



Prepared For:

City of Lompoc
Planning Division
100 Civic Center Plaza
P.O. Box 8001
Lompoc, CA 93438

Central Coast Business Park Specific Plan

Environmental Impact Report

SCH No. 2014021048



Final
Environmental Impact Report

Central Coast Business Park Specific Plan

City of Lompoc

(SCH No. 2014021048)

Prepared for:

City of Lompoc
100 Civic Center Plaza
Lompoc, California 93436

Prepared by:

Meridian Consultants LLC
910 Hampshire Road, Suite V
Westlake Village, California 91361

October 2015

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1.0 INTRODUCTION

PURPOSE

This Final Environmental Impact Report (Final EIR) has been prepared for the Central Coast Business Park Specific Plan (Project) by the City of Lompoc (the City). The purpose of a Final EIR is to provide an opportunity for the Lead Agency to respond to comments made by the general public and public agencies on the information, analysis, and conclusions in the Draft EIR. The document was created in accordance with the California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.) and the “Guidelines for the Implementation of the California Environmental Quality Act” (California Code of Regulations, Title 14, Section 15000 et seq., State CEQA Guidelines).

The City will consider the public comments and comprehensive planning analysis in the Final EIR before it approves, denies, or makes changes to the Project. The evaluation and response to these comments is highly important to the CEQA process. It allows for a comprehensive review on the methods of analysis used within the Draft EIR; the opportunity to detect and respond to omissions; the ability to check the adequacy and veracity of the analysis; and the opportunity to share both expert opinions and public concerns about the Project.

ORGANIZATION OF FINAL EIR

As required by the CEQA Guidelines Section 15132, this Final EIR includes the following information:

- The Draft EIR or a revision of the draft. This Final EIR incorporates the Draft EIR by reference.
- A list of persons, organizations, and public agencies commenting on the Draft EIR.
- The comments received on the Draft EIR.
- The responses to significant environmental points raised in the comments received.
- The revisions to the Draft EIR.

The Final and Draft EIR are available for review at the following locations:

City of Lompoc
Economic Development Department/Planning Division
100 Civic Center Plaza
Lompoc, California 93436

In addition, the Final EIR and Draft EIR are available on the City’s website at:

<http://www.cityoflompoc.com/>

ENVIRONMENTAL REVIEW PROCESS

The City is the Lead Agency responsible for preparation of this Final EIR because it has the principal responsibility for approving and implementing the Project.

On February 24, 2014, the City circulated a Notice of Preparation (NOP) (State Clearinghouse Number [SCH] 2014021048) of an EIR for review and comment by the public and by responsible and reviewing agencies. The 30-day NOP review period ended on March 24, 2014. The City then prepared the Draft EIR, including an analysis of potential impacts related to the following 12 environmental topics:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality and Greenhouse Gas Emissions
- Cultural Resources
- Hazards and Hazardous Materials
- Geology and Soils
- Land Use and Planning
- Noise
- Public Services
- Recreation
- Traffic and Transportation
- Utilities and Service Systems

The City released the Draft EIR for a 45-day public review period beginning June 22, 2015 and ending on August 5, 2015. A Notice of Completion of the Draft EIR was provided to the State of California Governor's Office of Planning and Research State Clearinghouse for environmental review documents with copies for review by state agencies.

A Notice of Availability of the Draft EIR for review was also mailed by the City to all owners of property located within 300 feet of the Project site and others who requested this notice. In addition, the Notice of Availability was also published on June 28, 2015 in the *Lompoc Record* and filed with the Santa Barbara County Clerk.

Following the completion of the review period for the Draft EIR, the City prepared this Final EIR as required by Section 15089 of the State CEQA Guidelines. The Final EIR consists of the June 2015 Draft EIR, comments received by the City during the 45-day public comment period, responses to those

comments, and changes to the text of the Draft EIR. Note that, as stated previously, this Final EIR incorporates the Draft EIR by reference.

Prior to considering approval of the Project, CEQA Guidelines Section 15090 requires the City to certify the following:

- The Final EIR was completed in compliance with CEQA.
- The Final EIR was presented to the City Council and Planning Commission and that the City Council and Planning Commission reviewed and considered the information contained in the Final EIR prior to considering approval of the Project.
- The Final EIR reflects the City's independent judgment and analysis.

Section 15191 of the State CEQA Guidelines requires the City to make one or more written findings of fact for each significant environmental impact identified in a certified Final EIR. The possible findings include the following:

- The Project was changed (including adoption of mitigation measures) to avoid or substantially reduce the magnitude of the impact.
- Changes to the Project are within another agency's jurisdiction and have been or should be adopted.
- Specific considerations make mitigation measures or alternatives infeasible.

After considering the information in the Final EIR and making the required findings, the City may consider approval of the Project. If impacts are identified in the Final EIR as significant and unavoidable, the City is required to prepare a Statement of Overriding Considerations, identifying the specific benefits of the Project that the City determines outweigh the unavoidable impacts of the Project.

Section 15097 of the CEQA Guidelines requires the City to adopt a Mitigation Monitoring and Reporting Program (MMRP) to ensure that the mitigation measures identified for the Project in the EIR are implemented.

CONTENTS OF THE FINAL EIR

A description of the organization of this Final EIR and the contents of each section are provided below to assist the reader in using this Final EIR as a source of information about the proposed project. The Final EIR has been organized to include the other required elements of a Final EIR in a format that provides easy access for the reader to the most important information related to the key issues associated with this proposed project. Sections of the Final EIR following this Introduction are organized as follows:

Section 2.0, Comments and Responses to Comments, contains a list of public agencies and private parties that submitted written comments on the Draft EIR during the public review period. A copy of each letter received by the City of Lompoc commenting on the Draft EIR is provided, followed by written responses to each comment contained in the letters.

Section 3.0, Revisions to the Draft EIR, contains revisions made to the Draft EIR resulting from comments made on the Draft EIR, minor staff edits, or minor modifications made to the project.

2.0 RESPONSES TO COMMENTS

INTRODUCTION

This section of the Final Environmental Impact Report (EIR) presents copies of comments on the Draft EIR received in written form during the public review period, and it provides the City of Lompoc's (City) responses to those comments. Each comment letter is numbered, and the subjects within each comment letter are identified by brackets and numbers. Comment letters are followed by responses, which are numbered to correspond with the bracketed comment letters.

The City's responses to comments on the Draft EIR represent a good-faith, reasonable effort to address the environmental issues identified by the comments. Under the *California Environmental Quality Act (CEQA) Guidelines*, the City is not required to respond to all comments on the Draft EIR, but only to those comments that raise environmental issues (refer to *CEQA Guidelines*, Section 15088[a]). Case law under CEQA recognizes that the City need only provide responses to comments that are commensurate in detail with the comments themselves. In the case of specific comments, the City has responded with specific analysis and detail; in the case of a general comment, the reader is referred to a related response to a specific comment, if possible. The absence of a specific response to every comment does not violate CEQA if the response would merely repeat other responses.

Organization and Table of Comment Letters

The City received a total of seven comment letters from State agencies, regional agencies, and local agencies. **Table 2.0-1, Comment Letters Received on the Central Coast Business Park Specific Plan EIR**, provides a list of all comment letters received and the identification number for each letter.

**Table 2.0-1
Comment Letters Received on the Central Coast Business Park Draft EIR**

Agency/Entity/Individual	Name of Commenter	Date of Comment	Letter No.
State Agencies			
State of California, Office of Planning and Research	Scott Morgan, Director, State Clearinghouse	August 6, 2015	1
State of California, Department of Transportation	Philip Crimmins, Aviation Environmental Specialist	August 4, 2015	2
State of California, Department of Transportation	Adam, Fukushima Development Review, Caltrans District 5	August 4, 2015	3
County Agencies			
Santa Barbara County Association of Governments	Andrew P. Orfila, Senior Transportation Planner	July 1, 2015	4
County of Santa Barbara	Mona Miyasato, County Executive Officer	August 3, 2015	5
County of Santa Barbara Fire Department	Ray Navarro, Fire Marshal	July 17, 2015	6
Santa Barbara County Air Pollution Control District	Carly Barham, Air Quality Specialist	August 7, 2015	7
Private Groups			
Santa Ynez Band of Mission Indians, Tribal Elders Council	Tonie Flores, Chairperson	August 15, 2015	8



Edmund G. Brown Jr.
Governor

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit



Ken Alex
Director

August 6, 2015

RECEIVED

AUG 10 2015

Lucille T. Breese
City of Lompoc
100 Civic Center Plaza
Lompoc, CA 93438-8001

Planning Division

Subject: Central Coast Business Park Project
SCH#: 2014021048

Dear Lucille T. Breese:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on August 5, 2015, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report
State Clearinghouse Data Base**

RECEIVED

AUG 10 2015

SCH# 2014021048
Project Title Central Coast Business Park Project
Lead Agency Lompoc, City of

Planning Division

Type EIR Draft EIR
Description The project includes the proposed adoption of a Specific Plan allowing development of up to 581,635 sf of industrial and warehouse development. Parcels would range in size between 2.44 to 3.49 acres. These lots may be developed over time individually or combined and developed to accommodate larger tenants.

Lead Agency Contact

Name Lucille T. Breese
Agency City of Lompoc
Phone (805) 875-8723
email
Address 100 Civic Center Plaza
City Lompoc
Fax
State CA **Zip** 93438-8001

Project Location

County Santa Barbara
City Lompoc
Region
Lat / Long 34° 39' 46" N / 120° 28' 23" W
Cross Streets V Street and Barton Avenue, Central Avenue
Parcel No. 93-450-014, -015, and -016
Township **Range** **Section** **Base**

Proximity to:

Highways Hwy 1, 246, 101
Airports Lompoc Airport
Railways
Waterways Santa Ynez River
Schools
Land Use Currently agricultural production. A sand and gravel mine, animal services facility and household hazardous waste collection/disposal facility. East: along the northern portion of the project site, is vacant land designated for airport/aviation uses and business park by the General Plan. Residential neighborhood.
GPLU:Business Park (BP); Z: Business Park (BP)

Project Issues Aesthetic/Visual; Agricultural Land; Air Quality; Archaeologic-Historic; Geologic/Seismic; Noise; Public Services; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Landuse; Cumulative Effects; Other Issues

Reviewing Agencies Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; California Highway Patrol; Caltrans, District 5; Air Resources Board; Regional Water Quality Control Board, Region 3; Native American Heritage Commission

Date Received 06/22/2015 **Start of Review** 06/22/2015 **End of Review** 08/05/2015

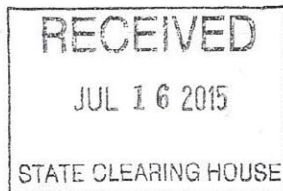
DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS
P. O. BOX 942874, MS-40
SACRAMENTO, CA 94274-0001
PHONE (916) 654-4959
FAX (916) 653-9531
TTY 711
www.dot.ca.gov



Serious drought
Help save water!

C1290
8/5/15
e



July 16, 2015

Ms. Lucille Breese
City of Lompoc
100 Civic Center Plaza
Lompoc, CA 93463

Dear Ms. Breese:

Re: Draft Environmental Impact Report for the Central Coast Business Park Specific Plan:
SCH No. 2014021048

The California Department of Transportation (Caltrans), Division of Aeronautics (Division), reviewed the above-referenced document with respect to airport-related noise and safety impacts and regional aviation land use planning issues pursuant to the California Environmental Quality Act (CEQA). The Division has technical expertise in the areas of airport operations safety, noise, and airport land use compatibility. We are a funding agency for airport projects and we have permit authority for public-use and special-use airports and heliports. The following comments are offered for your consideration.

The proposed project is the Central Coast Business Park Specific Plan which would allow for the development of a planned business park to include a mix of manufacturing, warehouse, hangar/storage, and office uses. The project site is located approximately 400 feet south of the Runway 7 centerline at Lompoc Airport.

In accordance with CEQA, Public Resources Code Section 21096, the California Airport Land Use Planning Handbook (Handbook) must be utilized as a resource in the preparation of environmental documents for projects within airport land use compatibility plan boundaries or if such a plan has not been adopted, within two miles of an airport. The Handbook is a resource that should be applied to all public use airports and is available on-line at <http://www.dot.ca.gov/hq/planning/aeronaut/documents/AirportLandUsePlanningHandbook.pdf>

Due to its proximity to the airport, the project site may be subject to aircraft overflights and subsequent aircraft-related noise impacts. Since communities vary greatly in size and character from urban to rural, the level of noise deemed acceptable in one community is not necessarily the same for another community.

California Public Utilities Code (PUC) Section 21659 prohibits structural hazards near airports in accordance with Federal Aviation Regulation, Part 77 "Objects Affecting Navigable Airspace." A Notice of Proposed Construction or Alteration (Form 7460-1) may be required by the Federal Aviation Administration (FAA). Form 7460-1 is available on-line at <https://oeaaa.faa.gov/oeaaa/external/portal.jsp> and should be submitted electronically to the FAA.

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Ms. Lucille Breese
July 16, 2015
Page 2

The location and type of landscaping trees, and their mature height, is also a potentially significant concern. Trees should be selected carefully so they do not become a hazard to aircraft around the airport.

In accordance with PUC Section 21676 *et seq.*, prior to the amendment of a general plan or specific plan, or the adoption or approval of a zoning ordinance or building regulation within the planning boundary established by the airport land use commission (ALUC), the local agency shall first refer the proposed action to the ALUC.

If the ALUC determines that the proposed action is inconsistent with the airport land use compatibility plan, the referring agency shall be notified. The local agency may, after a public hearing, propose to overrule the ALUC by a two-thirds vote of its governing body after it makes specific findings. At least 45 days prior to the decision to overrule the ALUC, the local agency's governing body shall provide to the ALUC and the Division, a copy of the proposed decision and findings. The Division reviews and comments on the specific findings a local government intends to use when proposing to overrule an ALUC. The Division specifically looks at the proposed findings to gauge their relationship to the overrule.

In addition to submitting the proposal to the ALUC, it should also be coordinated with Lompoc Airport staff to ensure that the proposal will be compatible with future as well as existing airport operations.

These comments reflect the areas of concern to the Division with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 5 office concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please contact me at (916) 654-6223, or by email at philip.crimmins@dot.ca.gov.

Sincerely,

Original Signed by

PHILIP CRIMMINS
Aviation Environmental Specialist

c: State Clearinghouse, Santa Barbara County ALUC, Lompoc Airport

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to enhance California's economy and livability"*

Letter No. 1: Scott Morgan, Director, California State Clearinghouse, August 10, 2015

Response 1-1

The comment notes that the Clearinghouse is submitting comments (Department of Transportation Letter No. 2) which are being forwarded, and should be addressed in the Final EIR. The City acknowledges the receipt of the comments and has included them in the Final EIR as Letter No. 2.



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DEPARTMENT OF TRANSPORTATION

DIVISION OF AERONAUTICS
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July 16, 2015

Ms. Lucille Breese
City of Lompoc
100 Civic Center Plaza
Lompoc, CA 93463

RECEIVED

JUL 23 2015

Planning Division

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SCH No. 2014021048

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Ms. Lucille Breese
July 16, 2015
Page 2

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In addition to submitting the proposal to the ALUC, it should also be coordinated with Lompoc Airport staff to ensure that the proposal will be compatible with future as well as existing airport operations.

These comments reflect the areas of concern to the Division with respect to airport-related noise, safety, and regional land use planning issues. We advise you to contact our District 5 office concerning surface transportation issues.

Thank you for the opportunity to review and comment on this proposal. If you have any questions, please contact me at (916) 654-6223, or by email at philip.crimmins@dot.ca.gov.

Sincerely,



PHILIP CRIMMINS
Aviation Environmental Specialist

c: State Clearinghouse, Santa Barbara County ALUC, Lompoc Airport

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Letter No. 2: Philip Crimmins, Aviation Environmental Specialist, California Department of Transportation, July 23, 2015

Response 2-1

The City of Lompoc recognizes the role of the Division of Aeronautics in airport-related compatible land use issues and acknowledges that the *California Airport Land Use Planning Handbook* published by the Division of Aeronautics should be utilized as a resource in the preparation of environmental documents for projects within airport comprehensive land use plan boundaries.

In the case of the Lompoc Airport, and to reduce the risk of airport-related safety hazards, land uses and development proposals near the airport are reviewed by the Airport Land Use Commission (ALUC) for consistency with the Santa Barbara County Airport Land Use Plan. The Santa Barbara County Airport Land Use Plan is consistent with the consideration of land use compatibility issues outlined in the *California Airport Land Use Planning Handbook*. According to the most recent Airport Land Use Plan and the draft plan currently being prepared, the existing and future land uses associated with the proposed project around the airport are considered safe land uses.

Response 2-2

As indicated with **Section 4.8, Noise** of the Draft EIR, the project site is located within the 60 dB(A) airport noise contour.¹ In addition, the proposed uses are permitted according to the draft Airport Land Use Compatibility Plan prepared by the Santa Barbara County Association of Governments (SBCAG). Standard construction techniques would attenuate exterior to interior noise levels a minimum of 20 dB(A). The City's exterior noise level for commercial and industrial land uses is between 65 and 75 dB(A). Therefore, uses proposed by the project would be compatible with the City's General Plan and the Airport Land Use Plan requirements for exterior and interior noise levels. Thus, people working on site would not be exposed to excessive noise levels and impacts would be less than significant.

Response 2-3

As permitted by the Central Coast Business Park Specific Plan, the proposed buildings would be similar in height to those building of the surrounding areas and be no more than two stories. As illustrated in **Figure 3.0-7, Architectural Theme Areas** of the Draft EIR, buildings within Area B would be constructed in accordance with Federal Aviation Administration (FAA) standards for height limitations, lighting requirements, and feature industrial building architectural design theme typified by the use of modular

1 Santa Barbara County Airport Land Use Commission, *Santa Barbara Airport Land Use Plan: Noise Compatibility Policy Map, Lompoc Airport* (April 2012).

metallic elements. Buildings along the northern boundary of the project site in Area B of the Specific Plan would have a maximum height of 18 feet. Buildings located in Area A of the Specific Plan would have a maximum height of 35 feet since they are not located directly adjacent to the Lompoc Airport. In accordance with the Specific Plan, landscaping will be selected and placed as to not cause hazards to aircraft utilizing the Lompoc Airport. Lastly, the City of Lompoc has included several conditions of approval on the proposed project pertaining to the Lompoc Airport. These include the following:

- AT1. Due to the proximity of the airport to the project site, the design engineer or architect must provide information to ensure that the height of the buildings do not exceed the FAA standards and regulations.

- AT2. Prior to the issuance of the building permit, the Owner shall complete the Aviation Easement form from the City of Lompoc and file the Federal Aviation Administration Form 7460 with the FAA and provide the City of Lompoc, Aviation/Transportation Administrator with a copy of the approved FAA form.

Response 2-4

The proposed project does not require an amendment to a General Plan or Specific Plan, or the adoption of a zoning ordinance or building regulation. Consequently, the proposed action does not require the referral to the Airport Land Use Commission. Please note that the Draft EIR was sent to the SBCAG, which submitted a comment letter pertaining to the ALUC. The response to SBCAG comments are contained in Letter No. 4. Please also refer to Responses 2-2 and 2-3, above.

DEPARTMENT OF TRANSPORTATION
50 HIGUERA STREET
SAN LUIS OBISPO, CA 93401-5415
PHONE (805) 549-3111
TTY 711



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August 4, 2015

Lucille Breese, AICP
City of Lompoc
100 Civic Center Plaza
Lompoc CA 93436

SCH# 2014021048
05-SB-1-022.18

**COMMENTS ON THE CENTRAL COAST BUSINESS PARK SPECIFIC PLAN DRAFT ENVIRONMENTAL
IMPACT REPORT (DEIR)**

Dear Ms. Breese:

The California Department of Transportation (Caltrans) appreciates the opportunity to provide input on the Central Coast Business Park Plan DEIR and provides the following comments for your consideration:

- 1) Most of the approaches of the intersection of State Route 1 (H Street) and W Central Avenue operate at Level of Service D under existing PM conditions. These include the following approaches:

Westbound left turn
Westbound through
Northbound left turn
Southbound left turn
Eastbound left turn

Even though the intersection operates at LOS C when all approaches are averaged together, there are still deficient approaches to the intersection under existing conditions for which the proposed project will add new traffic. Given the significant impact of the new trips on these approaches, the traffic study and EIR should identify the impact and the appropriate mitigation.

