121	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.2 Demolition - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Hauling	1.3000e- 004	4.3300e- 003	9.8000e- 004	1.0000e- 005	3.1000e- 004	1.0000e- 005	3.2000e- 004	8.0000e- 005	1.0000e- 005	1.0000e- 004	0.0000	1.3281	1.3281	9.0000e- 005	0.0000	1.3304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e- 004	4.2000e- 004	4.8300e- 003	2.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3821	1.3821	3.0000e- 005	0.0000	1.3830
Total	7.2000e- 004	4.7500e- 003	5.8100e- 003	3.0000e- 005	1.9600e- 003	2.0000e- 005	1.9800e- 003	5.2000e- 004	2.0000e- 005	5.5000e- 004	0.0000	2.7102	2.7102	1.2000e- 004	0.0000	2.7133

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Fugitive Dust					3.8900e- 003	0.0000	3.8900e- 003	5.9000e- 004	0.0000	5.9000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e- 004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e- 004	3.8900e- 003	0.0124	0.0163	5.9000e- 004	0.0116	0.0121	0.0000	33.9902	33.9902	9.5500e- 003	0.0000	34.2289

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.2 Demolition - 2022 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Hauling	1.3000e- 004	4.3300e- 003	9.8000e- 004	1.0000e- 005	3.1000e- 004	1.0000e- 005	3.2000e- 004	8.0000e- 005	1.0000e- 005	1.0000e- 004	0.0000	1.3281	1.3281	9.0000e- 005	0.0000	1.3304
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e- 004	4.2000e- 004	4.8300e- 003	2.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3821	1.3821	3.0000e- 005	0.0000	1.3830
Total	7.2000e- 004	4.7500e- 003	5.8100e- 003	3.0000e- 005	1.9600e- 003	2.0000e- 005	1.9800e- 003	5.2000e- 004	2.0000e- 005	5.5000e- 004	0.0000	2.7102	2.7102	1.2000e- 004	0.0000	2.7133

3.3 Site Preparation - 2022

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0905	0.0000	0.0905	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e- 004		8.0600e- 003	8.0600e- 003		7.4200e- 003	7.4200e- 003	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e- 004	0.0905	8.0600e- 003	0.0985	0.0497	7.4200e- 003	0.0571	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.3 Site Preparation - 2022
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					ton	s/yr							МТ	/yr		
Hauling	1.0500e- 003	0.0363	8.2400e- 003	1.1000e- 004	2.6000e- 003	1.0000e- 004	2.7000e- 003	7.1000e- 004	1.0000e- 004	8.1000e- 004	0.0000	11.1414	11.1414	7.6000e- 004	0.0000	11.1604
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	3.5000e- 004	2.5000e- 004	2.9000e- 003	1.0000e- 005	9.9000e- 004	1.0000e- 005	9.9000e- 004	2.6000e- 004	1.0000e- 005	2.7000e- 004	0.0000	0.8293	0.8293	2.0000e- 005	0.0000	0.8298
Total	1.4000e- 003	0.0366	0.0111	1.2000e- 004	3.5900e- 003	1.1000e- 004	3.6900e- 003	9.7000e- 004	1.1000e- 004	1.0800e- 003	0.0000	11.9707	11.9707	7.8000e- 004	0.0000	11.9902

	ROG	NOx	CO	SO2	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					ton	s/yr							МТ	/yr		
Fugitive Dust					0.0905	0.0000	0.0905	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0159	0.1654	0.0985	1.9000e- 004		8.0600e- 003	8.0600e- 003		7.4200e- 003	7.4200e- 003	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e- 004	0.0905	8.0600e- 003	0.0985	0.0497	7.4200e- 003	0.0571	0.0000	16.7197	16.7197	5.4100e- 003	0.0000	16.8549

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.3 Site Preparation - 2022 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					ton	s/yr							MT	/yr		
Hauling	1.0500e- 003	0.0363	8.2400e- 003	1.1000e- 004	2.6000e- 003	1.0000e- 004	2.7000e- 003	7.1000e- 004	1.0000e- 004	8.1000e- 004	0.0000	11.1414	11.1414	7.6000e- 004	0.0000	11.1604
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	3.5000e- 004	2.5000e- 004	2.9000e- 003	1.0000e- 005	9.9000e- 004	1.0000e- 005	9.9000e- 004	2.6000e- 004	1.0000e- 005	2.7000e- 004	0.0000	0.8293	0.8293	2.0000e- 005	0.0000	0.8298
Total	1.4000e- 003	0.0366	0.0111	1.2000e- 004	3.5900e- 003	1.1000e- 004	3.6900e- 003	9.7000e- 004	1.1000e- 004	1.0800e- 003	0.0000	11.9707	11.9707	7.8000e- 004	0.0000	11.9902

3.4 Grading - 2022

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	⁻ /yr		
Fugitive Dust					0.0659	0.0000	0.0659	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0195	0.2086	0.1527	3.0000e- 004		9.4100e- 003	9.4100e- 003		8.6600e- 003	8.6600e- 003	0.0000	26.0548	26.0548	8.4300e- 003	0.0000	26.2654
Total	0.0195	0.2086	0.1527	3.0000e- 004	0.0659	9.4100e- 003	0.0753	0.0337	8.6600e- 003	0.0424	0.0000	26.0548	26.0548	8.4300e- 003	0.0000	26.2654

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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					ton	s/yr							МТ	/yr		
Hauling	2.9500e- 003	0.1016	0.0231	3.2000e- 004	7.2600e- 003	2.9000e- 004	7.5500e- 003	1.9900e- 003	2.7000e- 004	2.2700e- 003	0.0000	31.1739	31.1739	2.1200e- 003	0.0000	31.2269
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e- 004	4.2000e- 004	4.8300e- 003	2.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3821	1.3821	3.0000e- 005	0.0000	1.3830
Total	3.5400e- 003	0.1021	0.0279	3.4000e- 004	8.9100e- 003	3.0000e- 004	9.2100e- 003	2.4300e- 003	2.8000e- 004	2.7200e- 003	0.0000	32.5560	32.5560	2.1500e- 003	0.0000	32.6098

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Fugitive Dust					0.0659	0.0000	0.0659	0.0337	0.0000	0.0337	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0195	0.2086	0.1527	3.0000e- 004		9.4100e- 003	9.4100e- 003	 	8.6600e- 003	8.6600e- 003	0.0000	26.0547	26.0547	8.4300e- 003	0.0000	26.2654
Total	0.0195	0.2086	0.1527	3.0000e- 004	0.0659	9.4100e- 003	0.0753	0.0337	8.6600e- 003	0.0424	0.0000	26.0547	26.0547	8.4300e- 003	0.0000	26.2654

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.4 Grading - 2022

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					ton	s/yr							MT	/yr		
Hauling	2.9500e- 003	0.1016	0.0231	3.2000e- 004	7.2600e- 003	2.9000e- 004	7.5500e- 003	1.9900e- 003	2.7000e- 004	2.2700e- 003	0.0000	31.1739	31.1739	2.1200e- 003	0.0000	31.2269
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e- 004	4.2000e- 004	4.8300e- 003	2.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3821	1.3821	3.0000e- 005	0.0000	1.3830
Total	3.5400e- 003	0.1021	0.0279	3.4000e- 004	8.9100e- 003	3.0000e- 004	9.2100e- 003	2.4300e- 003	2.8000e- 004	2.7200e- 003	0.0000	32.5560	32.5560	2.1500e- 003	0.0000	32.6098

3.5 Building Construction - 2022

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
- Chirtoda	0.1612	1.4757	1.5463	2.5500e- 003		0.0765	0.0765	 	0.0719	0.0719	0.0000	218.9804	218.9804	0.0525	0.0000	220.2919
Total	0.1612	1.4757	1.5463	2.5500e- 003		0.0765	0.0765		0.0719	0.0719	0.0000	218.9804	218.9804	0.0525	0.0000	220.2919

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.5 Building Construction - 2022 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					ton	s/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	0.0106	0.3642	0.0900	9.9000e- 004	0.0250	6.7000e- 004	0.0257	7.2200e- 003	6.4000e- 004	7.8600e- 003	0.0000	96.0486	96.0486	5.9000e- 003	0.0000	96.1960
Worker	0.0377	0.0268	0.3102	9.8000e- 004	0.1058	7.7000e- 004	0.1065	0.0281	7.1000e- 004	0.0288	0.0000	88.8135	88.8135	2.2300e- 003	0.0000	88.8692
Total	0.0483	0.3910	0.4002	1.9700e- 003	0.1308	1.4400e- 003	0.1322	0.0353	1.3500e- 003	0.0367	0.0000	184.8620	184.8620	8.1300e- 003	0.0000	185.0652

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
	0.1612	1.4757	1.5463	2.5500e- 003		0.0765	0.0765	 	0.0719	0.0719	0.0000	218.9801	218.9801	0.0525	0.0000	220.2916
Total	0.1612	1.4757	1.5463	2.5500e- 003		0.0765	0.0765		0.0719	0.0719	0.0000	218.9801	218.9801	0.0525	0.0000	220.2916

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.5 Building Construction - 2022 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					ton	s/yr							МТ	/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	0.0106	0.3642	0.0900	9.9000e- 004	0.0250	6.7000e- 004	0.0257	7.2200e- 003	6.4000e- 004	7.8600e- 003	0.0000	96.0486	96.0486	5.9000e- 003	0.0000	96.1960
Worker	0.0377	0.0268	0.3102	9.8000e- 004	0.1058	7.7000e- 004	0.1065	0.0281	7.1000e- 004	0.0288	0.0000	88.8135	88.8135	2.2300e- 003	0.0000	88.8692
Total	0.0483	0.3910	0.4002	1.9700e- 003	0.1308	1.4400e- 003	0.1322	0.0353	1.3500e- 003	0.0367	0.0000	184.8620	184.8620	8.1300e- 003	0.0000	185.0652

3.5 Building Construction - 2023

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
- Cil reduc	0.0322	0.2949	0.3330	5.5000e- 004		0.0143	0.0143		0.0135	0.0135	0.0000	47.5200	47.5200	0.0113	0.0000	47.8026
Total	0.0322	0.2949	0.3330	5.5000e- 004		0.0143	0.0143		0.0135	0.0135	0.0000	47.5200	47.5200	0.0113	0.0000	47.8026

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.5 Building Construction - 2023 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					ton	s/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	1.7100e- 003	0.0594	0.0175	2.1000e- 004	5.4300e- 003	7.0000e- 005	5.4900e- 003	1.5700e- 003	6.0000e- 005	1.6300e- 003	0.0000	20.2079	20.2079	1.1100e- 003	0.0000	20.2357
Worker	7.7100e- 003	5.2600e- 003	0.0620	2.1000e- 004	0.0229	1.6000e- 004	0.0231	6.0900e- 003	1.5000e- 004	6.2400e- 003	0.0000	18.5479	18.5479	4.4000e- 004	0.0000	18.5588
Total	9.4200e- 003	0.0647	0.0795	4.2000e- 004	0.0284	2.3000e- 004	0.0286	7.6600e- 003	2.1000e- 004	7.8700e- 003	0.0000	38.7558	38.7558	1.5500e- 003	0.0000	38.7945

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
	0.0322	0.2949	0.3330	5.5000e- 004		0.0143	0.0143	 	0.0135	0.0135	0.0000	47.5199	47.5199	0.0113	0.0000	47.8025
Total	0.0322	0.2949	0.3330	5.5000e- 004		0.0143	0.0143		0.0135	0.0135	0.0000	47.5199	47.5199	0.0113	0.0000	47.8025

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.5 Building Construction - 2023 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					ton	s/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	1.7100e- 003	0.0594	0.0175	2.1000e- 004	5.4300e- 003	7.0000e- 005	5.4900e- 003	1.5700e- 003	6.0000e- 005	1.6300e- 003	0.0000	20.2079	20.2079	1.1100e- 003	0.0000	20.2357
Worker	7.7100e- 003	5.2600e- 003	0.0620	2.1000e- 004	0.0229	1.6000e- 004	0.0231	6.0900e- 003	1.5000e- 004	6.2400e- 003	0.0000	18.5479	18.5479	4.4000e- 004	0.0000	18.5588
Total	9.4200e- 003	0.0647	0.0795	4.2000e- 004	0.0284	2.3000e- 004	0.0286	7.6600e- 003	2.1000e- 004	7.8700e- 003	0.0000	38.7558	38.7558	1.5500e- 003	0.0000	38.7945

3.6 Trenching - 2023

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
	0.0239	0.2375	0.2197	4.6000e- 004		9.7600e- 003	9.7600e- 003		9.2000e- 003	9.2000e- 003	0.0000	39.9078	39.9078	9.8900e- 003	0.0000	40.1550
Total	0.0239	0.2375	0.2197	4.6000e- 004		9.7600e- 003	9.7600e- 003		9.2000e- 003	9.2000e- 003	0.0000	39.9078	39.9078	9.8900e- 003	0.0000	40.1550

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.6 Trenching - 2023
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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					ton	s/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	7.7000e- 004	5.3000e- 004	6.2300e- 003	2.0000e- 005	2.3000e- 003	2.0000e- 005	2.3200e- 003	6.1000e- 004	2.0000e- 005	6.3000e- 004	0.0000	1.8628	1.8628	4.0000e- 005	0.0000	1.8639
Total	7.7000e- 004	5.3000e- 004	6.2300e- 003	2.0000e- 005	2.3000e- 003	2.0000e- 005	2.3200e- 003	6.1000e- 004	2.0000e- 005	6.3000e- 004	0.0000	1.8628	1.8628	4.0000e- 005	0.0000	1.8639

	ROG	NOx	CO	SO2	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					ton	s/yr							МТ	Γ/yr		
- Cirricad	0.0239	0.2375	0.2197	4.6000e- 004		9.7600e- 003	9.7600e- 003	i I	9.2000e- 003	9.2000e- 003	0.0000	39.9078	39.9078	9.8900e- 003	0.0000	40.1550
Total	0.0239	0.2375	0.2197	4.6000e- 004		9.7600e- 003	9.7600e- 003		9.2000e- 003	9.2000e- 003	0.0000	39.9078	39.9078	9.8900e- 003	0.0000	40.1550

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.6 Trenching - 2023

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					ton	s/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	7.7000e- 004	5.3000e- 004	6.2300e- 003	2.0000e- 005	2.3000e- 003	2.0000e- 005	2.3200e- 003	6.1000e- 004	2.0000e- 005	6.3000e- 004	0.0000	1.8628	1.8628	4.0000e- 005	0.0000	1.8639
Total	7.7000e- 004	5.3000e- 004	6.2300e- 003	2.0000e- 005	2.3000e- 003	2.0000e- 005	2.3200e- 003	6.1000e- 004	2.0000e- 005	6.3000e- 004	0.0000	1.8628	1.8628	4.0000e- 005	0.0000	1.8639

3.7 Paving - 2023

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Off-Road	0.0103	0.1019	0.1458	2.3000e- 004		5.1000e- 003	5.1000e- 003		4.6900e- 003	4.6900e- 003	0.0000	20.0269	20.0269	6.4800e- 003	0.0000	20.1888
Paving	6.0800e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0164	0.1019	0.1458	2.3000e- 004		5.1000e- 003	5.1000e- 003		4.6900e- 003	4.6900e- 003	0.0000	20.0269	20.0269	6.4800e- 003	0.0000	20.1888

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.7 Paving - 2023

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	3.8000e- 004	4.4500e- 003	1.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3306	1.3306	3.0000e- 005	0.0000	1.3313
Total	5.5000e- 004	3.8000e- 004	4.4500e- 003	1.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3306	1.3306	3.0000e- 005	0.0000	1.3313

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Off-Road	0.0103	0.1019	0.1458	2.3000e- 004		5.1000e- 003	5.1000e- 003		4.6900e- 003	4.6900e- 003	0.0000	20.0268	20.0268	6.4800e- 003	0.0000	20.1888
Paving	6.0800e- 003		 		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0164	0.1019	0.1458	2.3000e- 004		5.1000e- 003	5.1000e- 003		4.6900e- 003	4.6900e- 003	0.0000	20.0268	20.0268	6.4800e- 003	0.0000	20.1888

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.7 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	3.8000e- 004	4.4500e- 003	1.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3306	1.3306	3.0000e- 005	0.0000	1.3313
Total	5.5000e- 004	3.8000e- 004	4.4500e- 003	1.0000e- 005	1.6500e- 003	1.0000e- 005	1.6600e- 003	4.4000e- 004	1.0000e- 005	4.5000e- 004	0.0000	1.3306	1.3306	3.0000e- 005	0.0000	1.3313

3.8 Architectural Coating - 2023

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Archit. Coating	0.2633					0.0000	0.0000	i i	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e- 003	0.0130	0.0181	3.0000e- 005		7.1000e- 004	7.1000e- 004	i i	7.1000e- 004	7.1000e- 004	0.0000	2.5533	2.5533	1.5000e- 004	0.0000	2.5571
Total	0.2652	0.0130	0.0181	3.0000e- 005		7.1000e- 004	7.1000e- 004		7.1000e- 004	7.1000e- 004	0.0000	2.5533	2.5533	1.5000e- 004	0.0000	2.5571

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.8 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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					ton	s/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	7.4000e- 004	5.0000e- 004	5.9300e- 003	2.0000e- 005	2.1900e- 003	2.0000e- 005	2.2100e- 003	5.8000e- 004	1.0000e- 005	6.0000e- 004	0.0000	1.7741	1.7741	4.0000e- 005	0.0000	1.7751
Total	7.4000e- 004	5.0000e- 004	5.9300e- 003	2.0000e- 005	2.1900e- 003	2.0000e- 005	2.2100e- 003	5.8000e- 004	1.0000e- 005	6.0000e- 004	0.0000	1.7741	1.7741	4.0000e- 005	0.0000	1.7751

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	⁻ /yr		
Archit. Coating	0.2633					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	1.9200e- 003	0.0130	0.0181	3.0000e- 005		7.1000e- 004	7.1000e- 004		7.1000e- 004	7.1000e- 004	0.0000	2.5533	2.5533	1.5000e- 004	0.0000	2.5571
Total	0.2652	0.0130	0.0181	3.0000e- 005		7.1000e- 004	7.1000e- 004		7.1000e- 004	7.1000e- 004	0.0000	2.5533	2.5533	1.5000e- 004	0.0000	2.5571

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

3.8 Architectural Coating - 2023 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					ton	s/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	7.4000e- 004	5.0000e- 004	5.9300e- 003	2.0000e- 005	2.1900e- 003	2.0000e- 005	2.2100e- 003	5.8000e- 004	1.0000e- 005	6.0000e- 004	0.0000	1.7741	1.7741	4.0000e- 005	0.0000	1.7751
Total	7.4000e- 004	5.0000e- 004	5.9300e- 003	2.0000e- 005	2.1900e- 003	2.0000e- 005	2.2100e- 003	5.8000e- 004	1.0000e- 005	6.0000e- 004	0.0000	1.7741	1.7741	4.0000e- 005	0.0000	1.7751

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

	ROG	NOx	CO	SO2	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					ton	s/yr							MT	/yr		
Mitigated	0.2348	1.2456	4.2712	0.0196	1.8643	0.0137	1.8780	0.4995	0.0128	0.5122	0.0000	1,810.515 6	1,810.515 6	0.0724	0.0000	1,812.324 5
Unmitigated	0.2348	1.2456	4.2712	0.0196	1.8643	0.0137	1.8780	0.4995	0.0128	0.5122	0.0000	1,810.515 6	1,810.515 6	0.0724	0.0000	1,812.324 5

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Government Office Building	589.00	589.00	589.00	4,907,368	4,907,368
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	589.00	589.00	589.00	4,907,368	4,907,368

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Government Office Building	42.44	8.40	6.90	43.00	47.00	10.00	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Government Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Parking Lot	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Unrefrigerated Warehouse-No Rail	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	209.5350	209.5350	8.6500e- 003	1.7900e- 003	210.2846
Electricity Unmitigated	 					0.0000	0.0000	i i	0.0000	0.0000	0.0000	209.5350	209.5350	8.6500e- 003	1.7900e- 003	210.2846
NaturalGas Mitigated	2.9700e- 003	0.0270	0.0227	1.6000e- 004		2.0500e- 003	2.0500e- 003	, ! ! !	2.0500e- 003	2.0500e- 003	0.0000	29.3511	29.3511	5.6000e- 004	5.4000e- 004	29.5255
NaturalGas Unmitigated	2.9700e- 003	0.0270	0.0227	1.6000e- 004		2.0500e- 003	2.0500e- 003	yr	2.0500e- 003	2.0500e- 003	0.0000	29.3511	29.3511	5.6000e- 004	5.4000e- 004	29.5255

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s 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					ton	s/yr							MT	/yr		
Automobile Care Center	90500	4.9000e- 004	4.4400e- 003	3.7300e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.8294	4.8294	9.0000e- 005	9.0000e- 005	4.8581
Government Office Building	458040	2.4700e- 003	0.0225	0.0189	1.3000e- 004		1.7100e- 003	1.7100e- 003		1.7100e- 003	1.7100e- 003	0.0000	24.4428	24.4428	4.7000e- 004	4.5000e- 004	24.5880
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1479	1.0000e- 005	7.0000e- 005	6.0000e- 005	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.0789	0.0789	0.0000	0.0000	0.0794
Total		2.9700e- 003	0.0270	0.0227	1.6000e- 004		2.0600e- 003	2.0600e- 003		2.0600e- 003	2.0600e- 003	0.0000	29.3511	29.3511	5.6000e- 004	5.4000e- 004	29.5255

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s 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					ton	s/yr							MT	/yr		
Automobile Care Center	90500	4.9000e- 004	4.4400e- 003	3.7300e- 003	3.0000e- 005		3.4000e- 004	3.4000e- 004		3.4000e- 004	3.4000e- 004	0.0000	4.8294	4.8294	9.0000e- 005	9.0000e- 005	4.8581
Government Office Building	458040	2.4700e- 003	0.0225	0.0189	1.3000e- 004		1.7100e- 003	1.7100e- 003		1.7100e- 003	1.7100e- 003	0.0000	24.4428	24.4428	4.7000e- 004	4.5000e- 004	24.5880
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1479	1.0000e- 005	7.0000e- 005	6.0000e- 005	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	0.0789	0.0789	0.0000	0.0000	0.0794
Total		2.9700e- 003	0.0270	0.0227	1.6000e- 004		2.0600e- 003	2.0600e- 003		2.0600e- 003	2.0600e- 003	0.0000	29.3511	29.3511	5.6000e- 004	5.4000e- 004	29.5255

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Automobile Care Center	55500	17.6835	7.3000e- 004	1.5000e- 004	17.7468
Government Office Building	571560	182.1113	7.5200e- 003	1.5600e- 003	182.7628
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23940	7.6278	3.1000e- 004	7.0000e- 005	7.6551
Unrefrigerated Warehouse-No Rail	6630	2.1125	9.0000e- 005	2.0000e- 005	2.1200
Total		209.5350	8.6500e- 003	1.8000e- 003	210.2846

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Automobile Care Center	55500	17.6835	7.3000e- 004	1.5000e- 004	17.7468
Government Office Building	571560	182.1113	7.5200e- 003	1.5600e- 003	182.7628
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	23940	7.6278	3.1000e- 004	7.0000e- 005	7.6551
Unrefrigerated Warehouse-No Rail	6630	2.1125	9.0000e- 005	2.0000e- 005	2.1200
Total		209.5350	8.6500e- 003	1.8000e- 003	210.2846

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

	ROG	NOx	СО	SO2	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					ton	s/yr							MT	-/yr		
Mitigated	0.2231	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003
Unmitigated	0.2231	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	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					ton	s/yr							МТ	-/yr		
Architectural Coating	0.0263					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1964		1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e- 004	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003
Total	0.2231	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003

CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

6.2 Area by SubCategory 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					ton	s/yr							МТ	-/yr		
Architectural Coating	0.0263					0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1964		1 1 1			0.0000	0.0000	1 1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.2000e- 004	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005	1 1 1 1 1	2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003
Total	0.2231	4.0000e- 005	4.5400e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	8.8500e- 003	8.8500e- 003	2.0000e- 005	0.0000	9.4300e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 36 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
Mitigated	. 02.0701	0.3154	7.9000e- 003	73.1197
Ommagatoa	62.8794	0.3154	7.9000e- 003	73.1197

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	√yr	
Automobile Care Center	0.470406 / 0.288313		0.0155	3.9000e- 004	3.6231
Government Office Building	8.74103 / 5.3574	58.0022	0.2871	7.2000e- 003	67.3246
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.393125 / 0	1.7557	0.0129	3.2000e- 004	2.1719
Total		62.8794	0.3154	7.9100e- 003	73.1197

CalEEMod Version: CalEEMod.2016.3.2 Page 37 of 40 Date: 1/16/2020 4:02 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Annual

7.2 Water by Land Use Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Automobile Care Center	0.470406 / 0.288313	3.1214	0.0155	3.9000e- 004	3.6231
Government Office Building	8.74103 / 5.3574	58.0022	0.2871	7.2000e- 003	67.3246
Other Asphalt Surfaces	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.393125 / 0	1.7557	0.0129	3.2000e- 004	2.1719
Total		62.8794	0.3154	7.9100e- 003	73.1197

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
gatea	12.5083	0.7392	0.0000	30.9888
Jgatea	12.5083	0.7392	0.0000	30.9888

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Automobile Care Center	19.1	3.8771	0.2291	0.0000	9.6054
Government Office Building	40.92	8.3064	0.4909	0.0000	20.5787
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.6	0.3248	0.0192	0.0000	0.8046
Total		12.5083	0.7392	0.0000	30.9888

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons				
Automobile Care Center	19.1	3.8771	0.2291	0.0000	9.6054
Government Office Building	40.92	8.3064	0.4909	0.0000	20.5787
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	1.6	0.3248	0.0192	0.0000	0.8046
Total		12.5083	0.7392	0.0000	30.9888

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	100	670	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/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
Equipment Type					ton	s/yr							MT	/yr		
Emergency Generator - Diesel (600 - 750 HP)	003	0.0140	0.1186	2.6000e- 004		4.3000e- 004	4.3000e- 004		4.3000e- 004	4.3000e- 004	0.0000	25.5134	25.5134	3.5800e- 003	0.0000	25.6028
Total	3.1800e- 003	0.0140	0.1186	2.6000e- 004	·	4.3000e- 004	4.3000e- 004		4.3000e- 004	4.3000e- 004	0.0000	25.5134	25.5134	3.5800e- 003	0.0000	25.6028

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

CHP Santa Fe Springs South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	44.00	1000sqft	2.16	44,000.00	0
Unrefrigerated Warehouse-No Rail	1.70	1000sqft	0.04	1,700.00	0
Other Asphalt Surfaces	58.90	1000sqft	1.35	58,900.00	0
Other Asphalt Surfaces	76.20	1000sqft	1.75	76,200.00	0
Parking Lot	171.00	Space	1.54	68,400.00	0
Automobile Care Center	5.00	1000sqft	0.11	5,000.00	0

1.2 Other Project Characteristics

 Urbanization
 Urban
 Wind Speed (m/s)
 2.2
 Precipitation Freq (Days)
 31

 Climate Zone
 9
 Operational Year
 2025

 Utility Company
 Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Unrefrig.warehouse = storage, evidence bldgs. Parking spaces from PD. 1st Other Asphalt = impervious - other bldg & parking sq ft. Total ac. for project (5.2ac) reached by adding to Govt Office. 2nd other asphalt is sidewalks & streets

Construction Phase - Added 14 day trenching phase based on assumption of 300 ft/day and 4,110 ft of trenching for utilities

Trips and VMT -

Demolition -

Grading - Exported material represents removal of existing pavement, soil, and aggregate base. Import is engineered fill, sand bedding, aggregate base, and asphalt.