- 2) State Route 1 (H Street) through the City of Lompoc is identified as a portion of the State legislated Pacific Coast Bicycle Route. Given the importance of this route to bicyclists, the traffic study should provide an analysis of the impact of the project on the route, especially at the intersection with W Central Avenue. Pedestrians should also be included in the analysis. The Highway Capacity Manual provides tools for analyzing these impacts including Bicycle Level of Service and Pedestrian Level of Service.

If you have any questions or concerns, please feel free to contact me at (805) 549-3131 or adam.fukushima@dot.ca.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Adam Fukushima".

Adam Fukushima, PTP
Development Review
Caltrans District 5

*"Provide a safe, sustainable, integrated and efficient transportation system
to enhance California's economy and livability"*

Letter No. 3: Adam Fukushima, Development Review, Caltrans District 5, August 4, 2015.***Response 3-1***

The traffic study found that the H Street/Central Avenue intersection would operate at level of service (LOS) C under Existing + Project conditions and the proposed project would therefore not generate a project-specific impact based on adopted impact criteria. California Department of Transportation (Caltrans) staff commented that although the intersection operates at LOS C, some of the individual movements operate at LOS D, and the proposed project's traffic additions should be considered a significant impact.

The LOS methods used in the traffic study have been adopted by the City of Lompoc as well as by the Santa Barbara County Association of Governments as part of the Congestion Management Program. The impact criteria suggested in the Caltrans comment has not been adopted by Caltrans and is not included in Caltrans' *Guide for the Preparation of Traffic Impact Studies* (Caltrans, December 2002). Thus, there are no adopted criteria for assessing impacts based on the level of service for each movement at signalized intersections.

The traffic study shows that the Central Avenue/H Street intersection is forecast to operate at LOS D under Cumulative and Cumulative + Project conditions, exceeding the City's LOS C operating standard (a cumulative impact). The City is planning to improve the intersection by installing dual left-turn lanes on the northbound and southbound approaches at the intersection; and has been collecting traffic mitigation fees for the improvements. The proposed project would be required to contribute traffic mitigation fees to partially fund the planned improvements in order to mitigate its contribution to the cumulative impact at the intersection. Impacts would be mitigated to less than significant.

Response 3-2

This comment suggests that the traffic study include an analysis of bicycle and pedestrian levels of service for State Route 1 through the City of Lompoc using Highway Capacity Manual methods to determine the project's impact to the route, especially at the H Street/Central Avenue intersection. This type of analysis is more warranted for areas such as downtown San Luis Obispo and University of California Santa Barbara, where a substantial amount of bicycle and pedestrian trips interface. This type of analysis is not appropriate for this type of industrial business park project or for the project area, which has very little bicycle and pedestrian activity. Please note also that the proposed project is an industrial business park and would generate a maximum of 12 bicycle trips and 14 pedestrians users.

Please also note that the proposed project would be required to install frontage improvements along Central Avenue, V Street, and Barton Avenue; as well as construct Aviation Drive between V Street and

Barton Avenue. These frontage improvements would include sidewalks for pedestrians and bike facilities pursuant to City standards. The proposed project would also be responsible to improve the Central Avenue/Barton Avenue intersection, including installation of traffic signals with pedestrian facilities. The H Street/Central Avenue intersection currently has pedestrian facilities at the intersection (crosswalks and pedestrian signals) and there are Class II (painted) bike lanes on Central Avenue at the intersection. In addition to accommodating vehicles, these improvements are intended to accommodate pedestrians and bicycles in the vicinity of the project site. Pedestrians and bicyclists are anticipated to use the north-south streets that parallel H Street and then use Central Avenue when traveling to/from the project site because the parallel streets carry relatively low volumes when compared to H Street and are therefore more comfortable and feel safer to use.

From: Andrew P. Orfila [mailto:AOrfila@sbcag.org]
Sent: Wednesday, July 01, 2015 12:14 PM
To: Breese, Lucille
Cc: Peter Imhof; Philip.Crimmins@dot.ca.gov; 'Ron Bolyard (Ron.Bolyard@dot.ca.gov)
Subject: NOC DEIR: CC Business Park Project

Dear Lucille,

Thank you for the opportunity to comment on the DEIR for the Central Coast Business Park Project. State law (Public Utilities Code §21676(b)) requires that, prior to the adoption, approval or amendment of the City's General Plan that affects allowable land uses within the Airport Influence Area (AIA), that the land use action shall be referred to the Airport Land Use Commission (ALUC) for determination of consistency with the SB County Airport Land Use Plan prior to approval by the local agency.

Looking through the DEIR, it's unclear whether or not the project would require a GP amendment or re-zone. If it does, it would need to be referred to the ALUC prior to the land use action being taken. If you have any questions, feel free to contact me or Peter Imhof at 961-8910.

Andrew Orfila
Senior Transportation Planner
p: (805) 961-8907
e: aorfila@sbcag.org



Santa Barbara County Association of Governments
260 N. San Antonio Road, Suite B
Santa Barbara, CA 93110
<http://www.sbcag.org/>

Letter No. 4: Andrew Orfila, Senior Transportation Planner, Santa Barbara County Association of Governments, July 1, 2015

Response 4-1

The proposed project does not require an amendment to the General Plan or rezone because the site is currently zoned Business Park (BP). Consequently, the project does not need to be referred to the Airport Land Use Commission. The project site is located directly adjacent to the southern boundary of the Lompoc Airport. As stated in **Section 4.7, Land Use and Planning**, of the Draft EIR, the project site is not located within the clear zone or the approach zone for the Lompoc Airport, but there is a designated flight track over the site.²

In addition, the proposed project would allow the development of approximately 580,000 square feet of business park uses across the 38-net acre site. As permitted by the Central Coast Business Park Specific Plan, the proposed buildings would be similar in height to those building of the surrounding areas and be no more than two stories. As illustrated in **Figure 3.0-7, Architectural Theme Areas**, of the Draft EIR, buildings within Area B would be constructed in accordance with Federal Aviation Administration (FAA) standards for height limitations, lighting requirements, and feature industrial building architectural design theme typified by the use of modular metallic elements. Buildings along the northern boundary of the project site in Area B of the Specific Plan would have a maximum height of 18 feet. Buildings located in Area A of the Specific Plan would have a maximum height of 35 feet since they are not located directly adjacent to the Lompoc Airport.

Additionally, the ALUCP identifies that the existing land uses surrounding the Lompoc Airport are considered safe land uses.³ Thus, implementation of the proposed project's business park uses, which are consistent with the surrounding uses, would be consistent with the ALUCP. Therefore, employees and visitors within in the project site would not be subject to any aircraft safety hazards, and impacts would be less than significant.

Lastly, the City of Lompoc would also include the following conditions of approval on the project to reduce issue between the development and Lompoc Airport:

2 Santa Barbara County Association of Governments, *Santa Barbara County Airport Land Use Plan*, October 1993.

3 Santa Barbara County Association of Governments, *Santa Barbara County Airport Land Use Plan*, October 1993.

AT1. Due to the proximity of the airport to the project site, the design engineer or architect must provide information to ensure that the height of the buildings do not exceed the FAA standards and regulations.

AT2. Prior to the issuance of the building permit, the Owner shall complete the Aviation Easement form from the City of Lompoc and file the Federal Aviation Administration Form 7460 with the FAA and provide the City of Lompoc, Aviation/Transportation Administrator with a copy of the approved FAA form.

County Of Santa Barbara



Mona Miyasato
County Executive Officer

105 East Anapamu Street, Room 406
Santa Barbara, California 93101
805-568-3400 • Fax 805-568-3414
www.countyofsb.org

Executive Office

August 3, 2015

Ms. Lucille T. Breese, AICP
Planning Manager
City of Lompoc Planning Division
100 Civic Center Plaza
Lompoc, CA 93436

E-mail: lbreese@ci.lompoc.ca.us

Re: Notice of Completion of a Draft Environmental Impact Report – Central Coast Business Park Specific Plan

Dear Ms. Breese:

Thank you for the opportunity to comment on Draft Environmental Impact Report for the Central Coast Business Park Specific Plan. At this time, the County is submitting the attached letter from the Fire Department.

The County has no further comments on this project at this time and looks forward to hearing more about the project's progress. If you should have any further questions, please do not hesitate to contact my office directly or Matt Schneider, Deputy Director in the Office of Long Range Planning, at 805-568-2072.

5-1

Sincerely,


Mona Miyasato
County Executive Officer

cc: Glenn Russell, Ph.D., Director, Planning and Development Department
Matt Schneider, Deputy Director, Long Range Planning Division
Ray Navarro, Fire Marshal, Fire Department

Attachments: July 17th Letter, County Fire Department

Letter No. 5: Mona Miyasato, County Executive Officer, County of Santa Barbara, August 3, 2015

Response 5-1

The comment notes that the County is submitting comments (County of Santa Barbara Fire Department letter No. 6), which are being forwarded as part of an attachment. The City acknowledges the receipt of the comments and has included them in the Final EIR as letter No. 6.



Fire Department

"Serving the community since 1926"

HEADQUARTERS

4410 Cathedral Oaks Road
Santa Barbara, CA 93110-1042
(805) 681-5500 FAX: (805) 681-5563

Eric L. Peterson
Fire Chief
County Fire Warden

Rob Heckman
Deputy Fire Chief

July 17, 2015

Ms. Lucille T. Breese, Planning Manager
City of Lompoc Planning Division
100 Civic Center Plaza
Lompoc, CA 93436

Dear Ms. Breese:

SUBJECT: Central Coast Business Park Specific Plan

The Santa Barbara County Fire Department is concerned about the potential of increased fire service response both in suppression and medical aid with the development of the 12 parcels proposed. The building access, type of occupancies and water supply needs will affect the fire department's auto-aid and mutual aid agreements that currently exist.

These are critical factors in the effectiveness of any emergency response with a development of this size and magnitude. In keeping with standards of cover, NFPA 1710 and firefighter safety NFPA 1500, along with building and fire code, the EIR must ensure a quantitative evaluation of Fire and Emergency Medical Services mobilization needs for this project.

As always, if you have any questions or require further information, please call 681-5525 or 681-5523.

In the interest of life and fire safety,

Ray Navarro
Fire Marshal

RN: mkb

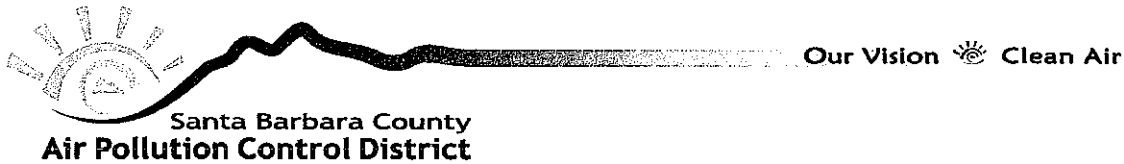
Serving the cities of Buellton, Goleta and Solvang, and the Communities of Casmalia, Cuyama, Gaviota, Hope Ranch, Los Alamos, Los Olivos, Mission Canyon, Mission Hills, Orcutt, Santa Maria, Sisquoc, Vandenberg Village

Letter No. 6: Ray Navarro, Fire Marshal, County of Santa Barbara Fire Department, July 17, 2015

Response 6-1

As discussed in **Section 4.9.1, Fire Protection Services**, in the Draft EIR, City Fire Station No. 2 would be the primary serving station because it is the closest station, approximately 1.1 miles from the project site. The City is currently developing a new location for Fire Station No. 2 which is proposed to be operational in 2016. The new station will be located approximately 950 feet from the new Business Park. The Lompoc Fire Department (LFD) estimates that the approximate response time responding to an emergency call to the project site is 3 minutes. Thus, the project site would be located within the 4-minute, 90 percent of calls received response performance objective established by the LFD. In addition, if back-up assistance is necessary, the project site would continue to be served by Fire Station No. 1. Fire emergency response impacts would be less than significant.

The LFD has indicated that the City's existing infrastructure, including access, traffic circulation, water, and hydrant systems, are adequate for current LFD needs as well as the needs of the proposed project. All development projects within the City are required to comply with the most current adopted fire, building codes, and nationally recognized fire and life safety standards. The proposed project would be required to comply with the City's Building and Safety Code, which includes the applicable California Building Code and the California Fire Code. Furthermore, the proposed project would be required to pay impact mitigation fees as set forth by City Resolution 3795(89). Payment of impact mitigation fees would result in funding equivalent to the provision of equipment for the LFD. As a result, the Project would not degrade existing facilities or response times provided by the LFD to serve the needs of the project site. Therefore, implementation of the proposed project is not anticipated to have a significant impact on fire protection services.



August 7, 2015

Lucille Breese
City of Lompoc
100 Civic Center Plaza
Lompoc, California 93436

Re: APCD Comments on the Draft Environmental Impact Report for the Central Coast Business Park Specific Plan, SCH No. 2014021048, EIR 14-01/LOM 599/SP 14-01/DR 13-14

Dear Ms. Breese:

The Air Pollution Control District (APCD) has reviewed the referenced project, which consists of the construction of up to approximately 581,000 square feet of manufacturing, warehouse, hangar/storage, and office space uses that could be divided into twelve individual parcels ranging from 2.4 to 3.5 acres in size. These lots may be developed over time individually or combined and developed to accommodate larger tenants. Additionally, there would be a total of approximately 995,000 square feet of roadways, parking, and sidewalks throughout the project site. The project site is undeveloped and is currently used for the agricultural production of various row crops. Surrounding land uses include a sand and gravel mine, an animal services facility, a solid waste operations yard, the Lompoc Airport to the north, and vacant land to the east designated for airport/aviation uses and business park uses by the General Plan. A residential neighborhood is located to the south across Central Avenue approximately 75 feet from the project site. The subject property, a 38-acre project site zoned BP (Business Park) and identified in the Assessor Parcel Map Book as APN 93-450-014, -015, and -016, is located at 1401 Central Avenue, between V Street and Barton Avenue, in the City of Lompoc.

Air Pollution Control District staff offers the following comments on the DEIR:

- 1. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-15:** The last paragraph on this page states that, *"The CAP was last updated in 2010 and adopted in January 2011, with a draft of the 2013 triennial update available for public review that serves as a guide to bring pollutant concentration into attainment with federal and state standards."* Please be aware that the 2013 Clean Air Plan was adopted by the APCD Board in March 2015; it can be viewed on our website at www.ourair.org/clean-air-plans/. Please update the document and analysis to acknowledge the adoption of the 2013 CAP.
- 2. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-23:** It is stated that, *"The SBCAPCD has not adopted any threshold for measuring the significance of a project's cumulative contribution to global climate change."* In April 2015, the APCD adopted thresholds of significance for GHG emissions for stationary sources; these thresholds can be viewed in our *Environmental Review Guidelines* available on our website at www.ourair.org/land-use/#Guidelines. Please update this statement.
- 3. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-24:** The last paragraph on this page states that, *"Table 4.3-6, Mass Daily Emissions Thresholds, identifies SBCAPCD thresholds to*

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APCD Comments on Draft EIR for the Central Coast Business Park Specific Plan, SCH No. 2014021048, EIR 14-01/LOM 599/
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determine the significance of impacts to air quality during construction activities and project operation. The SBCAPCD does not currently have quantitative thresholds of significance in place for short-term or construction emissions; however, the APCD uses 25 tons per year for ROC, NOX, or PM10 as a guideline for determining the significance of construction impacts. Please revise the document (including Table 4.3-6 on page 4.3-25) to clarify that SBCAPCD does not have adopted thresholds for construction emissions.

- 4. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-26:** The first full paragraph on this page states that, *“Neither the City of Lompoc nor the SBCAPCD have adopted thresholds for determining if the projected greenhouse gas emissions of a proposed project constitute a considerable contribution to GHG emissions...”* and then goes on to state that, *“The SBCAPCD is proposing to update its Environmental Review Guidelines to include guidance for evaluating the significance of the impacts of GHGs from new or modified stationary sources. One approach that the SBCAPCD is considering for determining significance is assessing a two phased approach utilizing a 10,000 MTCO₂e per year screen threshold for stationary uses and a 15.3 percent BAU reduction necessary to meet the 2014 Updated Scoping Plan 2020 goal.”* Please update the document to reflect the APCD adoption of thresholds as identified in **Comment 2** above.

Also note that the thresholds of significance adopted for greenhouse gas emissions are applicable to new or modified stationary sources. Stationary source projects include land uses with processes and equipment that require a District permit to operate, such as oil and gas facilities, landfills, and facilities with large combustion devices. These adopted thresholds were not designed to be applicable to land use development projects/plans (i.e. commercial and residential development projects).

- 5. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-27:** The third paragraph on this page states that, *“Operation emissions generated by both stationary and mobile sources would result from normal day-to-day activities of the project site. Stationary source emissions would be generated by the consumption of natural gas and landscape maintenance. Mobile emissions would be generated by the motor vehicles traveling to and from the project site.”* What the text refers to as “stationary sources” are actually considered and referred to as “area sources.” Stationary sources are sources that may require permits from the APCD. Examples of stationary emission sources include gas stations, auto body shops, diesel generators, boilers and large water heaters, dry cleaners, oil and gas production and processing facilities, and water treatment facilities. Other stationary sources such as residential heating and cooling equipment, wood burning stoves and fireplaces, or other individual appliances do not require permits from the APCD and are known as “area sources.” Emissions from “area sources” may be significant for some housing developments or for commercial projects. The CalEEMod computer program may be used for estimating unmitigated and mitigated “area source” impacts. Please revise the text accordingly.
- 6. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-27:** The last paragraph on this page references, *“SBCAPCD’s Air Quality Guidelines.”* SBCAPCD does not have a document with this title; was this intended to reference the APCD’s guidance document, entitled *Scope and Content of Air Quality Sections in Environmental Documents*, or APCD’s Board adopted *Environmental Review Guidelines*?

APCD Comments on Draft EIR for the Central Coast Business Park Specific Plan, SCH No. 2014021048, EIR 14-01/LOM 599/
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7. **Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-30:** This page states that, *“The most recent adopted comprehensive plan applicable for the proposed project is the 2010 Clean Air Plan. It should be noted that the SBCAPCD has released the draft 2013 CAP for public review and is dated January 2015.”* Please update the document and analysis to acknowledge the adoption of the 2013 CAP as identified in **Comment 1** above.
8. **Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-31:** The second sentence on this page states that, *“Temporary emissions associated with construction of the Project would not exceed any of the criteria pollutant SBCAPCD thresholds for regional emissions, as indicated in Table 4.3-7 and Table 4.3-8.”* As mentioned above, the SBCAPCD does not currently have quantitative thresholds of significance in place for short-term or construction emissions; however, the APCD uses 25 tons per year for ROC, NOX, or PM10 as a guideline for determining the significance of construction impacts. Please revise the document (including Table 4.3-7 on page 4.3-32) to clarify that SBCAPCD does not have adopted thresholds for construction emissions.
9. **Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-31:** The third paragraph on this page, states that, *“The draft 2013 CAP indicates that the number of employees in commercial and industrial businesses totaled 135,100 in 2008, would grow to 150,800 employees in 2020, and to 160,200 employees in 2030.”* First, as mentioned above, the 2013 Clean Air Plan was adopted by the APCD Board in March 2015. Second, these employment figures appear to be for countywide growth. To evaluate consistency with the CAP and growth comparisons, jurisdiction-specific information should be used (i.e. growth projections for the City of Lompoc). Please revise the analysis to reflect a jurisdiction-specific analysis.
10. **Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-34:** The last paragraph on this page states that, *“The impacts from these odors would be short term and would cease upon the completion of each selected well location.”* The project description does not mention that this project includes the drilling of “well locations.” Please confirm whether this project involves the drilling of well locations, and if so, please describe what resource the wells are being drilled to access (e.g. water, oil, etc.). Please contact the APCD if well drilling is a part of the proposed project, as APCD rules and regulations may be applicable to such activities. For example, well water may contain hydrogen sulfide (H₂S); the applicant must ensure that the well does not cause nuisance odors and should contact the APCD to determine the need for an Authority to Construct permit for any method used to control H₂S emissions.
11. **Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-35:** The first paragraph on this page states that, *“As presented in Table 4.3-7 and Table 4.3-8, construction and operation of the proposed project would not exceed the SBCAPCD project-specific thresholds and is consistent with the draft 2013 CAP.”* As mentioned above, the SBCAPCD does not currently have quantitative thresholds of significance in place for short-term or construction emissions; however, the APCD uses 25 tons per year for ROC, NOX, or PM10 as a guideline for determining the significance of construction impacts. Also, the 2013 Clean Air Plan was adopted by the APCD Board in March 2015. Please revise the document accordingly.
12. **Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-37:** Table 4.3-10 appears to be showing the “mitigated” GHG emissions from the proposed project, however it is unclear since

APCD Comments on Draft EIR for the Central Coast Business Park Specific Plan, SCH No. 2014021048, EIR 14-01/LOM 599/
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the table is not labeled as such. The EIR should disclose the project's unmitigated and mitigated emissions. Please consider adding a table to show the unmitigated emissions and label Table 4.3-10 to denote that the "Operational GHG Emissions" shown are the "mitigated" emissions.

13. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-37: The first paragraph on this page states that, "This amount of GHG emissions is less than the 10,000 MTCO₂e per year screening threshold for stationary land use projects proposed by the SBCAPCD. The next threshold proposed by the SBCAPCD is to reduce GHG emissions by 15.3 percent from business as usual by 2020." Staff has the following comments regarding this statement:

- a. First, as mentioned above, the process to update SBCAPCD's *Environmental Review Guidelines* to include thresholds of significance for greenhouse gas emissions concluded in April 2015 with our Board's adoption of revised *Environmental Review Guidelines* and thresholds of significance for GHG emissions for stationary sources. The recently adopted greenhouse gas thresholds can be viewed in our *Environmental Review Guidelines* available on our website at www.ourair.org/land-use/#Guidelines.
- b. Second, please be aware that the thresholds of significance adopted for greenhouse gas emissions are applicable to new or modified stationary sources. Stationary source projects include land uses with processes and equipment that require a District permit to operate, such as oil and gas facilities, landfills, and facilities with large combustion devices. The proposed project is not a "stationary source" project-type, it is a land use development project, specifically a Specific Plan for commercial land use development. APCD has not adopted or proposed thresholds for land use development projects/plans.

The lead agency has the discretion to apply a threshold of its choice to the project; however, the APCD would like to make it clear that its adopted greenhouse gas thresholds for stationary source projects were not designed to be applicable to land use development projects/plans. We suggest revising this analysis to utilize a threshold better suited for this project-type.

14. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-37 and Appendix 4.3 Air Quality and Greenhouse Gas Calculations: The operational GHG emissions presented in Table 4.3-10 do not correspond to the CalEEMod emissions calculations provided in *Appendix 4.3, Air Emissions Modeling* as claimed. The annual (mitigated) emissions total in Table 4.3-10 is listed as 5,675.67 MTCO₂e/year whereas the CalEEMod Annual emission summary report shows mitigated total emissions as 5,509.47 MTCO₂e/year. Emissions estimates presented in the EIR should be based on the CalEEMod modeling results. Please correct the document accordingly.

15. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-38 and Appendix 4.3 Air Quality and Greenhouse Gas Calculations: The first sentence on page 4.3-38 states that, "Measures would reduce GHG emissions by 1,670.19 MTCO₂e per year, approximately 23 percent, from the business as usual scenario, greater than the 15 percent reduction in GHG emissions." However, the CalEEMod Annual emission summary report shows an 11.36% reduction in GHG emissions from unmitigated to mitigated emission estimates. Please evaluate the accuracy of the stated emission reductions and address the potential discrepancy accordingly.

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16. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-39: The second paragraph on this page states that, *“Because the project achieves the AB 32 emissions reduction target, which is consistent with the draft SBCAPCD thresholds, the proposed project would be consistent with the 2020 reduction in GHG emissions from 1990 levels set forth in the 2008 Scoping Plan and 2014 Updated Scoping Plan. Therefore, the proposed project would not conflict with the 2008 Scoping Plan and the 2014 Updated Scoping Plan or with the draft standards proposed by the SBCAPCD.”* Please see **Comment 13** above as this comment applies to these statements as well.

17. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-39: The third paragraph on this page states that, *“Implementing the Project Design Features and GHG-reducing measures would result in a net decrease in GHG emissions.”* This statement is unsupported by evidence. If this statement were true it would mean that mitigation has been applied to the project that decreases GHG emissions over and above what the project is emitting. The CalEEMod reports and emission estimates provided in Table 4.3-10 do not support this statement. Please revise.

18. Section 4.3 Air Quality and Greenhouse Gas Emissions, MITIGATION MEASURES, Page 4.3-40-42: APCD staff has several comments regarding the mitigation measures presented in this section:

- a. The City should consider whether the mitigation measures presented in this section are designed to go beyond what is already required by existing regulations, and therefore whether the measures are designed to reduce greenhouse gas emissions beyond what is already required by law. Many of the measures appear to be committing to compliance with existing regulations, and the connection to a measurable and verifiable reduction is difficult to establish. See Comment 22 below for more discussion.
- b. The SBCAPCD does not adopt land use development standards, therefore statements made in several of the measures regarding SBCAPCD potential adoption of green building standards, energy efficiency standards, and recycling standards should be removed.
- c. Measure MM 4.3-5 discusses standards for “all pools and spas”. The City should consider whether this measure is applicable to the proposed project, as this project is a Specific Plan that involves the development of manufacturing, warehouse, hanger/storage, and office space uses.

19. Section 4.3 Air Quality and Greenhouse Gas Emissions, Page 4.3-42: The last sentence of this page states that, *“Development of the proposed project would be consistent with the goals of CARB’s 2008 Scoping Plan, the 2014 Updated Scoping Plan, the SBCAPCD draft GHG thresholds, and would incorporate best management practices which aim to require buildings to be more energy efficient than required by existing regulations.”* Please see **Comment 13** above as this comment applies to this statement as well.

20. Appendix 4.3 Air Quality and Greenhouse Gas Calculations: The CalEEMod reports show that the operational year was changed to 2035, however the EIR states that the build out year is 2020. To correctly estimate project-specific vehicle emissions and other emission calculations

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using the CalEEMod program, the operational year must be changed to reflect the year the project will be built (the on-road fleet-mix in subsequent years is assumed to have lower tail-pipe emissions and the fleet mix varies with the build out year selected).

21. Appendix 4.3 Air Quality and Greenhouse Gas Calculations: The CalEEMod reports show that the default Tier level for construction equipment was changed from Tier 0 to Tier 3. To justify the resultant emission reductions, the commitment to utilize Tier 3 construction equipment should be formalized in the EIR as a mitigation measures and included as a condition of approval by the City.

22. Appendix 4.3 Air Quality and Greenhouse Gas Calculations: The CalEEMod reports shows that various mitigation measures were applied to the project. Measures were selected such as exceeding Title 24 (percent unknown); installation of high efficiency lighting; low VOC paint; low VOC cleaning supplies; installation of low flow bathroom and kitchen fixtures, toilets, shower heads, and use of a water efficient irrigation system; and the institution of recycling and composting services. To justify the resultant mitigated emission estimates, the City should include each of these selected measures as a mitigation measure in the EIR that is enforceable through a mitigation and monitoring program or as a condition of approval for the project or other mechanism.

If you or the project applicant have any questions regarding these comments, please feel free to contact me at (805) 961-8890 or via email at barhamc@sbcapcd.org.

Sincerely,



Carly (Wilburton) Barham,
Air Quality Specialist
Technology and Environmental Assessment Division

cc: Chris Hampson, Meridian Consultants LLC
TEA Chron File

Letter No. 7: Carly Barham, Air Quality Specialist, Santa Barbara County Air Pollution Control District, August 7, 2015

Response 7-1

Text to the Final EIR has been revised to clarify that the latest Clean Air Plan was adopted by the Santa Barbara Air Pollution Control District Board (SBAPCD) in March 2015. Please refer to page 4.3-15 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-2

Text to the Final EIR has been revised to clarify that the SBAPCD adopted thresholds of significance for GHG emissions for stationary sources is not applicable to land use development projects and the thresholds can be viewed in the SBAPCD Environmental Review Guidelines, available on the SBAPCD website at www.ourair.org/land-use/#Guidelines. Please refer to page 4.3-23 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-3

Text to the Final EIR has been revised to clarify that the SBAPCD does not have quantitative thresholds of significance in place for short-term construction emissions. Please refer to page 4.3-25 and **Table 4.3-6 in Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-4

Text to the Final EIR has been revised to clarify that the SBAPCD-adopted thresholds of significance for GHG emissions for stationary sources were not designed as thresholds for land use development projects. Please refer to pages 4.3-26 and 4.3-27 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-5

Text to the Final EIR has been revised to clarify that the SBAPCD-adopted thresholds of significance for GHG emissions for stationary sources were not designed as thresholds for land use development projects. Please refer to page 4.3-27 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-6

Text to the Final EIR has been revised to clarify that the stationary sources are sources that require a permit from the SBAPCD, and area sources do not require permits and could include residential heating

and cooling equipment, fireplaces, or individual appliances. Please refer to page 4.3-28 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-7

Text to the Final EIR has been revised to clarify that the SBCAPCD guidance document, titled *Scoped and Content of Air Quality Sections in Environmental Documents*, was used to follow methodology for operation analysis. Please refer to page 4.3-28 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-8

Text to the Final EIR has been revised to clarify that the latest clean air plan was adopted by the SBAPCD in March 2015. Please refer to page 4.3-31 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-9

Text to the Final EIR has been revised to clarify that the SBAPCD does not have quantitative thresholds of significance in place for short-term construction emissions. Please refer to page 4.3-33 and **Table 4.3-7** in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-10

Text to the Final EIR has been revised to include additional analysis to support consistency with the SBCAPCD Clean Air Plan growth projections. Please refer to page 4.3-32 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-11

Text to the Final EIR has been revised to clarify that the short-term odors would cease upon completion of each parcel, and not each well location. Please refer to page 4.3-35 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-12

Text to the Final EIR has been revised to clarify that the SBAPCD does not have quantitative thresholds of significance in place for short-term construction emissions and that the 2013 CAP was adopted in March 2015. Please refer to page 4.3-36 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-13

Text to the Final EIR has been revised to clarify that operation emissions presented in **Table 4.3-10** include Project Design Features and Mitigation Measures. Please refer to page 4.3-37 and **Table 4.3-10** in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, for this revision.

Response 7-14

Please refer to Responses 7-2, 7-4, and 7-5 above. Text has been revised accordingly on pages 4.3-38 and 4.3-39 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**.

Response 7-15

Please refer to Response 7-14 above.

Response 7-16

Table 4.3-10 on page 4.3-38 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**, includes amortized construction emissions; operational mobile sources, including from N₂O; area sources; water; waste; and energy GHG emissions. The mitigated operation GHG emissions presented in the appendix do not include the amortized construction emissions, a difference of 166.20 MTCO₂e per year. Accordingly, the GHG emissions presented in **Table 4.3-10** are consistent with standard GHG analysis practices.

Response 7-17

Business-as-usual emissions, assuming the proposed project was operational in 2012, resulted in 7,345.86 MTZCO₂e per year (without Title 24 efficiencies, Project Design Features, and Mitigation Measures) as indicated on page 4.3-38 in Section 4.3 in the Draft EIR. The proposed project would generate 5,675.67 MTCO₂e per year (with Title 24 efficiencies, Project Design Features, and Mitigation Measures) and the difference between the proposed project and BAU would be 1,670.19 MTCO₂e per year, or approximately 23 percent reduction in GHG emissions from BAU. Therefore, the proposed project would reduce GHG emissions greater than the 15 percent reduction identified in the 2014 Updated Scoping Plan prepared by the California Air Resources Board (CARB) pursuant to AB 32 requirements. Project GHG emissions would be less than significant.

Response 7-18

Please refer to Responses 7-2, 7-4, 7-5, and 7-15 above. Text has been revised accordingly on page 4.3-40 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**.

Response 7-19

Please refer to Responses 7-16 and 7-17 above. The GHG analysis presented in Section 4.3 is consistent with industry standards. As determined in the Draft EIR, the proposed project would result in less than significant GHG impacts.

Response 7-20

The mitigation measures have been clarified to indicate that the SBCAPCD does not adopt land use development standards, and therefore, any reference to SBCAPCD has been removed. See text revisions on page 4.3-41 through 4.3-43 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**.

Response 7-21

Please refer to Response 7-20, above.

Response 7-22

Mitigation Measure MM 4.3-5 has been removed, and subsequent measures have been renumbered. See text revisions on pages 4.3-41 and 4.3-42 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**.

Response 7-23

Please refer to Responses 7-2, 7-4, 7-5, and 7-15 above. Text has been revised accordingly on page 4.3-43 in **Section 4.3, Air Quality and Greenhouse Gas Emissions**.

Response 7-24

Air quality modeling was conducted for year 2020 when the proposed project would be in operation. The estimated maximum daily unmitigated operation emissions and annual GHG emissions for mobile sources remained unchanged between the selected operation year of 2020 or 2035. Therefore, the analysis presented in the Draft EIR would remain applicable, and air quality and greenhouse gas impacts would remain less than significant.

Response 7-25

Tier 3 engines are required by CARB for all construction fleets as of 2010 (California Code of Regulations Article 4, Chapter 9, Off-Road Vehicles and Engines Pollution Control Devices, Sections 2420–2427).

Response 7-26

These measures have been identified in each applicable section as either a mitigation measure or a project design feature.



SANTA YNEZ BAND OF MISSION INDIANS
Tribal Elders Council

August 15, 2015

Lucille Breese, Planning Manager
City of Lompoc Planning Dept.
100 Civic Center Plaza
Lompoc, Calif. 93436

Re: Central Coast Business Park Project - EIR 14-01 / LOM 599 / SP 14-01 / DR 13-14

Ms. Breese,

The SYBCI Elders Council would like to thank you for the opportunity to comment on the above mentioned project. After review, we have come up the following comments and concerns;

1. We disagree with the width of the survey transects. The Council realizes that 15m is cost effective, but the Council would prefer a max width of 10m and if possible, 5m. The Santa Ynez river was the lifeblood of our people and just because sites have yet to be found does not mean care should not be taken.
2. The Council believes that a backhoe should be avoided due to the destructive nature of the machine. We are aware there has been no documentation of sites within the parcel, but the Council believes shovel testing would be a better solution. However, the backhoe makes some sense when you factor in the extent of the area to which they plan to trench for archaeological constituents, as it would take far less time. However, the Council's stance will always be in favor of taking extra care and time since our concern lies only with the heritage and archaeological remnants of the Chumash.

Therefore, the council would like to make the following recommendations; a.) that a combination of method types for archaeological investigation take place, such as Limited number of shovel test pits (STPs), Test excavation units (TEUs) 50x50, and limited trench units.

The Council would also ask that backhoe have rubberized tires, as not to cause too much disturbance and limit the possibility of impact to any possible unknown archaeological material.

3. The Council would also like a plan to be in place for any archaeological discovery that might take place during the survey work, created and approved in consultation with the Council or its representative. The Council would also like the ability to address the applicant to work on redesign for avoidance of any such discoveries.
4. The Council would also like to recommend that an area for conservation or conservancy be established within the project that would remain in perpetuity, for the purpose of reburial of cultural material or tribal ancestors, should any be discovered within this project.
5. Should cultural material or ancestral remains be discovered within project area during testing or construction, the Council would ask that redesign alternatives be built into the construction plan in order to prevent destruction of those items or ancestral remains.

The SYBCI Elders would again like to thank you for this opportunity to comment and voice our concerns, as it relates to the protection and preservation of our culture. The Council would also like to thank for your continued support in assisting us in that endeavor to preserve our heritage.

Should you have any questions, please feel free to call Freddie Romero at 805-688-7997 or email him at freddyromero1959@yahoo.com.

Sincerely,

 signed on behalf of Tonie Flores

Tonie Flores, Chairperson
SYBCI Elders Council

Letter No. 8: Tonie Flores, Santa Ynez Band of Mission Indians Tribal Elders Council, August 7, 2015

Response 8-1

The 15 meters used in the Phase I archaeological survey is the common practice in these surveys. This survey transect was determined by ASM Affiliates, which has numerous years of experiences in the preparation of archaeological surveys.

Response 8-2

The City of Lompoc, Santa Ynez Band of Mission Indians, Meridian Consultants (EIR Consultant), and project applicant met on April 2, 2014, for the purposes of SB 18 consultation. It was discussed that an intensive Phase I was prepared and concluded that there would be no significant impacts to archaeological resources.

However, due to the proposed project's proximity to the Santa Ynez River, which is a high archaeologically sensitive area, the Santa Ynez Chumash Reservation Elders' Council wanted to ensure that possible buried archaeological sites or deposits are not adversely impacted by the proposed development. After the SB 18 consultation between the City and Santa Ynez Band of Mission Indians Tribal Elders' Council, both parties agreed that prior to the issuance of grading permits for each individual project, and as a condition of approval to ensure the safety of any potential subsurface archaeological sites or deposits that may be present, the following procedures must be employed:

1. Subsurface testing will be conducted on an individual parcel basis, using a rubberized-tire backhoe. Backhoe trenches, measuring approximately 5 to 6 feet in length, will be excavated to a minimum depth of 6 feet, in approximate 6-inch lifts.
2. One large bucket of soil from each lift will be screened through a one-eighth-inch mesh by archaeologists and examined for the presence of artifacts or other archaeological indicators (e.g., midden soil, shellfish, or burnt animal bone fragments).
3. Any identified artifacts/archaeological indicators will be collected and bagged by trench and level.
4. To the degree possible, in light of trench safety issues, the soils stratigraphy of each trench will be documented.
5. A total of up to 48 backhoe trenches will be excavated on the project site (which could contain up to 12 parcels), allocated as follows: Parcels No. 9 to 12 (each approximately 3.5 acres), 6 trenches each; Parcels No. 1 to 8 (each approximately 2.5 acres), 4 trenches each. These will be approximately

evenly distributed across each parcel to achieve a representative sampling of the subsurface conditions.

6. A Native American monitor representing the Santa Ynez Chumash Reservation will be present during the excavation.
7. A letter report documenting the results of the extended Phase I survey will be submitted to the City of Lompoc, Community Development Department, within five days of the completion of the work.
8. In the event of an unanticipated discovery of human remains, the Santa Barbara County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
9. Should the results for any given parcel(s) indicate the presence of intact archaeological remains, a more detailed report outlining the discovery will also be submitted within one month of the completion of the fieldwork. This will include a description of the procedures followed during the extended Phase I survey, a summary of the findings, and an analysis of the recovered remains.
10. Final disposition of any recovered archaeological remains (e.g., museum curation, reburial) will be determined through consultation between the landowner, the Santa Ynez Chumash Reservation Elders' Council, and the City of Lompoc.
11. Should intact archaeological resources be identified within one or more parcels, additional archaeological testing (Phase II Testing and Determination of Significance) may be required to more accurately define the size, nature, and significance of the discovery. In the event of such a discovery, all efforts shall be made to preserve those remains through project redesign and/or protective soil capping, thereby minimizing potential adverse impacts. Should preservation prove unfeasible, potential adverse impacts would be mitigated through Phase III data recovery.

Compliance with these conditions of approval would ensure that potential impacts to archeological resources would be reduced to less than significant.

Response 8-3

Please refer to Response 8-2, above.

Response 8-4

Text has been added to the Final EIR to indicate a rubberized-tire backhoe would be used in any trenching associated with archaeological trenching. Please refer to page 4.4-9 in **Section 4.4, Cultural Resources**, for this revision.