Vehicle Trips - Updated with values from Trip Table for Air Study

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - Updated to reflect Tier 4 Final values

Off-road Equipment - Equipment assumptions based on modeled CHP Baldwin Park trenching equipment

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	4/24/2023	5/12/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	4/14/2023
tblConstructionPhase	PhaseStartDate	3/28/2023	4/15/2023
tblConstructionPhase	PhaseStartDate	2/28/2023	3/18/2023
tblGrading	MaterialExported	0.00	2,420.00
tblGrading	MaterialImported	0.00	6,760.00
tblLandUse	LotAcreage	1.01	2.16
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.48

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

Date: 1/16/2020 4:04 PM

Page 3 of 33

tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType	;	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	2.20
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.26
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	1.3000e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	670.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	303.00	302.00
tblVehicleTrips	CC_TTP	62.00	47.00
tblVehicleTrips	CNW_TTP	5.00	10.00
tblVehicleTrips	CW_TL	16.60	42.44
tblVehicleTrips	CW_TTP	33.00	43.00
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

Date: 1/16/2020 4:04 PM

Page 4 of 33

tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	0.00	13.39
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	0.00	13.39
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	68.93	13.39
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day								lb/day							
2022	3.4495	40.1876	21.9237	0.0632	18.8225	1.6344	20.4569	10.1328	1.5044	11.6372	0.0000	6,495.669 7	6,495.669 7	1.3611	0.0000	6,524.732 3
2023	26.5952	33.9962	32.3530	0.0689	1.4089	1.3969	2.1198	0.3798	1.3168	1.4057	0.0000	6,592.781 0	6,592.781 0	1.5645	0.0000	6,631.894 7
Maximum	26.5952	40.1876	32.3530	0.0689	18.8225	1.6344	20.4569	10.1328	1.5044	11.6372	0.0000	6,592.781 0	6,592.781 0	1.5645	0.0000	6,631.894 7

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day								lb/day							
2022	3.4495	40.1876	21.9237	0.0632	18.8225	1.6344	20.4569	10.1328	1.5044	11.6372	0.0000	6,495.669 7	6,495.669 7	1.3611	0.0000	6,524.732 3
2023	26.5952	33.9962	32.3530	0.0689	1.4089	1.3969	2.1198	0.3798	1.3168	1.4057	0.0000	6,592.781 0	6,592.781 0	1.5645	0.0000	6,631.894 7
Maximum	26.5952	40.1876	32.3530	0.0689	18.8225	1.6344	20.4569	10.1328	1.5044	11.6372	0.0000	6,592.781 0	6,592.781 0	1.5645	0.0000	6,631.894 7
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	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	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004	 	0.0832
Energy	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360
Mobile	1.3611	6.5010	25.2484	0.1118	10.4328	0.0754	10.5082	2.7909	0.0701	2.8609		11,398.85 32	11,398.85 32	0.4449	i i	11,409.975 6
Stationary	0.0636	0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459
Total	2.6645	6.9294	27.7810	0.1180	10.4328	0.0954	10.5282	2.7909	0.0901	2.8809		12,138.68 82	12,138.68 82	0.5274	3.2500e- 003	12,152.84 08

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

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					lb/e	day							lb/d	day		
Area	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Energy	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360
Mobile	1.3611	6.5010	25.2484	0.1118	10.4328	0.0754	10.5082	2.7909	0.0701	2.8609		11,398.853 2	11,398.853 2	0.4449		11,409.975 6
Stationary	0.0636	0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459
Total	2.6645	6.9294	27.7810	0.1180	10.4328	0.0954	10.5282	2.7909	0.0901	2.8809		12,138.68 82	12,138.68 82	0.5274	3.2500e- 003	12,152.84 08

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

3.0 Construction Detail

Construction Phase

Page 8 of 33

Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	2/28/2022	5	20	
2	Site Preparation	Site Preparation	3/1/2022	3/14/2022	5	10	
3	Grading	Grading	3/15/2022	4/11/2022	5	20	
4	Building Construction	Building Construction	4/12/2022	2/27/2023	5	230	
5	Trenching	Trenching	2/28/2023	3/17/2023	5	14	
6	Paving	Paving	3/18/2023	4/14/2023	5	20	
7	Architectural Coating	Architectural Coating	4/15/2023	5/12/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 76,050; Non-Residential Outdoor: 25,350; Striped Parking Area: 12,210 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

Page 9 of 33

Date: 1/16/2020 4:04 PM

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Trenching	Air Compressors	1	8.00	78	0.48
Trenching	Generator Sets	1	8.00	84	0.74
Trenching	Graders	1	8.00	187	0.41
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Pumps	1	8.00	84	0.74
Trenching	Rough Terrain Forklifts	1	8.00	100	0.40
Trenching	Scrapers	2	8.00	367	0.48
Trenching	Signal Boards	2	8.00	6	0.82
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	36.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	302.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	845.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2022**

	ROG	NOx	CO	SO2	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/d	day							lb/c	day		
Fugitive Dust					0.3888	0.0000	0.3888	0.0589	0.0000	0.0589			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524	 	3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.3888	1.2427	1.6315	0.0589	1.1553	1.2141		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.2 Demolition - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Hauling	0.0124	0.4208	0.0953	1.3600e- 003	0.0315	1.2100e- 003	0.0327	8.6200e- 003	1.1600e- 003	9.7800e- 003		147.5559	147.5559	9.7800e- 003		147.8004
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	0.0594	0.0371	0.5225	1.6100e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		160.1586	160.1586	4.0400e- 003		160.2595
Total	0.0718	0.4579	0.6178	2.9700e- 003	0.1991	2.4100e- 003	0.2015	0.0531	2.2600e- 003	0.0554		307.7145	307.7145	0.0138		308.0599

	ROG	NOx	CO	SO2	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/d	day							lb/d	lay		
Fugitive Dust	11 11 11				0.3888	0.0000	0.3888	0.0589	0.0000	0.0589		i i	0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427	 	1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.3888	1.2427	1.6315	0.0589	1.1553	1.2141	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.2 Demolition - 2022

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Hauling	0.0124	0.4208	0.0953	1.3600e- 003	0.0315	1.2100e- 003	0.0327	8.6200e- 003	1.1600e- 003	9.7800e- 003		147.5559	147.5559	9.7800e- 003		147.8004
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	0.0594	0.0371	0.5225	1.6100e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		160.1586	160.1586	4.0400e- 003		160.2595
Total	0.0718	0.4579	0.6178	2.9700e- 003	0.1991	2.4100e- 003	0.2015	0.0531	2.2600e- 003	0.0554		307.7145	307.7145	0.0138		308.0599

3.3 Site Preparation - 2022

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Fugitive Dust	 				18.0936	0.0000	18.0936	9.9348	0.0000	9.9348			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	18.0936	1.6126	19.7062	9.9348	1.4836	11.4184		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Hauling	0.2081	7.0595	1.5989	0.0229	0.5277	0.0204	0.5481	0.1446	0.0195	0.1641		2,475.660 0	2,475.660 0	0.1641		2,479.762 7
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	0.0713	0.0445	0.6270	1.9300e- 003	0.2012	1.4400e- 003	0.2026	0.0534	1.3200e- 003	0.0547		192.1903	192.1903	4.8400e- 003		192.3114
Total	0.2794	7.1040	2.2259	0.0248	0.7289	0.0218	0.7507	0.1980	0.0208	0.2188		2,667.850 3	2,667.850 3	0.1690		2,672.074 1

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Fugitive Dust					18.0936	0.0000	18.0936	9.9348	0.0000	9.9348		! !	0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922	,	3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	18.0936	1.6126	19.7062	9.9348	1.4836	11.4184	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.3 Site Preparation - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Hauling	0.2081	7.0595	1.5989	0.0229	0.5277	0.0204	0.5481	0.1446	0.0195	0.1641		2,475.660 0	2,475.660 0	0.1641		2,479.762 7
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	0.0713	0.0445	0.6270	1.9300e- 003	0.2012	1.4400e- 003	0.2026	0.0534	1.3200e- 003	0.0547		192.1903	192.1903	4.8400e- 003		192.3114
Total	0.2794	7.1040	2.2259	0.0248	0.7289	0.0218	0.7507	0.1980	0.0208	0.2188		2,667.850 3	2,667.850 3	0.1690		2,672.074 1

3.4 Grading - 2022

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Fugitive Dust					6.5906	0.0000	6.5906	3.3733	0.0000	3.3733			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	6.5906	0.9409	7.5314	3.3733	0.8656	4.2389		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	lay		
Hauling	0.2911	9.8763	2.2368	0.0320	0.7383	0.0285	0.7668	0.2023	0.0273	0.2296		3,463.464 7	3,463.464 7	0.2296		3,469.204 4
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	0.0594	0.0371	0.5225	1.6100e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		160.1586	160.1586	4.0400e- 003		160.2595
Total	0.3505	9.9134	2.7594	0.0336	0.9059	0.0297	0.9356	0.2468	0.0284	0.2751		3,623.623 3	3,623.623	0.2336		3,629.463 9

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Fugitive Dust					6.5906	0.0000	6.5906	3.3733	0.0000	3.3733			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	6.5906	0.9409	7.5314	3.3733	0.8656	4.2389	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.4 Grading - 2022

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/d	day		
Hauling	0.2911	9.8763	2.2368	0.0320	0.7383	0.0285	0.7668	0.2023	0.0273	0.2296		3,463.464 7	3,463.464 7	0.2296		3,469.204 4
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	0.0594	0.0371	0.5225	1.6100e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		160.1586	160.1586	4.0400e- 003	 	160.2595
Total	0.3505	9.9134	2.7594	0.0336	0.9059	0.0297	0.9356	0.2468	0.0284	0.2751		3,623.623	3,623.623 3	0.2336		3,629.463 9

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.5 Building Construction - 2022 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/d	lay		
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	0.1096	3.8024	0.8984	0.0106	0.2688	6.9900e- 003	0.2758	0.0774	6.6800e- 003	0.0841		1,134.248 3	1,134.248 3	0.0666	 	1,135.914 2
Worker	0.4039	0.2522	3.5532	0.0109	1.1401	8.1500e- 003	1.1483	0.3024	7.5100e- 003	0.3099		1,089.078 4	1,089.078 4	0.0275	 	1,089.764 7
Total	0.5135	4.0546	4.4516	0.0216	1.4089	0.0151	1.4241	0.3798	0.0142	0.3939		2,223.326 7	2,223.326 7	0.0941		2,225.678 9

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.5 Building Construction - 2022 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/d	day							lb/c	lay		
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	0.1096	3.8024	0.8984	0.0106	0.2688	6.9900e- 003	0.2758	0.0774	6.6800e- 003	0.0841		1,134.248 3	1,134.248 3	0.0666		1,135.914 2
Worker	0.4039	0.2522	3.5532	0.0109	1.1401	8.1500e- 003	1.1483	0.3024	7.5100e- 003	0.3099		1,089.078 4	1,089.078 4	0.0275		1,089.764 7
Total	0.5135	4.0546	4.4516	0.0216	1.4089	0.0151	1.4241	0.3798	0.0142	0.3939		2,223.326 7	2,223.326 7	0.0941		2,225.678 9

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
J. Trodu	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/d	lay		
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	0.0818	2.8746	0.8094	0.0103	0.2688	3.2300e- 003	0.2720	0.0774	3.0900e- 003	0.0805		1,099.844 4	1,099.844 4	0.0581	 	1,101.297 0
Worker	0.3797	0.2282	3.2813	0.0105	1.1401	7.9400e- 003	1.1481	0.3024	7.3100e- 003	0.3097		1,048.488 8	1,048.488 8	0.0248	 	1,049.107 7
Total	0.4615	3.1029	4.0907	0.0208	1.4089	0.0112	1.4201	0.3798	0.0104	0.3902		2,148.333 2	2,148.333 2	0.0829		2,150.404 8

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.5 Building Construction - 2023 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/d	day							lb/c	lay		
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	0.0818	2.8746	0.8094	0.0103	0.2688	3.2300e- 003	0.2720	0.0774	3.0900e- 003	0.0805		1,099.844 4	1,099.844 4	0.0581		1,101.297 0
Worker	0.3797	0.2282	3.2813	0.0105	1.1401	7.9400e- 003	1.1481	0.3024	7.3100e- 003	0.3097		1,048.488 8	1,048.488 8	0.0248		1,049.107 7
Total	0.4615	3.1029	4.0907	0.0208	1.4089	0.0112	1.4201	0.3798	0.0104	0.3902		2,148.333 2	2,148.333 2	0.0829		2,150.404 8

3.6 Trenching - 2023

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Off-Road	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146		6,284.402 0	6,284.402 0	1.5573		6,323.333 6
Total	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146		6,284.402 0	6,284.402 0	1.5573		6,323.333

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.6 Trenching - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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/d	day							lb/d	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	0.1117	0.0671	0.9651	3.0900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		308.3791	308.3791	7.2800e- 003		308.5611
Total	0.1117	0.0671	0.9651	3.0900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		308.3791	308.3791	7.2800e- 003		308.5611

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146	0.0000	6,284.402 0	6,284.402 0	1.5573		6,323.333 6
Total	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146	0.0000	6,284.402 0	6,284.402 0	1.5573		6,323.333 6

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.6 Trenching - 2023

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/d	day							lb/d	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	0.1117	0.0671	0.9651	3.0900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		308.3791	308.3791	7.2800e- 003		308.5611
Total	0.1117	0.0671	0.9651	3.0900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		308.3791	308.3791	7.2800e- 003		308.5611

3.7 Paving - 2023

	ROG	NOx	CO	SO2	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/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.6078				 	0.0000	0.0000		0.0000	0.0000			0.0000		 	0.0000
Total	1.6406	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.7 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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/d	day							lb/d	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	0.0558	0.0336	0.4825	1.5500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		154.1895	154.1895	3.6400e- 003		154.2806
Total	0.0558	0.0336	0.4825	1.5500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		154.1895	154.1895	3.6400e- 003		154.2806

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.6078				 	0.0000	0.0000	 	0.0000	0.0000		i i	0.0000			0.0000
Total	1.6406	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.7 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	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	0.0558	0.0336	0.4825	1.5500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		154.1895	154.1895	3.6400e- 003		154.2806
Total	0.0558	0.0336	0.4825	1.5500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		154.1895	154.1895	3.6400e- 003		154.2806

3.8 Architectural Coating - 2023

	ROG	NOx	CO	SO2	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/d	day							lb/c	day		
Archit. Coating	26.3291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168	 	281.8690
Total	26.5208	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.8 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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/d	day							lb/d	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	0.0745	0.0448	0.6434	2.0600e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		205.5860	205.5860	4.8500e- 003		205.7074
Total	0.0745	0.0448	0.6434	2.0600e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		205.5860	205.5860	4.8500e- 003		205.7074

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Archit. Coating	26.3291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708	 	0.0708	0.0708	0.0000	281.4481	281.4481	0.0168	 	281.8690
Total	26.5208	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

3.8 Architectural Coating - 2023 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/d	day							lb/d	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	0.0745	0.0448	0.6434	2.0600e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		205.5860	205.5860	4.8500e- 003		205.7074
Total	0.0745	0.0448	0.6434	2.0600e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		205.5860	205.5860	4.8500e- 003		205.7074

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Mitigated	1.3611	6.5010	25.2484	0.1118	10.4328	0.0754	10.5082	2.7909	0.0701	2.8609		11,398.853 2	11,398.853 2	0.4449		11,409.975 6
Unmitigated	1.3611	6.5010	25.2484	0.1118	10.4328	0.0754	10.5082	2.7909	0.0701	2.8609		11,398.85 32	11,398.85 32	0.4449		11,409.975 6

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Government Office Building	589.00	589.00	589.00	4,907,368	4,907,368
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	589.00	589.00	589.00	4,907,368	4,907,368

4.3 Trip Type Information

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Government Office Building	42.44	8.40	6.90	43.00	47.00	10.00	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Government Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Parking Lot	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Unrefrigerated Warehouse-No Rail	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
NaturalGas Mitigated	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360
NaturalGas Unmitigated	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360

5.2 Energy by Land Use - NaturalGas Unmitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Automobile Care Center	247.945	2.6700e- 003	0.0243	0.0204	1.5000e- 004		1.8500e- 003	1.8500e- 003		1.8500e- 003	1.8500e- 003		29.1700	29.1700	5.6000e- 004	5.3000e- 004	29.3434
Government Office Building	1254.9	0.0135	0.1230	0.1034	7.4000e- 004		9.3500e- 003	9.3500e- 003		9.3500e- 003	9.3500e- 003		147.6358	147.6358	2.8300e- 003	2.7100e- 003	148.5131
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.05205	4.0000e- 005	4.0000e- 004	3.3000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.4767	0.4767	1.0000e- 005	1.0000e- 005	0.4796
Total		0.0162	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Automobile Care Center	0.247945	2.6700e- 003	0.0243	0.0204	1.5000e- 004		1.8500e- 003	1.8500e- 003		1.8500e- 003	1.8500e- 003		29.1700	29.1700	5.6000e- 004	5.3000e- 004	29.3434
Government Office Building	1.2549	0.0135	0.1230	0.1034	7.4000e- 004		9.3500e- 003	9.3500e- 003	 	9.3500e- 003	9.3500e- 003		147.6358	147.6358	2.8300e- 003	2.7100e- 003	148.5131
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0040520 5	4.0000e- 005	4.0000e- 004	3.3000e- 004	0.0000		3.0000e- 005	3.0000e- 005	r	3.0000e- 005	3.0000e- 005		0.4767	0.4767	1.0000e- 005	1.0000e- 005	0.4796
Total		0.0162	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Mitigated	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Unmitigated	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Architectural Coating	0.1443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0759					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e- 003	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Total	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 33 Date: 1/16/2020 4:04 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

6.2 Area by SubCategory

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/d	day							lb/d	day		
Architectural Coating	0.1443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0759		1 1 1			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e- 003	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Total	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832

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
						• •

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

CHP Santa Fe Springs - South Coast AQMD Air District, Summer

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	100	670	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type					lb/d	day							lb/d	lay		
Emergency Generator - Diesel (600 - 750 HP)		0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459
Total	0.0636	0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

CHP Santa Fe Springs South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	44.00	1000sqft	2.16	44,000.00	0
Unrefrigerated Warehouse-No Rail	1.70	1000sqft	0.04	1,700.00	0
Other Asphalt Surfaces	58.90	1000sqft	1.35	58,900.00	0
Other Asphalt Surfaces	76.20	1000sqft	1.75	76,200.00	0
Parking Lot	171.00	Space	1.54	68,400.00	0
Automobile Care Center	5.00	1000sqft	0.11	5,000.00	0

1.2 Other Project Characteristics

UrbanizationUrbanWind Speed (m/s)2.2Precipitation Freq (Days)31Climate Zone9Operational Year2025

Utility Company Southern California Edison

 CO2 Intensity
 702.44
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Project Characteristics -

Land Use - Unrefrig.warehouse = storage, evidence bldgs. Parking spaces from PD. 1st Other Asphalt = impervious - other bldg & parking sq ft. Total ac. for project (5.2ac) reached by adding to Govt Office. 2nd other asphalt is sidewalks & streets

Construction Phase - Added 14 day trenching phase based on assumption of 300 ft/day and 4,110 ft of trenching for utilities

Trips and VMT -

Demolition -

Grading - Exported material represents removal of existing pavement, soil, and aggregate base. Import is engineered fill, sand bedding, aggregate base, and asphalt.

Vehicle Trips - Updated with values from Trip Table for Air Study

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Stationary Sources - Emergency Generators and Fire Pumps -

Stationary Sources - Emergency Generators and Fire Pumps EF - Updated to reflect Tier 4 Final values

Off-road Equipment - Equipment assumptions based on modeled CHP Baldwin Park trenching equipment

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	PhaseEndDate	4/24/2023	5/12/2023
tblConstructionPhase	PhaseEndDate	3/27/2023	4/14/2023
tblConstructionPhase	PhaseStartDate	3/28/2023	4/15/2023
tblConstructionPhase	PhaseStartDate	2/28/2023	3/18/2023
tblGrading	MaterialExported	0.00	2,420.00
tblGrading	MaterialImported	0.00	6,760.00
tblLandUse	LotAcreage	1.01	2.16
tblOffRoadEquipment	LoadFactor	0.41	0.41
tblOffRoadEquipment	LoadFactor	0.40	0.40
tblOffRoadEquipment	LoadFactor	0.48	0.48

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Date: 1/16/2020 4:05 PM

Page 3 of 33

tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType	}	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentType		Graders
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Scrapers
tblOffRoadEquipment	OffRoadEquipmentType		Signal Boards
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblStationaryGeneratorsPumpsEF	CO_EF	2.60	2.20
tblStationaryGeneratorsPumpsEF	NOX_EF	2.85	0.26
tblStationaryGeneratorsPumpsEF	PM10_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	PM2_5_EF	0.15	8.0000e-003
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	1.3000e-004
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	670.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	100.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00
tblTripsAndVMT	HaulingTripNumber	303.00	302.00
tblVehicleTrips	CC_TTP	62.00	47.00
tblVehicleTrips	CNW_TTP	5.00	10.00
tblVehicleTrips	CW_TL	16.60	42.44
tblVehicleTrips	CW_TTP	33.00	43.00
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00

Page 4 of 33

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Date: 1/16/2020 4:05 PM

tblVehicleTrips	ST_TR	23.72	0.00
tblVehicleTrips	ST_TR	0.00	13.39
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	11.88	0.00
tblVehicleTrips	SU_TR	0.00	13.39
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	23.72	0.00
tblVehicleTrips	WD_TR	68.93	13.39
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2022	3.4623	40.2673	21.9724	0.0625	18.8225	1.6347	20.4572	10.1328	1.5047	11.6375	0.0000	6,420.684 2	6,420.684 2	1.3675	0.0000	6,449.975 0
2023	26.6026	34.0025	32.2519	0.0687	1.4089	1.3969	2.1200	0.3798	1.3168	1.4057	0.0000	6,572.790 9	6,572.790 9	1.5640	0.0000	6,611.8919
Maximum	26.6026	40.2673	32.2519	0.0687	18.8225	1.6347	20.4572	10.1328	1.5047	11.6375	0.0000	6,572.790 9	6,572.790 9	1.5640	0.0000	6,611.891 9

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.4623	40.2673	21.9724	0.0625	18.8225	1.6347	20.4572	10.1328	1.5047	11.6375	0.0000	6,420.684 2	6,420.684 2	1.3675	0.0000	6,449.975 0
2023	26.6026	34.0025	32.2519	0.0687	1.4089	1.3969	2.1200	0.3798	1.3168	1.4057	0.0000	6,572.790 9	6,572.790 9	1.5640	0.0000	6,611.8919
Maximum	26.6026	40.2673	32.2519	0.0687	18.8225	1.6347	20.4572	10.1328	1.5047	11.6375	0.0000	6,572.790 9	6,572.790 9	1.5640	0.0000	6,611.891 9
	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	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/d	day			
Area	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004	 	0.0832
Energy	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112	 	0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360
Mobile	1.3021	6.7224	22.9158	0.1061	10.4328	0.0755	10.5083	2.7909	0.0702	2.8611		10,827.75 09	10,827.75 09	0.4382		10,838.70 55
Stationary	0.0636	0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003	 	8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459
Total	2.6055	7.1508	25.4484	0.1123	10.4328	0.0955	10.5283	2.7909	0.0902	2.8810		11,567.58 60	11,567.58 60	0.5206	3.2500e- 003	11,581.57 07

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

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	lb/day										lb/day					
Area	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Energy	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360
Mobile	1.3021	6.7224	22.9158	0.1061	10.4328	0.0755	10.5083	2.7909	0.0702	2.8611		10,827.75 09	10,827.75 09	0.4382		10,838.70 55
Stationary	0.0636	0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459
Total	2.6055	7.1508	25.4484	0.1123	10.4328	0.0955	10.5283	2.7909	0.0902	2.8810		11,567.58 60	11,567.58 60	0.5206	3.2500e- 003	11,581.57 07

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

3.0 Construction Detail

Construction Phase

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Date: 1/16/2020 4:05 PM

Page 8 of 33

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	2/1/2022	2/28/2022	5	20	
2	Site Preparation	Site Preparation	3/1/2022	3/14/2022	5	10	
3	Grading	Grading	3/15/2022	4/11/2022	5	20	
4	Building Construction	Building Construction	4/12/2022	2/27/2023	5	230	
5	Trenching	Trenching	2/28/2023	3/17/2023	5	14	
6	Paving	Paving	3/18/2023	4/14/2023	5	20	
7	Architectural Coating	Architectural Coating	4/15/2023	5/12/2023	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 4.64

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 76,050; Non-Residential Outdoor: 25,350; Striped Parking Area: 12,210 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Page 9 of 33

Date: 1/16/2020 4:05 PM

Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48
Trenching	Air Compressors	1	8.00	78	0.48
Trenching	Generator Sets	1	8.00	84	0.74
Trenching	Graders	1	8.00	187	0.41
Trenching	Plate Compactors	1	8.00	8	0.43
Trenching	Pumps	1	8.00	84	0.74
Trenching	Rough Terrain Forklifts	1	8.00	100	0.40
Trenching	Scrapers	2	8.00	367	0.48
Trenching	Signal Boards	2	8.00	6	0.82
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37

Trips and VMT

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Date: 1/16/2020 4:05 PM

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	36.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	302.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	845.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	102.00	42.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Trenching	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2022**

	ROG	NOx	СО	SO2	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/d	day							lb/d	lay		
Fugitive Dust			i i i		0.3888	0.0000	0.3888	0.0589	0.0000	0.0589		1	0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427	 	1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524	 	3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.3888	1.2427	1.6315	0.0589	1.1553	1.2141		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.2 Demolition - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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/e	day							lb/d	lay		
Hauling	0.0128	0.4253	0.1021	1.3400e- 003	0.0315	1.2300e- 003	0.0327	8.6200e- 003	1.1800e- 003	9.8000e- 003		144.8034	144.8034	0.0102		145.0579
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	0.0651	0.0406	0.4687	1.5000e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		149.7805	149.7805	3.7600e- 003	 	149.8745
Total	0.0778	0.4659	0.5708	2.8400e- 003	0.1991	2.4300e- 003	0.2016	0.0531	2.2800e- 003	0.0554		294.5839	294.5839	0.0139		294.9324

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Fugitive Dust	11 11 11				0.3888	0.0000	0.3888	0.0589	0.0000	0.0589		i i	0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427	 	1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524	 	3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	0.3888	1.2427	1.6315	0.0589	1.1553	1.2141	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.2 Demolition - 2022

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	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/c	day		
Hauling	0.0128	0.4253	0.1021	1.3400e- 003	0.0315	1.2300e- 003	0.0327	8.6200e- 003	1.1800e- 003	9.8000e- 003		144.8034	144.8034	0.0102		145.0579
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	0.0651	0.0406	0.4687	1.5000e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		149.7805	149.7805	3.7600e- 003	 	149.8745
Total	0.0778	0.4659	0.5708	2.8400e- 003	0.1991	2.4300e- 003	0.2016	0.0531	2.2800e- 003	0.0554		294.5839	294.5839	0.0139		294.9324

3.3 Site Preparation - 2022

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Fugitive Dust	 				18.0936	0.0000	18.0936	9.9348	0.0000	9.9348			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.061 9	3,686.061 9	1.1922		3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	18.0936	1.6126	19.7062	9.9348	1.4836	11.4184		3,686.061 9	3,686.061 9	1.1922		3,715.865 5

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Hauling	0.2141	7.1351	1.7122	0.0224	0.5277	0.0207	0.5484	0.1446	0.0198	0.1644		2,429.479 1	2,429.479 1	0.1708		2,433.749 9
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	0.0781	0.0487	0.5625	1.8000e- 003	0.2012	1.4400e- 003	0.2026	0.0534	1.3200e- 003	0.0547		179.7366	179.7366	4.5100e- 003		179.8494
Total	0.2921	7.1838	2.2747	0.0242	0.7289	0.0221	0.7510	0.1980	0.0211	0.2191		2,609.215 7	2,609.215 7	0.1753		2,613.599 2

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Fugitive Dust	 				18.0936	0.0000	18.0936	9.9348	0.0000	9.9348			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380	 	1.6126	1.6126		1.4836	1.4836	0.0000	3,686.061 9	3,686.061 9	1.1922	i i	3,715.865 5
Total	3.1701	33.0835	19.6978	0.0380	18.0936	1.6126	19.7062	9.9348	1.4836	11.4184	0.0000	3,686.061 9	3,686.061 9	1.1922		3,715.865 5

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.3 Site Preparation - 2022 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/d	day							lb/d	day		
Hauling	0.2141	7.1351	1.7122	0.0224	0.5277	0.0207	0.5484	0.1446	0.0198	0.1644		2,429.479 1	2,429.479 1	0.1708		2,433.749 9
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	0.0781	0.0487	0.5625	1.8000e- 003	0.2012	1.4400e- 003	0.2026	0.0534	1.3200e- 003	0.0547		179.7366	179.7366	4.5100e- 003		179.8494
Total	0.2921	7.1838	2.2747	0.0242	0.7289	0.0221	0.7510	0.1980	0.0211	0.2191		2,609.215 7	2,609.215 7	0.1753		2,613.599 2

3.4 Grading - 2022

	ROG	NOx	СО	SO2	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/d	day							lb/c	day		
Fugitive Dust					6.5906	0.0000	6.5906	3.3733	0.0000	3.3733			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297	 	0.9409	0.9409		0.8656	0.8656		2,872.046 4	2,872.046 4	0.9289	 	2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	6.5906	0.9409	7.5314	3.3733	0.8656	4.2389		2,872.046 4	2,872.046 4	0.9289		2,895.268 4

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.4 Grading - 2022

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	lay		
Hauling	0.2995	9.9820	2.3954	0.0314	0.7383	0.0289	0.7672	0.2023	0.0277	0.2300		3,398.857 4	3,398.857 4	0.2390		3,404.832
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	0.0651	0.0406	0.4687	1.5000e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		149.7805	149.7805	3.7600e- 003	 	149.8745
Total	0.3645	10.0226	2.8641	0.0329	0.9059	0.0301	0.9361	0.2468	0.0288	0.2756		3,548.637 8	3,548.637 8	0.2428		3,554.706 6

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Fugitive Dust	ii ii				6.5906	0.0000	6.5906	3.3733	0.0000	3.3733			0.0000			0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409	 	0.8656	0.8656	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4
Total	1.9486	20.8551	15.2727	0.0297	6.5906	0.9409	7.5314	3.3733	0.8656	4.2389	0.0000	2,872.046 4	2,872.046 4	0.9289		2,895.268 4

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/d	day		
Hauling	0.2995	9.9820	2.3954	0.0314	0.7383	0.0289	0.7672	0.2023	0.0277	0.2300		3,398.857 4	3,398.857 4	0.2390		3,404.832 2
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	0.0651	0.0406	0.4687	1.5000e- 003	0.1677	1.2000e- 003	0.1689	0.0445	1.1000e- 003	0.0456		149.7805	149.7805	3.7600e- 003		149.8745
Total	0.3645	10.0226	2.8641	0.0329	0.9059	0.0301	0.9361	0.2468	0.0288	0.2756		3,548.637 8	3,548.637 8	0.2428		3,554.706 6

3.5 Building Construction - 2022

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.5 Building Construction - 2022 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/d	lay		
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	0.1154	3.7872	1.0059	0.0103	0.2688	7.2200e- 003	0.2760	0.0774	6.9000e- 003	0.0843		1,101.215 7	1,101.215 7	0.0715		1,103.003 7
Worker	0.4424	0.2761	3.1872	0.0102	1.1401	8.1500e- 003	1.1483	0.3024	7.5100e- 003	0.3099		1,018.507 3	1,018.507 3	0.0256		1,019.146 4
Total	0.5578	4.0633	4.1931	0.0205	1.4089	0.0154	1.4243	0.3798	0.0144	0.3942		2,119.723 0	2,119.723 0	0.0971		2,122.150 1

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.5 Building Construction - 2022 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/c	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	0.1154	3.7872	1.0059	0.0103	0.2688	7.2200e- 003	0.2760	0.0774	6.9000e- 003	0.0843		1,101.215 7	1,101.215 7	0.0715	 	1,103.003 7
Worker	0.4424	0.2761	3.1872	0.0102	1.1401	8.1500e- 003	1.1483	0.3024	7.5100e- 003	0.3099		1,018.507 3	1,018.507 3	0.0256	 	1,019.146 4
Total	0.5578	4.0633	4.1931	0.0205	1.4089	0.0154	1.4243	0.3798	0.0144	0.3942		2,119.723 0	2,119.723 0	0.0971		2,122.150 1

3.5 Building Construction - 2023

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.5 Building Construction - 2023 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	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/d	day							lb/d	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	0.0861	2.8562	0.8894	9.9900e- 003	0.2688	3.3900e- 003	0.2722	0.0774	3.2400e- 003	0.0806		1,068.319 0	1,068.319 0	0.0619		1,069.866 9
Worker	0.4172	0.2497	2.9375	9.8300e- 003	1.1401	7.9400e- 003	1.1481	0.3024	7.3100e- 003	0.3097		980.5224	980.5224	0.0230		981.0982
Total	0.5034	3.1059	3.8270	0.0198	1.4089	0.0113	1.4203	0.3798	0.0106	0.3903		2,048.841 3	2,048.841 3	0.0850		2,050.965 2

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.5 Building Construction - 2023 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/d	day							lb/d	lay		
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	0.0861	2.8562	0.8894	9.9900e- 003	0.2688	3.3900e- 003	0.2722	0.0774	3.2400e- 003	0.0806		1,068.319 0	1,068.319 0	0.0619	i i	1,069.866 9
Worker	0.4172	0.2497	2.9375	9.8300e- 003	1.1401	7.9400e- 003	1.1481	0.3024	7.3100e- 003	0.3097		980.5224	980.5224	0.0230		981.0982
Total	0.5034	3.1059	3.8270	0.0198	1.4089	0.0113	1.4203	0.3798	0.0106	0.3903		2,048.841 3	2,048.841 3	0.0850		2,050.965 2

3.6 Trenching - 2023

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146		6,284.402 0	6,284.402 0	1.5573		6,323.333 6
Total	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146		6,284.402 0	6,284.402 0	1.5573		6,323.333 6

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.6 Trenching - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	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	0.1227	0.0734	0.8640	2.8900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		288.3889	288.3889	6.7700e- 003		288.5583
Total	0.1227	0.0734	0.8640	2.8900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		288.3889	288.3889	6.7700e- 003		288.5583

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Off-Road	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146	0.0000	6,284.402 0	6,284.402 0	1.5573		6,323.333 6
Total	3.4155	33.9291	31.3879	0.0658		1.3945	1.3945		1.3146	1.3146	0.0000	6,284.402 0	6,284.402 0	1.5573		6,323.333 6