Response 8-5

The requested recommendations are contained within **Section 4.4, Cultural Resources**, in the Draft EIR on pages 4.4-9 and 4.4-10. Please refer to conditions of approval Nos. 6, 7, 8, 9, 10, and 11 in Response 8-3, above.

3.0 REVISIONS TO THE DRAFT EIR

In accordance with the *CEQA Guidelines* Section 15132 (a), this section of the Final EIR provides changes to the Draft EIR that have been made to clarify, correct or supplement the environmental impact analysis for the proposed project. Such changes are a result of recognition of inadvertent errors or omissions as well as individuals, public and agency comments received in response to the Draft EIR. The changes described in this section do not result in any new or increased significant environmental impacts that would result from the proposed project.

The Draft EIR **Section 4.3, Air Quality and Greenhouse Gas Emissions, Section 4.4, Cultural Resources, and Section 4.11.3, Utilities and Service System – Solid Waste** include changes based on comments received and have been included in the Final EIR (Sections are provided below). Additions are underlined and deletions are shown in strikethrough (~~strikethrough~~) format.

4.3 AIR QUALITY AND GREENHOUSE GASES

This section describes and evaluates the potential for the proposed project to impact air quality and greenhouse gas (GHG) on a local and regional context. In assessing air quality and GHG impacts, the following sources were considered: emissions from equipment that will be used during construction-related activities, operational-related emissions generated from electricity and water use, emissions from motor vehicles generated by trips to and from the project site, and the application of paint and other architectural coatings. This section incorporates information from the air quality emissions calculations contained in **Appendix 4.3, Air Quality and Greenhouse Gas Calculations**.

ENVIRONMENTAL SETTING

Existing Conditions

Air Pollutants of Concern

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These are known as criteria air pollutants and are categorized into primary and secondary pollutants. Primary air pollutants are those that are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb) are primary air pollutants. VOC and NO_x are criteria pollutant precursors and go on to form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O₃) and nitrogen dioxide (NO₂) are the principal secondary pollutants.

A brief description of the criteria pollutants follows.

- **Ozone.** O₃ is a gas that is formed when VOCs and NO_x, both byproducts of internal combustion engine exhaust and other sources, undergo slow photochemical reactions in the presence of sunlight. O₃ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.
- **Volatile organic compounds.** VOCs are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to form secondary air pollutants, including O₃. VOCs are also referred to as reactive organic compounds or reactive organic gases. VOCs themselves are not “criteria” pollutants; however, they contribute to formation of O₃.
- **Nitrogen dioxide.** NO₂ is a reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitrogen monoxide (NO). NO₂ is also a byproduct of fuel combustion. The

principle form of NO₂ produced by combustion is NO, but NO reacts quickly to form NO₂, creating the mixture of NO and NO₂ referred to as NO_x. NO₂ acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_x is only potentially irritating. NO₂ absorbs blue light, the result of which is a brownish-red cast to the atmosphere and reduced visibility.

- **Carbon monoxide.** CO is a colorless, odorless gas produced by the incomplete combustion of fuels. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, and motor vehicles operating at slow speeds are the primary source of CO in the basin, the highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- **Sulfur dioxide.** SO₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high-sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO₂ oxidizes in the atmosphere, it forms sulfates (SO₄).
- **Respirable particulate matter.** PM₁₀ consists of extremely small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of PM₁₀, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM₁₀ is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.
- **Fine particulate matter.** PM_{2.5} refers to particulate matter that is 2.5 microns or smaller in size. The sources of PM_{2.5} include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as sulfur dioxide, NO_x, and VOCs are transformed in the air by chemical reactions.
- **Lead.** Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles such as racecars that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for the implementation of portions of the Clean Air Act (CAA) dealing with certain mobile sources of air emissions and other requirements. Charged with handling global, international, national, and interstate air pollution issues and policies, the USEPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans,¹ provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards (NAAQS). The NAAQS for six

1 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards.

common air pollutants (ozone, particulate matter PM10, nitrogen dioxide, carbon monoxide, lead, and sulfur dioxide) were identified from the provisions of the CAA of 1970.

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The California Air Resources Board (CARB), a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, the CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

The NAAQA and CAAQS for each of the monitored pollutants and their effects on health are summarized in **Table 4.3-1, Ambient Air Quality Standards**.

**Table 4.3-1
Ambient Air Quality Standards**

Air Pollutant	Concentration/Averaging Time		Most Relevant Health Effects
	State Standard (CAAQS)	Federal Primary Standard (NAAQS)	
Ozone	0.09 ppm, 1-hour 0.070 ppm, 8-hour	0.075 ppm, 8-hour	(a) Pulmonary function decrements and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; and (f) Property damage
Nitrogen dioxide	0.18 ppm, 1-hour 0.030 ppm, annual	100 ppb, 1-hour 0.053 ppm, annual	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration
Carbon monoxide	20 ppm, 1-hour 9.0 ppm, 8-hour	35 ppm, 1-hour 9 ppm, 8-hour	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses

Air Pollutant	Concentration/Averaging Time		Most Relevant Health Effects
	State Standard (CAAQS)	Federal Primary Standard (NAAQS)	
Sulfur dioxide	0.25 ppm, 1-hour 0.04 ppm, 24-hour	75 ppb, 1-hour 0.14 ppm, 24-hour	Bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma
Respirable particulate matter	50 $\mu\text{g}/\text{m}^3$, 24-hour 20 $\mu\text{g}/\text{m}^3$, annual	150 $\mu\text{g}/\text{m}^3$, 24-hour	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature birth
Fine particulate matter	12 $\mu\text{g}/\text{m}^3$, annual	35 $\mu\text{g}/\text{m}^3$, 24-hour 12 $\mu\text{g}/\text{m}^3$, annual	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; and (c) Increased risk of premature birth
Lead	1.5 $\mu\text{g}/\text{m}^3$, 30-day	0.15 $\mu\text{g}/\text{m}^3$, 3-month rolling	(a) Learning disabilities; and (b) Impairment of blood formation and nerve conduction
Visibility-reducing particles	In sufficient amount such that the extinction coefficient is greater than 0.23 kilometers at relative humidity less than 70 percent, 8-hour average (10 AM–6 PM)	None	Visibility impairment on days when relative humidity is less than 70 percent
Sulfates	25 $\mu\text{g}/\text{m}^3$, 24-hour	None	(a) Decrease in lung function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardiopulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and (f) Property damage
Hydrogen sulfide	0.03 ppm, 1-hour	None	Odor annoyance
Vinyl chloride	0.01 ppm, 24-hour	None	Known carcinogen

Source: California Air Resources Board, California Ambient Air Quality Standards (CAAQS), <http://www.arb.ca.gov/desig/desig.htm>.

Note: $\mu\text{g}/\text{m}^3$ = microgram per cubic meter; NAAQS = National Ambient Air Quality Standards; ppm = parts per million by volume.

Toxic Air Contaminants

In addition to criteria pollutants, the Santa Barbara County Air Pollution Control District (SBCAPCD) periodically assesses levels of toxic air contaminants (TACs) within its jurisdiction, which is the same area as the geographical boundaries of Santa Barbara County. A TAC is defined in the California Health and Safety Code, Section 39655, which states:

“Toxic air contaminant” means air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant.

Health effects are divided into cancer and noncancer risks. “Cancer risk” refers to the increased chance of contracting cancer as a result of an exposure, and is expressed as a probability: chance-in-a-million. The values expressed for cancer risk do not predict actual cases of cancer that will result from exposure to toxic air contaminants. Rather, they state a possible risk of contracting cancer over and above the background level.

For noncancer health effects, risk is characterized by a “Hazard Index” (HI), which is obtained by dividing the predicted concentration of a toxic air contaminant by a Reference Exposure Level (REL) for that pollutant that has been determined by health professionals.² RELs are used as indicators of the potential adverse effects of chemicals. A REL is the concentration at or below which no adverse health effects are anticipated for specific exposure duration. Thus, the HI is a measure of the exposure relative to a level of safety and is appropriately protective of public health.

Regional Conditions

The City of Lompoc (City) is located within the South Central Coast Air Basin (SCCAB), which includes all of San Luis Obispo, Santa Barbara, and Ventura Counties. The climate of the Santa Barbara foothills and all of the SCCAB is strongly influenced by its proximity to the Pacific Ocean and the location of the semipermanent high-pressure cell in the northeastern Pacific. With a Mediterranean-type climate, the region is characterized by warm, dry summers and cool winters with occasional rainy periods.

Air pollutant emissions within the SCCAB are primarily generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack at a facility. Portable diesel generators and other similar equipment also are considered to be stationary sources of air emissions. Area sources are widely distributed and can include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, parking lots, and some consumer products.

2 Santa Barbara County Air Pollution Control District (SBCAPCD), *Modeling Guidelines for Health Risk Assessment* (May 2014).

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

The main sources of pollutants near the project site include mobile emissions generated from both on-road and off-road vehicles, including from agricultural operations.

The current attainment designations for the SCCAB are shown in **Table 4.3-2, South Central Coast Air Basin Attainment Status**. The SSCAB is currently designated as being unclassified for federal SO₂ and PM₁₀ standards, nonattainment for State O₃ and PM₁₀, and unclassified for State PM_{2.5} standards.

**Table 4.3-2
South Central Coast Air Basin Attainment Status**

Pollutant	State Status	National Status
Ozone	Nonattainment	Unclassified/Attainment
Carbon Monoxide	Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Unclassified	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment

Source: California Environmental Protection Agency, Air Resources Board, <http://www.arb.ca.gov/desig/adm/adm.htm>. June 2013.

Local Air Quality

For evaluation purposes, the SBCAPCD uses data from a network of CARB air quality monitoring stations throughout the Santa Barbara County. The Lompoc-S H Street station, located at South H Street and Ocean Avenue is the closest monitoring station to the project site and monitors O₃, NO₂, CO, SO₂, and PM₁₀ levels. The nearest station that monitors federal PM_{2.5} standards is the Santa Maria-906 S Broadway station located in the City of Santa Maria.

Table 4.3-3, Air Quality Monitoring Summary, summarized published monitoring data from 2011 to 2013, the most recent 3-year period available. The data indicates that the Lompoc-S H monitoring station exceeded the 24-hour State PM 10 and PM2.5 standards in 2011, 2012, and 2013.

**Table 4.3-3
Air Quality Monitoring Summary**

Pollutant	Standards	Year		
		2011	2012	2013
Ozone (O3)				
Maximum 1-hour concentration monitored (ppm)		0.073	0.059	0.073
Maximum 8-hour concentration monitored (ppm) (state)		0.060	0.055	0.070
Number of days exceeding state 1-hour standard	0.09 ppm	0	0	0
Number of days exceeding state 8-hour standard	0.070 ppm	0	0	0
Number of days exceeding federal 8-hour standard	0.075 ppm	0	0	0
Nitrogen Dioxide (NO2)				
Maximum 1-hour concentration monitored (ppm)		0.031	0.033	0.105
Annual average concentration monitored (ppm)		0.004	0.003	0.004
Number of days exceeding state 1-hour standard	0.18 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 8-hour concentration monitored (ppm)		0.83	0.49	- ^a
Number of days exceeding state 8-hour standard	20 ppm	0	0	0
Number of days exceeding federal 8-hour standard	9.0 ppm	0	0	0
Sulfur Dioxide (SO2)				
Maximum 24-hour concentration monitored (ppm)		0.003	0.002	0.002
Number of samples exceeding state 24-hour standard	0.04 ppm	0	0	0
Number of days exceeding federal 24-hour standard	0.14 ppm	0	0	0
Respirable Particulate Matter (PM10)				
Maximum 24-hour concentration monitored ($\mu\text{g}/\text{m}^3$)		71.1	54.5	51.2
Annual average concentration monitored ($\mu\text{g}/\text{m}^3$)		21.8	21.6	- ^a
Number of samples exceeding state standard	50 $\mu\text{g}/\text{m}^3$	2	3	2
Number of samples exceeding federal standard	150 $\mu\text{g}/\text{m}^3$	0	0	0
Fine Particulate Matter (PM2.5)				
Maximum 24-hour concentration monitored ($\mu\text{g}/\text{m}^3$)		18.8	18.1	15.9
Annual average concentration monitored ($\mu\text{g}/\text{m}^3$)		0	0	0
Number of samples exceeding federal standard	35 $\mu\text{g}/\text{m}^3$	0	0	- ^a

a. Insufficient data was available to determine the value.

Source: California Air Resources Board, "Air Quality Data Statistics." <http://www.arb.ca.gov/adam/topfour/topfour1.php>. Assessed December 2014.

Note: $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air; aam = annual arithmetic mean; N/A = not available; ppm = parts per million by volume of air.

Individuals who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of this environmental analysis, sensitive receptors are locations where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain onsite for 24 hours. However, when assessing the impact of pollutants with 1-hour and 8-hour standards (such as nitrogen dioxide and carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

Numerous sensitive receptors surround the project site. The closest sensitive receptors include residential development located approximately 75 feet south of the project site and the Pali Wine Company approximately 60 feet to the east.

Greenhouse Gas Emissions

Climate change is a change in the average climatic conditions on earth that may be measured by changes in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes that have occurred in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) considered six alternative future GHG scenarios that would stabilize global temperatures and climate change impacts. The IPCC predicted that global mean temperature change from 1990 to 2100 for the six scenarios considered could range from 1.1 degrees Celsius ($^{\circ}\text{C}$) to 6.4 $^{\circ}\text{C}$. Global average temperatures and sea levels are expected to rise under all scenarios.³

3 Intergovernmental Panel on Climate Change, Summary for Policymakers, *Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K. B. Avery, M. Tignor and H. L. Miller, eds., (Cambridge, Eng.: Cambridge University Press: 2007).

In California, climate change may result in consequences such as the following:

- A reduction in the quality and supply of water to the State from the Sierra snowpack
- Increased risk of large wildfires
- Reductions in the quality and quantity of certain agricultural products
- Exacerbation of air quality problems
- A rise in sea levels resulting in the displacement of coastal business and residences
- Damage to marine ecosystems and the natural environment
- An increase in infections, disease, asthma, and other health-related problems
- A decrease in the health and productivity of California's forests

Gases that trap heat in the atmosphere are GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO₂), methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects the earth's temperature. Without the natural heat-trapping effect of GHG, the earth's surface would be about 34°C cooler.⁴ However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The global warming potential (GWP) is the potential of a gas or aerosol to trap heat in the atmosphere. The GWP compares the amount of heat trapped by a certain mass of the gas in question to the amount of heat trapped by a similar mass of carbon dioxide. A GWP is calculated over a specific time interval, commonly 20, 100, or 500 years. GWP is expressed as a factor of carbon dioxide (whose GWP is standardized to 1). For example, the 100-year GWP of methane is 21, which means that if the same mass of methane and carbon dioxide were introduced into the atmosphere, that methane will trap 21 times more heat than the carbon dioxide over the next 100 years.⁵ The GHGs of most concern are identified below in **Table 4.3-4, Greenhouse Gas Descriptors**. Of these two primary sources of GHG, CO₂ would be generated by sources associated with the Project, while methane would not be generated in any substantial amount.

4 California Environmental Protection Agency (CalEPA), Climate Action Team, *Climate Action Team Report to Governor Schwarzenegger and the California Legislature*, www.climatechange.ca.gov/climate_action_team/reports/index.html, (March 2006), accessed June 10, 2013.

5 Working Group, *Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (2007).

**Table 4.3-4
Greenhouse Gas Descriptors**

Greenhouse Gas	Description and Physical Properties	Sources
Carbon dioxide (CO ₂)	Carbon dioxide is an odorless, colorless, natural GHG. GWP = 1.	Carbon dioxide is emitted from natural and anthropogenic sources. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The concentration in 2005 was 379 ppm, which is an increase of about 1.4 ppm per year since 1960.
Haloalkanes	Haloalkanes (also known as halogenoalkanes or alkyl halides) are colorless, relatively odorless, and hydrophobic.	Haloalkanes are mostly human-produced such as flame retardants, fire extinguishants, refrigerants, propellants, solvents, and pharmaceuticals. Non-artificial-source haloalkanes do occur, mostly through enzyme-mediated synthesis by bacteria, fungi, and especially sea microalgae (seaweeds).
Methane (CH ₄)	Methane is a flammable gas and is the main component of natural gas. GWP = 21.	A natural source of methane is from the anaerobic decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from landfills, fermentation of manure, and cattle.
Nitrous oxide (N ₂ O)	Nitrous oxide is also known as laughing gas and is a colorless GHG. GWP = 310.	Microbial processes in soil and water, fuel combustion, and industrial processes.
Perfluorocarbons (PFCs)	Perfluorocarbons liquids are colorless with high density, up to over twice that of water. It is also an odorless, non-flammable, unreactive gas.	Man-made compounds containing just fluorine and carbon. Usage is mainly in the electronics sector in semiconductor manufacture, with significant usage as refrigerants.
Sulfur hexafluoride (SF ₆)	Sulfur hexafluoride is an inorganic, colorless, odorless, non-flammable, extremely potent GHG that is an excellent electrical insulator. GWP = 23,900	Sulfur hexafluoride emissions are virtually all of anthropogenic origin including electricity sector, magnesium industry, electronics industry, and adiabatic property.

Source: Intergovernmental Panel on Climate Change, Summary for Policymakers, Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M. Tignor and H.L. Miller [eds.]). (Cambridge University Press: Cambridge, United Kingdom and New York, NY, USA) 2007.

Notes: ppm = parts per million; ppt = parts per trillion (measure of concentration in the atmosphere); GWP = global warming potential

Individual GHG compounds have varying GWP and atmospheric lifetimes. The calculation of the carbon dioxide equivalent (CO₂e) is a consistent methodology for comparing GHG emissions, since it normalizes various GHG emissions to a consistent metric. Methane's warming potential of 21 indicates that

methane has a 21 times greater warming effect than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual GHG multiplied by its GWP.

State Emissions Inventory and Trends

California is the second largest contributor of GHGs in the US and the 16th largest in the world.⁶ In 2012, California produced 458.68 million metric tons of carbon dioxide equivalents (MMTCO₂e),⁷ including imported electricity and excluding combustion of international fuels and carbon sinks or storage. The major source of GHGs in California is transportation, contributing to 41 percent of the state's total GHG emissions.⁸ Electricity generation (both in and out of state) is the second largest source, contributing to 22 percent of the state's GHG emissions.⁹ The statewide inventory of GHGs by sector is shown in **Table 4.3-5, California GHG Inventory 2004-2012.**

**Table 4.3-5
California GHG Inventory 2004-2012**

Main Sector	Emissions MMTCO ₂ e								
	2004	2005	2006	2007	2008	2009	2010	2011	2012
Transportation ¹	186.88	189.08	189.18	189.27	178.02	171.47	170.46	168.13	167.38
Electric Power	115.20	107.86	104.54	113.94	120.15	101.32	90.30	88.04	95.09
Commercial/ Residential	42.90	41.24	41.89	42.11	42.44	42.65	43.82	44.32	42.28
Industrial ²	94.48	92.29	90.28	87.10	87.54	84.95	88.51	88.34	89.16
Recycling and Waste	7.57	7.75	7.80	7.93	8.09	8.23	8.34	8.42	8.49
High GWP ^{3,4}	9.56	10.36	11.08	11.78	12.87	13.99	15.89	17.35	18.41
Agriculture	36.26	36.54	37.75	37.03	37.99	35.84	35.73	36.34	37.86
Total Emissions	492.86	485.13	482.52	489.16	487.10	458.44	453.06	450.94	458.68

Source: CARB, May 2014.

¹ Includes equipment used in construction, mining, oil drilling, industrial and airport ground operations

² Reflects emissions from combustion of natural gas, diesel, and lease fuel plus fugitive emissions

³ These categories are listed in the Industrial sector of ARB's GHG Emission Inventory sectors

⁴ This category is listed in the Electric Power sector of ARB's GHG Emission Inventory sectors

6 California Energy Commission, *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report*, CEC-600-2006-013-SF (December 2006).