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.6 Trenching - 2023

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/d	day							lb/d	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	0.1227	0.0734	0.8640	2.8900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		288.3889	288.3889	6.7700e- 003		288.5583
Total	0.1227	0.0734	0.8640	2.8900e- 003	0.3353	2.3400e- 003	0.3377	0.0889	2.1500e- 003	0.0911		288.3889	288.3889	6.7700e- 003		288.5583

3.7 Paving - 2023

	ROG	NOx	СО	SO2	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/d	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.6078				 	0.0000	0.0000	 	0.0000	0.0000		i i i	0.0000			0.0000
Total	1.6406	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.7 Paving - 2023
<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	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	0.0614	0.0367	0.4320	1.4500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		144.1945	144.1945	3.3900e- 003		144.2792
Total	0.0614	0.0367	0.4320	1.4500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		144.1945	144.1945	3.3900e- 003		144.2792

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.6078				i i	0.0000	0.0000	 	0.0000	0.0000		! ! !	0.0000			0.0000
Total	1.6406	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.7 Paving - 2023

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	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	0.0614	0.0367	0.4320	1.4500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		144.1945	144.1945	3.3900e- 003		144.2792
Total	0.0614	0.0367	0.4320	1.4500e- 003	0.1677	1.1700e- 003	0.1688	0.0445	1.0800e- 003	0.0455		144.1945	144.1945	3.3900e- 003		144.2792

3.8 Architectural Coating - 2023

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Archit. Coating	26.3291					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168	 	281.8690
Total	26.5208	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.8 Architectural Coating - 2023 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	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	0.0818	0.0490	0.5760	1.9300e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		192.2593	192.2593	4.5200e- 003		192.3722
Total	0.0818	0.0490	0.5760	1.9300e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		192.2593	192.2593	4.5200e- 003		192.3722

	ROG	NOx	CO	SO2	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/d	day							lb/c	day		
Archit. Coating	26.3291		 			0.0000	0.0000	! !	0.0000	0.0000			0.0000			0.0000
	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708	,	0.0708	0.0708	0.0000	281.4481	281.4481	0.0168	,	281.8690
Total	26.5208	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

3.8 Architectural Coating - 2023 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/d	day							lb/d	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	0.0818	0.0490	0.5760	1.9300e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		192.2593	192.2593	4.5200e- 003		192.3722
Total	0.0818	0.0490	0.5760	1.9300e- 003	0.2236	1.5600e- 003	0.2251	0.0593	1.4300e- 003	0.0607		192.2593	192.2593	4.5200e- 003		192.3722

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	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/d	day							lb/c	lay		
Mitigated	1.3021	6.7224	22.9158	0.1061	10.4328	0.0755	10.5083	2.7909	0.0702	2.8611		10,827.75 09	10,827.75 09	0.4382		10,838.70 55
Unmitigated	1.3021	6.7224	22.9158	0.1061	10.4328	0.0755	10.5083	2.7909	0.0702	2.8611		10,827.75 09	10,827.75 09	0.4382		10,838.70 55

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	0.00	0.00	0.00		
Government Office Building	589.00	589.00	589.00	4,907,368	4,907,368
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	589.00	589.00	589.00	4,907,368	4,907,368

4.3 Trip Type Information

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

		Miles			Trip %			Trip Purpos	se %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
Government Office Building	42.44	8.40	6.90	43.00	47.00	10.00	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Automobile Care Center	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Government Office Building	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Other Asphalt Surfaces	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Parking Lot	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825
Unrefrigerated Warehouse-No Rail	0.551360	0.042151	0.204257	0.114482	0.014139	0.005783	0.021875	0.035696	0.002143	0.001676	0.004899	0.000713	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

	ROG	NOx	СО	SO2	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/d	day							lb/c	lay		
NaturalGas Mitigated	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360
NaturalGas Unmitigated	0.0163	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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/d	day							lb/c	lay		
Automobile Care Center	247.945	2.6700e- 003	0.0243	0.0204	1.5000e- 004		1.8500e- 003	1.8500e- 003		1.8500e- 003	1.8500e- 003		29.1700	29.1700	5.6000e- 004	5.3000e- 004	29.3434
Government Office Building	1254.9	0.0135	0.1230	0.1034	7.4000e- 004		9.3500e- 003	9.3500e- 003		9.3500e- 003	9.3500e- 003		147.6358	147.6358	2.8300e- 003	2.7100e- 003	148.5131
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	4.05205	4.0000e- 005	4.0000e- 004	3.3000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.4767	0.4767	1.0000e- 005	1.0000e- 005	0.4796
Total		0.0162	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	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/d	day							lb/d	day		
Automobile Care Center	0.247945	2.6700e- 003	0.0243	0.0204	1.5000e- 004		1.8500e- 003	1.8500e- 003		1.8500e- 003	1.8500e- 003		29.1700	29.1700	5.6000e- 004	5.3000e- 004	29.3434
Government Office Building	1.2549	0.0135	0.1230	0.1034	7.4000e- 004		9.3500e- 003	9.3500e- 003		9.3500e- 003	9.3500e- 003		147.6358	147.6358	2.8300e- 003	2.7100e- 003	148.5131
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0040520 5	4.0000e- 005	4.0000e- 004	3.3000e- 004	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.4767	0.4767	1.0000e- 005	1.0000e- 005	0.4796
Total		0.0162	0.1477	0.1241	8.9000e- 004		0.0112	0.0112		0.0112	0.0112		177.2825	177.2825	3.4000e- 003	3.2500e- 003	178.3360

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

	ROG	NOx	CO	SO2	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/d	day							lb/d	lay		
Mitigated	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004	i i	1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Unmitigated	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004	i i i	1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/d	day							lb/d	day		
Architectural Coating	0.1443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0759					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.3500e- 003	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832
Total	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 33 Date: 1/16/2020 4:05 PM

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

6.2 Area by SubCategory

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/d	day							lb/d	day		
Architectural Coating	0.1443					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.0759					0.0000	0.0000		0.0000	0.0000		;	0.0000			0.0000
Landscaping	3.3500e- 003	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004	 	0.0832
Total	1.2236	3.3000e- 004	0.0363	0.0000		1.3000e- 004	1.3000e- 004		1.3000e- 004	1.3000e- 004		0.0781	0.0781	2.0000e- 004		0.0832

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
Equipment Type	Number	1 loui 3/ Day	Days/Teal	1 lorse i ower	Load Factor	i dei Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

CHP Santa Fe Springs - South Coast AQMD Air District, Winter

Date: 1/16/2020 4:05 PM

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	1	100	670	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

10.1 Stationary Sources

Unmitigated/Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type					lb/d	day							lb/d	day		
Emergency Generator - Diesel (600 - 750 HP)		0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459
Total	0.0636	0.2804	2.3722	5.2800e- 003		8.6300e- 003	8.6300e- 003		8.6300e- 003	8.6300e- 003		562.4745	562.4745	0.0789		564.4459

11.0 Vegetation

Appendix D

Human Health Risk Assessment

CHP Santa Fe Springs Area Office Replacement Project Human Health Risk Assessment

Prepared by Horizon Water and Environment

February 2020

ACRONYMS AND ABBREVIATIONS

A absorption

ASF age sensitivity factor AT averaging time

BAAQMD Bay Area Air Quality Management District

CalEEMod California Emissions Estimator Model

CAPCOA California Air Pollution Control Officers Association

CARB California Air Resources Board

CF conversion factor

CHP California Highway Patrol
CPF cancer potency factor

DBR daily breathing rate
DPM diesel particulate matter

ED exposure duration
EF exposure frequency

ET exposure time

HI hazard index HQ hazard quotient

HRA health risk assessment

LDT1 light-duty truck 1

l/kg-day liters per kilogram-day

m meters

MBTE methyl tertiary-butyl ether mg/kg-day milligrams per kilogram-day

OEHHA [California] Office of Environmental Health Hazard Assessment

PM particulate matter

REL reference exposure level

SCAQMD South Coast Air Quality Management District

TAC toxic air contaminant
TAF time adjustment factor
TOG total organic gases

USEPA U.S. Environmental Protection Agency

°F degrees Fahrenheit °K degrees Kelvin

μg/m³ micrograms per cubic meter

INTRODUCTION

The California Highway Patrol (CHP) is conducting a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of this memorandum is to document development of a set of air dispersion modeling parameters that can be combined with emission rates and location-to-sensitive-receptor information for the CHP Santa Fe Springs Area Office activities to evaluate the health impacts from operation of the proposed CHP Area Office. Activities that are typical at CHP Area Offices include testing of emergency generators, use of refueling pumps, and vehicle idling.

This memorandum describes the methodology used to generate generic air dispersion factors, exposure factors, and toxicity information. In addition, it describes how the generic parameters can be combined with site-specific emission rate information to derive a final estimate of health impacts. Health impacts associated with construction emissions are evaluated qualitatively because the project construction periods are short in duration. This memorandum concludes with the site-specific results for the CHP Santa Fe Springs Area Office Replacement Project.

TOXIC AIR CONTAMINANTS

Diesel exhaust is a complex mixture that includes hundreds of individual constituents and is identified by the State of California as a known carcinogen. Diesel particulate matter (DPM) could be emitted from the emergency diesel generators during periodic testing, and various gasoline fuel-related toxic air contaminants (TACs) would be emitted from the refueling pump station and idling vehicles in the parking lots. Specifically, TACs such as benzene, toluene, ethylbenzene, 1,3-butadiene, acrolein, and xylenes may be emitted from the refueling pump station and idling vehicles. Because several types of sensitive receptors may be present in the project area, a screening-level quantitative health risk assessment (HRA) was conducted to estimate the potential health risks to these sensitive receptors during project operation.

SCREENING-LEVEL HEALTH RISK ASSESSMENT

To evaluate the impacts of DPM and TACs on nearby sensitive receptors, an HRA was conducted consistent with the Office of Environmental Health Hazard Assessment (OEHHA) guidance for determining local community risks and hazards (OEHHA 2015). The HRA is used to evaluate the health risks associated with the CHP Santa Fe Springs Area Office Replacement Project. The HRA evaluated project emissions associated with testing of the emergency generator, refueling pump emissions, and vehicle idling. Detailed information on the methodology and data used to conduct the HRA is summarized below. The screening-level HRA involved estimating emissions of DPM and TACs, followed by screening-level air dispersion modeling using the AERSCREEN modeling program to estimate ambient air concentrations at various distances from the source. After the ambient air concentrations were determined, these were combined with exposure parameters and toxicity information to determine health impacts on nearby sensitive receptors.

EMISSIONS

The emissions for emergency generator testing were estimated using California Emissions Estimator Model (CalEEMod) version 2016.3.2; it was assumed that the generator would be in operation for 1 hour on 100 days per year. This allows for short weekly and longer monthly testing periods that are required for the CHP station facility. For chronic and cancer assessments, the emissions were amortized over a year.

The idling emission factors were taken from the EMFAC 2014 model to be consistent with the CalEEMod emission factors. Exhaust emissions used in this analysis were at the 5-mile-per-hour running exhaust emission rate. These emissions were converted to an hourly emission rate by multiplying with a unit conversion factor of 5. Overall exhaust emissions were speciated into emissions of individual TACs based on a typical vehicle exhaust profile (Bay Area Air Quality Management District [BAAQMD] 2012). Vehicle type was conservatively assumed to be equivalent to a light duty truck 1 (LDT1) vehicle class.

Refueling pump emissions were estimated for an above-ground storage tank with Phase II vent valve control equipment according to values in the California Air Pollution Control Officers Association's (CAPCOA's) *Gasoline Service Station Industrywide Risk Assessment Guidelines* (CAPCOA 1997). Overall refueling pump emissions were speciated into emissions of individual TACs based on profiles presented by CAPCOA (1997) except that methyl tertiary-butyl ether (MTBE) was removed because it is no longer present in gasoline.

AIR DISPERSION

The dispersion of emissions in ambient air was simulated using the U.S. Environmental Protection Agency's (USEPA's) approved model, AERSCREEN, which is a screening model based on the AERMOD modeling system. The model inputs and assumptions are summarized below.

Emission Rate: A unit emission rate was used in the AERSCREEN analysis, which allows for the AERSCREEN results or dispersion factors to be multiplied by project-specific emission rates to identify the project-specific ambient air concentrations.

Meteorological Data: AERSCREEN uses the MAKEMET program to generate worst-case meteorological data based on the range in temperatures and minimum wind speed. The default temperature range of 250-310 degrees Kelvin (approximately -10 degrees Fahrenheit [°F] to 100°F) was used. The default wind speed of 0.5 meter per second was used.

Surface parameters: AERSCREEN requires estimates of the surface roughness, albedo, and Bowen ratio². AERSURFACE is a tool that processes land cover data to

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¹ Speciation profiles provide estimates of the chemical composition of emissions, and are used in emission inventory and air quality models (California Air Resources Board [CARB] 2015). As an example, CARB maintains and updates estimates of the chemical composition and size fractions of particulate matter (PM) and the chemical composition and reactive fractions of total organic gases (TOG) for a variety of emission source categories.

² Albedo is the fraction of solar energy reflected from the Earth back into space. The Bowen ratio is an indicator of surface moisture. The surface roughness length is related to the height of obstacles to wind flow and is an important factor in determining the magnitude of mechanical turbulence and the stability of the boundary layer.

determine surface characteristics for use in the meteorological inputs to AERSCREEN. Using information in the AERSURFACE user's guide (USEPA 2013), the albedo, Bowen ratio, and surface roughness for the "commercial/industrial/transportation not at an airport" land cover classification was selected and assumed to be constant throughout the year. Albedo was 0.18, Bowen ratio was 1.5, and surface roughness was 0.7.

Terrain: Terrain was assumed to be flat. Receptors were modeled at 25-meter increments from the source out to 5,000 meters and at a height of 1.5 meters.

Source Parameters: Emergency generators were modeled as point sources of large or small size. Vehicle idling emissions were modeled with a volume source equivalent to the size of a parking space. Refueling pump emissions used volume sources for refueling and spillage emissions and point sources for loading and breathing emissions, consistent with recommendations from CAPCOA's *Gasoline Service Station Industrywide Risk Assessment Guidelines* (CAPCOA 1997). Details of source parameters are shown in **Table D-1**.

The output of AERSCREEN is the 1-hour maximum air concentration under worst-case meteorological conditions. The AERSCREEN user's guide (USEPA 2016) recommends that a factor of 0.1 is used to adjust the 1-hour maximum air concentration to annual average air concentration.

Table D-1. Model Source Parameters

Source	Model Source Type	Temperature (ºK)	Exit Velocity (m/sec)	Diameter (m)	Stack Height (m)	Release Height (m)	Lateral Dimen- sion (m)	Vertical Dimension (m)
Emergency Generator (Small)	Point	754.96	81.71	0.13	2.42			
Emergency Generator (Large)	Point	793.56	92.45	0.16	3.71			
Vehicle Idling	Volume					0.5	1.40	1.40
Refueling – Loading	Point	291	0.00177	0.0508	3.66			
Refueling – Breathing	Point	298	0.000224	0.0508	3.66			
Refueling – Refueling	Volume					1	3.02	1.86
Refueling – Spillage	Volume					0	3.02	1.86

Notes:

m = meters, m/sec = meters per second, ${}^{\circ}K = degrees$ Kelvin

EXPOSURE FACTORS

Potential sensitive receptors were characterized as residents, day-care children, school children, medical patients, senior center users, and recreational users. The maximally exposed receptor for each of these categories near the project site, if present, is reported.

The exposure parameters used to estimate excess lifetime cancer risks and chronic non-cancer Hazard Index (HI) for all potentially exposed populations were obtained using risk assessment guidelines from OEHHA (2015).

The inhalation dose is a function of the concentration of a chemical and the intake of that chemical. The dose can be calculated as follows:

$$Dose = \frac{Conc * DBR * ET * EF * ED * CF}{AT}$$

Where:

Dose = Dose of chemical (milligrams per kilogram-day [mg/kg-day])

Conc = Chemical concentration in air (micrograms per cubic meter [µg/m³])

DBR = Daily Breathing Rate (liters per kilogram-day [l/kg-day])

ET = Exposure Time (hours/day)

EF = Exposure Frequency (days/year)
ED = Exposure Duration (years)
AT = Averaging Time (days)
CF = Conversion Factor (cubic meters per liter [m³/l] and milligrams per microgram [mg/μg])

The DBR was set to the 95th percentile for third trimester, 0-2 years, 2-15 years, and 16-70 years as recommended by OEHHA (2015). The exposure frequency for residents was 350 days per year, consistent with a resident being present at the home except for a 2-week vacation. Exposure frequency was 180 days and 250 days for school children and day-care children, respectively, as recommended by OEHHA (2015). The averaging time was based on 70 years. The transitional adult residential facility was set to adult residential standards assuming a person age 16-70 would live there for 30 years and be present except for 2-weeks out of the year. The details of the exposure factors for each receptor type are shown in **Table D-2**.

Table D-2. Exposure Parameters and Age Specific Factors

Sensitive Population Type	Age	DBR	EF	TAF	CF	Α	ED	ASF	AT
Resident Child	3rd trimester	361	350	1	1.00E-06	1	0.25	10	25550
	0<2	1090	350	1	1.00E-06	1	2	10	25550
	2<16	572	350	1	1.00E-06	1	14	3	25550
Resident Adult	16<70	261	350	1	1.00E-06	1	14	1	25550
Daycare	0<2	1200	250	1	1.00E-06	1	2	10	25550
	2<9	640	180	1	1.00E-06	1	4	3	25550
Preschool	2<9	640	180	1	1.00E-06	1	2.5	3	25550
School Child – Elementary	2<9	640	180	1	1.00E-06	1	6	3	25550
School Child – Middle	2<16	520	180	1	1.00E-06	1	3	3	25550
School Child – High School	2<16	520	180	1	1.00E-06	1	4	1.5	25550
Medical Patient – Child	0<2	1090	350	1	1.00E-06	1	1	10	25550
Medical Patient – Adult	16<70	290	350	1	1.00E-06	1	1	1	25550
Recreation Child	2<9	640	350	1	1.00E-06	1	9	3	25550
Recreation Adult	16<70	230	350	1	1.00E-06	1	40	1	25550
Transitional Residential Adult Center	16<70	261	350	1	1.00E-06	1	30	1	25550

Notes:

- 1. A = absorption; ASF = age sensitivity factor; AT = averaging time; CF = conversion factor; DBR = daily breathing rate; ED = exposure duration; EF = exposure frequency; TAF = time adjustment factor.
- 2. It was assumed that the emergency generator is tested outside of normal school hours so schools and day-care children are not exposed to these emissions.
- 3. Exposure Frequency (EF) was assumed to be 350 days per year, except school children were assumed to be exposed 180 days per year and day-care children 250 days per year.
- 4. Residential exposure was assumed to be 30 years with a continuously aging child from third trimester onward from construction through operation.
- 5. Exposure duration (ED) of school children was assumed to be 6 years of elementary school, 3 years of middle school, and 4 years of high school. ED of recreation child was assumed to be 9 years. ED for recreation adult was assumed to be 40 years. ED for medical patients was assumed to be 1 year.
- 6. The school child, and recreation user breathing rates are based on the 8-hour breathing rate for moderate-intensity activities.
- 7. Averaging time is based on a 70-year lifetime cancer risk.

TOXICITY ASSESSMENT

The toxicity assessment characterizes the relationship between the magnitude of exposure and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories: cancer and non-cancer endpoints. Toxicity values, used to estimate the likelihood of adverse effects occurring in humans at different exposure levels, are identified as part of the toxicity assessment component of a risk assessment.

In this HRA, diesel exhaust is the only chemical of potential concern that was quantified. Under California regulatory guidelines, DPM is used as a surrogate measure of carcinogen exposure for the mixture of chemicals that make up diesel exhaust as a whole. For gasoline and gasoline exhaust, the individual chemicals making up the primary components were used to estimate health effects based on common speciation profiles.

The estimated excess lifetime cancer risk for a resident was adjusted using the age sensitivity factors (ASFs) recommended by OEHHA (2015). This approach accounts for an "anticipated special sensitivity to carcinogens" of infants and children. Cancer risk estimates are weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to 2 years of age and by a factor of 3 for exposures that occur from 2 years through 15 years of age. No weighting factor (i.e., an ASF of 1, which is equivalent to no adjustment) is applied to exposure from ages 16 to 70 years. These ASFs are shown in **Table D-2**.

Excess lifetime cancer risks are estimated as the upper-bound incremental probability³ that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs if the chemical is being inhaled) by the chemical-specific cancer potency factor (CPF).

The equation used to calculate the potential excess lifetime cancer risk for the inhalation pathway is as follows:

$$Risk_i = Dose * CPF_i * ASF$$

Where:

Risk_i = Cancer Risk, the incremental probability of an individual developing cancer as a result of inhalation exposure to a particular potential carcinogen (unitless)

Dose = Dose of chemical (mg/kg-day)

2

³ The upper-bound incremental probability means that the "true carcinogenic risk" of an individual is unlikely to exceed the model-derived cancer risk estimates and, therefore, is likely to be less than the predicted (modeled) risk (USEPA 2012). Thus, the modeled cancer risks would represent a conservative scenario.

CPF_i Cancer Potency Factor for Chemical I (mg chemical/kg body weightday)-1

ASF Age Sensitivity Factor (unitless)

The CPFs for potential carcinogens that are anticipated to be present at the project site are shown in **Table D-3**.

The potential for exposure to result in chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) to the chemical-specific non-cancer chronic reference exposure level (RELs). When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient (HQ). To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the HQs for all chemicals are summed, yielding an HI.

The equations used to calculate the chemical-specific HQs and the overall HI are:

Chronic
$$HQ_i = C_i/REL_i$$

Chronic
$$HI = \sum HQ_i$$

Where:

Chronic $HQ_i =$ Chronic Hazard Quotient for Chemical_i (unitless)

Chronic HI Hazard Index (unitless)

 C_{i} Annual average air concentration for Chemical_i (µg/m³)

REL_i = Chronic Non-cancer Reference Exposure Level for Chemicali

 $(\mu g/m^3)$

Acute non-cancer impacts were estimated in a similar manner to chronic non-cancer impacts, by estimating the HQs for all chemicals and summing them to yield an HI. Table C-3 contains the chronic and acute RELs used in this screening HRA.

For this screening HRA, the HQs were conservatively summed without considering end target organs or systems.

Table D-3. Toxicity Parameters and Speciation Profiles

Toxic Air Components	Acute REL ² (μg/m³)	Chronic REL ² (μg/m³)	Cancer Potency Factor ² (mg/kg- day)	Idling Speciation	Refueling Speciation – Vapor	Refueling Speciation – Liquid
Acetaldehyde	470	140	1.00E-02	0.0028	0	0
Acrolein	2.5	0.35		0.0013	0	0
Benzene	27	3	1.00E-01	0.0247	0.003	0.01
1,3-Butadiene		20	6.00E-01	0.0055	0	0
DPM		5	1.10E+00	0	0	0
Ethylbenzene		2000	8.70E-03	0.0105	0	0.016
Formaldehyde	55	9	2.10E-02	0.0158	0	0
Hexane		7000		0.016	0	0
Methanol	28000	4000		0.0012	0	0
Methyl Ethyl Ketone	13000			0.0002	0	0
Naphthalene		9	1.20E-01	0.0005	0	0
Propylene		3000		0.0306	0	0
Styrene	21000	900		0.0012	0	0
Toluene	37000	300		0.0576	0	0.08
Xylenes	22000	700		0.048	0	0.024

Notes:

μg/ m³ = micrograms per cubic meter; mg/kg-day = milligrams per kilogram-day

Sources: BAAQMD 2012, CAPCOA 1997, EMFAC 2014 model, OEHHA/ARB 2017

PROJECT-SPECIFIC HRA RESULTS

CONSTRUCTION HEALTH EFFECTS

During project construction, DPM and gasoline fuel combustion emissions that are classified as TACs could be emitted from construction equipment. The construction period for the CHP Area Office facilities is short in duration (approximately 24 months with the majority of the work occurring within 15 months) and will not extend over a long period. Due to the variable nature of construction activity, the generation of TAC emissions would be temporary in most cases, especially considering the short amount of time such equipment is typically within an influential distance to expose sensitive receptors to substantial emission concentrations.

Chronic and cancer health effects estimated over short periods are uncertain for several reasons. CPFs are based on animal lifetime studies or worker studies with long-term exposure to the carcinogenic agent. Considerable uncertainty exists in trying to evaluate the cancer risk from a project that would last only a small fraction of a lifetime. Some studies indicate that the dose rate affects the potency of a given dose of a carcinogenic chemical. In other words, a dose delivered over a short period may have a different potency than the same dose delivered over a lifetime (OEHHA 2015). Furthermore, construction impacts are most substantial adjacent to the construction area and decrease rapidly with distance. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB 2005). Given the uncertainty of estimating chronic health effects over a short period, combined with the uncertainty in conducting only a screening-level HRA, health effects from construction are not quantified.

OPERATIONAL HEALTH IMPACTS

To estimate the health impacts at the CHP Santa Fe Springs Area Office facilities during operations, the AERSCREEN model runs for each source type were tabulated by distance from the source to a sensitive receptor location. The distance of each source to the sensitive receptor location was rounded to the nearest 25-meter increment. When the distance was entered, the AERSCREEN dispersion factor for that specific source/receptor combination was determined and multiplied by the specific source emission factor to obtain the air concentration at the receptor location. Next, the exposure factors and toxicity information were combined with the air concentrations to estimate the health effects. Finally, the health effects were summed across all sources for each receptor type and location. The detailed values for these calculations are found in Attachment A. The health impacts for each receptor type at the proposed CHP Santa Fe Springs Area Office are shown in **Table D-4**.

Emissions at the proposed CHP Santa Fe Springs Area Office would not result in health impacts above the Air District's 10 in 1 million cancer significance threshold (SCAQMD 2015) applicable to this region or exceed the chronic and acute HI of 1. This is based on the operation of a large emergency generator for 100 hours of testing a year and a refueling pump station throughput of 153,000 gallons per year, as well as up to two vehicles idling at all times. The cancer health risk for all sensitive receptors would be substantially less and well below the threshold of 10 in 1 million cancers.

Table D-4. CHP Santa Fe Springs Area Office Health Risk Assessment Results

Emission Source	Resident	Daycare	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Transitional Adult Residential
			Can	cer Risk by Se	nsitive Recep	tor Type/L	ocation				
Emergency Generator (Large)	3.22E-08	8.58E-09	1.03E-09	2.38E-09	8.28E-10	5.57E-10	4.32E-09	1.15E-10	6.90E-09	3.67E-09	9.47E-09
Vehicle Idling	5.01E-08	1.06E-08	3.25E-09	1.99E-09	5.17E-10	3.33E-10	3.73E-09	9.92E-11	5.54E-09	2.95E-09	9.78E-08
Truck Idling	1.26E-08	2.65E-09	8.15E-10	5.00E-10	1.30E-10	8.34E-11	9.35E-10	2.49E-11	1.39E-09	7.40E-10	2.45E-08
Refueling-Loading	5.45E-09	1.01E-09	1.42E-10	1.40E-10	3.57E-11	2.49E-11	3.27E-10	8.70E-12	3.77E-10	2.01E-10	2.76E-09
Refueling-Breathing	6.88E-10	1.28E-10	1.79E-11	1.76E-11	4.51E-12	3.15E-12	4.13E-11	1.10E-12	4.76E-11	2.53E-11	3.48E-10
Refueling-Refueling	1.15E-08	2.14E-09	2.99E-10	3.06E-10	7.86E-11	5.48E-11	6.92E-10	1.84E-11	8.27E-10	4.40E-10	5.80E-09
Refueling-Spillage	3.61E-08	6.74E-09	9.42E-10	9.75E-10	2.50E-10	1.75E-10	2.18E-09	5.79E-11	2.63E-09	1.40E-09	1.81E-08
Total	1.49E-07	3.18E-08	6.50E-09	6.31E-09	1.84E-09	1.23E-09	1.22E-08	3.25E-10	1.77E-08	9.43E-09	1.59E-07

Emission Source	Resident	Daycare	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Transitional Adult Residential
				Chr	onic Hazard I	ndex					
Emergency Generator (Large)	7.04E-06	5.40E-06	5.56E-06	5.32E-06	4.57E-06	4.61E-06	5.25E-06	5.25E-06	5.30E-06	5.30E-06	1.61E-05
Vehicle Idling	1.37E-04	8.34E-05	2.19E-04	5.60E-05	3.58E-05	3.45E-05	5.70E-05	5.70E-05	5.34E-05	5.34E-05	2.08E-03
Truck Idling	2.74E-06	1.67E-06	4.38E-06	1.12E-06	7.15E-07	6.90E-07	1.14E-06	1.14E-06	1.07E-06	1.07E-06	4.16E-05
Refueling-Loading	2.18E-05	1.17E-05	1.40E-05	5.73E-06	3.61E-06	3.78E-06	7.30E-06	7.30E-06	5.31E-06	5.31E-06	8.57E-05
Refueling-Breathing	2.75E-06	1.47E-06	1.76E-06	7.24E-07	4.56E-07	4.78E-07	9.21E-07	9.21E-07	6.70E-07	6.70E-07	1.08E-05
Refueling-Refueling	4.60E-05	2.47E-05	2.95E-05	1.26E-05	7.94E-06	8.32E-06	1.54E-05	1.54E-05	1.16E-05	1.16E-05	1.80E-04
Refueling-Spillage	1.39E-04	7.45E-05	8.90E-05	3.84E-05	2.43E-05	2.54E-05	4.66E-05	4.66E-05	3.56E-05	3.56E-05	5.40E-04
Total	3.56E-04	2.03E-04	3.64E-04	1.20E-04	7.74E-05	7.78E-05	1.34E-04	1.34E-04	1.13E-04	1.13E-04	2.95E-03
				Ac	ute Hazard In	ıdex					
Emergency Generator (Large)	2.58E-04	1.98E-04	2.04E-04	1.95E-04	1.67E-04	1.69E-04	1.92E-04	1.92E-04	1.94E-04	1.94E-04	5.88E-04
Vehicle Idling	1.66E-04	1.01E-04	2.65E-04	6.77E-05	4.32E-05	4.17E-05	6.88E-05	6.88E-05	6.45E-05	6.45E-05	2.51E-03
Truck Idling	6.58E-04	4.00E-04	1.05E-03	2.69E-04	1.72E-04	1.66E-04	2.73E-04	2.73E-04	2.56E-04	2.56E-04	9.98E-03
Refueling-Loading	2.42E-05	1.30E-05	1.55E-05	6.37E-06	4.01E-06	4.20E-06	8.11E-06	8.11E-06	5.90E-06	5.90E-06	9.53E-05
Refueling-Breathing	3.06E-06	1.64E-06	1.96E-06	8.05E-07	5.07E-07	5.31E-07	1.02E-06	1.02E-06	7.45E-07	7.45E-07	1.20E-05
Refueling-Refueling	5.11E-05	2.74E-05	3.28E-05	1.40E-05	8.83E-06	9.24E-06	1.72E-05	1.72E-05	1.29E-05	1.29E-05	2.00E-04
Refueling-Spillage	1.42E-04	7.65E-05	9.13E-05	3.94E-05	2.49E-05	2.61E-05	4.78E-05	4.78E-05	3.65E-05	3.65E-05	5.54E-04
Total	1.30E-03	8.17E-04	1.66E-03	5.92E-04	4.20E-04	4.16E-04	6.09E-04	6.09E-04	5.71E-04	5.71E-04	1.39E-02

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Attachment A

Table D-A-1a. CHP Santa Fe Springs Area Office – Specific Parameters

					Ser	nsitive R	eceptor	Туре						
	Resident Child	Resident Adult	Day Care	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Transitional Adult Residential	1 hour max Emission Factor	Annual Emission Factor
Parameter						Dista	nce (m)							g/s
Emergency Generator (Large)	430	655	556	1145	2117	1977	900	900	1247	1247	176	430	4.53067E- 05	1.23696E-05
Vehicle Idling	543	768	387	1110	2028	2140	1076	1076	1189	1189	78	543	0.0003452 22	0.000345222
Truck Idling	543	768	387	1110	2028	2140	1076	1076	1189	1189	78	543	1.18681E- 05	4.94506E-07
Refueling-Loading	410	636	556	1125	2100	1984	898	898	1266	1266	172	410	0.0009242 71	0.000924271
Refueling-Breathing	410	636	556	1125	2100	1984	898	898	1266	1266	172	410	0.0001166 34	0.000116634
Refueling-Refueling	410	636	556	1125	2100	1984	898	898	1266	1266	172	410	0.0013864 07	0.001386407
Refueling-Spillage	410	636	556	1125	2100	1984	898	898	1266	1266	172	410	0.0009242 71	0.000924271

Table D-A-1b. CHP Santa Fe Springs Area Office – Specific Parameters

					Se	nsitive Re	ceptor Ty	ре				
	Resident Child	Resident Adult	Daycare	Preschool	Elementary School	Middle School	High School	Medical Child	Medical Adult	Recreation Child	Recreation Adult	Transitional Adult Residential
Parameter					1-hr max I	Dispersion	Factor (µ	g/m³/g/s)				
Emergency Generator (Large)	28.4	64.9	21.8	22.5	21.5	18.5	18.6	21.2	21.2	21.4	21.4	64.9
Vehicle Idling	277.3	4204.1	168.6	443.2	113.2	72.3	69.8	115.1	115.1	107.9	107.9	4204.1
Truck Idling	277.3	4204.1	168.6	443.2	113.2	72.3	69.8	115.1	115.1	107.9	107.9	4204.1
Refueling-Loading	235.9	927.5	126.4	151.2	62.0	39.1	40.9	79.0	79.0	57.4	57.4	927.5
Refueling-Breathing	235.9	927.6	126.4	151.2	62.1	39.1	40.9	79.0	79.0	57.5	57.5	927.6
Refueling-Refueling	331.7	1299.2	178.1	212.9	90.7	57.3	60.0	111.4	111.4	84.0	84.0	1299.2
Refueling-Spillage	411.8	1603.7	221.4	264.5	114.1	72.1	75.5	138.5	138.5	105.7	105.7	1603.7

Appendix E

Biological Resources Analysis Supporting Information

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE RareFind

Query Summary:
Quad IS (Los Angeles (3411812) OR El Monte (3411811) OR Baldwin Park (3411718) OR South Gate (3311882) OR Whittier (3311881) OR La Habra (3311788) OR Long Beach (3311872) OR Los Alamitos (3311871) OR Anaheim (3311778))

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CNDDB Element Query Results

				CIVE	DD Elellie	nt Query Res	uito					
Scientific Name	Common Name	Taxonomic Group	Element Code		Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	PDNYC010P1	98	1	None	None	G5T2?	S2	1B.1	BLM_S- Sensitive, SB_RSABG- Rancho Santa Ana Botanic Garden, USFS_S- Sensitive	Chaparral, Coastal scrub, Desert dunes
Accipiter cooperii	Cooper's hawk	Birds	ABNKC12040	118	1	None	None	G5	S4	null	CDFW_WL- Watch List, IUCN_LC- Least Concern	Cismontane woodland, Riparian forest, Riparian woodland, Upper montane coniferous forest
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	955	1	None	Threatened	G2G3	S1S2	null	BLM_S- Sensitive, CDFW_SSC- Species of Special Concern, IUCN_EN- Endangered, NABCI_RWL- Red Watch List, USFWS_BCC- Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Aimophila ruficeps canescens	southern California rufous- crowned sparrow	Birds	ABPBX91091	235	1	None	None	G5T3	S3	null	CDFW_WL- Watch List	Chaparral, Coastal scrub
Ammodramus savannarum	grasshopper sparrow	Birds	ABPBXA0020	27	1	None	None	G5	S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern	Valley & foothill grassland
Anniella stebbinsi	southern California legless lizard	Reptiles	ARACC01060	417	8	None	None	G3	S3	null	CDFW_SSC- Species of Special Concern, USFS_S- Sensitive	Broadleaved upland forest, Chaparral, Coastal dunes, Coastal scrub
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	3	None	None	G5	S3	null	BLM_S- Sensitive, CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFS_S- Sensitive, WBWG_H- High Priority	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	260	1	None	None	G5T2	S2	null	CDFW_SSC- Species of Special Concern	null

Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	ARACJ02143	148	8	None	None	G5T5	S3	null	CDFW_SSC- Species of Special Concern	null
Astragalus hornii var. hornii	Horn's milk- vetch	Dicots	PDFAB0F421	28	1	None	None	GUT1	S1	1B.1	BLM_S- Sensitive	Alkali playa, Meadow & seep, Wetland
Athene cunicularia	burrowing owl	Birds	ABNSB10010	1989	4	None	None	G4	S3	null	BLM_S- Sensitive, CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, USFWS_BCC- Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Atriplex coulteri	Coulter's saltbush	Dicots	PDCHE040E0	121	1	None	None	G3	S1S2	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley & foothill grassland
Atriplex parishii	Parish's brittlescale	Dicots	PDCHE041D0	15	2	None	None	G1G2	S1	1B.1	USFS_S- Sensitive	Alkali playa, Chenopod scrub, Meadow & seep, Vernal pool, Wetland
Atriplex serenana var. davidsonii	Davidson's saltscale	Dicots	PDCHE041T1	27	1	None	None	G5T1	S1	1B.2	null	Coastal bluff scrub, Coastal scrub
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	234	6	None	Candidate Endangered	G3G4	S1S2	null	null	null
Buteo regalis	ferruginous hawk	Birds	ABNKC19120	107	1	None	None	G4	S3S4	null	CDFW_WL- Watch List, IUCN_LC- Least Concern, USFWS_BCC- Birds of Conservation Concern	Great Basin grassland, Great Basin scrub, Pinon & juniper woodlands, Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2518	3	None	Threatened	G5	S3	null	BLM_S- Sensitive, IUCN_LC- Least Concern, USFWS_BCC- Birds of Conservation Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
California Walnut Woodland	California Walnut Woodland	Woodland	CTT71210CA	76	6	None	None	G2	S2.1	null	null	Cismontane woodland
Calochortus plummerae	Plummer's mariposa-lily	Monocots	PMLIL0D150	230	7	None	None	G4	S4	4.2	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Valley & foothill grassland
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	PMLIL0D1J1	140	5	None	None	G3G4T2	S2	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden, USFS_S- Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Calystegia felix	lucky morning-glory	Dicots	PDCON040P0	10	2	None	None	G1Q	S1	1B.1	null	Meadow & seep, Riparian scrub
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	ABPBG02095	156	2	None	None	G5T3Q	S3	null	CDFW_SSC- Species of Special Concern, USFS_S- Sensitive, USFWS_BCC- Birds of Conservation Concern	Coastal scrub

Centromadia parryi ssp. australis	southern tarplant	Dicots	PDAST4R0P4	94	13	None	None	G3T2	S2	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Marsh & swamp, Salt marsh, Valley & foothill grassland, Vernal pool, Wetland
Chelonia mydas	green turtle	Reptiles	ARAAA02010	2	1	Threatened	None	G3	S1	null	IUCN_EN- Endangered	Marine bay
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	PDSCR0J0C2	30	4	Endangered	Endangered	G4?T1	S1	1B.2	SB_CRES- San Diego Zoo CRES Native Gene Seed Bank, SB_RSABG- Rancho Santa Ana Botanic Garden, SB_SBBG- Santa Barbara Botanic Garden	Coastal dunes, Marsh & swamp, Salt marsh, Wetland
Cicindela gabbii	western tidal- flat tiger beetle	Insects	IICOL02080	9	3	None	None	G2G4	S1	null	null	Estuary, Mud shore/flats
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	34	3	None	None	G5T2	S2	null	null	Coastal dunes
Cicindela latesignata latesignata	western beach tiger beetle	Insects	IICOL02113	15	2	None	None	G2G4T1T2	S1	null	null	Mud shore/flats
Cicindela senilis frosti	senile tiger beetle	Insects	IICOL02121	9	1	None	None	G2G3T1T3	S1	null	null	Mud shore/flats, Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	156	8	Threatened	Endangered	G5T2T3	S1	null	BLM_S- Sensitive, NABCI_RWL- Red Watch List, USFS_S- Sensitive, USFWS_BCC- Birds of Conservation Concern	Riparian forest
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Dicots	PDCUS01111	6	1	None	None	G5T4?	SH	2B.2	null	Marsh & swamp, Wetland
Danaus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	383	4	None	None	G4T2T3	S2S3	null	USFS_S- Sensitive	Closed-cone coniferous forest
Dudleya multicaulis	many- stemmed dudleya	Dicots	PDCRA040H0	154	1	None	None	G2	S2	1B.2	BLM_S- Sensitive, SB_RSABG- Rancho Santa Ana Botanic Garden, USFS_S- Sensitive	Chaparral, Coastal scrub, Valley & foothill grassland
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	70	3	Endangered	Endangered	G5T2	S1	null	NABCI_RWL- Red Watch List	Riparian woodland
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1385	9	None	None	G3G4	S3	null	BLM_S- Sensitive, CDFW_SSC- Species of Special Concern, IUCN_VU- Vulnerable, USFS_S- Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin gwaters, South coast flowing waters, South coast flowing waters, South coast standing waters, Wetland
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	7	None	None	G5T4	S3S4	null	BLM_S- Sensitive, CDFW_SSC- Species of Special Concern,	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland

											WBWG_H- High Priority	
Euphydryas editha quino	quino checkerspot butterfly	Insects	IILEPK405L	127	1	Endangered	None	G5T1T2	S1S2	null	XERCES_CI- Critically Imperiled	Chaparral, Coastal scrub
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Dicots	PDAST4N102	7	2	None	None	G5TH	SH	1A	null	Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Horkelia cuneata var. puberula	mesa horkelia	Dicots	PDROS0W045	103	4	None	None	G4T1	S1	1B.1	USFS_S- Sensitive	Chaparral, Cismontane woodland, Coastal scrub
Icteria virens	yellow- breasted chat	Birds	ABPBX24010	100	3	None	None	G5	S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Isocoma menziesii var. decumbens	decumbent goldenbush	Dicots	PDAST57091	126	1	None	None	G3G5T2T3	S2	1B.2	SB_CRES- San Diego Zoo CRES Native Gene Seed Bank	Chaparral, Coastal scrub
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	2	None	None	G5	S3S4	null	IUCN_LC- Least Concern, WBWG_M- Medium Priority	Lower montane coniferous forest, Oldgrowth, Riparian forest
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	238	3	None	None	G5	S4	null	IUCN_LC- Least Concern, WBWG_M- Medium Priority	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lasiurus xanthinus	western yellow bat	Mammals	AMACC05070	58	2	None	None	G 5	S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, WBWG_H- High Priority	Desert wash
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	PDAST5L0A1	111	8	None	None	G4T2	S2	1B.1	BLM_S- Sensitive, SB_RSABG- Rancho Santa Ana Botanic Garden, SB_SBBG- Santa Barbara Botanic Garden	Alkali playa, Marsh & swamp. Salt marsh, Vernal pool, Wetland
Laterallus jamaicensis coturniculus	California black rail	Birds	ABNME03041	303	1	None	Threatened	G3G4T1	S1	null	BLM_S- Sensitive, CDFW_FP- Fully Protected, IUCN_NT- Near Threatened, NABCI_RWL- Red Watch List, USFWS_BCC- Birds of Conservation Concern	Brackish marsh, Freshwater marsh, Marsh & swamp, Salt marsh, Wetland
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	PDBRA1M114	142	1	None	None	G5T3	S3	4.3	null	Chaparral, Coastal scrub
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	AMAEB03051	103	1	None	None	G5T3T4	S3S4	null	CDFW_SSC- Species of Special Concern	Coastal scrub
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	7	1	None	None	G5T1T2	S1S2	null	CDFW_SSC- Species of Special Concern	null

Nama stenocarpa	mud nama	Dicots	PDHYD0A0H0	22	1	None	None	G4G5	S1S2	2B.2	null	Marsh & swamp, Wetland
Nasturtium gambelii	Gambel's water cress	Dicots	PDBRA270V0	13	1	Endangered	Threatened	G1	S1	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden, SB_SBBG- Santa Barbara Botanic Garden	Brackish marsh, Freshwater marsh, Marsh & swamp, Wetland
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	PDPLM0C0Q0	60	4	None	None	G2	S2	1B.2	null	Coastal scrub, Meadow & seep, Valley & foothill grassland, Vernal pool, Wetland
Nemacaulis denudata var. denudata	coast woolly- heads	Dicots	PDPGN0G011	42	1	None	None	G3G4T2	S2	1B.2	SB_CRES- San Diego Zoo CRES Native Gene Seed Bank, SB_RSABG- Rancho Santa Ana Botanic Garden	Coastal dunes
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	AMACD04010	90	2	None	None	G4	S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, WBWG_M- Medium Priority	Joshua tree woodland, Pinon & juniper woodlands, Riparian scrub, Sonoran desert scrub
Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	32	3	None	None	G5	S3	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern, WBWG_MH- Medium-High Priority	null
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	AFCHA0209J	20	1	Endangered	None	G5T1Q	S1	null	AFS_EN- Endangered	Aquatic, South coast flowing waters
Orcuttia californica	California Orcutt grass	Monocots	PMPOA4G010	37	2	Endangered	Endangered	G1	S1	1B.1	SB_CRES- San Diego Zoo CRES Native Gene Seed Bank, SB_RSABG- Rancho Santa Ana Botanic Garden	Vernal pool, Wetland
Passerculus sandwichensis beldingi	Belding's savannah sparrow	Birds	ABPBX99015	39	1	None	Endangered	G5T3	S3	null	null	Marsh & swamp, Wetland
Pelecanus occidentalis californicus	California brown pelican	Birds	ABNFC01021	27	1	Delisted	Delisted	G4T3T4	S3	null	BLM_S- Sensitive, CDFW_FP- Fully Protected, USFS_S- Sensitive	null
Pentachaeta Iyonii	Lyon's pentachaeta	Dicots	PDAST6X060	45	1	Endangered	Endangered	G1	S1	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Chaparral, Coastal scrub, Valley & foothill grassland
Perognathus longimembris pacificus	Pacific pocket mouse	Mammals	AMAFD01042	14	1	Endangered	None	G5T1	S1	null	CDFW_SSC- Species of Special Concern	Coastal scrub
Phacelia stellaris	Brand's star phacelia	Dicots	PDHYD0C510	15	3	None	None	G1	S1	1B.1	SB_RSABG- Rancho Santa Ana Botanic Garden	Coastal dunes, Coastal scrub
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	784	15	None	None	G3G4	S3S4	null	BLM_S- Sensitive, CDFW_SSC- Species of	Chaparral, Cismontane woodland, Coastal bluff

											Special Concern, IUCN_LC- Least Concern	scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian scrub, Valley & foothill grassland
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	846	23	Threatened	None	G4G5T2Q	S2	null	CDFW_SSC- Species of Special Concern, NABCI_YWL- Yellow Watch List	Coastal bluff scrub, Coastal scrub
Pseudognaphalium leucocephalum	white rabbit- tobacco	Dicots	PDAST440C0	62	1	None	None	G4	S2	2B.2	null	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Ribes divaricatum var. parishii	Parish's gooseberry	Dicots	PDGRO020F3	5	4	None	None	G5TX	sx	1A	null	Riparian woodland
Riparia riparia	bank swallow	Birds	ABPAU08010	298	3	None	Threatened	G5	S2	null	BLM_S- Sensitive, IUCN_LC- Least Concern	Riparian scrub, Riparian woodland
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	CTT32720CA	30	1	None	None	G1	S1.1	null	null	Coastal scrub
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Dicots	PDLAM1U0A1	43	1	None	None	G4T3	S3	1B.2	SB_RSABG- Rancho Santa Ana Botanic Garden, USFS_S- Sensitive	Chaparral, Cismontane woodland, Lower montane coniferous forest
Sidalcea neomexicana	salt spring checkerbloom	Dicots	PDMAL110J0	30	4	None	None	G4	S2	2B.2	USFS_S- Sensitive	Alkali playa, Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Wetland
Sorex ornatus salicornicus	southern California saltmarsh shrew	Mammals	AMABA01104	4	1	None	None	G5T1?	S1	null	CDFW_SSC- Species of Special Concern	Salt marsh
Southern Coastal Salt Marsh	Southern Coastal Salt Marsh	Marsh	CTT52120CA	24	1	None	None	G2	S2.1	null	null	Marsh & swamp, Wetland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1213	7	None	None	G3	S3	null	BLM_S- Sensitive, CDFW_SSC- Species of Special Concern, IUCN_NT- Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Sternula antillarum browni	California least tern	Birds	ABNNM08103	75	5	Endangered	Endangered	G4T2T3Q	S2	null	CDFW_FP- Fully Protected, NABCI_RWL- Red Watch List	Alkali playa, Wetland
Suaeda esteroa	estuary seablite	Dicots	PDCHE0P0D0	39	2	None	None	G3	S2	1B.2	null	Marsh & swamp, Salt marsh, Wetland
Symphyotrichum defoliatum	San Bernardino aster	Dicots	PDASTE80C0	102	5	None	None	G2	S2	1B.2	BLM_S- Sensitive, USFS_S- Sensitive	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Valley & foothill grassland
Symphyotrichum greatae	Greata's aster	Dicots	PDASTE80U0	56	2	None	None	G2	S2	1B.3	BLM_S- Sensitive	Broadleaved upland forest, Chaparral,

												Cismontane woodland, Lower montane coniferous forest, Riparian woodland Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal prairie, Coastal scrub, Desert dunes, Desert wash,
Taxidea taxus	American badger	Mammals	AMAJF04010	592	3	None	None	G5	53	null	CDFW_SSC- Species of Special Concern, IUCN_LC- Least Concern	Freshwater marsh, Great Basin grassland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, Morth coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	503	16	Endangered	Endangered	G5T2	S2	null	IUCN_NT- Near Threatened, NABCI_YWL- Yellow Watch List	Riparian forest, Riparian scrub, Riparian woodland
Walnut Forest	Walnut Forest	Forest	CTT81600CA	6	2	None	None	G1	S1.1	null	null	Broadleaved upland forest







Plant List

Inventory of Rare and Endangered Plants

37 matches found. Click on scientific name for details

Search Criteria

Found in Quads 3411812, 3411811, 3311882, 3311881, 3311871, 3311778, 3311788 3311872 and 3411718;

Q Modify Search Criteria SExport to Excel Modify Columns Modify Sort Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Abronia villosa var. aurita	chaparral sand- verbena	Nyctaginaceae	annual herb	(Jan)Mar- Sep	1B.1	S2	G5T2?
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	1B.2	S1S2	G3
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	1B.1	S1	G1G2
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Calochortus catalinae	Catalina mariposa lily	Liliaceae	perennial bulbiferous herb	(Feb)Mar- Jun	4.2	S3S4	G3G4
<u>Calochortus</u> <u>plummerae</u>	Plummer's mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	4.2	S4	G4
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G3G4T2
Calystegia felix	lucky morning- glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	1B.1	S1	G1Q
Camissoniopsis lewisii	Lewis' evening- primrose	Onagraceae	annual herb	Mar-May (Jun)	3	S4	G4
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's- beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct (Nov)	1B.2	S1	G4?T1
<u>Clinopodium</u> <u>mimuloides</u>	monkey-flower savory	Lamiaceae	perennial herb	Jun-Oct	4.2	S3	G3
Convolvulus simulans	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	4.2	S4	G4
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4T5

Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	Asteraceae	perennial rhizomatous herb	Aug-Oct	1A	SH	G5TH
Hordeum intercedens	vernal barley	Poaceae	annual herb	Mar-Jun	3.2	S3S4	G3G4
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul (Sep)	1B.1	S1	G4T1
lsocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	1B.2	S2	G3G5T2T3
Juglans californica	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	4.2	S4	G4
<u>Lasthenia glabrata</u> <u>ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
<u>Lepidium virginicum</u> <u>var. robinsonii</u>	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	4.3	S3	G5T3
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Nemacaulis denudata var. denudata	coast woolly- heads	Polygonaceae	annual herb	Apr-Sep	1B.2	S2	G3G4T2
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Pentachaeta Iyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar- Aug	1B.1	S1	G1
Phacelia hubbyi	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	4.2	S4	G4
Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	Hydrophyllaceae	perennial herb	Mar-Aug	3.2	S3	G5?T3Q
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pseudognaphalium leucocephalum	white rabbit- tobacco	Asteraceae	perennial herb	(Jul)Aug- Nov(Dec)	2B.2	S2	G4
Quercus engelmannii	Engelmann oak	Fagaceae	perennial deciduous tree	Mar-Jun	4.2	S3	G3
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	1A	SX	G5TX
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	1B.2	S3	G4T3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(May)Jul- Oct(Jan)	1B.2	S2	G3
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov (Dec)	1B.2	S2	G2
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	1B.3	S2	G2

Suggested Citation

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Questions and Comments

rareplants@cnps.org

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USFWS IPAC Resource List

IPaC

U.S. Fish & Wildlife Service

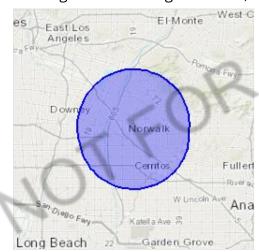
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Los Angeles and Orange counties, California



Local office

Carlsbad Fish And Wildlife Office

\((760) 431-9440

(760) 431-5901

2177 Salk Avenue - Suite 250 Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

- 1. Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information.
- 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME STATUS

Pacific Pocket Mouse Perognathus longimembris pacificus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8080 Endangered

Birds

California Least Tern Sterna antillarum browni
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8104

Coastal California Gnatcatcher Polioptila californica californica
There is final critical habitat for this species. Your location overlaps the critical habitat.
https://ecos.fws.gov/ecp/species/8178

Least Bell's Vireo Vireo bellii pusillus

Endangered

Western Snowy Plover Charadrius nivosus nivosus

There is **final** critical habitat for this species. Your location is outside the critical habitat.

There is **final** critical habitat for this species. Your location is outside

https://ecos.fws.gov/ecp/species/8035

https://ecos.fws.gov/ecp/species/5945

Threatened

Flowering Plants

the critical habitat.

NAME **STATUS** Nevin's Barberry Berberis nevinii **Endangered** There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8025 Salt Marsh Bird's-beak Cordylanthus maritimus ssp. maritimus **Endangered** No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6447 Ventura Marsh Milk-vetch Astragalus pycnostachyus var. **Endangered** lanosissimus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1160

Critical habitats

IPaC: Explore Location

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME

Coastal California Gnatcatcher Polioptila californica californica

https://ecos.fws.gov/ecp/species/8178#crithab

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act 1 and the Bald and Golden Eagle Protection Act 2 .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds
 http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

MIGRATORY BIRD INFORMATION IS NOT AVAILABLE AT THIS TIME

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the AKN Phenology Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen</u> science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.</u>

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <u>NWI map</u> to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Appendix F

Cultural Resources Report

Technical Report

CULTURAL RESOURCES ASSESSMENT REPORT

CHP Santa Fe Springs Area Office Replacement Project Norwalk, Los Angeles County, California

February 2020

Prepared for:

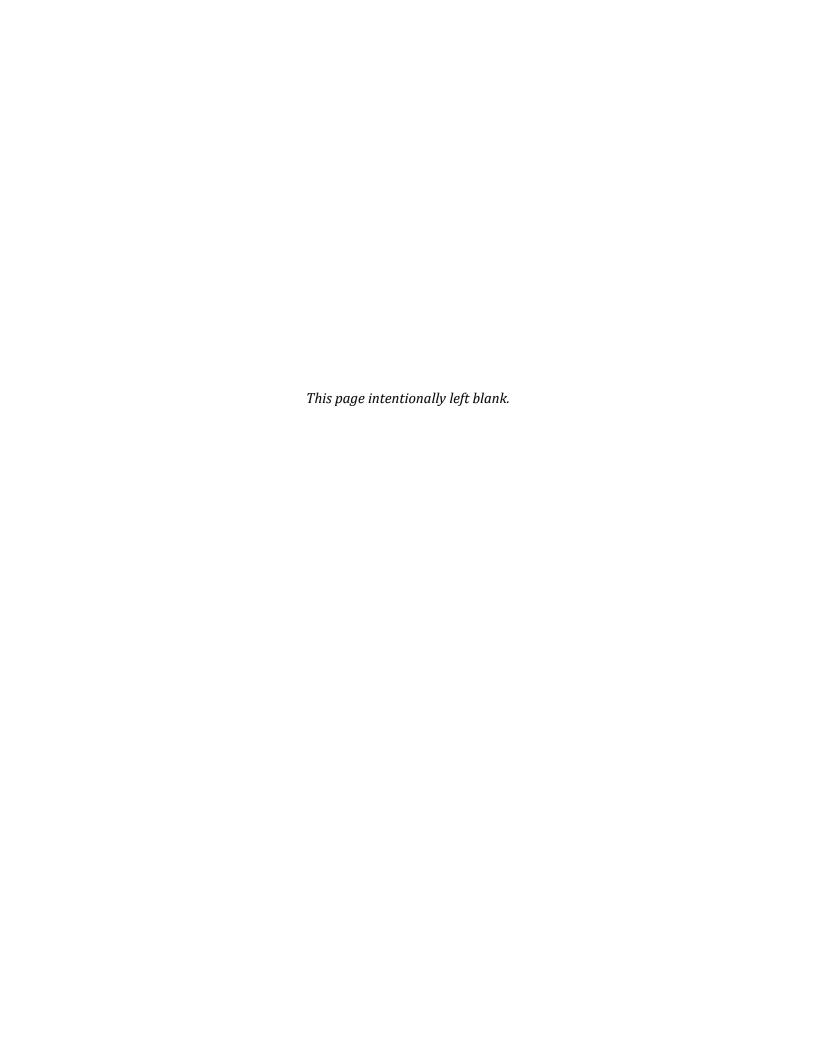
Ms. Jennifer Parson California Department of General Services 707 3rd Street West Sacramento, CA 95605

On behalf of the California Highway Patrol

Prepared by:



P.O. Box 2727
Oakland, CA 94612
Janis Offermann, RPA
Cultural Resources Practice Lead



Limitations

This report contains confidential cultural resources location information; report distribution should be restricted to those with a need to know. Cultural resources are non-renewable, and their scientific, cultural, and aesthetic values can be significantly impaired by disturbance. To deter vandalism, artifact hunting, and other activities that can damage cultural resources, the locations of cultural resources should be kept confidential. The legal authority to restrict cultural resources information is in California Government Code 6254.1 and the National Historic Preservation Act of 1966, as amended, Section 304.

California Highway Patrol		
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Santa Fe Springs Area Office Replace	ement Project	February 202

Table of Contents

Execu	itive S	ummary	ES-2
1	Introd	uction	1-1
	1.1 Lo	ocation and Setting	1-1
		roject Description and Area of Potential Effects	
	1.3 R	egulatory Setting and Need for Study	1-5
	1.	.3.1 State of California Regulations	
		.3.2 Federal Regulations	
	1.4 Po	ersonnel	1-8
2	Projec	t Context	2-1
•	2.1 Pi	rehistoric Context	2-1
	2.1 Et	thnohistoric Context	2-1
	2.1 H	istoric-Era Context	2-2
3	Native	American Consultation and Archival Research	3-1
	3.1 N	ative American Consultation	3-1
		rchival Research	
4	Invent	ory Methods and Results	4-1
		ary and Recommendations	
		nces	
U .	iterer e	11003	1
Figu	ıres		
Figure	e 1	Project Vicinity	1-2
Figure		Project Location	
Figure		Area of Potential Effects	
Figur	e 4	Norwalk State Historic Hospital District with CHP Facility Footprint	3-4
Tab	les		
Table	1	Native American Consultation	3-1
App	end	ices	
Appe	ndix B	Native American Correspondence CHRIS South Central Coastal Information Center Results State Historic Preservation Officer Concurrence Letter	

List of Acronyms

APE area of potential effects

CCR California Code of Regulations

CEQA California Environmental Quality Act

CFR Code of Federal Regulations
CHP California Highway Patrol

CHRIS California Historical Resources Information System

CRHR California Register of Historical Resources
DGS California Department of General Services
Horizon Horizon Water and Environment, LLC

JRP Historical Resources

NAHC Native American Heritage Commission
NHPA National Historic Preservation Act
NRHP National Register of Historic Places
NSHHD Norwalk State Hospital Historic District

PRC Public Resources Code TCR tribal cultural resource

RPA Registered Professional Archaeologist

Executive Summary

The California Highway Patrol (CHP), with support from the California Department of General Services (DGS), is proposing to replace its existing Santa Fe Springs Area Office as part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The Santa Fe Springs Area Office Replacement Project (Proposed Project or Project) would relocate the existing office at 10051 Orr and Day Road, Santa Fe Springs, California, to new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed new office would be located on a 6-acre parcel on the east edge of the Metropolitan State Hospital campus in the City of Norwalk, California. The parcel is on Bloomfield Avenue, directly south of the Metropolitan State Hospital entrance at 11401 Bloomfield Avenue. CHP/DGS have retained Horizon Water and Environment, LLC (Horizon) to complete the cultural resources assessment in support of the Project.

This report documents cultural resources inventory methods and results as required for compliance with federal and California regulations. The study consisted of a literature review to identify any previously recorded cultural resources that could be affected by the Proposed Project, and a field survey to locate any archaeological sites that may exist but have not yet been recorded. No archaeological resources were identified as the result of a pedestrian survey, but the Metropolitan State Hospital has been determined eligible for listing on the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR).

This report has been prepared based on certain key assumptions made by Horizon that substantially affect its conclusions and recommendations. These assumptions are that the information gathered during the record search is up to date and accurate, and that the field survey results accurately identified the presence or absence of archaeological resources visible on the ground surface. These assumptions, although thought to be reasonable and appropriate, may not prove to be true in the future. Horizon's conclusions and recommendations are conditioned upon these assumptions.

The archaeological inventory was performed based on information obtained at the South Central Coastal Information Center of the California Historical Resources Information System, as well as on direct observation of site conditions and other information generally applicable as of December 2018. The conclusions and recommendations herein are therefore based on information available up to that point in time. Further information may come to light in the future that could substantially change the conclusions found herein.

Information obtained from these sources in this timeframe is assumed to be correct and complete. Horizon does not assume any liability for findings or lack of findings based upon misrepresentation of information presented to Horizon or for items that are not visible, made visible, accessible, or present at the time of the project area inventory.