7 California Air Resources Board (CARB), *California Greenhouse Gas Inventory for 2000–2012—by Category as Defined in the Scoping Plan* (March 24, 2014), http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-12_2014-03-24.pdf (accessed May 20, 2014).

8 California Energy Commission, *Inventory* (December 2006).

9 California Energy Commission, *Inventory* (December 2006).

REGULATORY SETTING

Air Quality

Air quality within the SCCAB is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly as well as individually to improve air quality through legislation, regulations, planning, policymaking, education, and a variety of programs. The agencies primarily responsible for improving the air quality within the SCCAB are discussed in the following paragraphs along with their individual responsibilities.

Federal

At the federal level, the USEPA is responsible for the implementation of portions of the CAA that deal with certain mobile sources of air emissions and other requirements. Charged with handling global, international, national, and interstate air pollution issues and policies, the USEPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans,¹⁰ provides research and guidance for air pollution programs, and sets NAAQS.

The NAAQS were set to protect public health, including that of sensitive individuals, and for this reason, the standards continue to change as more medical research becomes available regarding the health effects of the criteria pollutants. The primary NAAQS define the air quality level considered necessary, with an adequate margin of safety, to protect the public health.¹¹ Other portions of the CAA, such as the portions dealing with stationary source requirements, are implemented by State and local agencies.

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA that are most applicable to the Project include Title I, Nonattainment Provisions, and Title II, Mobile Source Provisions.

10 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain NAAQS.

11 US Environmental Protection Agency, *A Comprehensive Analysis of Biodiesel Impacts on Exhaust Emissions*, EPA420-P-02-001 (October 2002). EPA, Office of Air and Radiation, *Nitrogen Oxides: Impact on Public Health and the Environment* (1997), www.epa.gov/ttn/oarpg/t1/reports/noxrept.pdf. EPA, *Ozone and Your Health*, EPA-452/F-99-003 (1999), www.epa.gov/air/ozonepollution/pdfs/health.pdf. EPA, *Particle Pollution and your Health*, EPA-452/F-03-001 (September 2003), <http://epa.gov/pm/pdfs/pm-color.pdf>. EPA, *Health and Environmental Impacts of CO*, <http://www.epa.gov/airquality/carbonmonoxide/health.html>. EPA, *Fact Sheet: Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide* (July 22, 2009), www.epa.gov/air/nitrogenoxides/pdfs/20090722fs.pdf.

State

The California CAA, signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles, consumer products, and various types of commercial equipment sold in California. It also sets fuel specifications to further reduce vehicular emissions. **Table 4.3-1** includes the CAAQS currently in effect for each of the criteria pollutants as well as other pollutants recognized by the State. As shown in **Table 4.3-1**, the CAAQS includes more stringent standards than the NAAQS.

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain the NAAQS. The State Implementation Plan for California is administered by the CARB, which has overall responsibility for statewide air quality maintenance and air pollution prevention. The CARB also administers CAAQS for the 10 air pollutants designated in the California Clean Air Act. The 10 State air pollutants are the six NAAQS listed above (O₃, particulate matter PM₁₀ and PM_{2.5}, NO_x, CO, Pb, and SO₂) as well as visibility-reducing particulates¹², hydrogen sulfide, sulfates, and vinyl chloride.

CARB Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. CARB adopted a new section 2485 within Chapter 10, Article 1, Division 3, title 13 in the California Code of Regulations.¹³ This measure limits the idling of diesel vehicles to reduce emissions of toxics and criteria pollutants. The driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location; and (2) shall not idle a diesel-fueled auxiliary power system for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

12 Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

13 CARB, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling," www.arb.ca.gov/regact/idling/idling.htm (accessed September 30, 2012).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks.

This regulation requires that new 2008 and subsequent model-year heavy-duty diesel engines are equipped with an engine shutdown system. This system automatically shuts down the engine after 5 minutes of continuous idling operation once the vehicle is stopped, the transmission is set to “neutral” or “park,” and the parking brake is engaged. If the parking brake is not engaged, the engine shutdown system shuts down the engine after 15 minutes of continuous idling operation once the vehicle is stopped and the transmission is set to “neutral” or “park.”

CARB Regulation for In-Use Off-Road Diesel Vehicles. On July 26, 2007, the CARB adopted a regulation to reduce diesel particulate matter and NOx emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are typically used in construction, mining, and industrial operations. As similar types of diesel equipment will be used in the construction and development of the project site, this regulation is relevant to this Project. The regulation imposed limits on idling, buying older off-road diesel vehicles, and selling vehicles beginning in 2008. It requires all vehicles to be reported to CARB and labeled in 2009; and then in 2010 begins gradual requirements to clean up their fleet by getting rid of older engines, using newer engines, and installing exhaust retrofits. The regulation requires equipment to be retrofitted or retired. The regulation takes effect in phases, requiring the largest fleets to comply by 2010, medium fleets by 2013, and smaller fleets by 2015.

Statewide Truck and Bus Rule. On December 12, 2008, the CARB approved a new regulation to significantly reduce emissions from existing on-road diesel vehicles operating in California. The regulation requires affected trucks and buses to meet performance requirements between 2011 and 2023. By January 1, 2023, all vehicles must have a 2010 model year engine or be modified to result in equivalent performance. The regulation applies to all on-road heavy-duty diesel-fueled vehicles with a gross vehicle weight rating greater than 14,000 pounds, agricultural yard trucks with off-road certified engines, and certain diesel fueled shuttle vehicles of any gross vehicle weight rating. Out-of-state trucks and buses that operate in California are also subject to the regulation.

Diesel Particulate Matter. Diesel-fueled vehicles are a source of diesel exhaust particulate matter (DPM), which CARB has designated as a TAC. In addition, motor vehicles are a source of other TACs that can contribute to health effects. CARB has determined that health effects are generally elevated near heavily traveled roadways. The CARB *Air Quality and Land Use Handbook* states, “Air pollution studies indicate that living close to high traffic and the associated emissions may lead to adverse health effects beyond those associated with regional air pollution in urban areas.”¹⁴ The *Air Quality and Land Use*

¹⁴CalEPA, California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective* (2005), 8.

Handbook cites several studies linking adverse respiratory health effects (e.g., asthma) to proximity to roadways with heavy traffic densities, where the distances between the roadway and the receptors were 300 to 1,000 feet. Other studies suggest that such impacts diminish with distance, and a substantial benefit occurs if the separation distance is greater than 300 to 500 feet.

The *Air Quality and Land Use Handbook*, which is intended to serve as a general reference guide for planning agencies to evaluate and reduce air pollution impacts associated with new projects that go through the land use decision-making process, contains general recommendations that may reduce potential health impacts by establishing a buffer zone or setback between sensitive land uses and sources of TACs. Specifically, with respect to land uses located near freeways and other heavily traveled roadways, CARB recommends that lead agencies avoid citing new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.

Regional and Local

Santa Barbara County Air Pollution Control District

The SBCAPCD is located within the SCCAB, which includes all of Santa Barbara, Ventura, and San Luis Obispo Counties. The SBCAPCD is the agency principally responsible for comprehensive air pollution control in the Santa Barbara County portion of the SCCAB. To that end, the SBCAPCD, a regional agency, works directly with the Santa Barbara County Association of Governments, local governments, and cooperates actively with all state and federal government agencies.

Under state law, the SBCAPCD is required to prepare an overall plan for air quality improvement for the SCCAB, known as the Clean Air Plan (CAP).¹⁵ The CAP was last updated in 2013 and adopted in March 2015, the 2013 triennial update is available for public review and serves as a guide to bring pollutant concentration into attainment with federal and state standards. Health and Safety Code sections 40924 and 40925 require that every three years areas update their clean air plans to attain the state eight-hour ozone standard.¹⁶ The 2013 CAP also documents progress toward the state 1-hour and 8-hour ozone standards. The SBCAPCD determines if certain rules and control measures are appropriate for their specific region according to technical feasibility, cost effectiveness, and the severity of nonattainment.

Among the SBCAPCD rules applicable to the proposed project are Rule 345 to control fugitive dust from construction activities. Activities subject to this regulation are also subject to Rule 302 (Visible Emissions) and Rule 303 (Nuisance).

15 SBCAPCD, *Final 2013 Clean Air Plan* (March 2015).

16 Currently, the 2013 Final Clean Air Plan is available for review, <http://www.ourair.org/clean-air-plans/>.

SBCAPCD Rule 345. This rule governs emissions of fugitive dust during construction and demolition activities. It establishes various standards in regards to visible fugitive dust control, truck hauling operations, and structure demolition. Compliance with this rule and its requirements is achieved through best management practices (BMPs), which are used to control air pollutants and particulate matter from impacting air quality. This includes requirements and standards related to visible fugitive dust, truck hauling, and track-out/carry-out.

The SBCAPCD published the document title *Scope and Content of Air Quality Sections in Environmental Documents*, which contains guidance on assessing and mitigating air quality impacts. Criteria for evaluating the significance of adverse air quality impacts from projects subject to CEQA were adopted in the APCD *Environmental Review Guidelines*.

Santa Barbara County Association of Governments

The Santa Barbara County Association of Governments (SBCAG) is the authorized regional planning agency comprised of Santa Barbara County and all eight incorporated cities within the county consisting of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, and Solvang. The SBCAG acts as the region's designated metropolitan planning organization (MPO), regional transportation planning agency, airport land use commission, local transportation authority, and congestion management agency.

SBCAG is required by federal and State law to prepare and update the regional transportation plan (RTP) every four years, including its Sustainable Communities Strategy (SCS) component pursuant to SB 375. The SCS has been formulated to reduce greenhouse gas emissions from passenger vehicles and light trucks of 10.5 percent in 2020 and 15.4 percent in 2035 when compared to 2005 emissions.¹⁷

Greenhouse Gases

Federal

On April 17, 2009, the USEPA released a proposed finding that determined climate change poses a risk to public health. The USEPA held a 60-day public comment period, which ended June 23, 2009, and received over 380,000 public comments. On December 7, 2009, the USEPA Administrator (Administrator) signed two distinct findings regarding GHGs under section 202(a) of the CAA:

17 Santa Barbara County Association of Governments, *2040 Regional Transportation Plan and Sustainable Communities Strategy* (August 2013) p. 6-2.

- **Endangerment Finding:** The Administrator finds that the current and projected concentrations of the six key well-mixed GHGs—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6)—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the proposed USEPA GHG standards for light-duty vehicles. These were jointly proposed by the USEPA and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) on September 15, 2009. The two findings were published in Federal Register Docket ID No. EPA-HQ-OAR-2009-0171. The final rule was effective January 14, 2010.

The USEPA has issued the Final Mandatory Reporting of Greenhouse Gases Rule that requires reporting of GHG emissions from large sources and suppliers in the United States. Under the rule (effective December 29, 2009), suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the USEPA. The gases covered by the proposed rule are CO₂, CH₄, N₂O, HFC, PFC, SF₆, and other fluorinated gases including nitrogen trifluoride (NF₃) and hydrofluorinated ethers (HFE).

On September 15, 2009, the USEPA and the NHTSA proposed a new national program to reduce greenhouse gas emissions and improve fuel economy for all new cars and trucks sold in the United States. The USEPA proposed the first-ever national GHG emissions standards under the CAA, and NHTSA proposed Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. This proposed national program would allow automobile manufacturers to build a single light-duty national fleet that satisfies all requirements under both federal programs and the standards of California and other states.

State

Assembly Bill 1493

California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, requires the California Air Resources Board to adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. CARB estimates that the regulation would reduce climate change emissions from the light-duty passenger

vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.¹⁸ On June 30, 2009, the USEPA granted a waiver of CAA preemption to California for the state's GHG emission standards for motor vehicles beginning with the 2009 model year. The waiver was published in the Federal Register on July 8, 2009.

Executive Order S-3-05 and the Climate Action Team

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05,¹⁹ the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target. To meet these targets, the Governor directed the Secretary of the California Environmental Protection Agency to lead a Climate Action Team made up of representatives from the Business, Transportation, and Housing Agency; the Department of Food and Agriculture; the Resources Agency; the CARB; the Energy Commission; and the Public Utilities Commission. The Climate Action Team's Report to the Governor in 2006 contains recommendations and strategies to help ensure that the targets in Executive Order S-3-05 are met.²⁰

Assembly Bill 32

In 2006, the California State Legislature enacted Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO₂, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. The California Air Resources Board (CARB) is the state agency charged with monitoring and regulating

18 CARB, *Climate Change Emission Control Regulations*, fact sheet (December 10, 2004).

19 State of California, Executive Order S-3-05 (June 1, 2005), <http://www.dot.ca.gov/hq/energy/ExecOrderS-3-05.htm> (accessed June 10, 2013).

20 CalEPA Climate Action Team, *Climate Action Team Report*.

sources of emissions of GHGs that cause global warming as part of an effort to reduce emissions of GHGs.

The CARB Governing Board approved the 1990 GHG emissions level of 427 MMTCO₂e on December 6, 2007. Therefore, in 2020, emissions in California are required to be at or below 427 MMTCO₂e.

Under the current “business as usual” scenario, statewide emissions are increasing at a rate of approximately 1 percent per year as noted below.²¹

- 1990: 427 MMTCO₂e
- 2004: 480 MMTCO₂e
- 2008: 495 MMTCO₂e
- 2020: 596 MMTCO₂e

Under AB 32, the CARB published its *Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California*.²² The CARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of those early action measures, nine are considered discrete early action measures,²³ as they were adopted by the CARB and enforceable by January 1, 2010. The CARB estimates that the 44 early action measures will result in reductions of at least 42 MMTCO₂e by 2020, representing approximately 25 percent of the projected reduction needed to reach the 2020 target.

CEQA is only mentioned once in the Early Action Measures report. The California Air Pollution Control Officer’s Association suggested that CARB work with local air districts on approaches to review GHG impacts under the CEQA process, including significance thresholds for GHGs for projects and to develop a process for capturing reductions that result from CEQA mitigations. CARB’s response to this recommendation in the report is as follows:

[T]he Governor’s Office of Planning and Research is charged with providing statewide guidance on CEQA implementation. With respect to quantifying any

21 CARB, *Climate Change Scoping Plan* (2008), 12.

22 CARB, *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration* (October 2007), www.arb.ca.gov/cc/ejac/ghg_eamcommitteelist.pdf (accessed June 10, 2013).

23 Discrete early actions are regulations to reduce greenhouse gas emissions adopted by the CARB Governing Board and enforceable by January 1, 2010.

*reductions that result from project-level mitigation of GHG emissions, we would like to see air districts take a lead role in tracking such reductions in their regions.*²⁴

CARB approved the Climate Change Scoping Plan (2008 Scoping Plan) in December 2008. The 2008 Scoping Plan

*proposed a comprehensive set of actions designed to reduce overall GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health.*²⁵

As noted in the approved 2008 Scoping Plan, the projected total business-as-usual emissions for year 2020 (estimated as 596 MMTCO₂e) must be reduced by approximately 28 percent to achieve the CARB's approved 2020 emission target of 427 MMTCO₂e. CARB updated the 2008 Scoping Plan in May 2014 (Updated 2014 Scoping Plan).²⁶ The Updated 2014 Scoping Plan adjusted the 1990 GHG emissions level to 431 MMTCO₂e and the updated 2020 GHG emissions forecast is 509 MMTCO₂e which took credit for certain GHG emission reduction measures already in place (e.g., the Renewables Portfolio Standard). As revised in 2014, the projected total business-as-usual emissions for year 2020 must be reduced by approximately 15 percent to achieve the CARB's approved 2020 emission target of 431 MMTCO₂e. The Updated 2014 Scoping Plan also recommends a 40 percent reduction in GHG emissions from 1990 levels by 2030 and a 60 percent reduction in GHG emissions from 1990 levels by 2040.

The 2008 Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the 2008 Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewable energy mix of 33 percent
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets

24 CARB, *Expanded List of Early Action Measures* (October 2007).

25 CARB, *Climate Change Scoping Plan: A Framework for Change as Approved December 2008* (December 2008) http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf (accessed June 10, 2013).

26 CARB, *First Update to the Climate Change Scoping Plan, Building on the Framework Pursuant to AB 32* (May 2014).

- Adopting and implementing measures pursuant to existing state laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the state’s long-term commitment to AB 32 implementation

In addition, the 2008 Scoping Plan differentiates between “capped” and “uncapped” strategies. “Capped” strategies are subject to the proposed cap-and-trade program.²⁷ The 2008 Scoping Plan states that the inclusion of these emissions within the cap-and-trade program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. “Uncapped” strategies include additional reductions that will not be subject to the cap-and-trade emissions requirements. They are provided as a margin of safety to help achieve required GHG emission reductions.

Executive Order S-01-07

The former California Governor Arnold Schwarzenegger signed Executive Order S-01-07 on January 18, 2007. The order mandated that a statewide goal be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. It also established a Low Carbon Fuel Standard for transportation fuels for California.

Senate Bill 97

SB 97 was passed in August 2007, and added Section 21083.05 to the *Public Resources Code*. Section 21083.05 states:

(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a).

27 The cap-and-trade program is a central element of AB 32 and covers major sources of GHG emissions in the state such as refineries, power plants, industrial facilities, and transportation fuels. The regulation includes an enforceable GHG cap that will decline over time. CARB will distribute allowances, which are tradeable permits, equal to the emission allowed under the cap.

Senate Bill 375

SB 375 was signed into law by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which contributes up to 40 percent of the total GHG emissions in California. Automobiles and light trucks alone contribute almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology but significant reductions from a change in land use patterns and improved transportation are necessary. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) it requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) it aligns planning for transportation and housing, and (3) it creates specified incentives for the implementation of the strategies.

California Air Resources Board

On October 24, 2008, CARB released the first preliminary draft of recommended approaches for setting interim significance thresholds for GHG under CEQA. The draft approach seeks to establish GHG thresholds and/or performance standards based on sector-types, as defined in the 2008 Scoping Plan. Sectors identified in the 2008 Scoping Plan are Transportation, Electricity, Industrial, Commercial and Residential, Agricultural, High Global Warming Potential, and Recycling and Waste. CARB has not yet finalized the proposed thresholds/performance standards.

Non-Legislative

CAPCOA. On January 8, 2008, the California Air Pollution Control Officers Association (CAPCOA) released a paper to provide a common platform of information and tools for public agencies. The disclaimer states that it is not a guidance document, but rather a resource to enable local decision makers to make the best decisions they can in the face of incomplete information during a period of change. The paper indicates that it is an interim resource and does not endorse any particular approach. It discusses three groups of potential thresholds, including a no significance threshold, a threshold of zero emissions, and a non-zero threshold.²⁸ The non-zero quantitative thresholds as identified in the paper range from 900

28 California Air Pollution Control Officers Association, *CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act* (January 2008), www.capcoa.org/ (accessed June 10, 2013).

to 50,000 metric tons of CO₂ per year. The CAPCOA paper also identified non-zero qualitative thresholds.²⁹

Attorney General. The Office of the California Attorney General maintains a list of CEQA Mitigations for Global Warming Impacts on its website. The Attorney General's Office has listed some examples of types of mitigations that local agencies may consider to offset or reduce global warming impacts from a project. The Attorney General's Office states that the lists are examples and not intended to be exhaustive, but instead are provided as measures and policies that could be undertaken. Moreover, the measures cited may not be appropriate for every project, so the Attorney General suggests that the lead agency should use its own informed judgment in deciding which measures it would analyze, and which measures it would require, for a given project. The mitigation measures are divided into two groups: generally applicable measures and general plan measures. The Attorney General presents "generally applicable" measures in the following areas:

- Energy efficiency
- Renewable energy
- Water conservation and efficiency
- Solid waste measures
- Land use measures
- Transportation and motor vehicles
- Carbon offsets

Regional and Local

Santa Barbara County Air Pollution Control District

In April 2015, the SBCAPCD adopted thresholds of significance for GHG emissions for stationary sources. A proposed stationary source project will not have a significant HG impact, if operation of the project will: (1) emit less than the screening significance level of 10,000 MTCO₂e per year; or (2) show compliance with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions (sources subject to the AB 32 Cap-and-Trade requirements pursuant to Title 17, Article 5 (California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms) would meet the criteria); or (3) show consistency with the AB 32 Scoping Plan

²⁹ A non-zero threshold could minimize the resources spent reviewing environmental analyses that do not result in real GHG reductions or to prevent the environmental review system from being overwhelmed.