California Highway Patrol		Executive Summary
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1 Introduction

1.1 Location and Setting

The Proposed Project site is in the City of Norwalk in southeastern Los Angeles County, California **(Figure 1)**. It is situated within the Coastal Plain of Los Angeles Basin, at an elevation of about 138 feet above mean sea level. The Coastal Plain of Los Angeles is bounded by the Santa Monica Mountains to the north; the Puente Hills, Chino Hills, and the Santa Ana Mountains to the east; the San Joaquin Hills to the south; and the Pacific Ocean to the west (Avocet Environmental 2018). The Proposed Project area is depicted on the Whittier 7.5" United State Geological Survey topographic map in Section 8, Township 3 South, Range 11 West (**Figure 2**).

The Proposed Project site is at the east edge of the Metropolitan State Hospital campus, just south of the main entrance to the facility. The irregularly-shaped parcel is bounded by Bloomfield Avenue on the east and Cedar Street on the west, Elm Street on the north, and South Circle to the south.

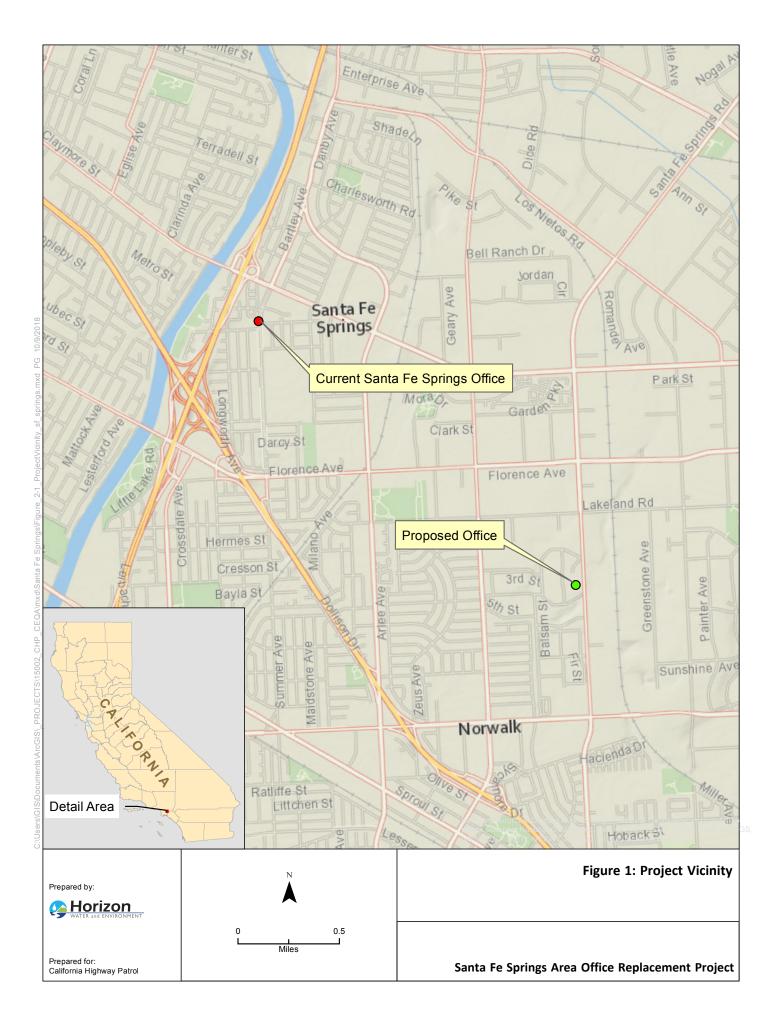
Prior to construction of the hospital in 1916, the area was undeveloped, though the earliest topographic maps from the 1890s show the presence of Bloomfield Avenue and scattered residences, one of which appears to be in the southwest corner of the Project parcel. The buildings surrounding the Proposed Project were largely constructed by 1925; the residence depicted in earlier maps was no long present by this time (Avocet Environmental 2018).

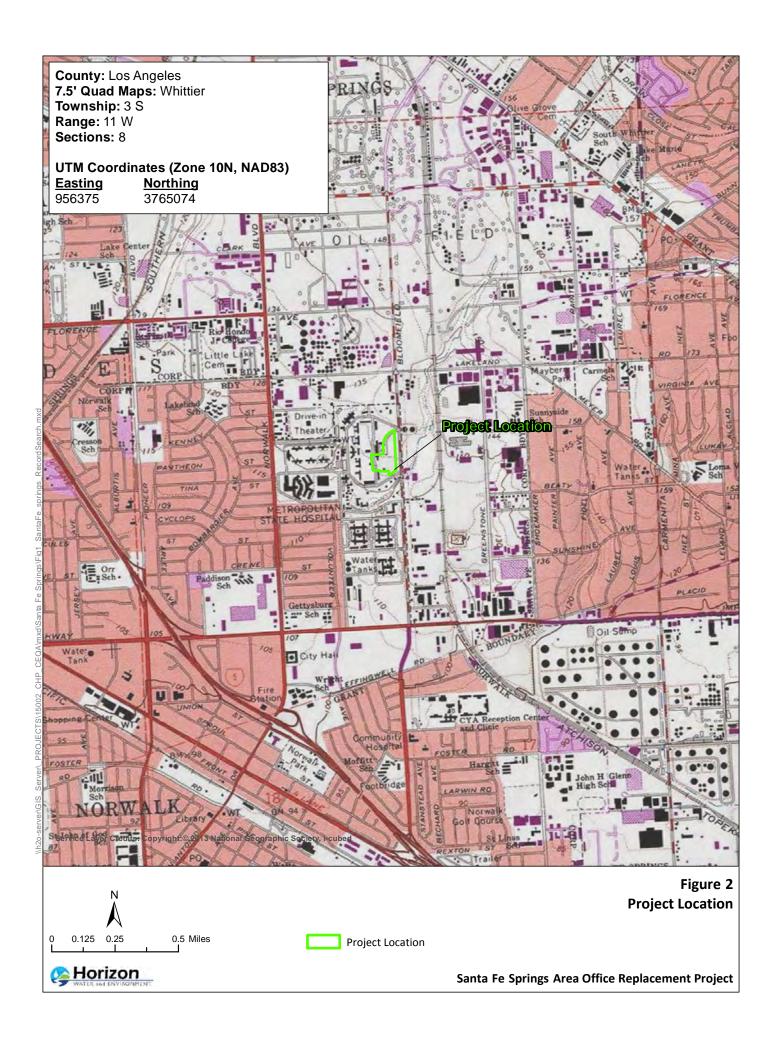
1.2 Project Description and Area of Potential Effects

The CHP is proposing to construct and operate a replacement CHP Area Office in the City of Norwalk, Los Angeles County. The new facility, proposed to be located on property that is within the current boundaries of the Metropolitan State Hospital, would replace the existing office at 10051 Orr and Day Road in the City of Santa Fe Springs, which is about 2 miles northwest of the Project site. The Proposed Project site is approximately 6 acres in size.

The Proposed Project would include structures (main office building, automobile service building, storage building, radio vault building), a radio tower, secured and visitor parking areas, enclosures and storage areas, a fuel island and gas tank, along with utility improvements and other ancillary improvements. The main office building would be a single-story building of approximately 44,000 square feet. The facility would be built to meet California Green Code and Title 24 energy and resource standards and achieve a U.S. Green Building Council Leadership in Energy and Environmental Design silver or higher accreditation. Roadway and sidewalk improvements along South Circle and Elm Street adjacent to the Project site are included in the Project plans.

The area of potential effects (APE) (**Figure 3**) for the Proposed Project consists of the 6-acre site identified for the facility, along with areas needed for road and sidewalk improvements. No additional construction staging areas are required. The maximum vertical APE is 148 feet above the ground surface to accommodate the new radio tower. Below ground, the APE is a maximum of 18 feet for the installation of drainage, water supply, and wastewater pipelines, and underground utilities. These would be installed in open trenches, typically using conventional cut-and-cover construction techniques.







1.3 Regulatory Setting and Need for Study

1.3.1 State of California Regulations

CEQA and State CEQA Guidelines

The Proposed Project must comply with California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq. and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, Chapter 3), which determine, in part, whether the project has a significant effect on a unique archaeological resource (per PRC 21083.2) or a historical resource (per PRC 21084.1).

CEQA Guidelines CCR 15064.5 notes that "a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment." Lead agencies are required to identify potentially feasible measures or alternatives to avoid or mitigate significant adverse changes in the significance of a historical resource before such projects are approved. According to the CEQA guidelines, historical resources are:

- Listed in, or determined to be eligible for listing in, the California Register of Historical Resources (per PRC 5024.1(e));
- Included in a local register of historical resources (per PRC 5020.1(k)) or identified as significant in a historical resource survey meeting the requirements of PRC 5024.1(g); or
- Determined by a lead state agency to be historically significant.

CEQA Guidelines CCR 15064.5 also applies to unique archaeological resources as defined in PRC 21084.1.

Assembly Bill 52, which went into effect on July 1, 2015, requires, per PRC 21080.3.1, that CEQA lead agencies consult with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of a proposed project if so requested by the tribe, and if the agency intends to release a negative declaration, mitigated negative declaration, or environmental impact report for a project. The bill also specifies, under PRC 21084.2, that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource (TCR) is considered a project that may have a significant effect on the environment. This latter language was added to the CEQA checklist in September 2016. DGS, as the project's CEQA lead agency, consulted with Native American tribes pursuant to PRC 21080.3.1.

As defined in Section 21074(a) of the PRC, TCRs are:

- (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - a. Included or determined to be eligible for inclusion in the California Register of Historical Resources: or
 - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.

(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

TCRs are further defined under Section 21074(b) and (c) as follows:

- (b) A cultural landscape that meets the criteria of subdivision (a) is a TCR to the extent that the landscape is geographically defined in terms of the size and scope of the landscape; and
- (c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

Mitigation measures for TCRs must be developed in consultation with the affected California Native American tribe pursuant to the newly chaptered Section 21080.3.2, or according to Section 21084.3. Section 21084.3 identifies mitigation measures that include avoidance and preservation of TCRs and treating TCRs with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource.

California Register of Historical Resources

PRC Section 5024.1 establishes the California Register of Historical Resources (CRHR). This register lists all California properties considered to be significant historical resources. The CRHR includes all properties listed, or determined to be eligible for listing, in the National Register of Historic Places (NRHP), including properties evaluated under Section 106 of the National Historic Preservation Act. The criteria for listing are similar to those of the NRHP. Criteria for listing in the CRHR include resources that:

- 1) Are associated with the events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- 2) Are associated with the lives of persons important in our past;
- 3) Embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possess high artistic values; or
- 4) Have yielded, or may be likely to yield, information important in prehistory or history.

The California Code of Regulations Section 4952 sets forth the criteria for eligibility as well as guidelines for assessing historical integrity and resources that have special considerations.

Public Resources Code 5024 and 5024.5

As part of its effort to establish a comprehensive program to preserve historic resources, the California State Legislature enacted PRC Section 5024 in 1981. PRC Section 5024 requires that state agencies maintain an inventory of resources under their jurisdiction that are listed in or eligible for listing in the NRHP or as CHLs and that they submit these lists to the SHPO. PRC Section 5024(a)

additionally requires state agencies to "formulate policies to preserve and maintain, when prudent and feasible, all State-owned historical resources under its jurisdiction."

Under PRC Sections 5024(f) and 5024.5, DGS must consult with the SHPO regarding any project that has the potential to affect a resource included in the Master List. The SHPO is tasked with commenting on the project to determine whether it may cause an adverse effect on the resource. In the case of resources included in the Master List, an adverse effect is one that causes a substantial adverse change in the significance of the resource.

1.3.2 Federal Regulations

The Proposed Project does not require any federal permits, and it is not located on federal lands; therefore, federal laws do not apply to the Proposed Project. The following laws are provided for context only.

The implementing regulations of the National Historic Preservation Act (NHPA) require that cultural resources be evaluated for NRHP eligibility if they cannot be avoided by an undertaking (Proposed Project). To determine site significance through application of NRHP criteria, several levels of potential significance that reflect different (although not necessarily mutually exclusive) values must be considered. As provided in Title 36 Code of Federal Regulations (CFR) Section 60.4, "the quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association" and must be considered within the historic context. Resources must also be at least 50 years old, except in rare cases, and, to meet eligibility criteria of the NRHP, must:

- (A) Be associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) Be associated with the lives of persons significant in our past; or
- (C) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) Have yielded, or may be likely to yield, information important in prehistory or history.

For archaeological sites evaluated under criterion (D) above, integrity requires that the site remain sufficiently intact to convey the expected information to address specific important research questions.

Cultural resources also may be considered separately under the National Environmental Protection Act per Title 42 Unite States Code Sections 4321 through 4327. These sections require federal agencies to consider potential environmental impacts and appropriate mitigation measures for projects with federal involvement.

1.4 Personnel

Fieldwork, analysis, and reporting were carried out by the below-listed professionals who meet the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (per Title 48 of the CFR, Section 44716, as amended in 1983). Procedures complied with NHPA Section 106 as set forth in Title 36 of the CFR, Section 800.

- Kara Brunzell, Architectural Historian (Horizon), prepared the history of the Metropolitan State Hospital presented in Section 2.3 of this report. Ms. Brunzell holds a Bachelor's degree in History from the University of California, Los Angeles, and a Master's degree in Public History from California State University, Sacramento. She has been a practicing architectural historian in California for 11 years.
- Janis Offermann, Registered Professional Archaeologist (Horizon), prepared this report. She has a Bachelor's degree in Anthropology from Sonoma State University in Rohnert Park, California, and a Master's degree in Anthropology from the University of California at Davis. She has more than 40 years of experience in California archaeology and cultural resource management. Ms. Offermann is the cultural resources practice leader with Horizon.
- Keith Syda, Archaeologist (Horizon), conducted the archaeological field survey on November 1, 2018. He has a Bachelor's degree in Anthropology from California State University, Sacramento. Mr. Syda has over 35 years of experience as an archaeologist, working on hundreds of projects over that time that have included both archaeological surveys and excavations.

2 Project Context

2.1 Prehistoric Context

Nearly a century of archaeological research in the Los Angeles County region has established human occupation during the Early Holocene as early as 9000 B.C., or more. These data are from the northern Channel Islands but work at San Clemente and Santa Catalina islands also reflects great antiquity at 6500 to 6000 B.C., and establishes a rich and elaborate maritime tradition by this early date (Byrd and Raab 2010). Similarly, early sites have also been identified on the mainland near the coast (c.f., Altschul et al 2007). Overall, research in the interior has demonstrated that settlement and resource exploitation was very diverse and related to local environmental conditions. Generally, however, the prehistory of the mainland in the Project vicinity can be expressed as four different phases of cultural progression during the Pleistocene, Early Holocene, Middle Holocene, and Late Holocene, as summarized below. The following is extrapolated from Byrd and Raab (2010).

Pleistocene (Pre-9600 B.C.)

Little evidence of human occupation has been found in the Los Angeles Basin during the last phases of the Pleistocene. The Paleo-Indians of this time appear to be concentrated in areas where large Pleistocene lakes, such as China and Searles lakes in the (now) Mojave Desert, were ideal for hunting large game. When the Pleistocene lakes began to dry up at the end of this period, populations moved west into Los Angeles County and the coastal zone to take advantage of a more diverse range of plant and animal species.

Early Holocene (9600 cal. B.C. to 5600 cal. B.C.)

The new inhabitants of the Project area turned to the exploitation of plant resources as important staples within their diet, in addition to small animals. On the coast, shellfish and fish, were important foods.

Middle Holocene (5600 B.C. to 1650 B.C.)

The importance of seeds and other vegetal resources is evident early during this period, as the use of millingstones becomes prevalent in the archaeological record; hence the period is often referred to as the Millingstone Horizon. Small game gains in importance over large game at this time. Populations appear to become more sedentary, both inland and along the coast. Regional environmental variations reflect local adaptations to the Middle Holocene, when the climate was somewhat drier and warmer than today (West et al. 2010:20). In some cases, this caused the abandonment of some estuarine habitats in favor of river valley locations late in the period.

Late Holocene (1650 cal. B.C. to cal. A.D. 1769)

Resource intensification continued throughout the Late Holocene, particularly in the early stages, as the regional population focused on smaller animals and a more diverse range of plants. This pattern is seen on the coast, as well as inland. Around A.D. 500, the bow and arrow were introduced to the region; this was about the same time that the Gabrielino moved into the area, likely pushing out ancestral Chumash peoples. Settlement patterns shifted from small semi-permanent villages, to large permanent residential communities surrounded by smaller residential encampments. Beyond these there existed seasonal camps for the exploitation of specialized resources.

2.2 Ethnohistoric Context

The Project area is in the ethnographic territory of the Gabrielino, who inhabited the San Fernando Valley and the Los Angeles Basin, including much of present-day Orange County, when the Spanish first arrived in the region. They also occupied the off-coast islands of San Nicolas, Santa Barbara, Santa Catalina, and San Clemente. Because the population was quickly conscripted by the Spanish missionaries, little detail has been recorded about the Gabrielino lifeways prior to the mission period. However, they have been described as the "wealthiest, most populous and most powerful ethnic nationality in aboriginal southern California, their influence spreading as far north as the San Joaquin Valley Yokuts, as far east as the Colorado River, and south into Baja California" (Bean and Smith 1978). Only the Chumash, their neighbors directly to the north, held a similar status.

Settlement pattern studies for the mainland Gabrielino have found that the primary Gabrielino villages were inland along the rivers and major streams within their territory, especially at the interface of the mountains and foothills, and in the prairie that flanks the mountains. Secondary habitation or camp sites were also abundant in these areas. Important resources in these locations included small animals and deer, acorns and pine nuts, and a variety of plants. Also available in the prairie were yucca and cactus, and waterfowl in the adjacent marshlands (Bean and Smith 1978).

The Gabrielino relied heavily on ocean resources, as well. Although no primary villages were located on the coast from San Pedro south to Newport Bay, the area was important for acquiring shellfish, harvesting kelp, and the taking of fish such as tuna, swordfish, and sharks. Primary villages were scattered along the coast from San Pedro north to Topanga Canyon, where marine resources such as fish, shellfish, sea mammals, and water fowl were important foodstuffs (Bean and Smith 1978).

2.3 Historic-Era Context

The Spanish arrived in Southern California in 1769, where they established a mission in modern-day San Diego. During this same year, Gaspar de Portola explored north to the area of Monterey Bay in search of sites for new missions, passing near to the location where the Mission San Gabriel Arcangel would be founded two years later, on September 8, 1771 (Kyle et al. 2002). The mission was established near the Rio Hondo, about 13 miles north of the Project site.

The Spanish quickly established themselves in the region and conscripted the local Native American population to work at the missions and numerous pueblos that were settled in the late 1700s to support the missions. Land grants were also made to private citizens by the Spanish, and then Mexican governments. Between the missions, pueblos, and ranchos, the region quickly became rich in agriculture and for the raising of cattle. The Project site is within the boundaries of Rancho Santa Gertrudes, which was awarded to Antonio Maria Nieto in 1834 (Kyle et al. 2002).

Like the fate of many ranchos after California became part of the United States, the lands of Rancho Santa Gertrudes were subdivided and sold at auction and it was not unusual for properties to rapidly change ownership. By 1869, the land that would become Norwalk was purchased by Gilbert and Atwood Sproul. The 463 acres were referred to as Corazon de los Valles (heart of the Valleys). Gilbert Sproul surveyed and mapped a city by the same name in 1874. The name was soon shortened to Corvalles and officially changed to Norwalk in 1877 (City of Norwalk 2018).

The original city plan included 23 acres set aside for a Southern Pacific Railroad train station. By the end of the 1870s, the passenger station was in operation and was a focal point of the town. The presence of the station contributed to the industrial and population growth of Norwalk through the end of the nineteenth century (City of Norwalk 2018).

Metropolitan (Norwalk) State Hospital

The Project site is located at the east edge of the Metropolitan State Hospital campus adjacent to Bloomfield Avenue in the City of Norwalk. Originally known as Norwalk State Hospital, the facility was constructed on 300 acres in 1915 as a state hospital devoted to the treatment of California's mentally ill residents. The facility was developed in what was then a rural area in villages of Santa Fe Springs and Norwalk but adjacent to a rail line from downtown Los Angeles; this allowed the new facility to be designed according to the latest principles of institutional design (Stoll & Thayer Co. 1900). "Garden City" urban design and "Cottage Plan" institutional design principles were both employed in the plan for Norwalk. Although Cottage Plan was being introduced at institutions on the East Coast by the early 1850s, it did not arrive in California until the first decade of the twentieth century, when its implementation at Agnews State Hospital in Santa Clara established a new template for the State's institutions. The Cottage Plan used buildings that were smaller, more informal, and less pretentious than the forbidding congregate asylums, utilizing instead a human scale which was meant to be more home-like for residents (Crenson 1998; JRP 2017).

The new Norwalk campus was laid out on a grid of orthogonal internal roads and pathways enclosed within a curving ring road. The ring road had two access points at the east end of the property on Bloomfield Road, which met at a landscaped oval near the west end of the property. A U-shaped driveway was planned to lead from the ring road's two entrances to a traffic circle with a landscaped center in front of the original Administration and Receiving buildings (only the north arm of the driveway was constructed). The heart of the campus was the rectangular 1500-foot by 500-foot open area set well back from the road, a green quadrangle around which the earliest buildings were sited (JRP 2017).

Norwalk State Hospital was the sixth mental institution in California, and was intended to accommodate up to 2,000 patients to alleviate overcrowding in the system. Its actual development, however, was gradual. The first buildings constructed in 1915 were the Kitchen (later Library) and Boiler Plant on either side of the landscaped oval at the west end of the ring road, and Ward 306-308 southeast of the Kitchen facing onto the central quadrangle. When it opened in 1916, Norwalk State Hospital had only 105 residents (all male) and 21 employees on site. Labor was considered essential therapy during this period, and the patients were put to work on the institution's construction. Development of the campus was incremental, with new buildings added as funds became available. By about 1920, much of the central portion of the campus had been developed: a Property Warehouse near the Boiler Plant, the Employee Dining Room (later Oasis) east of the Kitchen, the Administration Building (later Elm Street Homes), and seven ward buildings grouped around the green quadrangle. The early buildings displayed French Eclectic and Tudor architecture, both of which were popular during the era as residential styles. Although most of these buildings had expansive footprints, their size was de-emphasized by one- and two-story massing as well as their widely spaced siting with expanses of open areas between buildings. Intended to read as a human-scale environment, the Cottage Plan as executed at Norwalk was far from naturalistic. With the notable exception of the Kitchen (which curved around the landscaped oval where the north and south ring roads met), the buildings were rectangular in plan or L-shaped. Buildings were carefully grouped according to function, with distinct areas designated for treatment, residence, receiving, etc. Arranged around the

rectangular open quadrangle at the center of the institution, the wards and receiving center were designed to emphasize formality with symmetrical placement of identical buildings (JRP 2017).

The state had paved the road leading to the oval between the Kitchen and Boiler Plant by June 1916, but paving and planting progressed slowly in the first years. The first footpaths were temporary boardwalks. By 1917, the institution had planted 400 trees, 115 bushes, and some lawns, but the size of the campus meant much of it remained in a raw state. Like the symmetrically arranged buildings and roads, early plantings emphasized formality with trees of the same species planted at regular intervals along roadways and even a formal garden (quickly abandoned) laid out in the area north of the Administration Building. The gradual pace of landscaping development can be attributed to the fact that the patients were responsible for gardening on the campus, as well as construction (JRP 2017).

Development of Norwalk State Hospital accelerated during the 1920s, when some of the largest and most important buildings on the site were constructed: the Administration Building, James Hall (an auditorium), and the massive Receiving Building (now demolished). A rectangular area west of the Boiler Plant was developed into a second ward quadrangle, with seven large ward buildings as well as several smaller support buildings developed around a large open space. New buildings were added outside the ring road, most of which were smaller in scale and intended for employee use. Although the pace of development slowed in the 1930s, by the last years of the decade Norwalk State Hospital had 47 buildings, a fully developed system of walking paths and paved road, and mature trees set within manicured lawns. By 1940, the facility had 2,292 live-in patients, which was more than 25 percent over capacity (JRP 2017).

The formal garden near the Administration Building had been abandoned by the late 1920s, replaced with lawns, informally massed trees, and a curved row of shrubs that followed the curve of the driveway (Elm Street). The second quadrangle to the west was planted heavily in the 1920s (when its buildings were constructed), with a formal row of palm trees around all four edges and various species of trees filling most of the interior area. Although few new buildings were constructed in the 1930s, plantings that had been established in the 1920s reached maturity, and by the end of the decade large trees and other greenery gave the campus a garden setting as designed. Aerial photographs from this era show large expanses of lawn outlined by maturing trees and shrubs. By 1954, the campus had 2,500 to 3,000 trees, 5,500 feet of hedge, and several acres of lawn. In the mid-1950s, aerial photographs show a heavily wooded campus with mature trees that are taller than the buildings. The area between the Kitchen and Boiler Plant and the recreation fields near the southeast corner of the campus were among the few open areas which lacked large trees. After the mid-1960s, the tree canopy was substantially thinned (IRP 2017).

The institution began to develop recreational facilities in the early 1930s, sited near Bloomfield Avenue along the lightly developed eastern edge of the campus. The first baseball field was constructed in the early 1930s south of the traffic circle at the Administration and Receiving buildings. The baseball facility was moved to its present location near the intersection of South Circle Road and Bloomfield Avenue in 1936. The baseball field area underwent gradual changes over the decades as tennis, volleyball, and basketball courts were installed between 1953 and 1963. Covered shelters were added to the recreation facilities around 2000 (JRP 2017).

The Depression and World War II on its heels meant that there was little expansion at the institution between 1932 and 1947, but about 1948, the state began adding more new buildings. Beginning in the early 1950s, large multi-story treatment wards were constructed outside the ring road on the edges of the original institution. The flat-roofed Modern buildings did not conform to the Spanish Revival, Tudor, and French Eclectic styles established at the institution during its early decades, nor did they fit into Cottage Plan institutional design. Norwalk's patient population reached 4,140 in 1962, after which a decrease in institutionalization and other social changes brought a gradual decline in numbers (JRP 2017).

California Highway Patrol		2. Project Context
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3 Native American Consultation and Archival Research

In accordance with the Secretary of the Interior's Standards and the Guidelines for Archaeology and Historic Preservation (Title 48 CFR Section 44716 [amended 1983]), the goals of this archaeological inventory were to identify and completely document the location, qualities, and condition of any potential historic properties in the project's APE. Methods employed to achieve these goals follow.

3.1 Native American Consultation

An email request was made to the Native American Heritage Commission (NAHC) on September 28, 2018, to review its files for the presence of recorded sacred sites on the Project site. The NAHC responded on October 10, 2018, stating that no significant resources were identified in the Project area as a result of a search of their files. The NAHC also provided a list of tribes and tribal contacts with a traditional and cultural affiliation with the Project area for notification pursuant to PRC Section 21080.3.1 (Assembly Bill 52).

DGS, on behalf of the CHP, notified local tribes identified by the NAHC as having a traditional and cultural association with the Project area about the Project via letters dated November 5, 2018. DGS did not receive any tribal requests for consultation on the Project. **Table 1** lists all those contacted and summarizes the results of the consultation. All correspondence between the NAHC, Native American tribes, and the state is provided in **Appendix A**.

Table 1. Native American Consultation

Organization/Tribe	Name of Contact	Letter Date	Tribal Response	Comments
Gabrieleno Band of Mission Indians – Kizh Nation	Andrew Salas, Chairperson	11/05/2018	No response, to date.	None
Gabrieleno/Tongva Band of Mission Indians	Anthony Morales, Chairperson	11/05/2018	No response, to date.	None
Gabrielino/Tongva Nation	Sandonne Goad, Chairperson	11/05/2018	No response, to date.	None
Gabrielino Tongva Indians of California Tribal Council	Robert F. Dorame, Chairperson	11/05/2018	No response, to date.	None
Gabrielino-Tongva Tribe	Linda Candelaria, Chairperson	11/05/2018	No response, to date.	None
Gabrielino-Tongva Tribe	Charles Alvarez, Council member	11/05/2018	Letter not picked up at the post office	None

3.2 Archival Research

A records search was conducted by the South Central Coastal Information Center of the California Historical Resources Information System at California State University, Fullerton (see **Appendix B**). The purpose of the record search was to identify the presence of any previously recorded cultural resources within the Project site and to determine whether any portions of the Project site had been surveyed for cultural resources. The record search (Records Search File No.:19557.5511) indicated that the Project area had not previously been surveyed for cultural resources, but that three surveys had occurred within ¼-mile radius of the property. One resource, the Burlington Northern Santa Fe Railway, was recorded during two of the studies.

The record search also indicated that the Proposed Project is within the boundaries of the NRHP- and CRHR-eligible Norwalk State Hospital Historic District (NSHHD). The NSHHD was first identified as a historic district in 1980, but a formal evaluation for NRHP/CRHR eligibility did not take place at that time. A second study was conducted in 2004, in which some of the buildings on the campus were investigated (JRP 2017). The NSHHD was not fully documented and evaluated for NRHP/CRHR eligibility until 2017, when the DGS and California Department of State Hospitals retained JRP Historical Resources (JRP) to prepare a Historical Resources Inventory and Evaluation Report. At that time, California Department of Parks and Recreation 523 forms were produced for the NSHHD and all of the contributing elements (JRP 2017).

JRP evaluated the state-owned property as a historic district under NRHP and CRHR criteria, and as a California State Landmark. The study found the NSHHD eligible as a historic district under Criterion A/1 (history) for "the important role it played in the evolution of public institutional mental health care as the first state hospital campus to be organized entirely around the Cottage Plan model" (JRP 2017). The NSHHD was also determined eligible under Criterion C/3 (architecture) as a relatively intact example of Cottage Plan institutional design, which opened during the peak of the concept's popularity and on which its principles were fully realized. In addition, JRP recommended the property eligible as a California Historical Landmark because of its status as the first fully realized, most significant, and last surviving Cottage Plan institution in California (JRP 2017).

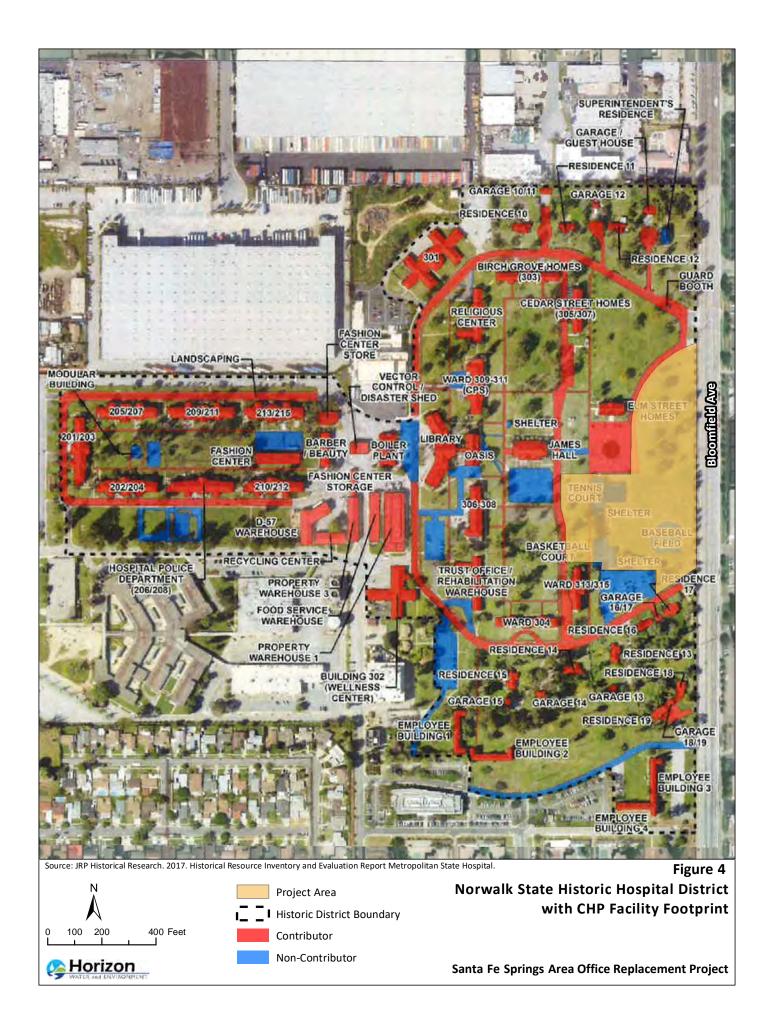
The NSHHD includes 72 acres and contains 61 buildings, of which 55 retain sufficient integrity to qualify as historic district contributors but do not have sufficient architectural or historical significance to qualify for individual eligibility (**Figure 4**). Four of the six non-contributors within the district boundary were constructed outside the period of significance (1915–1950), while the Baseball Field (1936) and Superintendent's Residence (1919) lacked sufficient integrity to qualify as historic district contributors (JRP 2017).

The Norwalk Hospital Grounds were evaluated along with the buildings on the campus and recommended eligible as a district contributor under Criterion A/1 and Criterion C/3 for association with Cottage Plan institution design. Character-defining elements of the grounds are "central green spaces featuring concrete pathways lined with period-style light standards; the campus's open and scenic views featuring expansive lawn, mature trees, and shrubs, the asphalt perimeter roads around treatment areas and driveways leading to residences" (JRP 2017). JRP noted that the hospital grounds' integrity is slightly diminished because of alterations to sections of interior roads and footpaths as well as thinning of vegetation after 1963; however, despite these alterations, the grounds retain the ability to convey association with Cottage Plan design principals. "The grounds remain open and scenic, the pathways and roads remain in their general alignment and are reflective of how the hospital's Board of Managers originally intended" (JRP 2017). The Proposed Project is

located within one of the large open spaces at the east edge of the campus, just south of the main entrance to the Metropolitan State Hospital. This area includes the baseball diamond, an expanse of lawn, various walkways, and numerous mature trees, the latter three of which contribute to the Norwalk Hospital Grounds eligibility.

In addition to being determined eligible for listing on the NRHP and CRHR, the NSHHD was found to be eligible as a California Historical Landmark (JRP 2017). The State Historic Preservation Officer concurred with these determinations in a letter to DGS dated October 20, 2017 (see **Appendix C**).

Archival research also included a review of the Phase I Environmental Site Assessment of the Project area which included a detailed review of historic maps and aerial photographs. Research indicated that one building at the west edge of the Project site and bordering Cedar Street, which had been constructed sometime between 1923 and 1925, was removed between 1977 and 1983 (Avocet 2018). Figure 4



4 Inventory Methods and Results

An archaeological survey of the Project location was conducted on November 1, 2018, by a Horizon archaeologist who meets the U.S. Secretary of the Interior's Professional Standards. As previously noted, the Project site is located on an undeveloped portion on the grounds of the Metropolitan State Hospital. Systematic pedestrian survey transects were walked at intervals of no greater than 50 feet. Any exposed areas free of vegetation or construction debris were more closely inspected. The Project site's ground surface was heavily disturbed and previously graded, and a significant percentage of the ground surface was covered in landscaped grassy areas and gravel. No archaeological materials were observed during the survey, including the areas within the Project footprint that were once occupied by buildings associated with the Metropolitan State Hospital.

As previously discussed, the Proposed Project is located within the boundaries of the NSHHD.

California Highway Patrol		4. Inventory Meth	ods and Results
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5 Summary and Recommendations

The CHP is proposing to replace its existing Santa Fe Springs Area Office as part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The Santa Fe Springs Area Office Replacement Project would relocate the Santa Fe Springs Area Office on Orr and Day Road in Santa Fe Springs to a parcel within the boundaries of the existing Metropolitan State Hospital on Bloomfield Avenue in the City of Norwalk. Although archival research indicated that a building was once located at the west edge of the Project parcel, pedestrian surveys did not identify any archaeological resources within the Project's APE.

Although no archaeological sites were identified by the archaeological inventory, archaeological sites may be buried with no surface manifestation. Furthermore, the Holocene soils that underlie the Project location have the potential to contain buried archaeological remains. If prehistoric or historic-era materials are encountered, all work in the vicinity should halt until a qualified archaeologist can evaluate the discovery and make recommendations in accordance with 36 CFR Section 800.13(b). Prehistoric materials would most likely include obsidian and chert flaked-stone tools (e.g., projectile points, knives, choppers), tool-making debris, or milling equipment such as mortars and pestles. Historic-era materials might include remains of agricultural implements; stone or concrete footings and walls; and deposits of metal, glass, and/or ceramic refuse.

The possibility of encountering human remains cannot be discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human burial. If human remains are encountered, work should halt in the vicinity of the remains and, as required by law, the Los Angeles County coroner should be notified immediately. An archaeologist should also be contacted to evaluate the find. If human remains are of Native American origin, the coroner must notify the NAHC within 24 hours of that determination. Pursuant to PRC Section 5097.98, the NAHC, in turn, will immediately contact an individual who is most likely descended from the remains (the "Most Likely Descendant"). The Most Likely Descendant has 48 hours to inspect the site and recommend treatment of the remains. The landowner is obligated to work with the Most Likely Descendant in good faith to find a respectful resolution to the situation and entertain all reasonable options regarding the Most Likely Descendant's preferences for treatment.

DGS will be evaluating the effects of positioning the new CHP area office within the NSHHD boundaries under separate cover.

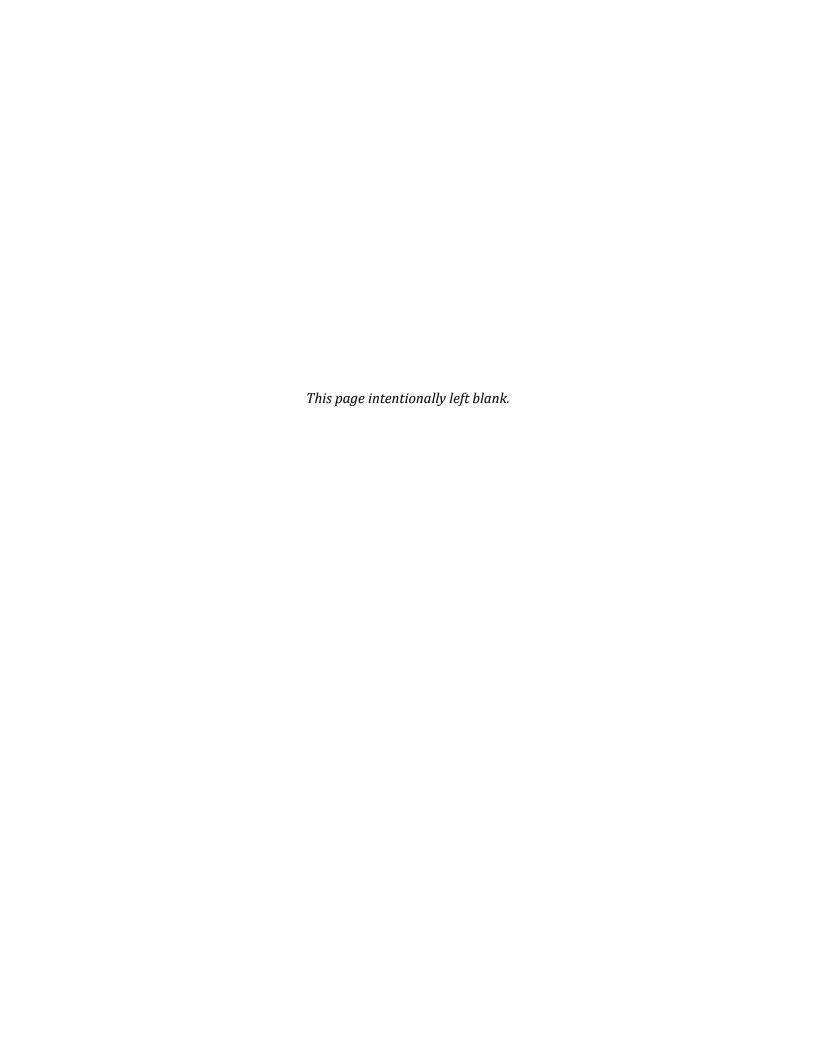
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Appendix A Native American Correspondence



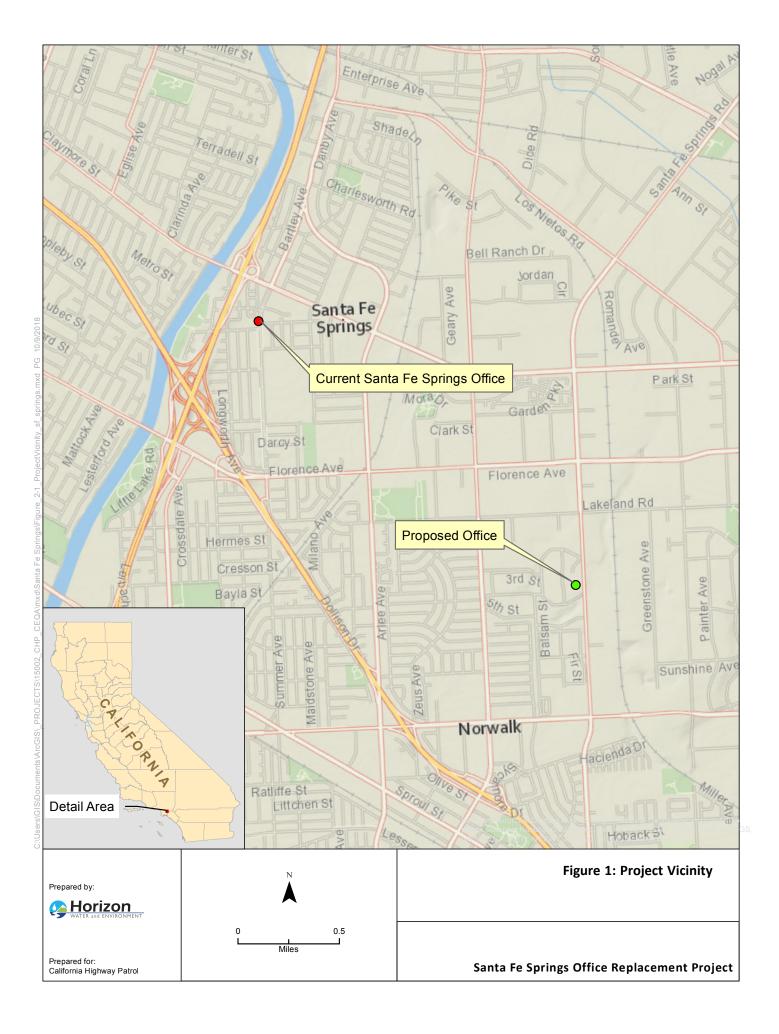
Local Government Tribal Consultation List Request

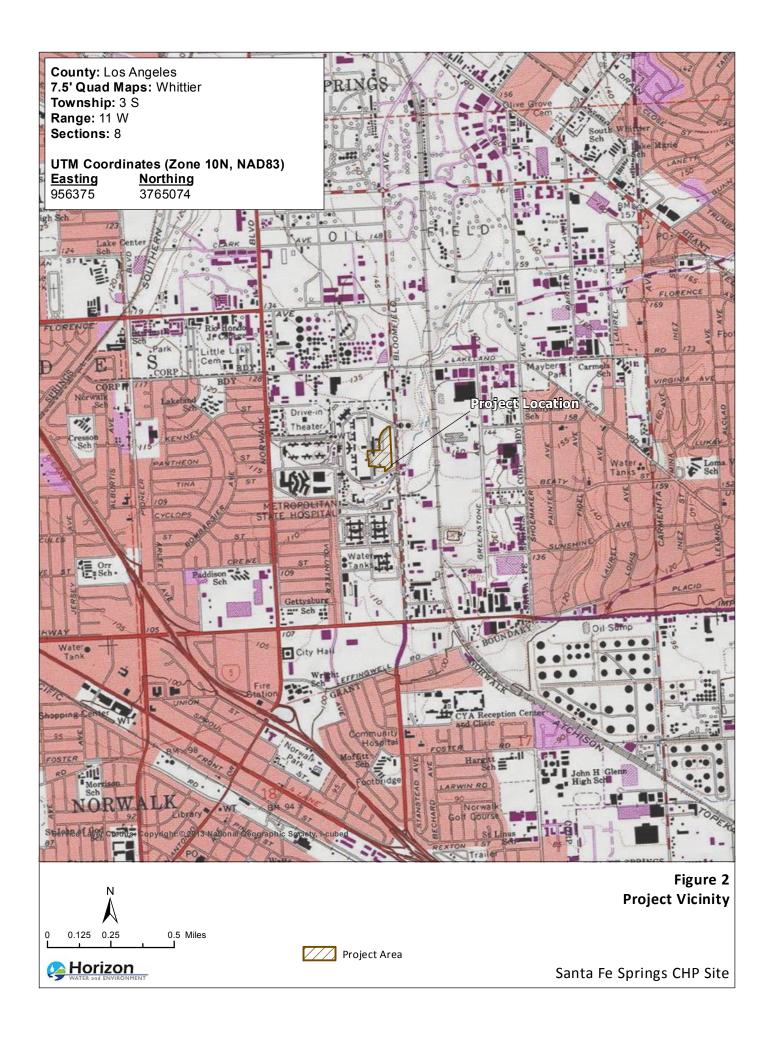
Native American Heritage Commission 1550 Harbor Blvd, Suite 100

1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691 916-373-3710 916-373-5471 – Fax nahc@nahc.ca.gov

Type	of L	ist	Req	uested

×	CEQA Tribal Consultation List (AB 52) – Per Public Resources Code § 21080.3.1, subs. (b), (d), (e) and 21080.3.2
	General Plan (SB 18) - Per Government Code § 65352.3. Local Action Type: General Plan General Plan Element General Plan Amendment
	Specific Plan Specific Plan Amendment Pre-planning Outreach Activity
equired	<u>Information</u>
Pı	roject Title: CHP Santa Fe Springs Office Replacement Project
\mathbf{L}_{0}	ocal Government/Lead Agency:California Highway Patrol/Department of General Services
C	ontact Person:
St	reet Address:707 Third Street, Suite 4-430
C	ty: West Sacramento Zip: 95605
Pl	none: 916-376-1604 Fax:
E	mail:jennifer.parson@dgs.ca.gov
Sı	pecific Area Subject to Proposed Action
	County: Los Angeles City/Community: Santa Fe Springs
Pı	roject Description:
	The California Highway Patrol is proposing to replace its existing office in Santa Fe Springs with a new office in the vicinity on property currently owned by the Metropolitan State Hospital.
dditiona	<u>l Request</u>
<u></u>	Sacred Lands File Search - Required Information:
	USGS Quadrangle Name(s): Whittier
	Township: 38 Range: 11W Section(s): 8





NATIVE AMERICAN HERITAGE COMMISSION

Cultural and Environmental Department 1550 Harbor Blvd., Suite 100 West Sacramento, CA 95691 Phone: (916) 373-3710 Email: nahc@nahc.ca.gov Website: http://www.nahc.ca.gov



October 10, 2018

Jennifer Parsons California Highway Patrol/Department of General Services

VIA Email to: Jennifer.parsons@dgs.ca.gov

RE: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, CHP Santa Fe Springs Office Replacement Project, Los Angeles County.

Dear Ms. Parsons,

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section. (Public Resources Code §21080.3.1(d))

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

In accordance with Public Resources Code section 21080.3.1 (d), formal notification must include a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation. The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the Area of Potential Effect (APE), such as:

- The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:
 - A listing of any and all known cultural resources that have already been recorded or are adjacent to the APE, such as known archaeological sites;
 - Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
 - Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
 - If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.
- 2. The results of any archaeological inventory survey that was conducted, including:
 - Any report that may contain site forms, site significance, and suggested mitigation measures.

All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

- 3. The result of the Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was <u>negative</u>.
- 4. Any ethnographic studies conducted for any area including all or part of the potential APE; and
- 5. Any geotechnical reports regarding all or part of the potential APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive or conclusive as to the presence of resources that may be tribal cultural resources. A negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we are able to assure that our consultation list remains current.

If you have any questions, please contact me at my email address: katy.sanchez@nahc.ca.gov.

Sincerely,

Katy Sanchez

Associate Environmental Planner

Attachment

Native American Heritage Commission Tribal Consultation List October 10, 2018

Gabrieleno Band of Mission Indians - Kizh Nation

Andrew Salas. Chairperson

P.O. Box 393

Covina . CA 91723

admin@gabrielenoindians.org

Gabrielino

(626) 926-4131

Gabrielino-Tongva Tribe

Charles Alvarez. Councilmember

23454 Vanowen St.

Gabrielino

West Hills

· CA 91307

roadkingcharles@aol.com

(310) 403-6048

Gabrieleno/Tongva San Gabriel Band of Mission Indians

Anthony Morales, Chairperson

P.O. Box 693

Gabrielino Tongva

San Gabriel , CA 91778

GTTribalcouncil@aol.com

(626) 483-3564 Cell

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson

106 1/2 Judge John Aiso St., #231

Los Angeles CA 90012 sgoad@gabrielino-tongva.com

(951) 807-0479

Gabrielino Tongva

Gabrielino Tongva Indians of California Tribal Council

Robert F. Dorame, Chairman

P.O. Box 490

Gabrielino Tongva

Bellflower CA 90707 otongva@gmail.com

(562) 761-6417 Voice/Fax

Gabrielino-Tonqva Tribe Linda Candelaria. Chairperson 80839 Camino Santa Juliana Indio CA 92203

lcandelaria1@gabrielinotribe.or Gabrielino

This list is current only as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Public Resources Code Sections 210080.1, 21080.3.1 and 21080.3.2. CHP Santa Fe Springs Office Replacement Project, Los Angeles County



Charles Alvarez, Council member Gabrielino-Tongva Tribe 23454 Vanowen Street West Hills, CA 91307

RE: CHP Santa Fe Springs Area Office Replacement Project – Tribal Coordination

Dear Mr. Alvarez:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither the DGS nor the CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

The CHP is proposing to replace its current office at 10051 Orr and Day Road in Santa Fe Springs, California, with a new facility. The proposed new office, located on 6 acres on the corner of Bloomfield Avenue and Elm Street at the entrance of the Metropolitan State Hospital in the City of Norwalk, California, is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the existing CHP Santa Fe Springs area office on Orr and Day Road and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed project would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

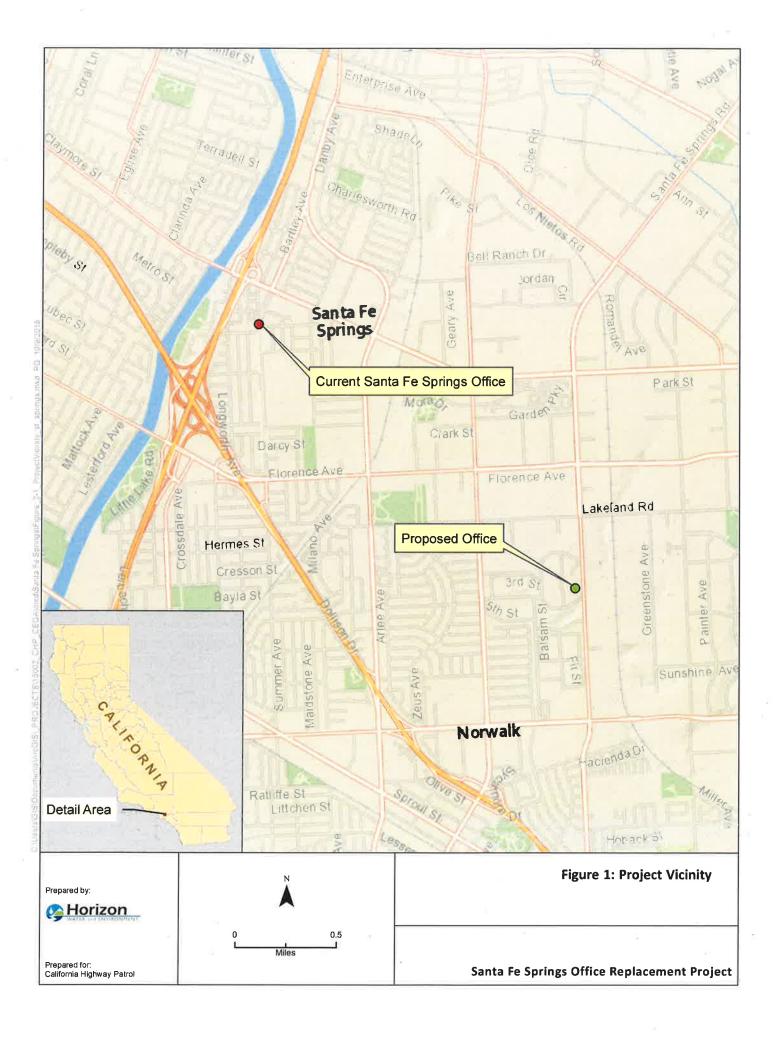
Sincerely,

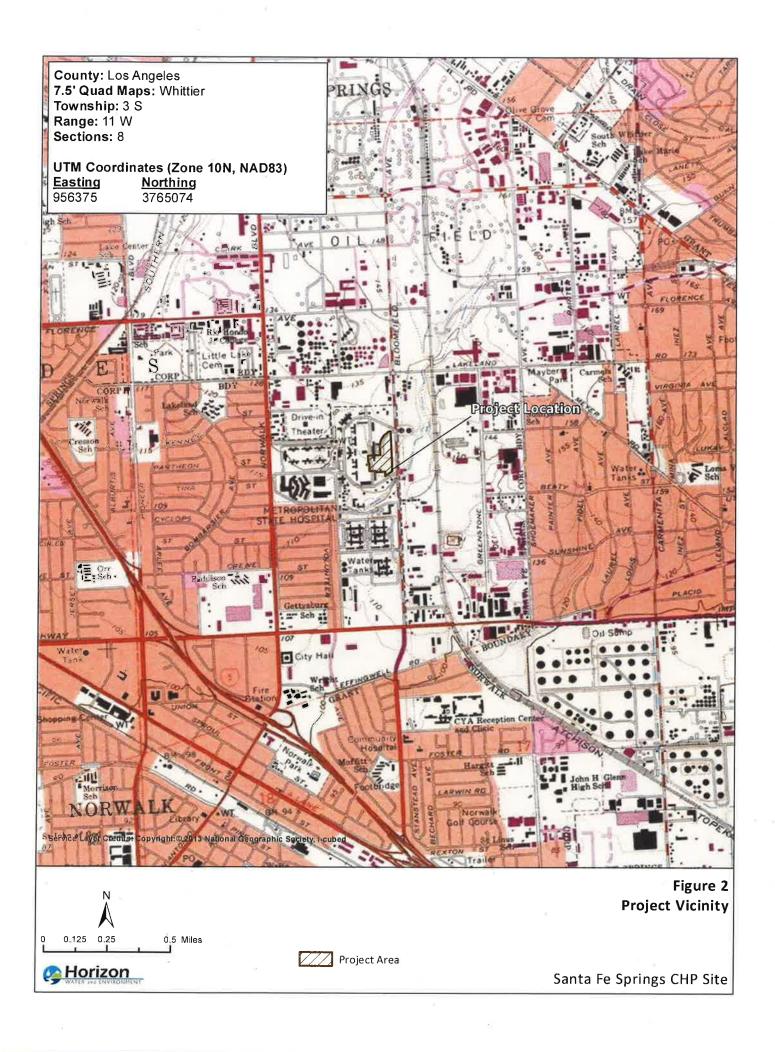
Jennifer Parson

Jennifer Parson

Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map







Linda Candelaria, Chairperson Gabrielino-Tongva Tribe 80839 Camino Santa Juliana Indio, CA 92203

RE: CHP Santa Fe Springs Area Office Replacement Project - Tribal Coordination

Dear Honorable Chairperson Candelaria:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither the DGS nor the CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

The CHP is proposing to replace its current office at 10051 Orr and Day Road in Santa Fe Springs, California, with a new facility. The proposed new office, located on 6 acres on the corner of Bloomfield Avenue and Elm Street at the entrance of the Metropolitan State Hospital in the City of Norwalk, California, is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the existing CHP Santa Fe Springs area office on Orr and Day Road and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed project would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

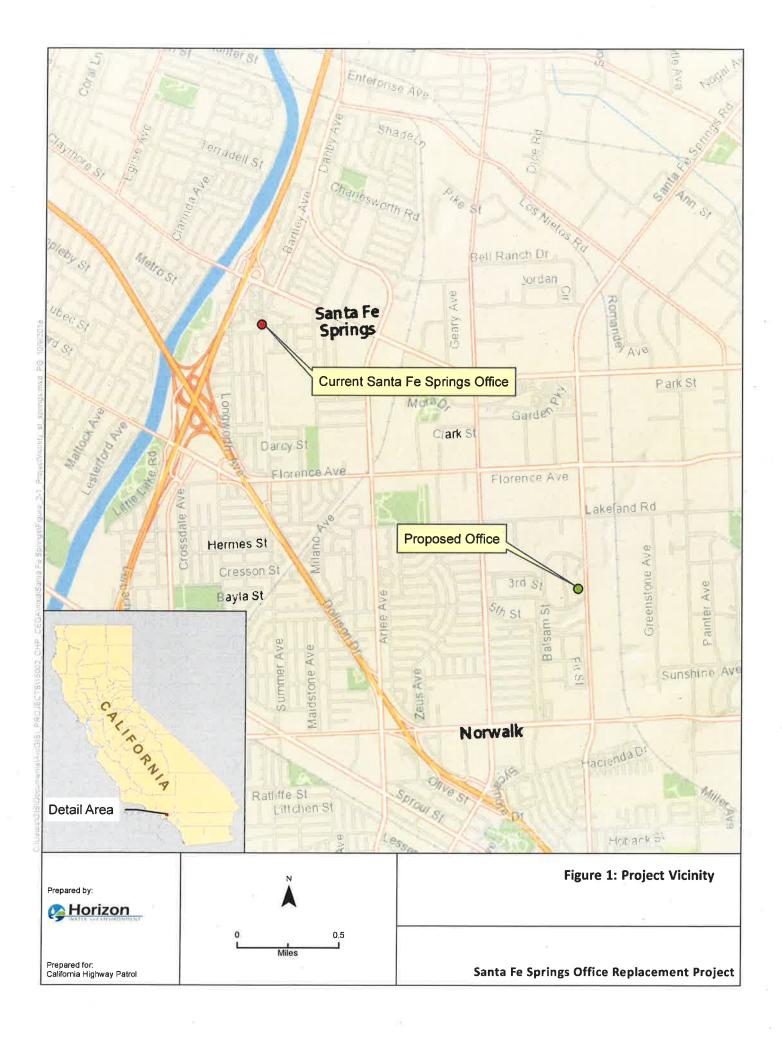
Sincerely,

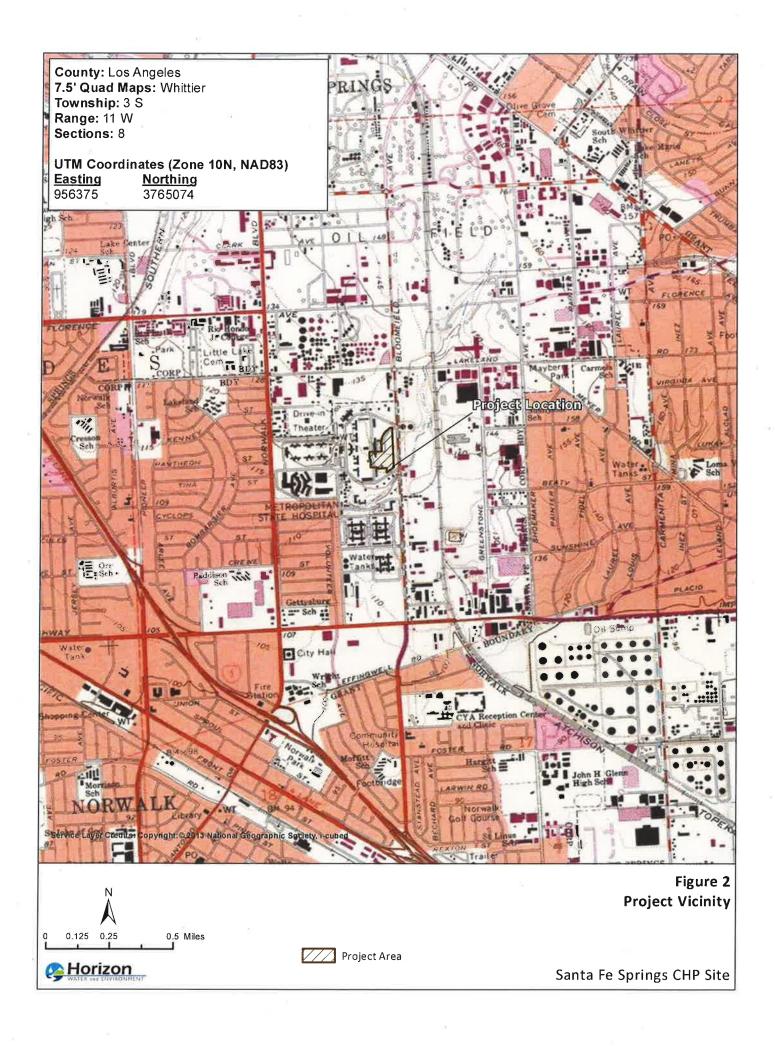
Jennifer Parson

Jennifer Parson

Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map







Robert F. Dorame, Chairperson Gabrielino Tongva Indians of California Tribal Council P.O. Box 490 Bellflower, CA 90707

RE: CHP Santa Fe Springs Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Dorame:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither the DGS nor the CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