GHG emission reduction goals by reducing project emissions 15.3 % below BAU. Implementation of measures to reduce construction, energy use, and mobile source emissions could be considered as a means to reduce greenhouse gas emissions and address global climate change at a programmatic level. The SBCAPCD *Scope and Content of Air Quality Sections in Environmental Documents* recommend that projects implement all feasible mitigation measures to reduce the emissions of GHGs.³⁰

City of Lompoc General Plan

The City of Lompoc General Plan Conservation and Open Space Element includes policies to improve air quality in the Lompoc Valley, minimize emissions from vehicles, reduce GHG emissions, and minimize per capita consumption of nonrenewable energy resources within the City. An analysis of the consistency of these applicable goals and policies with the proposed project is provided in **Section 4.7, Land Use and Planning**.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Air Quality

In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact on air quality if it would:

30 Santa Barbara County Air Pollution Control District, *Scope and Content of Air Quality Sections in Environmental Documents*, Updated April 2015, page 16.

- Threshold 4.3-1** Conflict with or obstruct implementation of the applicable air quality plan?
- Threshold 4.3-2** Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- Threshold 4.3-3** Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- Threshold 4.3-4** Expose sensitive receptors to substantial pollutant concentrations?
- Threshold 4.3-5** Create objectionable odors affecting substantial number of people?

In order to facilitate the intent and significance determinations of the *State CEQA Guidelines*, the SBCAPCD has adopted criteria for determining the level of significance for project-specific impacts within its jurisdiction. Projects meeting any of the criteria discussed below are considered to have significant air quality impact.

Regional Air Quality Thresholds

Table 4.3-6, Mass Daily Emissions Thresholds, identifies SBCAPCD thresholds to determine the significance of impacts to air quality during project operation. Please note that the SBAPCD does not have quantitative thresholds of significance in place for short-term or construction emissions. As indicated in Table 4.3-6, the SBAPCD uses 25 tons per year for ROC, NO_x, or PM₁₀ as a guideline for determining significance of construction impacts. Due to the relatively low background ambient CO levels in Santa Barbara County, localized CO impacts associated with congested intersections are not expected to exceed the CO health-related air quality standards. Therefore, CO “hotspot” analyses are not required. A proposed project would result in a potentially significant impact if it would emit more than 25 pounds per day of NO_x or VOC from motor vehicle trips only.

Table 4.3-6
Mass Daily Emissions Thresholds

Pollutant	Construction (tons/year) ²	Operational (pounds/day)
Volatile Organic Compounds (VOCs)	25	240 ³
Nitrogen dioxide (NO _x)	25	240 ³
Carbon monoxide (CO) ¹	-	-

Pollutant	Construction (tons/year) ²	Operational (pounds/day)
Sulfur dioxide (SOx)	-	-
Respirable particulate matter (PM10)	25	80
Fine particulate matter (PM2.5)	-	-

¹ The SBCAPCD does not have a threshold for CO.

² The SBCAPCD does not have construction thresholds; however, it does use 25 tons per year for VOC, NOx, or PM10 as a guideline to determine the significance of construction emissions.

³ Emit less than 25 pounds per day of NOx or VOC from motor vehicle trips only

Abbreviations: CO = carbon monoxide; NOx, = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; VOC = volatile organic compounds; SOx = sulfur oxides.

Toxic Air Contaminants

Carcinogenic compounds are not considered to have threshold levels (i.e. dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. As a result, the SBCAPCD identifies a potentially significant impact to public health if the health risk exceeds 10 cancer cases in a million for cancer risk and a Hazard Index of more than one (1.0) for non-cancer risk.

Greenhouse Gases

In order to assist in determining whether a project would have a significant effect on the environment, the project may be deemed to have a significant impact to greenhouse gases, if it would:

Threshold 4.3-6 Generate greenhouse gas emissions, either directly or indirectly that may have a significant impact on the environment.

Threshold 4.3-7 Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Pursuant to *CEQA Guidelines* Section 15064.4, the methods suitable for analysis of GHG emissions are:

1. Use a model or methodology to quantify greenhouse gas emissions resulting from a project. The Lead Agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The Lead Agency should explain the limitations of the particular model or methodology selected for use.
2. Rely on a qualitative analysis or performance-based standards.

In April 2015, the SBCAPCD adopted thresholds of significance for GHG emissions for stationary sources. The thresholds of significance adopted for GHG emissions are applicable to new or modified stationary

sources. Stationary source projects include land uses with processes and equipment that require a SBCAPCD permit to operate, such as oil and gas facilities, landfills, and facilities with large combustion devices. Please note that the adopted GHG thresholds previously identified were not designed to be applicable to land use development projects/plans (i.e., commercial and residential development projects).

The performance standard identified in the 2014 Updated Scoping Plan recommends a 15 percent reduction from business as usual by 2020. This document is the most current reference which quantifies statewide GHG emissions and the percentage reduction required by AB 32 mandates to meet GHG reduction goals. As indicated in the 2014 Updated Scoping Plan, CARB encourages local governments and air districts to meet the 15 percent reduction below today's levels by 2020 to ensure that their municipal and community-wide emissions match the State's reduction target.

As previously indicated, the State has reduced today's GHG emissions 15 percent from 1990 levels. Therefore, since the proposed project would be completed and operational by 2020, the Project would need to reduce GHG emissions by 15 percent from today's emissions levels to meet the 2020 reduction goals.

- The proposed project would result in a potentially significant impact if it would:
- Exceed the 10,000 MTCO_{2e} per year screening threshold; and
- Result in a reduction from business as usual GHG emissions lower than 15 percent by 2020³¹

Methodology

Air Quality

Construction

Construction activities produce combustion emissions from various sources, such as on-site heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Grading activities produce fugitive dust emissions (PM₁₀ and PM_{2.5}) from soil-disturbing activities. Exhaust emissions from construction activities on site would vary daily as construction activity levels change. Short-term emissions of criteria air pollutants (e.g., CO, SO_x, PM₁₀ and PM_{2.5}) generated by project construction and ozone precursors (e.g., VOC and NO_x) were assessed in accordance with SBCAPCD-recommended methods. These emissions were modeled using the CARB-

31 The Project would be built out by 2020. GHG emissions would need to be reduced 15 percent by 2020 from today's level to meet the 30 percent Statewide goal. Assuming a straight-line assumption, the Project would need to reduce 1 percent each year until build-out to meet the 40 percent reduction in GHG emissions from 1990 levels by 2030.

approved California Emissions Estimator Model (CalEEMod) computer program. CalEEMod is designed to model construction emissions for land use development projects and allows for the input of project-specific information. The program contains default settings specific to the air district, county, air basin, or state level using approved vehicle emissions factors (EMFAC 2011), established methodologies, and the latest survey data.

Based on the CalEEMod model, the emission calculations take into account compliance with Rule 345 to control fugitive dust from construction activities and CARB for In-use Off-road Diesel Vehicles (Title 13 California Code Regulations, Chapter 9, Section 2449 and 2485).

Operation

Operation emissions generated by both area and mobile sources would result from normal day-to-day activities of the project site. Area source emissions would be generated by the consumption of natural gas and landscape maintenance. Mobile emissions would be generated by the motor vehicles traveling to and from the project site.

Project-generated, regional, and mobile-source emissions of criteria air pollutants and ozone precursors were also modeled using the CalEEMod computer program. CalEEMod allows land use selections that include project location specifics and trip generation rates. CalEEMod accounts for area-source emissions from the use of natural gas, landscape maintenance equipment, and consumer products and accounts for mobile-source emissions associated with vehicle trip generation.

The analysis of daily operational emissions associated with the proposed project have been prepared using the data and methodologies identified in the SBCAPCD's *Scope and Content of Air Quality Sections in Environmental Documents* and current motor vehicle emission factors in CalEEMod. Trip rates for these land uses were obtained from the traffic impact study for the Project (**Appendix 4.10**).

The following assumptions were made in the CalEEMod computer program:

Land Uses

- 590,000 square foot industrial and warehouse (light industrial)
- 1,000,000 square foot roadways, parking, and sidewalk (other asphalt surfaces)
- 83,200 square foot landscape (other non-asphalt surfaces)

Construction

- Construction period of approximately 4.5 years beginning July 2016 and ending by February 2020

- Construction would occur over five phases: (1) Site Preparation which would last approximately 30 days, (2) Grading for approximately 75 days, (3) Building Construction for approximately 740 days, (4) Paving for approximately 55 days, and (5) architectural coating for approximately 55 days.
- Construction would occur 5 days per week with 8 hour work days

Each phase of construction would result in varying levels of intensity and the number of construction personnel. The construction workforce would consist of approximately 18 worker trips per day during site preparation, 20 worker trips per day during grading, 703 worker trips per day during building construction, 15 worker trips per day during paving, and 141 worker trips day during architectural coating.

Toxic Air Containments

An evaluation of the potential carcinogenic and noncarcinogenic effects was also conducted. Under the point estimate approach, adverse health effects are evaluated by comparing the pollutant concentration to its identified Reference Exposure Level (REL). The REL presented in the Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values for diesel particulate was utilized in the assessment. Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu\text{g}/\text{m}^3$) over a 70 year lifetime. To represent residential exposures, the assessment employed U.S. EPA guidance to develop viable dose estimates based on reasonable maximum exposures (RME). Specifically, activity patterns for population mobility recommended by the U.S. EPA and presented in the Exposure Factors Handbook were utilized. As a result, lifetime risk values for residents were adjusted to account for an exposure duration of 350 days per year for 30 years (i.e., 95th percentile). Additional discussion regarding the use of the 30 year exposure duration is presented in Attachment F. A 9 year exposure duration was additionally assessed to identify risk estimates associated with the average time individuals are reported to reside at a given residence.

To quantify noncarcinogenic impacts, a hazard index exceeding a value of one presumes a health hazard. The hazard index assumes that subthreshold exposures adversely affect a specific organ or organ system (i.e., toxicological endpoint). The respiratory endpoint is identified as the only target organ associated with diesel particulate exposure. To calculate the hazard index, the pollutant concentration or dose is divided by its toxicity value and summed for compounds affecting the same toxicological endpoint. Where the total equals or exceeds one (i.e., unity), a health hazard is presumed to exist.

To quantify the impact of diesel particulate (PM10) emissions associated with the operation of the project, dispersion modeling utilizing the Industrial Source Complex-Short Term (ISCST3) model was used to assess the impact of PM10 emissions to the nearest sensitive receptors. The dispersion modeling incorporates all relevant and appropriate procedures presented by the USEPA and California Environmental Protection Agency.

Greenhouse Gases

A quantified estimate of GHG emissions was prepared using CalEEMod computer program and emission factors from California Climate Action Registry (CCAR), which estimates construction and operations emissions of carbon dioxide, among other air pollutants. Project-generated emissions were modeled based on proposed land uses and general information provided in the **Section 3.0, Project Description**.

Project Design Features

The following Project Design Features (PDF) are incorporated into the proposed project and would reduce the potential air quality impacts of the project. These features were taken into account in the analysis of potential impacts.

PDF 4.3-1

Construction activities for each individual project shall be required to comply with Santa Barbara County Air Pollution Control District (SBCAPCD) rules to reduce the generation of air emissions applicable to the proposed project. Applicable SBCAPCD rules and regulations include:

- Rule 345 to control fugitive dust from construction activities and California Air Resources Board Regulation for In-use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449 and 2485) to reduce diesel particulate and NOx emissions. Specifically, the SBCAPCD rules require use of watering to minimize fugitive dust, reduced vehicle speeds to 15 miles per hour, cover soil stockpiled for more than two days, minimize dust generation after well drilling and pipeline construction activities, and monitor dust control to prevent dust offsite.
- All portable diesel-powered construction equipment will be registered with the state's portable equipment registration program or will obtain an SBCAPCD permit.
- The California Air Resources Board requires diesel construction equipment to meet CARB Tier 2 or higher emission standards to the maximum extent feasible, limit idling time to five (5) minutes during loading/unloading operations, and replace diesel powered equipment with electric equipment whenever feasible.

PDF 4.3-2

Buildings will be sited and designed to maximize the use of sunlight and shade for energy savings and respect the right to solar access of nearby and adjacent buildings. Whenever appropriate, buildings will be oriented so that the long axis of the building is oriented east–west to maximize the opportunity for north- and south facing windows, which receive indirect, diffused light with low heat gain for the building, reducing cooling costs during summer months.

Project Impacts

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

The SBCAPCD is the local agency that provides air quality guidance with jurisdiction over the entire County. The most recent adopted comprehensive plan applicable for the proposed project is the 2013 Final Clean Air Plan, dated March 2015.³² Regional growth projections are used by the SBCAPCD to

32 SBCAPCD, 2013 Final Clean Air Plan (March 2015).

forecast future emission levels in the air basin. The draft 2013 CAP utilized SBCAG's Regional Growth Forecast 2010-2040, to project population growth and associated air pollutant emissions for all of Santa Barbara County.

The proposed project involves the development of approximately 590,000 square feet of business park uses on a site designated for business park uses in the City of Lompoc General Plan. The proposed Project would accommodate a mixture of manufacturing, warehouse, hangar/storage, and office uses currently permitted in the City of Lompoc's Business Park Zoning District. The proposed Project would not result in a direct population increase, as the proposed project does not contain any residential units. Although the proposed project would increase employment due to the business park development, this employment can be utilized by current City residents.

Temporary emissions associated with construction of the Project would not exceed any of the criteria pollutant SBCAPCD thresholds for regional emissions, as indicated in **Table 4.3-7** and **Table 4.3-8**. Therefore, the proposed project's construction and operation related emissions would be consistent with the CAP.

The 2013 CAP indicates that the number of employees in commercial and industrial businesses totaled 135,100 in 2008, would grow to 150,800 employees in 2020, and to 160,200 employees in 2030.³³ The SBCAG indicates that the number of employees in the City totaled 10,686 in 2010, would grow to 11,643 employees in 2020, to 12,756 employees in 2035, and to 12,777 employees in 2040.³⁴ The proposed project would employ up to 931 employees by 2020, which would account for approximately 6 percent of the projected growth in the region and would fall within the projected growth in the City between 2008 and 2020. Furthermore, the proposed project would permit similar business park uses as those currently permitted by existing zoning for the project site. The proposed project would also be consistent with the City's General Plan Conservation Element goals and policies to minimize air quality impacts resulting from construction and development activities regulated by the City using current recommendations from the SBCAPCD conditions and implementing the City's grading ordinance; the project would minimize vehicle-related air quality impacts; and would reduce GHG emissions from BAU conditions. Accordingly, the proposed project would be consistent with the employment projections within the 2013 CAP and the 2012 Regional Growth Forecast and impacts would be less than significant.

33 SBCAPCD, *Final 2013 Clean Air Plan* (March 2015), Table 3-2.

34 Santa Barbara County Association of Governments, *Regional Growth Forecast 2010-2040*, adopted December 2012, Table 7.

Violate any air quality standard or contribute substantially to an existing or projected air quality violation

Construction Emissions

The estimated maximum daily construction emissions for the proposed project are listed in **Table 4.3-7, Construction Emissions (tons/year)**. These estimates are based on the expected location, size, and development of the proposed project. The analysis assumes that all of the construction equipment and activities would occur continuously over the day and that activities would overlap. In reality, this would not occur, as most equipment operates only a fraction of each workday and many of the activities would not overlap on daily basis. Project Design Feature (PDF) 4.3-1 requires compliance with the applicable SBCAPCD rules during construction of each individual project. The emissions presented in **Table 4.3-7** include PDFs, as required by applicable SBCAPCD rules, to reduce emissions during construction activities. Construction activities would require use of watering to minimize fugitive dust, reduced vehicle speeds to 15 miles per hour, cover soil stockpiled for more than two days, minimize dust generation after construction activities, and monitor dust control to prevent dust off site. Furthermore, all portable diesel-powered construction equipment would be required to be registered with the state's portable equipment registration program or would require a SBCAPCD permit prior to arrive on the project site. The California Air Resources Board requires diesel construction equipment to meet CARB Tier 2 or higher emission standards to the maximum extent feasible, limit idling time to five minute during loading/unloading operations, and replace diesel powered equipment with electric equipment whenever feasible.

**Table 4.3-7
Construction Emissions (tons/year)**

Source	Pollutant (tons/year)					
	VOC	NOx	CO ^a	SOx	PM10	PM2.5
Maximum	14.81	5.61	10.95	0.02	1.14	0.43
SBCAPCD Threshold	25	25	-	-	25	25
Exceeds Threshold?	No	No	-	No	No	No

*Air Emissions Model Results are presented in **Appendix 4.3**.*

Note:

^a *The SBCAPCD does not have a threshold for CO.*

Please note that the SBCAPCD does not have construction thresholds; however, it does use 25 tons per year for VOC, NOx, or PM10 as a guideline to determine the significance of construction emissions.

Abbreviations: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; VOC = volatile organic compounds; SOx = sulfur oxides.

As shown in **Table 4.3-7**, construction activities associated with the development of the proposed project would not exceed short term construction emissions thresholds for VOC, NO_x, CO, SOX, PM₁₀, and PM_{2.5}. Construction impacts would be less than significant.

Operational Emissions

Operational emissions would be generated by both stationary and mobile sources as a result of normal day-to-day activities at the project site. **Table 4.3-8, Operational Emissions**, provides the maximum daily operational emissions for both stationary and mobile sources.

**Table 4.3-8
Operational Emissions**

Source	Pollutant (pounds/day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
Maximum	52.44	20.24	87.77	0.38	26.09	7.43
SBCAPCD Threshold	240	240	-	-	80	-
Exceeds Threshold?	No	No	-	-	No	-
Maximum Mobile	8.26	16.39	84.37	0.36	25.80	7.14
SBCAPCD Mobile Threshold	25	25	-	-	-	-
Exceeds Threshold?	No	No	-	-	-	-

*Air Emissions Model Results are presented in **Appendix 4.3**.*

Note: CO = carbon monoxide; NOx = nitrogen oxides; PM10 = particulate matter less than 10 microns; PM2.5 = particulate matter less than 2.5 microns; VOC = volatile organic compounds; SOx = sulfur oxides.

As shown in **Table 4.3-8**, stationary and mobile emissions generated during operation of the proposed would not exceed SBCAPCD's thresholds of significance VOC, NOx, CO, SOx, PM10, and PM2.5. Impacts during operation would be less than significant.

Toxic Air Contaminants

The State of California considers a project would be considered to have a significant impact if it would result in a probability of contracting cancer of more than one in one hundred thousand (1.0E-05). This standard is lower than the SBCAPCD public health standard that if the health risk exceeds 10 cancer cases in a million for cancer risk and a Hazard Index of more than 1.0 for non-cancer risk.

Based on the information provided by Associated Traffic Engineers (**Appendix 4.10**), the traffic study assumed that 209 trucks would enter and exit the site per day with an equal distribution travelling east and west along Central Avenue. For the maximum exposed residential receptor, risk estimates were predicted to be 4.3 in one million (4.3E-06) and 1.3 in one million (1.3E-06) for the 30 and 9 year exposure scenarios, respectively. In comparison to the threshold level referenced above, carcinogenic risks do not exceed the level posing no significant risk. Carcinogenic impacts would be less than significant.

For non-carcinogenic effects, the hazard index totaled less than one (6.7E-03) for both the 30 and 9 year exposure scenarios. Therefore, non-carcinogenic hazards would be below the Hazard Index of more than 1.0 for non-cancer risk. Non-carcinogenic impacts would be less than significant.

Result in a cumulatively considerable net increase of any criteria pollutant

The SBCAPCD is in nonattainment for ozone and PM10. Projects that do not exceed the project-level threshold would not contribute to cumulatively significant air quality impacts. As shown in **Table 4.3-7** and **Table 4.3-8**, all emissions associated with the proposed project would not exceed the SBCAPCD-recommended thresholds and would, therefore, not result in a cumulatively considerable net increase of any criteria pollutant. As such, impacts would be less than significant.