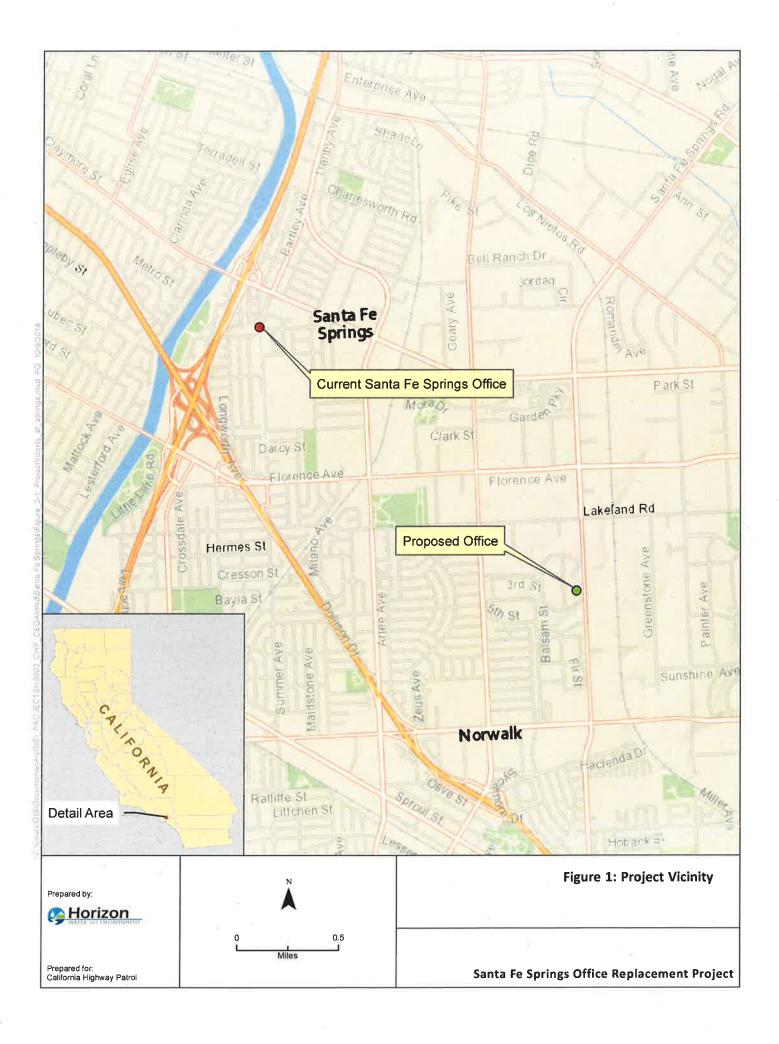
The CHP is proposing to replace its current office at 10051 Orr and Day Road in Santa Fe Springs, California, with a new facility. The proposed new office, located on 6 acres on the corner of Bloomfield Avenue and Elm Street at the entrance of the Metropolitan State Hospital in the City of Norwalk, California, is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the existing CHP Santa Fe Springs area office on Orr and Day Road and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed project would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

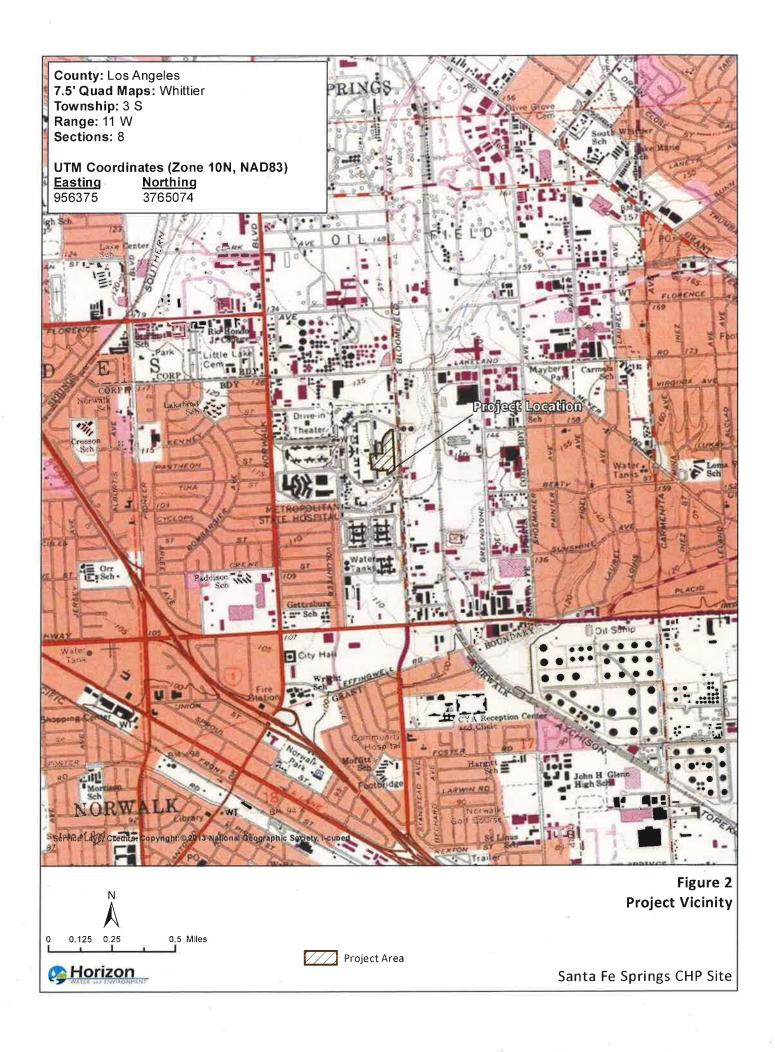
Sincerely,

Jennifer Parson

Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map







Sandonne Goad, Chairperson Gabrielino/Tongva Nation 106 ½ Judge John Aiso Street, #231 Los Angeles, CA 90012

RE: CHP Santa Fe Springs Area Office Replacement Project - Tribal Coordination

Dear Honorable Chairperson Goad:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither the DGS nor the CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

The CHP is proposing to replace its current office at 10051 Orr and Day Road in Santa Fe Springs, California, with a new facility. The proposed new office, located on 6 acres on the corner of Bloomfield Avenue and Elm Street at the entrance of the Metropolitan State Hospital in the City of Norwalk, California, is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the existing CHP Santa Fe Springs area office on Orr and Day Road and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed project would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

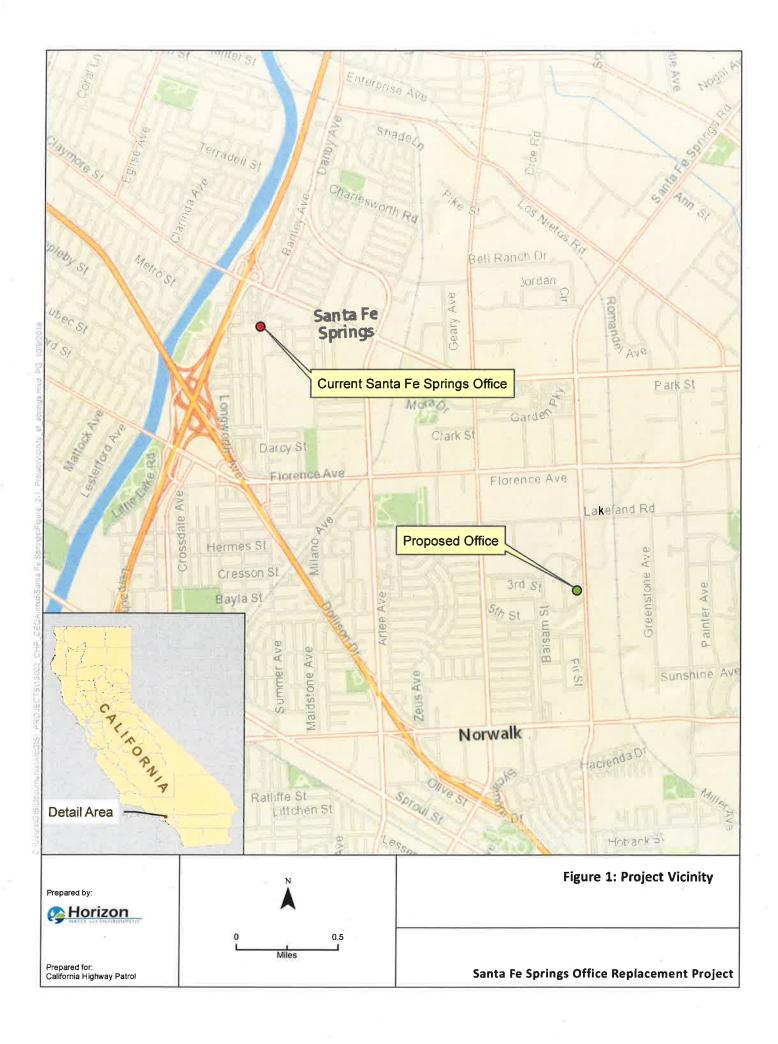
Sincerely,

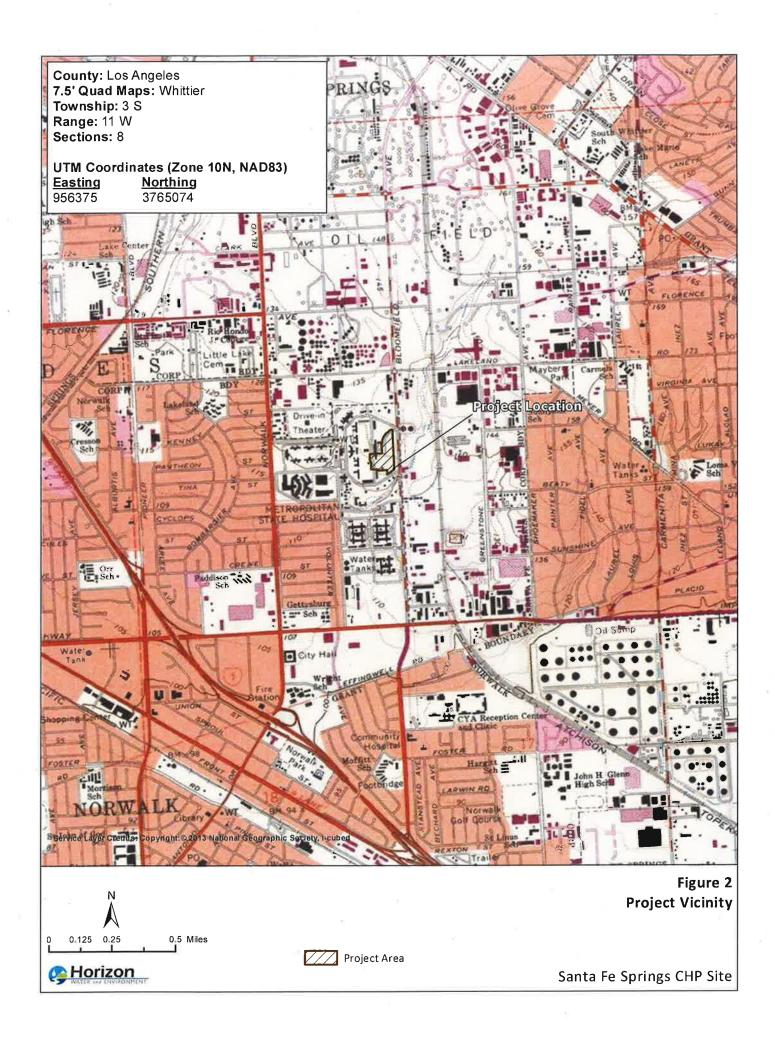
Jennifer Parson

Jennifer Parson

Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map







Anthony Morales, Chairperson San Gabriel Band of Mission Indians P.O. Box 693 San Gabriel, CA 91778

RE: Santa Fe Springs Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Morales:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. We are contacting you pursuant to your letter, dated December 1, 2016, in which you requested Assembly Bill 52 consultations on California Department of State Hospital (DSH) projects that have the potential to impact tribal cultural resources. Although CHP is the project proponent, the project is proposed to be located within the current Metropolitan State Hospital boundaries, which is under the jurisdiction of DSH, as described below.

CHP is proposing to replace its current office at 10051 Orr and Day Road in Santa Fe Springs, California, with a new facility. The proposed new office, located on 6 acres on the corner of Bloomfield Avenue and Elm Street at the entrance of the Metropolitan State Hospital in the City of Norwalk, California, is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the Santa Fe Springs area office on Orr and Day Road and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed project would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

A Sacred Lands and Files Search request at the Native American Heritage Commission (NAHC) did not identify any known tribal resources within the project area. We are requesting any information that you may have regarding tribal cultural resources (as defined by Public Resources Code 21074) within the project area so that this information can be incorporated into project planning. DGS is respectfully requesting a response from you within 30 days of receipt of this letter, pursuant to PRC 21080.3.1(b)(2).

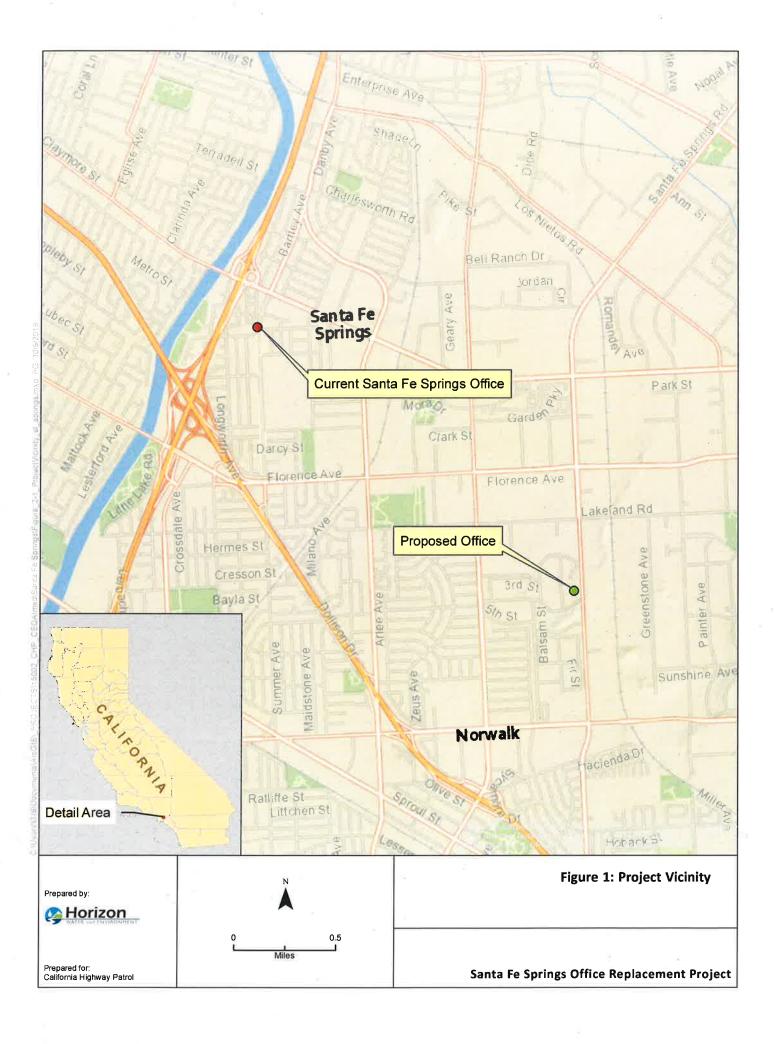
Sincerely,

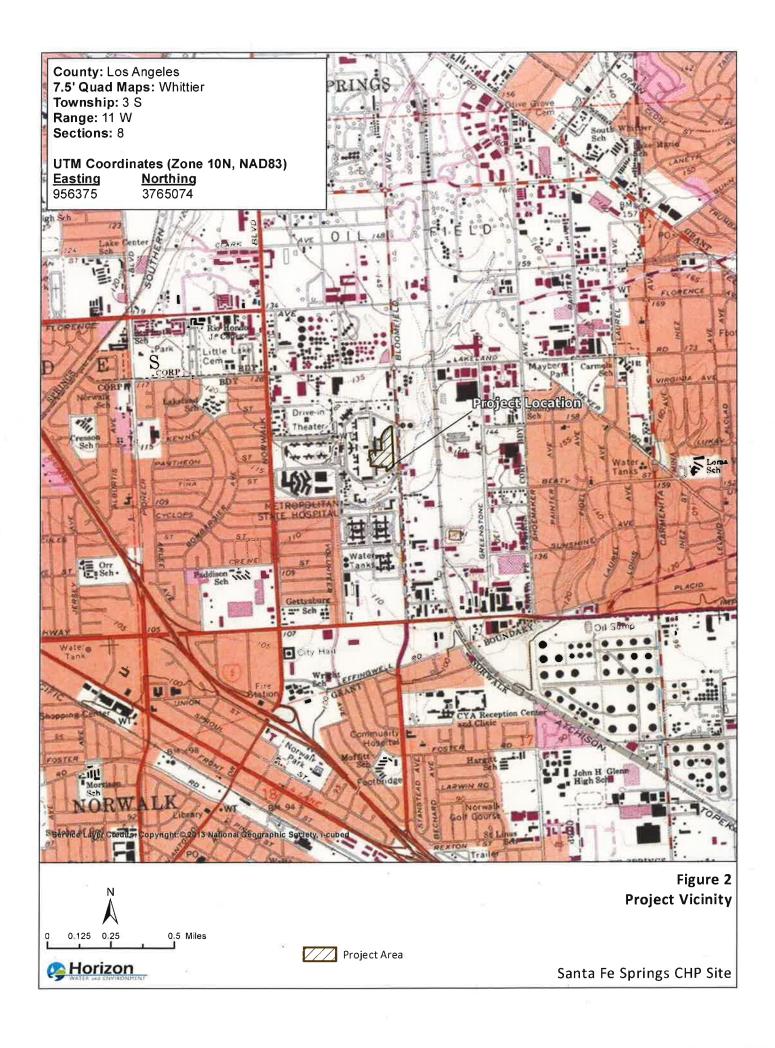
Jennifer Parson

Serrifer Parson

Senior Environmental Planner

Enclosures: Figure 1 – Project Vicinity Map







Andrew Salas, Chairperson Gabrieleno Band of Mission Indians – Kizh Nation P.O. Box 393 Covina, CA 91723

RE: CHP Santa Fe Springs Area Office Replacement Project – Tribal Coordination

Dear Honorable Chairperson Salas:

The Department of General Services (DGS), on behalf of the California Highway Patrol (CHP), is writing to notify you of a proposed project in order to coordinate with you and verify the existence of any information on known tribal resources that may be present or affected. It is important to note that neither the DGS nor the CHP has received a request from you for notification of projects under Assembly Bill 52 (AB52).

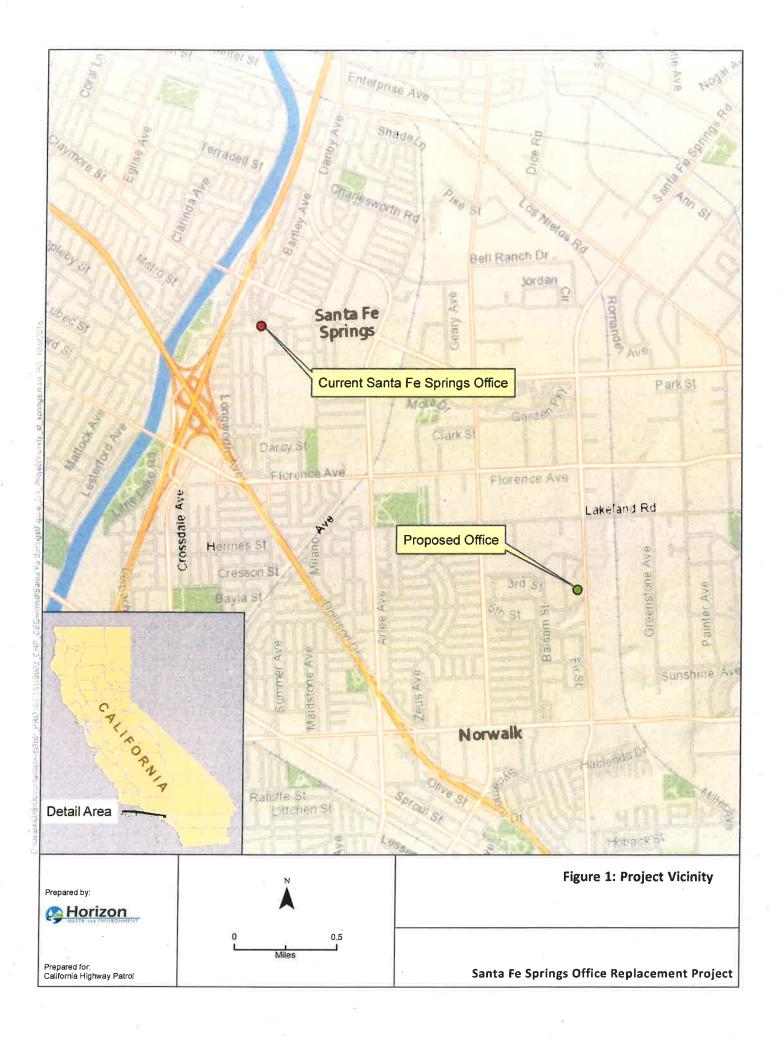
The CHP is proposing to replace its current office at 10051 Orr and Day Road in Santa Fe Springs, California, with a new facility. The proposed new office, located on 6 acres on the corner of Bloomfield Avenue and Elm Street at the entrance of the Metropolitan State Hospital in the City of Norwalk, California, is part of a statewide effort to replace aging or inadequate CHP field offices and other facilities. The purpose of the proposed project is to relocate the existing CHP Santa Fe Springs area office on Orr and Day Road and replace it with new facilities that would provide adequate workspace, equipment storage, and vehicle parking for an increasing number of employees assigned to this office. The proposed project would include four single-story structures (an office building, an automobile service building, a radio vault building, and a property-storage building); a communications tower with a total height of 148 feet; secured and visitor parking areas; enclosures and storage areas; a fuel island and gas tank; various utility improvements; and other ancillary improvements (i.e., fencing, flagpoles, landscaping, exterior lighting, etc.).

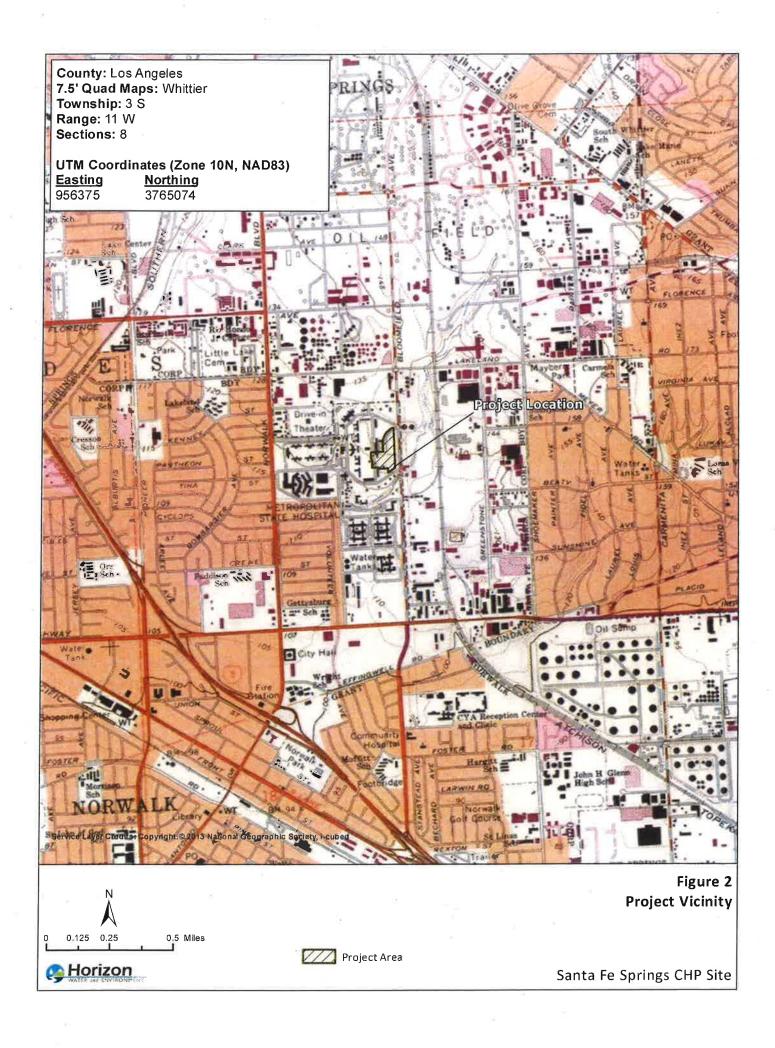
Sincerely,

Jennifer Parson

Senior Environmental Planner

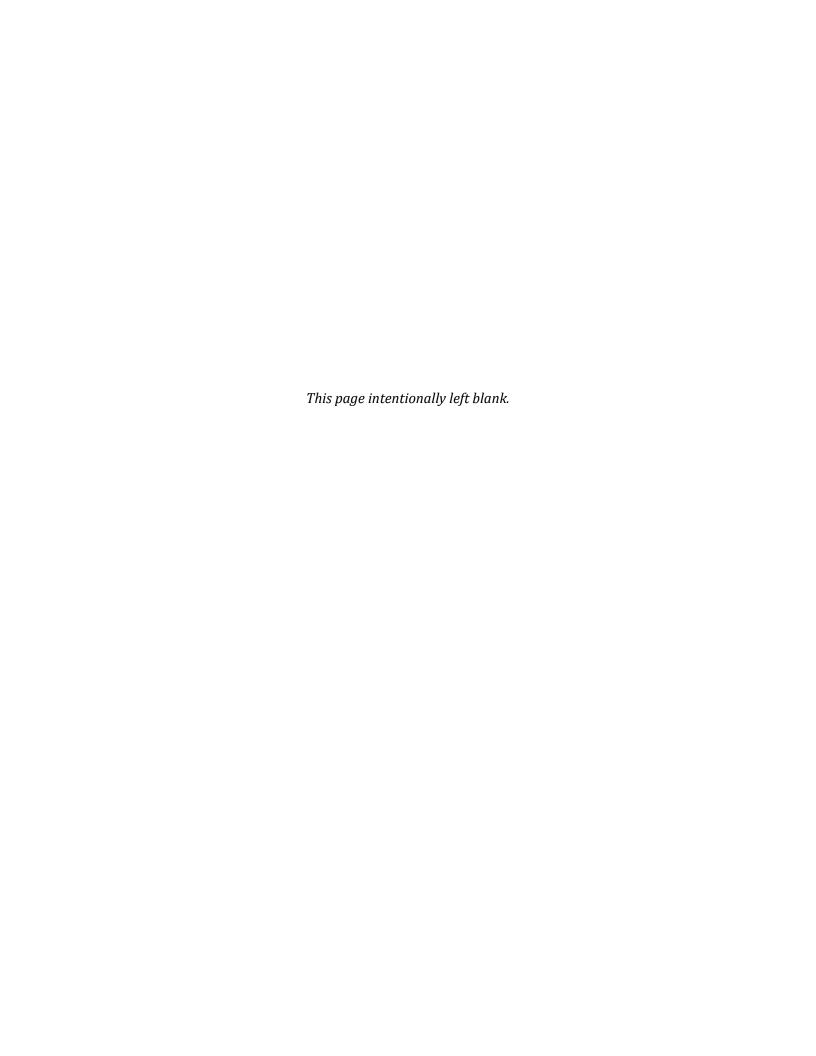
Enclosures: Figure 1 – Project Vicinity Map



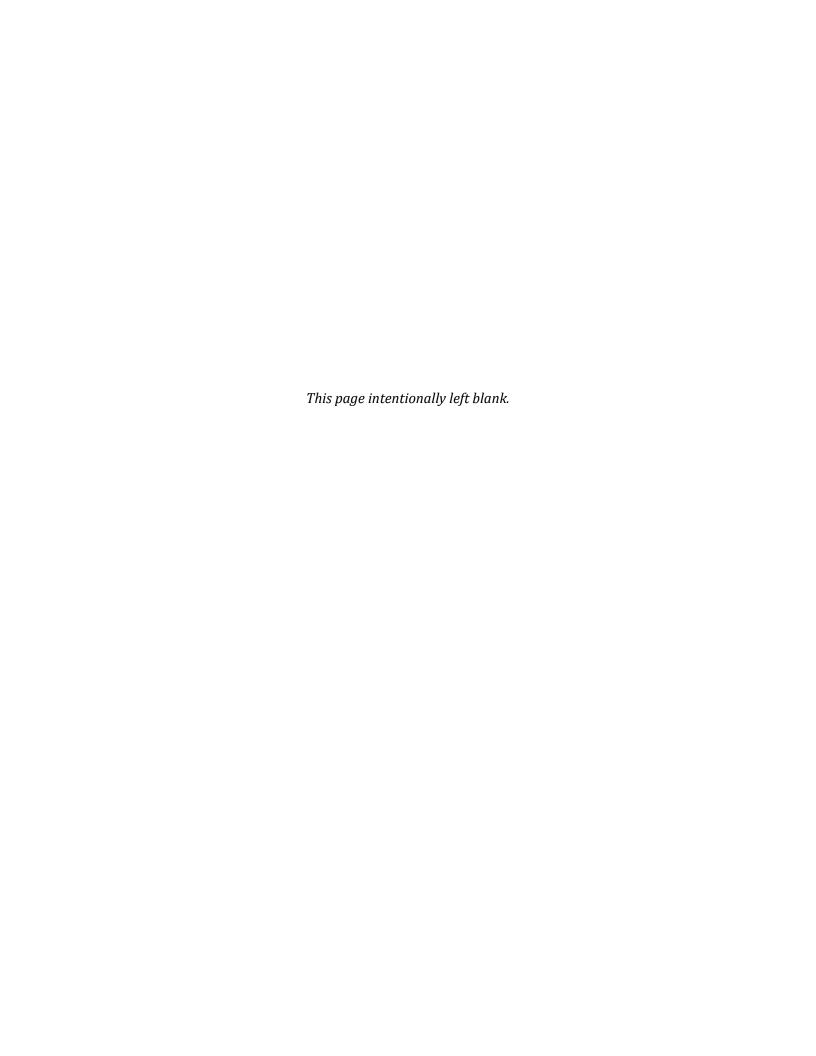


Appendix B CHRIS South Central Coastal Information Center Results

This appendix contains confidential information and has been removed.



Appendix C State Historic Preservation Officer Concurrence Letter





DEPARTMENT OF PARKS AND RECREATION OFFICE OF HISTORIC PRESERVATION

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

October 20, 2017

Reply in Reference to: CAGEN_2016_0601_001

Jennifer Parson
Senior Environmental Planner
Energy & Environmental Section
California Department of General Services
707 3rd St., 4th Floor
West Sacramento, CA 95605

RE: PRC 5024 Consultation for Metropolitan State Hospital, Final Historic Resources Inventory and Evaluation Report, 11401 Bloomfield Ave. Norwalk, Los Angeles County

Dear Ms. Parson:

OHP received the California Department of General Services (DGS) September 26, 2017 letter, on behalf of the Department of State Hospitals (DSH), continuing consultation pursuant to Public Resources Code PRC 5024 for the inventory and evaluation of Metropolitan State Hospital (MSH). In addition to your letter, the submission includes a revised Historic Resources Inventory and Evaluation Report, September 2017 (HRIER) with associated DPR523 forms.

The revised HRIER and DPR523 forms address OHP's comments (March 29, 2017).

DGS, on behalf of DSH, determined that Norwalk State Hospital Historic District is a Historic District eligible under National Register Criterion A for the important role it played in the evolution of public institutional mental health care, and under Criterion C at the state level of significance, as an intact representative example of Cottage Plan hospital design. The character-defining elements of the Historical District are site design, physical layout with 55 contributors and with contributing features. The Period of Significance (POS) is from 1915-1950.

Table B-1 of the DPR forms (District Record) listing the District's contributing resources is enclosed as a copy.

And DGS, on behalf of DSH, determined that the Historic District meets California Historical Landmark (CHL) Criterion 1 as the first fully realized, and last surviving, and

most significant Cottage Plan hospital complex, and meets Criterion 3 as a prototype example of the Cottage Plan campus design in California.

OHP has reviewed the documentation provided, and is offering the following comments.