Expose sensitive receptors to substantial pollutant concentrations

Sensitive receptors are defined as schools, residential homes, hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health conditions that would be adversely impacted by changes in air quality.

The closest sensitive receptors to the project site are residential uses 75 feet to the south. As shown in **Table 4.3-7** and **Table 4.3-8**, criteria pollutants would not exceed SBCAPCD thresholds. Furthermore, the proposed project would not expose sensitive populations to toxic air contaminants which exceed State or SBCAPCD thresholds. Therefore, impacts would be less than significant.

Create objectionable odors affecting substantial number of people?

According to the California Air Resources Board's *Air Quality and Land Use Handbook*,³⁵ odors are the most common source of air pollution complaints and as with other types of air pollution, a number of factors need to be considered when determining potential effects on land use. Land uses that are more likely to produce odor include agriculture, chemical plants, composting operations, dairies, fiberglass, molding, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The area surrounding the project site is currently developed with residential uses to the south, industrial development to the east and west, and the Lompoc Airport to the north.

Construction activities associated with the proposed project would generate odors from heavy-duty equipment exhaust including diesel and gasoline. Odors associated with diesel and gasoline fumes are transitory in nature and would not create objectionable odors affecting a substantial number of people. The impacts from these odors would be short term and would cease upon the completion of each parcel. The proposed uses for the project site include a mix of manufacturing, warehouse, hangar/storage, and office space. These uses do not generally generate substantial odors which would affect the residences to the south. Therefore, impacts would be less than significant.

35 CalEPA, California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective* (2005).

Cumulative Impacts

Individual projects that exceed SBCAPCD-recommended daily thresholds for project-specific impacts would be considered to cause a cumulative considerable increase in emissions for those pollutants for which the SCCAB is in nonattainment. As presented in **Table 4.3-7** and **Table 4.3-8**, construction and operation of the proposed project would not exceed the SBCAPCD guidance thresholds for short term or construction emissions or the project-specific operation thresholds and is consistent with the 2013 CAP. Therefore, cumulative impacts would be less than significant.

Greenhouse Gases

Generate greenhouse gas emissions that may have a significant impact on the environment

Construction activities for the proposed project would include the use of heavy-duty construction equipment. The vast majority of construction equipment (e.g., backhoes, rubber-tired loaders, scrapers, and haul trucks) rely on fossil fuels, primarily diesel, as an energy source. The combustion of fossil fuels in construction equipment results in GHG emissions of CO₂ and smaller amounts of CH₄ and N₂O. Emissions of GHG would also result from the combustion of fossil fuels from haul trucks and vendor trucks delivering materials, and construction worker vehicles commuting to and from the project site. Typically, light-duty and medium-duty automobiles and trucks would be used for worker trips and heavy-duty trucks would be used for vendor trips. The vast majority of motor vehicles used for worker trips rely on gasoline as an energy source while motor vehicles used for vendor trips would primarily rely on diesel as an energy source. The proposed project would result in short-term emissions of GHGs during construction—that is, the emissions would occur only during active construction and would cease after the proposed project is built. The GHG emissions were estimated using the CalEEMod model and are located in **Appendix 4.3** of this Draft EIR.

As presented in **Table 4.3-9, Construction GHG Emissions**, construction activities associated with the project would generate 4,985.99 MTCO₂e GHG emissions. Although GHGs are generated during construction and are accordingly considered one-time emissions, it is important to include construction-related GHG emissions when assessing of all of the long-term GHG emissions associated with a project. Therefore, the industry standard recommends annualizing construction-related GHG emissions over a project's lifetime, defined as a 30-year period, in order to include these emission as part of the annual total operational emissions. Therefore, construction-related GHG emissions have been annualized over this period and included in the annual operational emissions later in this section.

**Table 4.3-9
Construction GHG Emissions**

Year	CO ₂ e Emissions (Metric Tons per Year)
2016	451.68
2017	1,653.12
2018	1,620.64
2019	1,237.61
2020	22.94
<hr/>	
Total Construction GHG Emissions*	4,985.99
Annualized over Project Lifetime	166.20

*Source: CalEEMod Emissions calculations are provided in **Appendix 4.3**.*

Note: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Abbreviations: MTCO₂e = metric tons of carbon dioxide emissions.

**N₂O emissions account for 0.08 MTCO₂e/year.*

Operation

The proposed project is anticipated to be fully completed by 2020. Once fully occupied, the project would result in GHG emissions, primarily CO₂, CH₄, and N₂O, as a result of fuel combustion from building heating systems, landscaping equipment, and motor vehicles. Building and motor vehicle air conditioning systems may use HFCs; however, these emissions are not quantified since they would only occur through accidental leaks. It is not possible to estimate the frequency of accidental leaks without some level of speculation.

A summary of the annual operational emissions of the proposed project is provided in **Table 4.3-10, Operational Mitigated GHG Emissions**. The estimates represent emissions with incorporation of the Project Design Features and Mitigation Measures during operation of the project.

**Table 4.3-10
Operational GHG Emissions**

GHG Emissions Source	Emissions (MTCO₂e/year)
Construction (amortized)	166.20
Operational (mobile) sources*	3,074.08
Area sources	0.03
Energy	1,975.53
Waste	166.41
Water	293.42
Annual Total	5,675.67

Source: CalEEMod Emissions calculations are provided in Appendix 4.3, Air Emissions Modeling.

Notes: Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Abbreviations: MTCO₂e = metric tons of carbon dioxide emissions.

**N₂O emissions account for 0.13 MTCO₂e/year.*

As shown in **Table 4.3-10**, the operational GHG emissions for the project with Project Design Features and Mitigation Measures would be 5,675.67 MTCO₂e per year. This amount of GHG emissions is less than the 10,000 MTCO₂e per year screening threshold for stationary land use projects proposed by the SBCAPCD. (Please note that the proposed project is not considered a stationary land use by the SBCAPCD and the screening threshold has been used for analysis purposes only). The next threshold used for analysis purposes is to reduce GHG emissions by 15 percent from business as usual by 2020.

Business as usual refers to emissions levels absent the implementation of GHG emissions reduction measures, such as increased reliance on energy efficiency technologies. Today's GHG emissions have been reduced by 15 percent from 1990 levels. The 2014 Updated Scoping Plan for AB 32 mandates requires an additional 15 percent reduction in emissions from business as usual to meet the 30 percent reduction from 1990 levels by 2020.

Today's GHG emissions have been reduced by 15 percent, and as such, the business as usual scenario assumes the project would be completely built by 2012. The business as usual scenario would result in GHG emissions (without Title 24 efficiencies, Project Design Features) of 7,345.86 MTCO₂e per year.³⁶ As indicated in **Table 4.3-10**, the proposed project would result in 5,675.67 MTCO₂e per year with Project Design Features and Mitigation Measures MM 4.3-1 through MM 4.3-8. The Project Design Features and Mitigation Measures would reduce GHG emissions by 1,670.19 MTCO₂e per year,

³⁶ 7,177.78 MTCO₂e per year BAU + 168 MTCO₂e per year BAU Construction + 0.08 MTCO₂e per year N₂O = 7,345.86 MTCO₂e per year BAU.

approximately 23 percent, from the business as usual scenario, greater than the 15 percent reduction in GHG emissions. The Project would exceed the required GHG emission reduction of 15 percent from business as usual as identified in the 2014 Updated Scoping Plan and would be below the 10,000 MTCO₂e per year screening threshold, impacts would be less than significant.

Would the Project conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

The goal of AB 32 is to reduce statewide GHG emissions to 1990 levels by 2020. In December 2008, CARB adopted the *Climate Change Scoping Plan*, which details strategies to meet that goal. The 2008 Scoping Plan instructs local governments to establish sustainable community strategies to reduce GHG emissions associated with transportation, energy, and water, as required under SB 375. Planning efforts that lead to reduced vehicle trips while preserving personal mobility should be undertaken in addition to programs and designs that enhance and complement land use and transit strategies. The 2008 Scoping Plan also recommends energy-efficiency measures in buildings such as maximizing the use of energy efficient appliances and solar water heating as well as complying with green building standards that result in decreased energy consumption compared to Title 24 building codes. In addition, the 2008 Scoping Plan encourages the use of solar photovoltaic panels and other renewable sources of energy to provide clean energy and reduce fossil-fuel based energy. The CARB 2014 Updated Scoping Plan was updated in May 2014, which adjusted the statewide GHG emissions reduction goals to achieve 1990 levels.

In addition to the measures listed in the 2008 Scoping Plan, other state offices have provided recommended measures that would assist lead agencies in determining consistency with the state's GHG reduction goals. The California Attorney General's Office (AGO) has stated that lead agencies can play an important role in "moving the State away from 'business as usual' and toward a low-carbon future."³⁷ The AGO has released a guidance document that provides information to lead agencies that may be helpful in carrying out their duties under CEQA with respect to GHGs and climate change impacts. Provided in the document are measures that can be included as project design features, required changes to the project, or mitigation measures at the project level and at the general-plan level. The measures are not intended to be exhaustive and may not be appropriate for every project or general plan. The AGO affirms that "the decision of whether to approve a project—as proposed or with required changes or mitigation—is for the local agency, exercising its informed judgment in compliance with the law and balancing a variety of public objectives".

37 California Office of the Attorney General, *The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level* (2008).

The proposed project would incorporate measures that reduce GHG emissions compared to a conventional project of similar size and scope. The proposed project would incorporate energy and water efficiency design features to enhance efficiency in all aspects of a building's life-cycle. These designs would increase the structures energy efficiency, water efficiency, and overall sustainability. The project would also exceed Title 24 energy requirements by 15 percent. The project is also located in an suburban area that would reduce vehicle trips and vehicles miles traveled due to the urban infill characteristics and proximity to public transit stops. These measures and features are consistent with existing recommendations to reduce GHG emissions.

Because the project achieves the AB 32 emissions reduction target, the proposed project would be consistent with the 2020 reduction in GHG emissions from 1990 levels set forth in the 2008 Scoping Plan and 2014 Updated Scoping Plan. Therefore, the proposed project would not conflict with the 2008 Scoping Plan and the 2014 Updated Scoping Plan.

Cumulative Impacts

Although the proposed project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHG from more than one project and many sources in the atmosphere that may result in global climate change. However, currently there are no significance thresholds, specific reduction targets, and no approved policy or guidance to assist in determining significance at the project or cumulative level. Additionally, there is currently no general accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Implementing the Project Design Features and GHG-reducing measures would result in a net decrease in GHG emissions. The project's design features and GHG reduction measures make the project consistent with the goals of AB 32.

Given the proposed project's consistency with state GHG emission reduction goals and objectives, the Project's contribution to the cumulative impact of greenhouse gas emissions would not be cumulative considerable and would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs (i.e., the 2014 Updated Scoping Plan). Similarly, related projects would also be anticipated to comply with these same emissions reduction goals and objectives. Therefore, cumulative impacts with respect to greenhouse gas emissions would be less than significant.

MITIGATION MEASURES

The following mitigation measures would reduce potential greenhouse gas emissions generated by the proposed project:

- MM 4.3-1** Prior to issuance of each building permit, the applicant shall provide a list to the Building Division of the green building practices and design elements used in building that reduce GHG emissions. The green building practices and design elements shall be consistent with the current standards in Title 24 and any other green building standards subsequently adopted by the City of Lompoc (City).
- MM 4.3-2** Prior to the issuance of each building permit, the applicant shall provide evidence of its use of energy-efficient designs meeting and/or consistent with the standards in the current green building program and any other green building standards adopted by the City. In accordance with Title 24, all buildings shall, at a minimum, exceed Title 24 (2008) by 15 percent. This measure does not exempt buildings from meeting future energy efficiency obligations that may result from future revisions to the Title 24 standards. Furthermore, the proposed project shall commit to exceeding future Title 24 standards as close to the 15 percent target for commercial buildings as possible, to the extent that it is feasible to do so based on technological and financial feasibility factors at the time of permit application.
- MM 4.3-3** Prior to the issuance of each building permit, the applicant shall provide evidence to the Building Division of its use of energy efficient lighting, heating and cooling systems, appliances, equipment, and control systems, including the installation of ENERGY STAR-certified products, consistent with the standards in Title 24 and any other energy efficiency standards adopted by the City.
- MM 4.3-4** Prior to the issuance of each building permit, the applicant shall provide evidence to the Building Division of the use of “cool” roofs or “green” roofs, and cool pavements for all roofs and pavements to the extent that such products are commercially available for the implementing project.
- MM 4.3-5** Prior to the issuance of each building permit, the applicant shall provide evidence to the Building Division of the use of water efficient irrigation systems and devices, such as soil-based irrigation controls and use water-efficient irrigation methods consistent with measures recommended in the City’s Municipal Code, and any other green building standards adopted by the City. In accordance with the appropriate program, the applicant shall provide evidence that building is consistent with the following Central Coast Business Park Specific Plan (CCBPSP)-wide water conservation measures and/or does not prevent or conflict with the CCBPSP’s ability to meet the following water conservation measures:

- 90 percent of all builder-installed plumbing devices in each non-residential buildings shall be low-flow and water-efficient.
- Turf shall not exceed 25 percent of the total landscaped area of each lot.
- 80 percent of public and common landscape areas shall use smart irrigation systems per project.
- 80 percent of public and common landscape areas shall use drought-tolerant, native, and/or water-efficient plant materials per project.

MM 4.3-6 Prior to grading for the project, the applicant or their contractor shall submit to the City of Lompoc Utility Department for review and approval of a Solid Waste Management Plan for the reuse and recycle construction and demolition waste (including soil, vegetation, concrete, lumber, metal, and cardboard).

MM 4.3-7 Prior to the issuance of each building permit, the applicant shall provide evidence to the Planning Division of reuse and recycling measures in residential, industrial, and commercial projects consistent with measures recommended in Title 24 or any other green building standards adopted by the City. In accordance with the adopted green building program, the applicant shall provide evidence that the building is consistent with the following CCBPSP-wide recycling and waste reduction measures and/or does not prevent or conflict with the CCBPSP's ability to meet the following recycling and waste reduction measures:

- Provide recycling containers within all commercial, office, and light industrial buildings.

MM 4.3-8 Prior to the issuance of each building permit, the applicant shall provide evidence to the Planning Division the use of employment based trip and vehicle miles traveled (VMT) policies that encourage the use of alternative transportation. Comprehensive employment based trip and VMT reduction policy measures shall be in compliance with City or Santa Barbara County Association of Government mass transit programs and include but are not limited to the measures listed below:

- Use shared and/or centralized parking facilities consistent with a "park once" approach.
- Require that employers provide information on public transportation options to employees.

- Require that large employers (250 or more employees at a single work-site location) and encourage small employers (less than 250 employees at a single work-site location) to provide bicycle parking facilities, employee break rooms with refrigerators and microwaves, and automated teller machines (ATMs).
- Require that large employers (250 or more employees at a single work-site location) provide a transportation demand management program, such as vanpools/carpools, ride-sharing/ride-matching, and/or “guaranteed ride home” services that allow employees who use public transit to get a free ride home if they need to stay at work late.
- Require that 1 electric vehicle charging station be provided for every application for 100,000 or more square feet of non-residential development.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Air Quality (Construction and Operation)

The proposed project would incorporate Project Design Features to further reduce air emission during construction and operation. Emissions generated during the construction and operation of the project would be under the SBCAPCD guidelines. Therefore, the project would result in less than significant impacts.

Greenhouse Gases

Development of the proposed project would be consistent with the goals of CARB’s 2008 Scoping Plan and the 2014 Updated Scoping Plan, and would incorporate best management practices which aim to require buildings to be more energy efficient than required by existing regulations. GHG emission impacts would be less than significant.

4.4 CULTURAL RESOURCES

This section evaluates the potential for implementation of the proposed project to impact cultural resources within and near the project site. Information from the *Phase I Archaeological Survey of the Project Site* prepared by ASM Affiliates (April 2014; see **Appendix 4.4**) has been incorporated into this section.

ENVIRONMENTAL SETTING

Existing Conditions

The project site is located adjacent to the south of the Lompoc Airport, which is located adjacent to the south of the Santa Ynez River. The project site is relatively flat, fallow agricultural land that contains a small shed on the northern portion of the site, as seen on **Figure 4.1-2, View Locations 1 and 2**. Elevations within the project site range from approximately 90 feet above mean sea level (amsl) in the northwest corner to approximately 60 feet amsl in the southwest corner of the project site.

Surrounding land uses include a sand and gravel mine, an animal services facility, and a solid waste operations yard to the west across V Street and the Lompoc Airport to the north, with the south-side taxiway located approximately 150 feet north of the property line. To the east along the northern portion of the project site is vacant land designated for airport/aviation uses by the General Plan. To the east along the southern portion of the project site, across Barton Street, is the Pali Wine Company and vacant land designated for business park uses by the General Plan. A residential neighborhood is located to the south across Central Avenue approximately 75 feet from the project site.

The proposed project is not located in the Cultural Resources Overlay District and is located in a low archaeological sensitivity zone.

Cultural Setting

Ethnographic Background

The Lompoc region, and Santa Barbara County in general, lies within the territory of the Chumash ethnolinguistic group, specifically the Purisimeño Chumash. The Purisimeño Chumash were Hokan speaking people, who occupied the area from Topanga Canyon northwest to approximately San Carpojo Creek. The Chumash culture was heavily disrupted prior to any modern efforts of research due to their location in an area of early Spanish missionization. Knowledge of the Purisimeño Chumash is limited but based on fragmentary records and various means of inferential and analogical studies, a certain amount can be reconstructed about their way of life.

The Chumash followed a hunting-gathering-fishing subsistence pattern, which incorporated a heavy reliance on maritime resources, including pelagic and littoral fishes, and shellfish. The Chumash lived in permanent coastal villages along the Channel Islands area containing as many as 1,000 inhabitants,¹ as well as a hierarchical sociopolitical organization consisting of at least two major chiefdoms.²

The Lompoc area was within the northern portion of Chumash territory. Aboriginal Purisimeño Chumash place-names were recorded in the Lompoc area and include the following:³

- Lompo: “stagnant water”; a village near the modern town of Lompoc
- Amuwu: “a kind of plant”; a village at the La Purisima Mission

There is no evidence to suggest that any of these place-names apply to the project site or surrounding area, and it does not appear to have been specifically identified as an area of historical aboriginal use.

Archaeological Background

The chronology for coastal California where the project site is located includes four time periods, the earliest of which (Early Man/Big Game Hunting period) was considered speculative, and thought to correlate with the end of the Pleistocene Era (approximately 10,000 years ago). Although it is likely that occupation of the southern California coastal region occurred during this early time period, to date the only evidence of such has been limited to a few discoveries of fluted projectile points, found in isolated locales. However, the characteristic geomorphological instability of the California coastline, combined with the major change in erosional/degradation regimes that occurred at the end of the Pleistocene Era, does not favor the preservation of remains from this period.

Recent studies by Erlandson provide evidence of a significant, albeit small, population of coastal hunters-gatherers in the region before 7,000 years ago, or at the beginning of the Early Millingstone period.⁴ Erlandson has shown that these were neither Big Game hunters, nor specialized hard-seed gatherers, but instead generalized foragers that relied on a variety of different kinds of terrestrial, coastal, and marine resources, and that they were adapted to estuarine embayments that have long-since disappeared from the local environment. Further, his evidence indicates that their primary protein

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- 1 A.K. Brown, *The Aboriginal Population of the Santa Barbara Channel* (Berkeley, California: University of California Archaeological Survey Reports 1967), 69.
 - 2 D.S. Whitley and M.P. Beaudry, “Chiefs on the Coast: Developing Chiefdoms in the Tiquisate Region in Ethnographic Perspective,” in *The Development of Complex Societies in Southeastern Mesoamerica*, ed. W. Fowler (Orlando, FL: CRC Press, 1991).
 - 3 R.A. Applegate, “An Index of Chumash Place Names,” in *Papers on the Chumash*, San Luis Obispo County Archaeological Society Occasional Paper (San Luis Obispo County, CA, 1975) 9:19-46.
 - 4 J. Erlandson, *Of Millingstones and Molluscs: The Cultural Ecology of Early Holocene Hunter-Gatherers on the California Coast*. Ph.D. dissertation (University of California, Santa Barbara) 1988..

sources were shellfish and other marine resources. This suggests that the adaptation to the seashore is a very ancient and long-lived tradition in local prehistory.