I concur that the Norwalk State Hospital Historic District at 11401 Bloomfield Ave., Norwalk, Los Angeles County, is eligible under National Register A and C, and as a California Historical Landmark meeting criteria 1 and 3.

The Norwalk State Hospital Historic District will be added to the Master List of stateowned historical resources.

Should you have any questions or concerns, please contact Michelle C. Messinger, State Historian II of my staff at (916) 445-7005 or at Michelle.Messinger@parks.ca.gov.

Sincerely,

Julianne Polanco

State Historic Preservation Officer

CC: Debi Nishimoto, Department of State Hospitals (DSH)

Enclosure

Table B-1. DPR 523 Forms -Listed Alphabetically by Form Name, as ordered in appendix.

Note: Norwalk State Hospital Historic District is ordered first in this appendix, followed first by an alphabetical listing by for name of those resources (shown *italicized* below) that are located within the historic district boundary. Non-italicized resources that follow the historic district listing are not located within the historic district.

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Table B-1. DPR 523 Forms -Listed Alphabetically by Form Name, as ordered in appendix.

Note: Norwalk State Hospital Historic District is ordered first in this appendix, followed first by an alphabetical listing by for name of those resources (shown *italicized* below) that are located within the historic district boundary. Non-italicized resources that follow the historic district listing are not located within the historic district.

D. St. II.		X. 11 143.31	· · · · · · · · · · · · · · · · · · ·
Building No.	Resource Name	Year Built	Form Name
n/a	Residence 16 15 15 15 15 15 15 15 15 15 15 15 15 15	1948 : 5 1 ::	Residences 16,47,18,19 & Garages 16/17 & 18/19 & G
n/a	Residence 17	1948	Residences 16, 17, 18, 19 & Garages 16/17 & 18/19
n/a	Residence 18	1948	Residences 16, 17, 18, 19 & Garages 16/17 & 18/19
n/a	Residence 19	1948	Residences 16, 17, 18, 19 & Garages 16/17 & 18/19
n/a	Gorage 16/17 18/10	1948	Residences 16, 17, 18, 19 & Garages 16/17 & 18/19
n/a 20	Garage 18/19 Residence 20	1948	Residences 16, 17, 18, 19 & Garages 16/17 & 18/19
n/a	Garage/Guest House	1919 1919	Residence 20
n/a	Baseball Field	ca 1936	Residence 20 Garage
n/a	Basketball Court	ca. 1953-63	Sports Fields Sports Fields
n/a	Tennis Court	ca. 1953-63	Sports Fields
n/a	Vector Control/Disaster Shed	1925	Vector Control
301	Mara 301 Colored	1940	Ward,301
303	Birch Grove Homes	1922	Wards 303-304
304	Ward 304	1922	Wards 303-304
305/307	Cedar Street Homes	1921	Wards 305/307, 313/ 315
313/315	Ward 313/315	1921	Wards 305/307, 313/315
306/308	Ward 306/308	1915	Wards 306/308, 309/311
309/311	Ward 309/311 (CPS)	1918	Wards 306/308, 309/311
n/a	Property Warehouse 3	1948	Warehouse 3 & Fashion Center Storage
n/a	Fashion Center Storage (12 16 16 16 16 16 16 16 16 16 16 16 16 16	1948 🚛	Warehouse 3 & Fashion Center Storage
302	Wellness Center	1948	Wellness Center
	4. The resources listed below are not loca	tea within the	NOTWAIK State Hospital Historic District
401/409,	Chronic Treatment East (CTE)	1958	Chronic Treatment East, Chronic Treatment West, &
403/411,			Occupational Therapy Buildings
405/413,			
407/415			
402/410,	Chronic Treatment West (CTW)	1958	: Chronic Freatment East, Chronic Freatment West, & ***
404/412,			Occupational Therapy Buildings
406/414,			
408/416			
n/a	Occupational Therapy (OT) Clinic, CTE	1958	Chronic Treatment East, Chronic Treatment West, &
Tel ann no regularise. Dissalantes regularia menel	and the state of t	######################################	Occupational Therapy Bulldings
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n/a	Occupational Therapy (OT) Clinic, CTW	1958	Chronic Treatment East, Chronic Treatment West, &
			Occupational Therapy Buildings
n/a	Occupational Therapy (OT) Clinic; CTW	1958	Chronic Treatment East, Chronic Treatment West, &
		ar and desired and	Occupational Therapy Buildings
n/a	Cottage 1	1918-19	Cottage 1 & Garage
1.n/a	Garage Cottage 1	pre-1967	Gottage 1 & Garage
n/a	Cottage 5	1919	Cottages 5, 6, 7, and 8
n/a	Cottage 6.	1919	Cottages 5, 6, 7, and 8
n/a	Cottage 7	1919	Cottages 5, 6, 7, and 8

Appendix G

Noise Analysis Technical Appendix

Noise Calculations for Santa Fe Springs CHP

Daytime calculations

Construction Equipment 1 (Jackhammer)	88	dBA at 50 feet
Construction Equipment 2 (Multiple Equipment Types)	85	dBA at 50 feet

Combined Daytime Noise at 50 feet (Ltotal at 50 feet)

89.8 dBA

Ltotal=10 log(10^L1/10+10^L2/10)

Santa Fe Springs Noise Threshold Limits and Distances from Project Sites to those Limits for Construction Equipment

Noise Threshold	Threshold Level - Leq	Distance to Leq Threshold from Middle of Project Site (feet)
Daytime Limit (7 am-6 pm or sunset)	90	48.7
Daytime Limit (7 am-6 pm or sunset)	60	1,538.8

Noise Ordinance - Residential Daytime Ambient + 5 = 60 dB. No construction outside those hours without a permit. It doesn't sound like construction is exempt.

Source: Santa Fe Springs (2018) Noise Ordinance

Nearest Sensitive Receptors and Approximate Distances from Middle of Project Site

Sensitive Receptor	Distance (feet)
Nearest residences to center of work area	270

Vibration Source Levels for Construction Equipment (FTA 2006)

The factor of th					
Equipment	PPV at 25 feet	VBA			
Vibratory Roller	0.21	94			
Large Bulldozer	0.089	87			

Vibration Calculations with Equations for Vibration-Causing Equipment (use of vibratory roller) for Project Site

Thurschald	Distance to Threshold from Middle of Project	Nata	
Threshold	Site (feet)	Notes Building damage	-
		threshold (sensitive	
PPV=PPVref * (25/d)^1.5	36.3	buildings)	
	231.5	Human Perception (65)	65 VdB
			Federal - Annoyance 80 VdB, Damage 0.3 PPV,
Lvd=Lvref-30log(D/25)	73.2	Annoyance (Federal)	0.12 for sensitive buildings

Vibration Calculations with Equations for Vibration-Causing Equipment (use of Large Bulldozer) for Project Site

	Distance to Threshold from		
	Middle of Project		
Threshold	Site (feet)	Notes	
		Building damage	
		threshold (sensitive	
PPV=PPVref * (25/d)^1.5	20.5	buildings)	
	135.3	Human Perception (65)	65 VdB
Lvd=Lvref-30log(D/25)	42.8	Annoyance (Federal)	

Distance (feet) from Center of		
Project Site to Sensitive	Construction Noise	
Receptors	level dBA	Noise Level Equation: Leq = EL50-20*log(D/50)
270	75.1	Elm Street Apartments
1350	61.1	Plaza de la Raza Child Development Services
1475	60.4	Residence on Volunteer Ave.
2175	57.0	Vickies Kids Family Daycare

This list is from the project description. CalEEMod defaults are slightly different (no jackhammer, but has concrete saw)

Equipment List	Similar name used	dBA 50 from:		FTA 2006	
			FHWA	PPV at 25	
		FTA 2018	Handbook	feet	VBA
Dumptrucks (End and 10 wheel)			84	0.076	86
Compressor	Compressor (air)	80	80		
	Jackhammer	88			
Boom Truck	Crane, Mobile	83			
Crane	Crane	83	85		
Flatbed Delivery Truck			84		
Backhoe/Forklift/Loader		80	80		
Generator		82			
Grader	Grader	85	85		
Track Mounted Excavator	Excavator		85		
Front-end Loader			80		
Bulldozer	Dozer	85	85	0.089	87
Paving Equipment	Scraper, Paver	85	85		
Paving Equipment	Roller	85	85	0.21	94
Concrete Truck	Concrete mixer truck	85	85		
Compactor	Compactor (ground)	82	80		
Mowing equipment					

http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

Two loudest

Two largest vibration sources

Santa Fe Springs Sensitive Receptors	Distance (ft)		
Receptor	From Center	From Edge	
Residence - Homes for Life	270	20	
Assisted Living - Cedar St. Homes	600	310	
Residence on Volunteer Ave.	1475	1060	
Lakeland Elementary School	3500	3250	
Plaza de la Raza Child Development Services	1350	825	
Vickies Kids Family Daycare	2175	1775	
Kaiser Medical Clinic - Robert Dinh Hoang	3200	2800	
Calvary Chapel Santa Fe Springs	3800	3450	
Amelia Mayberry Park	4150	3830	
Middle & High Schools >1 mile			
Retirement Home >1 mile			

Airports:

Norwalk Sheriff Station Heliport 4,200 feet to the SW

Long Beach Airport8+ milesFullerton Municipal Airport6 milesCompton/Woodley10+ miles

Major sources of Noise

I-5 1 mile to the SW Railroad 870 to the E

Industrial Operations across Bloomfield Ave from the site



Appendix H

Transportation Analysis Supporting Information

Norwalk Related Projects List

Project Number	Address	Zoning	Project Description	Status
PDP 2000	13108 Domart	R-1	New single family dwelling	Pending Planning Commission Approval
PDP 2001	11018 Rosecrans	C-1	establish a recycling center	Pending Planning Commission Approval
PDP 2002	12061 163rd	R-1	New single family dwelling on a substandard lot	Pending Planning Commission Approval
PDP 2003	10632 Alondra	M-1	removal of 2 parking spots to place an Edison Electical Box/Transformer Pad	Pending Planning Commission Approval
PDP 2004	15213 Pioneer	R-1	Addition of Archways to the existing entrance gates; will include signs, lights and security cameras	Pending Planning Commission Approval
PDP 2005	11009 Rosecrans	C-1	Placement and operation of three (3) recycling containers for collection of used textiles, clothes and shoes.	Pending Planning Commission Approval
PDP 2006	14133 Pioneer	C-3	Establish new burger restaurant (BurgerIM) in existing building. Façade upgrade, new roof and HVAC unit	Pending Planning Commission Approval
PDP 2007	14020 Pioneer	C-3	Façade enhancement of existing structure and divide existing space to create three (3) new retail units.	Pending Planning Commission Approval
PDP 2008	12311 Firestone	C-3	lot line adjustment to include recently acquired south/east property and modify parking	Pending Planning Commission Approval

SANTA FE SPRINGS CUMULATIVE PROJECTS LIST

Project Name	Address	Land Use	Size	Status	Estimated Completion Year
Air Liquide	8832 Dice Road	Industrial	15,000sf	Formal application submitted, not yet approved.	2019
Aptus- Sorensen	8940 Sorensen Ave	Industrial	26,250sf (addition)	Approved, construction pending	2018
Aric Gless	11908 Bloomfield Ave	Industrial	8,022sf	Formal application submitted, not yet approved.	2019
Azar Event Center	12215 Slauson Ave	Commerical	920sf (addition)	Approved, under construction	2018
		Industrial	BLDG 1: 78,417sf	Approved, construction pending	2020
Breitburn Operating L.P.	12405 Telegrpah Road	Industrial	BLDG 2: 58,463sf	Approved, construction pending	2020
Breitburn Operating L.P.	12405 Telegipan Road	Industrial	BLDG 3: 121,124sf	Approved, construction pending	2020
		Industrial	BLDG 4: 60,117sf	Approved, construction pending	2020
		Industrial	BLDG 1: 74,038sf	Complete	2017
Bridge Development	13101, 13123 Rosecrans Ave	Industrial	BLDG 2: 75,331sf	Complete	2017
		Industrial	BLDG 3: 82,382sf	Complete	2017
Burke Real Estate Group	11756-11770 Burke St	Industrial	79,252sf	Formal application submitted, not yet approved.	*
Durable Properties	9951 Greenleaf Ave	Industrial	Approx. 38,000sf	Approved, construction pending	*
Golden State Storage	13020 Telegraph Rd	Self-Storage	56,426sf	Approved, construction pending	2019
		Industrial	BLDG 1: 403,635sf	Complete	2017
Goodman	12345 Lakeland Rd	Industrial	BLDG 2: 506,465sf	Complete	2018
		Industrial	BLDG 3: 300,700sf	Complete	2018
JSF Management, LLC	11212 Norwalk Blvd	Industrial	128,896 sf	Approved, construction pending	2019
Keana Development	9830 Jersey Avenue, 9841 Alburtis Avenue and 9851 Alburtis Avenue	Residential / multi-family	50-units	Complete	2018
Marquez Revocable Living Trust	SE/C of Dice Rd & Altamar	Industrial	BLDG 1: 35,500sf	Complete	2018
iviarquez Revocable Living Trust	SE/C of Dice Rd & Altamar	Industrial	BLDG 2: 13,500sf	Complete	2018
Maruichi American Corp	11529 Greenstone Ave	Industrial	53,190sf (addition)	Approved, under construction	2018
OC Engineering	9211 Sorensen Ave	Industrial	49,000sf	Complete	2018
OC Engineering	8739 Dice Road	Industrial	30,902sf	Formal application submitted, not yet approved.	2020
Ore International Inc	13360 Mollette St	Industrial	15,098sf (addition)	Formal application submitted, not yet approved	2019
Overton Moore	SE/C of Telegraph Rd / Painter Av	Industrial	41,340sf	Complete	2018
PPF Industrial 12016 Telegraph Road LP	10370 Slusher Drive	Industrial	25,132sf	Approved, construction pending	2019
Rexford Industrial	9615 Norwalk Blvd	Industrial	200,150sf	Approved, construction pending	2019
Roy Furuto & Associates	9911 Romandel Ave	Industrial	21,563sf	Complete	2018

Last Updated: 10/12/2018

SANTA FE SPRINGS CUMULATIVE PROJECTS LIST

Project Name	Address	Land Use	Size	Status	Estimated Completion Year
Roy Furuto & Associates	8312 Allport Ave	Industrial	8,926sf	Approved, construction pending	*
Roy Furuto & Associates	14114 Carmenita Rd	Industrial	42,594sf	Approved, construction pending	2018
Roy Furuto & Associates	13417 Rosecrans Ave	Commercial	3,453sf (gas station/convenience store); 2,635sf (mechanical car wash)	Approved, construction pending	2018
Roy Furuto & Associates	12636 Los Nietos Rd	Industrial	16,936sf	Approved, construction pending	*
Storm Properties	S/W corner of Carmenita Rd. and Lakeland Rd.	Residential / multi-family	128-units	Approved, construction pending	2020
UWS	9010-9016 Norwalk Blvd	Industrial	20,000sf	Approved, under construction	2019
VB-Marquardt	14013 Marquardt	Industrial	71,750sf	Approved, under construction	2018
Xebec Realty Partners	8201 Sorensen Ave	Industrial	233,789sf	Formal application submitted, not yet approved	2020

^{*} It appears the developer is either trying to selling the land with entitlements or there are complex environmental issues on-site. Contruction timeline is uncertain as plans are not yet in



TABLE A CONSTRUCTION TRIP GENERATION

		Trip Generation Summary							
			Daily	AM Peak Hour		lour	PM Peak Hour		our
TRIP TYPE	Size	Unit	Trips	ln	Out	Total	ln	Out	Total
Worker Trips	102	Workers/day	204	102	0	102	0	102	102
Hauling Trucks	42	Trucks/day	252	13	13	26	13	13	26
Total Trips (PCEs)			456	115	13	128	13	115	128

Note: For hauling/vendor truck trips, PCE factor of 3.0 was used.

- 1. Truck trips were assumed to arrive and depart between 7:00 AM and 5:00 PM, a 10-hour work day.
- 2. Trips were converted from truck trips to a passenger car equivalents of 3.0.



Appendix I

Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM SUMMARY TABLE

The following mitigation monitoring and reporting program (MMRP) summary table includes the mitigation measures identified in the California Highway Patrol (CHP) Santa Fe Springs Area Office Replacement Project Environmental Impact Report (EIR). For each mitigation measure, this table identifies monitoring and reporting actions that shall be carried out, the party responsible for implementing these actions, and the monitoring schedule. This table also includes a column where responsible parties can check off monitoring and reporting actions as they are completed. It is the responsibility of the Contractor to ensure that actions required for all of the mitigation measures listed herein are included in the project plans and specifications. It is the responsibility of the State to review and confirm that all of the mitigation measure actions described herein are in the project plans and specifications.

Acronyms and Abbreviations

CDFW California Department of Fish and Wildlife
CEQA California Environmental Quality Act

CHP California Highway Patrol

CRHR California Register of Historical Resources

DGS Department of General Services
EIR Environmental Impact Report

MLD Most Likely Descendant

MMRP mitigation monitoring and reporting program
NAHC Native American Heritage Commission
NRHP National Register of Historic Places
NSHHD Norwalk State Hospital Historic District

OSHA Occupational Safety and Health Administration

TCR tribal cultural resource

USFWS U.S. Fish and Wildlife Service

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	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
Biological Resou	ırces				
BIO-1	Conduct Pre-construction Surveys for Nesting Birds and Implement Non-disturbance Buffer Areas. To the extent feasible, all vegetation removal, including trees, shall occur between September 1 and January 14, which is outside the bird/raptor nesting season, to avoid potential impacts on nesting birds. If construction activities (including staging and vegetation removal) will occur during the nesting season (January 15 through August 31), the Project proponent shall retain a qualified wildlife biologist to conduct focused surveys for active bird nests on the Project site and within a 250-foot buffer no more than 7 days before initiation of construction activities. If no work occurs for a period of 5 days during the nesting season, surveys must be performed before work within 250 feet of suitable nesting substrate is resumed. If the survey indicates that no active nests are present, no further mitigation shall be required. If an active bird or raptor nest is located during the preconstruction surveys, a qualified biologist shall establish appropriate species-specific non-disturbance buffer zones in consultation with USFWS and/or CDFW. No Project activity shall commence within the non-disturbance buffer until a qualified	 N/A Provide the State with advance notice of construction schedule and anticipated start date. Support site access for qualified biologist. Do not initiate construction activities until Step #4 occurs. Inform the State if no work occurs for a period of 5 days or more during the nesting season, and follow Step #4. Halt or do not initiate construction activities until receive authorization from the State (based on nesting bird survey results). 	 Retain a qualified biologist to conduct preconstruction surveys. Ensure qualified biologist conducts pre-construction surveys of construction work area within 7 days before construction activity. If no construction work occurs for a period of 5 days during the nesting season, surveys must be performed before work is resumed. Authorize construction activities to proceed if a qualified biologist has confirmed that nests are no longer active. 	1. Prior to construction 2. Prior to construction 3. During construction 4. During construction	

	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
	biologist confirms that the nest is no longer active.				
Cultural Re	esources				
CR-1	Design the project to preserve contributing elements of the NSHHD. The project will be designed to preserve contributing elements to the historical resource within the project area, as feasible. Avoidance of existing interior paths and roadways (such as the sidewalk parallel to Cedar Street in the southwest part of the project area) and retention of existing mature trees (such as in the storm water retention areas, parking lots, and between the main building and Bloomfield Ave), where feasible, would partially mitigate the negative impact to the historical resource. The State will work with the SHPO to develop mitigation measures agreeable to all parties.	1. N/A 2. Ensure preservation of some of the elements that contribute to historical resources (as discussed in this mitigation measure) within the project area. 3. N/A	1. Design the project to preserve some historical resources within the project area. 2. Work with Contractor to ensure preservation of the contributing elements to historical resources as specified in this mitigation measure. 3. Work with the SHPO to develop mitigation measures.	1. Prior to construction 2. During construction 3. Prior to construction	
CR-2	Implement landscaping to enhance the scenic feeling of the original grounds. Landscape design will attempt to minimize the impacts to the open and scenic feeling of the grounds by establishing new plantings, that are compatible with the historic district landscaping. In addition, landscaping will be	N/A Work with the State to ensure that the new plantings fulfill the focus of this mitigation measure.	1. Incorporate landscaping into the project design that would retain the open and scenic feeling of the original grounds and	Prior to construction During/after construction	

	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
	designed to screen incompatible elements of the project (such as the 6-foot-tall concrete masonry unit wall) with compatible trees and shrubbery, to the degree feasible without compromising the safety and security of the facility.		screen incompatible elements. 2. Ensure that landscaping meets the focus of this mitigation measure.		
CR-3	Prepare documentation according to the standards of the Historic American Building Survey/Historic American Engineering Record and submit it to a local archive or repository for curation. Documentation in the form of a public report can be undertaken as mitigation. A typical documentation effort for a historical resource of this nature would include production of a historical narrative and accompanying photodocumentation. Photo-documentation would be undertaken with large-format black-andwhite film according to the standards of the Historic American Building Survey/Historic American Engineering Record and submitted to a local archive or repository for curation. (Submission of documentation materials to Library of Congress would not be required for historical resources of this nature). It is recommended that the mitigation measure of a public report establish specific production standards, reviewers and commenters, and final disposition of the public report if this option is undertaken. These specific requirements should	1. N/A 2. N/A	1. Obtain a qualified historian to prepare a report that includes a historical narrative and photo documentation that meets the standards of the Historic American Building Survey/Historic American Engineering Record and submit it to a local archive or repository for curation. 2. Ensure that the public report's mitigation measures includes the requirements specified in this	Prior to construction Prior to construction	

	Mitigation Measure be determined in consultation with interested local parties. Interested local parties include (but are not limited to) local preservation groups, and any local neighborhood groups that may express interest in the historical resources.	Contractor Responsibility	State Responsibility mitigation measure.	Monitoring Schedule	Completion Date and Initials
CR-4	Immediately Halt Construction if Cultural Resources Are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion in the CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources. If any cultural resources, such as structural features, unusual amounts of bone or shell, flaked or ground stone artifacts, historic-era artifacts, human remains, or architectural remains, are encountered during any project construction activities, work shall be suspended immediately at the location of the find and within a radius of at least 50 feet and the State will be contacted. All cultural resources accidentally uncovered during construction within the project site shall be evaluated for eligibility for inclusion in the NRHP/CRHR. Resource evaluations will be conducted by individuals who meet the U.S. Secretary of the Interior's professional standards in archaeology, history, or architectural history, as appropriate. For finds that are of Native American concerns, local Native American tribes will be notified, if they have requested notification. If any of the	1. Coordinate with the State to provide workers information about potential buried cultural resources. 2. If any cultural resources are discovered, halt construction immediately within 50 feet of the find, contact the State. 3. Do not resume construction in the vicinity of the finds until clearance is given by the State. 4. Implement all additional mitigation measures determined by the State.	1. Arrange for a qualified archaeologist to provide workers information about potential buried cultural resources. 2. Confirm that any discoveries of archaeological finds are evaluated and addressed properly in accordance with the mitigation measure. 3. Provide clearance for construction activities to resume once appropriate. 4. For any resources that would be rendered ineligible for listing in CRHR due to effects of	1. Prior to construction 2. During construction, if necessary 3. Following any cultural resource discovery 4. Following any cultural resource discovery	

	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
	resources meet the eligibility criteria identified in Public Resources Code § 5024.1 or CEQA § 21083.2(g), mitigation measures will be developed and implemented in accordance with CEQA Guidelines § 15126.4(b) before construction resumes. For resources eligible for listing in the CRHR that would be rendered ineligible by the effects of Project construction, additional mitigation measures will be implemented. Mitigation measures for archaeological resources may include (but are not limited to) avoidance; incorporation of sites within parks, greenspace, or other open space; capping the site; deeding the site into a permanent conservation easement; or data recovery excavation. Mitigation measures for archaeological resources shall be developed in consultation with responsible agencies and, as appropriate, interested parties such as Native American tribes. Native American consultation is required if an archaeological site is determined to be a TCR. Implementation of the approved mitigation would be required before resuming any construction activities with potential to affect identified eligible resources at the site.		project construction, determine additional mitigation measures in consultation with responsible agencies. Ensure implementation of those measures.		
CR-5	Immediately Halt Construction if Human Remains Are Discovered and Implement Applicable Provisions of the California Health and Safety Code. If human remains are accidentally discovered during the Proposed Project's construction	1. Include a stop work provision for the discovery of human remains in the project plans and specifications.	Confirm that a stop work measure for the discovery of human remains is included in project	preparation of plans and specifications	

Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
activities, the requirements of California Health and Human Safety Code § 7050.5 shall be followed. Potentially damaging excavation shall halt in the project site of the remains, with a minimum radius of 100 feet, and the Los Angeles County Coroner shall be notified. The Coroner is required to examine all discoveries of human remains within 48 hours of receiving notice of a discovery on private or state lands (California Health and Safety Code § 7050.5[b]). If the Coroner determines that the remains are those of a Native American, he or she must contact NAHC by phone within 24 hours of making that determination (California Health and Safety Code § 7050[c]). Pursuant to the provisions of Pub. Res. Code § 5097.98, the NAHC shall identify a Most Likely Descendent (MLD). The MLD designated by the NAHC shall have at least 48 hours to inspect the site and propose treatment and disposition of the remains and any associated grave goods. The State shall work with the MLD to ensure that the remains are removed to a protected location and treated with dignity and respect. Native American human remains may also be determined to be tribal cultural resources. The County Coroner will contend with the human remains if they are not of Native American origin.	 In the event that human remains are encountered, halt work and contact the State. Do not resume construction in the vicinity of the finds until clearance is given by the State. 	plans and specifications. 2. The State shall immediately contact the Los Angeles County Coroner upon notification of any findings of human remains. 3. Confirm that any discoveries of human remains are evaluated and addressed properly in accordance with the mitigation measure.	3. During construction	

	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
HAZ-1	Management of Unknown Hazardous Materials. If hazardous materials, wastes, or suspected soil contamination is encountered during construction of the Proposed Project, Project activities in that area should stop until appropriate health and safety procedures are implemented. CHP and/or its contractors shall be required to conduct an investigation to determine the composition of the encountered material, including sampling by an OSHA trained individual and testing at a certified laboratory. Once the composition of the material is known, CHP and/or its contractors shall ensure that workers are provided with adequate personal protective equipment to prevent unsafe exposure and properly manage, remove, report, and dispose of any hazardous materials or contaminated soil in a hazardous waste landfill.	or suspected soil contamination is encountered and halt work. 2. Implement appropriate health and safety procedures upon discovery. 3. Work with the State and an OSHA trained individual to determine the	1. Confirm that work is halted upon notification from the contractor of a discovery of hazardous materials, wastes, or suspected soil contamination. 2. Ensure that the contractor implements appropriate health and safety measures upon discovery. 3. Hire an OSHA certified contractor (if necessary) to determine the composition of the discovered material. 4. Ensure that the hazardous materials are properly removed. 5. After confirming that all hazardous	1. During construction 2. During construction 3. During construction 4. During construction 5. During construction	

	Mitigation Measure	Contractor Responsibility the State that it is	State Responsibility materials have	Monitoring Schedule	Completion Date and Initials
		ok to do so.	been removed, notify the contractor that work can be continued.		
Noise					
NOI-1	 Implement Vibration-reducing Measures The State and their construction contractor will implement the following vibration-reducing measures during all construction activities, unless as specified below, to minimize impacts on nearby sensitive receptors: Ensure proper tuning of vibration-causing equipment. Vibration damping devices will be used to the extent feasible. Use of vibratory equipment will be limited to the extent feasible. Vibration shields, such as sound aprons or temporary enclosures with soundabsorbing material, will be used on or around construction equipment, particularly if construction activities are conducted after 7:00 pm. For all construction activities occurring within 40 feet of residences at any time of day a temporary vibration barrier will be installed between the Project site and the nearest sensitive receptors. Following the 	 Include vibration reduction measures in the project plans and specifications. Implement the vibration reduction measures specified in this mitigation measure. N/A 	 Confirm that vibration reduction measures are included in project plans and specifications. Ensure implementation of the vibration reduction measures specified in this mitigation measure. Notify residences and other sensitive receptors within 500 feet of the Project site prior to the start of construction. 	1. During preparation of plans and specifications 2. During construction 3. Prior to construction	

	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials
	completion of construction activities within that distance, the barrier will be removed. The State will notify all residences and other sensitive receptors within 500 feet of the Project site prior to the initiation of the proposed construction activities. The notification will provide the name and contact information, including a phone number, of a State representative for use before and during construction activities to address any questions or concerns regarding the Project's construction activities or anticipated noise and vibration levels. If any occupants or other sensitive receptors report sensitive operations that could be affected, construction activities will be modified to minimize vibration near those buildings. Potential modifications include limiting the hours of operation for pieces of equipment that are major vibration sources and maximizing the distance between these pieces of equipment and sensitive buildings.				
Transportation					
TRA-1	Prepare and Implement a Construction Traffic Management Plan The Contractor shall prepare and implement a construction traffic management plan to reduce potential interference with an emergency response plan, as well as to reduce potential traffic safety hazards and ensure adequate	1. Work with the State to include this mitigation measure in the project construction plans and specifications.	1. Review and approve project construction plans and specifications to confirm that this mitigation	 Prior to construction. Prior to construction. Prior to construction. 	

access for emergency responders. Development 2. Prepare and and implementation of this plan shall be coordinated with the Cities of Norwalk and Santa Fe Springs. CHP or the California Department of General Services (DGS) shall ensure that the plan is implemented during construction. The plan shall include, but will not be limited to, the following items:

- Identify construction truck haul routes to limit truck and automobile traffic on nearby streets. The identified routes will be designed to minimize impacts on vehicular and pedestrian traffic, circulation, and safety. Identified haul routes will be recorded in the contract documents.
- Implement comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, warning and detour signs (if required), lane closure procedures (if required), and cones for drivers.
- Evaluate the need to provide flaggers or temporary traffic control at key intersections along the haul route during all or some portion of the construction period.
- Notify adjacent property owners and public safety personnel regarding timing of major deliveries, detours, and lane closures.
- Develop a process for responding to and tracking complaints pertaining to construction activity, including identification of an on-site complaint

- implement a Traffic Management Plan that includes, at a minimum, all of the elements in this mitigation measure.
- 3. Document road pavement conditions for all routes that would be used by construction vehicles before and after construction.
- 4. Repair damaged areas to a level at which they existed before project construction.

- measure has been included.
- 2. Review and approve the Traffic Management Plan, and ensure that it is implemented.
- 3. Ensure that the contractor documents road pavement conditions for all routes that would be used by construction vehicles before and after project construction.
- 4. Ensure damaged areas are repaired to a level at which they existed before project construction.

4. Postconstruction.

	Mitigation Measure	Contractor Responsibility	State Responsibility	Monitoring Schedule	Completion Date and Initials	
	manager. Post 24-hour contact information for the complaint manager on the site.					
	Document road pavement conditions for all routes that would be used by construction vehicles before and after Project construction. Make provisions to monitor the condition of surface streets used for haul routes so that any damage and debris attributable to the haul trucks could be identified and corrected. Roads damaged by construction vehicles shall be repaired to the level at which they existed before Project construction.					
Tribal Cultural Re	Tribal Cultural Resources					
See CR-4 and CR-5						

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