The Intermediate period followed the Early Millingstone period from about 3,500 years ago to until A.D. 1200. It is marked on the coast by a growing exploitation of marine resources, the appearance of the hopper mortar and stone bowl/mortar, and a diversification and an increase in the number of chipped stone tools. Further, there is substantial evidence that it was at the early end of this Intermediate period that inland sites, such as those found in the Conejo Corridor on the north side of the Santa Monica Mountains, and those on the Cuyama River Valley and in the Carrizo Plain, were first established and occupied, suggesting the exploitation of more varied environments and perhaps an increase in population, as well as a movement of coastal sites down towards the beaches. In general, however, the Intermediate period can be argued to have set the stage for the accelerated changes that took place immediately following it.

With the transition to the Late Prehistoric period at A.D. 1200, which followed the introduction of the bow and arrow at about A.D. 600, and is represented by a major reduction in the size of projectile points, we can correlate local prehistory with Chumash society as described (even if in abbreviated form) by early chroniclers and missionaries. However, this is not to suggest that society was in any way static, for the transition to the Late Prehistoric period was marked by the evolution and eventual dominance of a sophisticated maritime economy. Further, the rise in Chumash social complexity has been shown to be associated with the development of craft specialization involving the use of standardized microdrills to mass produce shell beads on Santa Cruz Island, which occurred during the Late Prehistoric period.

Traditional Chumash society was altered irrevocably with the onset of the missionization and Spanish colonization of the coastal region. First contact with European culture occurred relatively early on: Juan Rodriguez Cabrillo stopped in the general Chumash area in A.D. 1542 while exploring the coast, and Sebastián Vizcaíno sailed by in 1602. However, the historical period effectively began with the passing of the Gaspar de Portolá expedition through the area in 1769–1770. It was shortly thereafter, with the establishment of the Missions of San Luis Obispo de Tolosa in 1772, Santa Barbara in 1786, and La Misión de La Purísima Concepción de la Santísima Virgen María in the Lompoc Valley in 1787, which marked the true end of the aboriginal period.

Historical Background

Following the end of Spanish rule in 1821, the Mexican government needed to protect its vast land holdings. The Mexican Governor of California began awarding generous land grants to its army veterans and their descendants. The land that now comprises Santa Barbara County was divided into some forty

ranchos, including five in the Lompoc Valley. In 1837, brothers Jose and Joaquin Carrillo were granted a large tract of land encompassing “nearly all the level land in the valley south of the Santa Ynez River.”

The Mexican government granted the land around Lompoc as the Rancho Lompoc land grant in 1837, which stood until the United States gained control of California after the Mexican-American War of 1846–1848. In the early 1860s, droughts decimated the local cattle herds and many Mexican landowners were forced to sell their ranchos to American settlers. The Carrillos were forced to sell both of their Lompoc Valley ranchos. In 1863, Rancho Lompoc and Rancho Mission Vieja were purchased by William W. Hollister, along with partners Hubbard Hollister, Albert Dilbee, and Thomas Dilbee, for the purpose of grazing 20,000 sheep. It is on this land that the town of Lompoc would soon be established. The City of Lompoc was incorporated on August 13, 1888.

A number of wharves had been constructed along the coast during the early days of the colony that were used for shipping and receiving; however, at the turn of the century, the railroad replaced shipping as the primary means of commercial transportation. The coastal branch of the Southern Pacific Railroad between San Francisco and Los Angeles was completed in 1901. The later extension of a spur into Lompoc provided the impetus for growth in the Lompoc Valley. The flower seed industry came to dominate agricultural production in the area, so much so that Lompoc Valley was dubbed *The Valley of Flowers*. Another early and dominant industry was mining of diatomaceous earth in the southern hills; the mining industry continues to be a major employer in the Lompoc area.

The United States military entered the area with the establishment in 1941 of Camp Cooke. This was initially an Army training base, later becoming Cooke Air Force Base, and finally being renamed Vandenberg Air Force base in 1958, the United States Air Force’s first missile base.

REGULATORY FRAMEWORK

State

California Register of Historic Places

Section 21084.1 of the Public Resources Code equates a substantial adverse change in the significance of an historical resource with a significant effect on the environment. “Historical resources” include archaeological and historical sites listed in or eligible for listing in the California Register of Historical Resources (CRHR) and, by reference, the National Register of Historic Places (NRHP), California Historical Landmarks, Points Historical Interest, and local registers of historical resources. Any resource listed in, or eligible for listing in, one of these registers or inventories is presumed to be historically or culturally significant. A substantial adverse change is demolition, destruction, relocation, or alteration that would impair historical significance (Section 5020.1).

For a resource to qualify for listing in the CRHR or NRHP it must meet one or more identified criteria of significance. A resource may qualify for CRHR listing if it:

- a. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- b. Is associated with the lives of persons important in our past.
- c. Embodies the distinctive characteristics of type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- d. Has yielded, or may be likely to yield, information important in prehistory or history [PRC § 5024.1(c)].

California Senate Bill 18

California Senate Bill (SB) 18⁵ requires cities and counties to notify and consult with California Native American Tribes about proposed local land use planning decisions in order to protect Traditional Tribal Cultural Places.⁶ Cities and counties must obtain a list of the California Native American tribes from the Native American Heritage Commission (NAHC), whose traditional lands within the agency's jurisdiction may be affected by a proposed adoption or amendment of a general plan or specific plan. Before the adoption or any amendment of a general or specific plan, a local government must notify the appropriate tribes of the opportunity to conduct consultations on the proposed project. Before the adoption or substantial amendment of the general plan or specific plan, a local government must refer the proposed project to those tribes on the Native American contact list that have traditional lands within the agency's jurisdiction.

California Environmental Quality Act

According to State CEQA Guidelines § 15126.4(b)(3), public agencies should, whenever feasible, seek to avoid damaging effects on any historical resource. Preservation in place is the preferred manner of mitigating impacts.⁷ Preservation in place may be accomplished by planning construction to avoid the resource, incorporating sites within parks or open space, covering sites with chemically stable and culturally sterile fill, or deeding the site into a permanent conservation easement. For buildings and structures, maintenance, repair, restoration, preservation, conservation, or reconstruction consistent with the Secretary of Interior's Standards and Guidelines for the Treatment of Historic Properties is

5 California Government Code, sec. 65040.2, 65092, 65351, 65352, and 65560; California Civil Code, sec. 815.3.

6 California Senate Bill 18, ch. 905, Statutes of 2004.

7 14 CCR 15126.4(b)(3).

considered mitigation of impacts to a less than significant level.⁸ When data recovery excavation of an archaeological site is the only feasible mitigation, a detailed data recovery plan must be prepared and adopted prior to any excavation. If human remains are present, such remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code.

Local

The City's cultural resources management and historic preservation program has evolved over the past several decades in response to changing regulatory requirements and public perception. Several major cultural resource investigations have been completed within the city, and several ordinances and measures have been adopted to facilitate the identification, protection, and interpretation of important resources. Adopted City ordinances and policies are described below.

City of Lompoc Ordinance No. 1142

To "promote the general and economic welfare of the City of Lompoc by preserving and protecting those places, sites, buildings, structures, works of art and other objects having special historical or aesthetic character or interest, for the use, education and view of the general public and to remind the citizens of this city and visitors from elsewhere of the historical background of the City of Lompoc," the City of Lompoc adopted Ordinance No. 1142 in 1982.⁹ This ordinance amends Ordinance 804 relating to the preservation of historic landmarks. It states that the City of Lompoc may "provide for places, buildings, objects, works of art, and other objects, having a special character or a special historical or aesthetic interest or value..." and established the Lompoc Advisory Landmark Committee for reviewing proposed city landmarks. There are currently 10 designated city landmarks; the City Planning Commission must approve any proposed demolition or alteration of the structures. However, in their 2005 Historic Resources Survey for the City of Lompoc, Historic Resources Group noted 73 potential landmarks throughout the City.

City of Lompoc Ordinance 1521

In 2006, the City adopted Ordinance No. 1521, which establishes a Cultural Resources Overlay District for the City's Zoning Map, an area "located south of the centerline of Olive Avenue and its extrapolation to the east, between V Street and State Route 1." The district will aid in ensuring the protection of cultural resources in the City while streamlining the process of development review within the Archaeological High Sensitivity Zone on the City's south side, and identified on the Archaeological Sensitivity Zones Map in the Resource Management Element of the Lompoc General Plan. The Cultural

⁸ 14 CCR 15126.4(b)(1).

⁹ City of Lompoc, Ordinance 1142 (82).

Resource Overlay District and Archaeological High Sensitivity Zone both encompass the historic Mission Vieja, a portion of which is listed on the National Register of Historic Places (Site No. 78000775) and is identified as State Historical Landmark No. 928; however, not all of the known Mission grounds or surrounding use area are encompassed in the National Register site designation.

The ordinance divides the City into two parts with respect to cultural resources: areas of high sensitivity and low sensitivity.

2030 Lompoc General Plan

The City of Lompoc 2030 General Plan's Conservation and Open Space Element provides goals and policies that protect cultural resources in the City.¹⁰ The Conservation and Open Space Element emphasizes Lompoc's desire to conserve, preserve, and enhance natural and cultural resources. The Element establishes a number of goals, policies and implementation actions for the long-term protection and preservation of resources that help define the City's identity, contribute to its economy, and improve its quality of life.

The Conservation and Open Space Element contains several goals and policies that relate to the conservation of cultural resources. All applicable General Plan policies are discussed in **Section 4.7, Land Use and Planning**.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

To assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant impact to cultural resources if it would:

- Threshold 4.4-1** **Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5.**

- Threshold 4.4-2** **Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5.**

- Threshold 4.4-3** **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

- Threshold 4.4-4** **Disturb any human remains, including those interred outside of formal cemeteries.**

10 City of Lompoc, *General Plan, "Conservation and Open Space Element"* (2013).

The project site is vacant and contains no structures or objects that could be determined to be eligible for listing in the California Register of Historic Resources or the National Register of Historic Places. In addition, the project would have a very low probability of impacting paleontological resources, due to the underlying geology and relatively shallow depth of excavation. Threshold 4.4-1 and Threshold 4.4-3 related to historical and paleontological resources are discussed in **Section 6.0, Effects Not Found To Be Significant.**

Methodology

A Phase I Archaeological Survey for the project site was prepared by ASM Affiliates and consisted of archival record search and field survey.

The archival records search was conducted at the Central Coast Information Center (IC), at the University of California, Santa Barbara on February 24, 2014.¹¹ Additionally, a search of the NAHC *Sacred Lands File* was conducted in order to ascertain whether traditional cultural places or cultural landscapes had been identified within the project site.

A field survey was conducted over the project site in which trained personnel walked parallel transects across the site spaced at 15-meter intervals. The purpose of this effort was to identify surface artifacts, archaeological indicators (e.g., shellfish or animal bone), and/or archaeological deposits (e.g., organically enriched midden soil), including tabulating and recording surface diagnostic artifacts; making site sketch maps; providing preliminary evaluations of site integrity; and recording sites, following the California Office of Historic Preservation Instructions for Recording Historic Resources.

As part of the process of identifying Native American cultural resources within or near the project area and to meet the requirement of Senate Bill 18, the City prepared and mailed letters to a contact list of 25 Native American individuals, provided by the NAHC, that may have knowledge of cultural resources in or near the project area. The City requested information regarding any Native American cultural resources within or immediately adjacent to the project area. The only Native American group that requested consultation per SB 18 with the City was the Santa Ynez Band of Chumash Indians Elders Council. The City of Lompoc meets with the Santa Ynez Band of Chumash Indians Elders Council on April 2, 2014 to address their concerns.

Project Design Features

There are no applicable project design features.

11 ASM Affiliates, *Phase I Archaeological Survey of McGaelic Industrial Park Project, Lompoc, Santa Barbara County, California*, Archival Records Search (April 2014).

Project Impacts

Cause a Substantial Change to an Archaeological Resource

A 2014 records search, conducted at the Central Coast Information Center at the University of California, Santa Barbara, indicated that 13 studies had taken place within 0.5 miles of the project site, 6 of which involved some or all of the site. A single site has been documented within 0.5 miles of the project site, on the north side of the Santa Ynez River, at the very edge of the records search buffer.

No archeological sites were identified on the project site during the field survey, and the immediate area around the project site exhibited little archeological sensitivity. The lack of archeological sites could be due to the extensive disruption from agricultural activities and, therefore, the likelihood for significant resources is low. Additionally, the NAHC *Sacred Lands File* did not indicate the presence of any cultural places within the area. Any archaeological resources that may have existed at one time on or beneath the site have likely been previously disturbed or removed. Based on the results of the intensive Phase I there would be no significant impacts to archaeological resources.

However, due to the project's proximity to the Santa Ynez River, which is a high archaeologically sensitive area, the Santa Ynez Chumash Reservation Elders' Council would like to ensure that possible buried archaeological sites or deposits are not adversely impacted by the proposed development. After SB 18 consultation between the City and Santa Ynez Chumash Reservation Elders' Council, the City has decided that, prior to the issuance of grading permits for each individual project and as a condition of approval, to ensure the safety of any potential subsurface archaeological sites or deposits that may be present, the following procedures must be employed:

1. Subsurface testing will be conducted on an individual parcel basis, using a rubberized tire backhoe. Backhoe trenches, measuring approximately 5 to 6 feet in length, will be excavated to a minimum depth of 6 feet, in approximate 6-inch lifts.
2. One large bucket of soil from each lift will be screened through a one-eighth-inch mesh by archaeologists and examined for the presence of artifacts or other archaeological indicators (e.g., midden soil, shellfish, or burnt animal bone fragments).
3. Any identified artifacts/archaeological indicators will be collected and bagged by trench and level.
4. To the degree possible, in light of trench safety issues, the soils stratigraphy of each trench will be documented.
5. A total of up to 48 backhoe trenches will be excavated on the project site (which could contain up to 12 parcels), allocated as follows: Parcels No. 9 to 12 (each approximately 3.5 acres), 6 trenches each; Parcels No. 1 to 8 (each approximately 2.5 acres), 4 trenches each. These will be approximately

evenly distributed across each parcel to achieve a representative sampling of the subsurface conditions.

6. A Native American monitor representing the Santa Ynez Chumash Reservation will be present during the excavation.
7. A letter report documenting the results of the extended Phase I survey will be submitted to the City of Lompoc, Community Development Department, within five days of the completion of the work.
8. In the event of an unanticipated discovery of human remains, the Santa Barbara County Coroner shall be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
9. Should the results for any given parcel(s) indicate the presence of intact archaeological remains, a more detailed report outlining the discovery will also be submitted within one month of the completion of the fieldwork. This will include a description of the procedures followed during the extended Phase I survey, a summary of the findings, and an analysis of the recovered remains.
10. Final disposition of any recovered archaeological remains (e.g., museum curation, reburial) will be determined through consultation between the landowner, the Santa Ynez Chumash Reservation Elders' Council, and the City of Lompoc.
11. Should intact archaeological resources be identified within one or more parcels, additional archaeological testing (Phase II Testing and Determination of Significance) may be required to more accurately define the size, nature, and significance of the discovery. In the event of such a discovery, all efforts shall be made to preserve those remains through project redesign and/or protective soil capping, thereby minimizing potential adverse impacts. Should preservation prove unfeasible, potential adverse impacts would be mitigated through Phase III data recovery.

With adherence to the above condition of approval imposed onto the proposed project, impacts to archaeological resources would be less than significant.

Cause a Disturbance of any Human Remains

No formal cemeteries are known to have occupied the project site, so any human remains encountered would likely come from archaeological or historical archaeological contexts. As described above, the Phase I survey found no archaeological resources in the project site. The project site was previously graded and the surrounding areas are characterized by features typical of the urban landscape and include commercial, industrial, and residential uses. However, due to the fact that Chumash Indians and later historic peoples were located in the area, there is a possibility that undetected artifacts or features

could be present within the project boundaries. The potential exists for such resources to be present and to be disturbed during construction activities that would result in a potentially significant impact.

Human burials, in addition to being potential archaeological resources, have specific provisions for treatment in the California Public Resources Code.¹² Disturbing human remains could violate the Health Code, as well as destroy the resource. Consequently, to ensure proper treatment of burials in the event of discovery, the law requires that in the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately, the area of the find shall be protected, and the developer immediately shall notify the Santa Barbara County Coroner of the find and comply with the provisions of the California Public Resources Code with respect to Native American involvement, burial treatment, and reburial, if necessary.

Following the applicable provisions of the California Public Resources Code, the potential impact to the discovery of human remains would be less than significant by ensuring appropriate examinations, treatment, and protection of human remains, as required by state law.

Cumulative Impacts

Similar to the proposed project, ground-disturbing activities would have the potential to uncover previously unknown archaeological resources, fossils of paleontological importance, and human remains. The proposed project, in combination with cumulative development, could contribute to the loss of undeveloped land, which could potentially contain archaeological or paleontological resources. Determinations regarding the significance of impacts of the related projects on archaeological or paleontological resources would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement appropriate mitigation measures. Furthermore, the project's potential impacts to archaeological and human remains would be less than significant with the implementation of the condition of approval. Therefore, the proposed project would not contribute to any potential cumulative impacts on archaeological resources or human remains.

The analysis of cumulative impacts to historic resources is based on whether impacts of the project and related projects, when taken as a whole, substantially diminish the number of historic resources within the same or similar context or property type. As discussed in **Section 6.0**, the proposed project would not significantly impact any historic resources. Thus, the proposed project would not contribute to cumulative impacts to historic resources and would result in a less than significant impact.

¹² California Public Resources Code, sec. 5097.

MITIGATION MEASURES

No mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of existing regulations and standards identified above, impacts associated with cultural resources would be less than significant. Therefore, no significant unavoidable adverse impacts relating to cultural resources have been identified. Cumulative impacts would also result in less than significant impacts to cultural resources.

MITIGATION MEASURES

The following mitigation measures shall be implement to reduce the proposed project's solid waste impacts:

Construction

- MM 4.11.3-1** Prior to implementing individual project approval, a Waste Recycling Plan (WRP) shall be submitted and approved by the Planning Division and provided to the Solid Waste Division prior to the issuance of building permits. At a minimum the WRP shall identify the materials (e.g., concrete, asphalt, wood, etc.) that would be generated by construction and development, the project amounts, measures/methods that would be implemented to recycle, reuse, and/or reduce the amount of materials, the facilities and haulers that would be utilized, and the targeted recycling or reduction rates to be achieved.
- MM 4.11.3-2** Each individual project proponent shall recycle, reuse, and/or reduce, to the maximum extent feasible, the amount of construction and demolition materials (i.e., concrete, asphalt, wood, etc.) generated by development of the proposed project that would otherwise be taken to a landfill. This diversion of waste must exceed a 50 percent reduction by weight. The proposed project shall complete a Construction and Demolition Waste form as evidence to ensure compliance. The reporting form must be approved by the Planning Division and submitted to the Solid Waste Division prior to the issuance of Certificate of Occupancy.

Operation

- MM 4.11.3-3** All commercial refuse generated from the proposed project shall be delivered to the Lompoc Sanitary Landfill or other locations as determined by the Lompoc Solid Waste Division.
- MM 4.11.3-4** The Property Owners Association (POA) established for the proposed development shall establish green waste recycling through its landscape maintenance or waste hauling contracts. Green waste recycling includes such things as grass recycling (where lawn clippings from a mulching-type mower are left on the lawn) and on- or off-site composting. This measure shall be implemented to reduce green waste going to landfills. If such services are not available through the yard maintenance or waste haulers in the area, the POA shall provide individual property owners with information