city of ontario

West Ontario Commerce Center

Specific Plan

Final EIR June 2018

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1.0 INTRODUCTION AND LIST OF COMMENTERS

1.0.1 INTRODUCTION

This Final Environmental Impact Report (FEIR) contains the West Ontario Commerce Center Specific Plan Draft Environmental Impact Report (DEIR) by reference, public agency comments received during the public review period of the DEIR, a list of the agencies commenting on the DEIR, and the responses by the City of Ontario, as the lead agency, to the environmental points raised in the public agency comments. This document has been prepared by the City of Ontario in accordance with the California Environmental Quality Act (CEQA).

1.0.2 BACKGROUND

Project Location

The project is located within the City of Ontario, in San Bernardino County (the County). More specifically, as shown in Figure 1-1, the West Ontario Commerce Center Specific Plan is located adjacent to and south of Eucalyptus Avenue, east of Carpenter Avenue, west of the Cucamonga Channel, and north of Merrill Chino Avenue. An aerial photograph of the site is shown in Figure 1-2.

Project Site Characteristics

The proposed West Ontario Commerce Center Specific Plan site plan is shown in Figure 1-3. The Site totals approximately 120-net acres and is owned by five landowners. The majority of the Site is currently in agricultural use, including two active dairy farms, row crops, and a hay and alfalfa wholesaler. The remainder of the Site is vacant land that was previously used for agriculture. The Site is relatively level with the exception of isolated areas where soil and debris from demolished structures have been mounded and an earthen drainage channel that extends along Merrill Avenue on the southern boundary of the Site. The Project also includes an area of the Parkside Specific Plan that is located at the northwest corner of the Site, which would be used to realign and extended Eucalyptus Avenue north of its present location. This portion of the Parkside Specific Plan is currently planned for road right-of-way and potentially residential development. Table 1-1 provides a summary of information, including the ownership, existing land use, land use and zoning designations, for the parcels that comprise the Site.

Table 1.0-1
Summary of Existing Parcels and Land Uses on Project Site

APN	Parcel Size (Acres)	Owner	Existing Use	Existing General Plan/Zoning Designations
0218-221-09	2.49	Parkside Specific Plan	Roadway, Utility, and Agriculture	Parkside Specific Plan (PSP03-002)
0218-271-18	21.13	Inland Harbor Com LLC	Agricultural (Farming)	Industrial (0.55 FAR)/ AG-Specific Plan
0218-261-23	16.06	Farm Fresh Commodities LLC	Agricultural (Farming)	Business Park (0.6 FAR)/ AG-Specific Plan

0218-261-22	20.415	Inland Harbor Com LLC	Agricultural (Farming)	Business Park (0.6 FAR)/ AG-Specific Plan
0218-261-32	12.54	G. H. Dairy	Agricultural (Dairy)	Business Park (0.6 FAR)/ AG-Specific Plan
0218-271-08	7.4	G. H. Dairy	Agricultural (Dairy)	Business Park (0.6 FAR)/ AG-Specific Plan
0218-271-13	14.46	G. H. Dairy	Agricultural (Dairy)	Business Park (0.6 FAR)/ AG-Specific Plan
0218-261-16	42.25	Harold and Pamela Tillema	Agricultural (Dairy and hay/alfalfa wholesaler)	Industrial (0.55 FAR)/ AG-Specific Plan

Source: MIG Hogle Ireland, January 2017.

1.0.3 SURROUNDING LAND USES

The properties surrounding the Site are within the City and the existing land uses include agricultural use to the north and west, a regional concrete-lined storm drain channel (Cucamonga Creek Channel) to the east, and vacant land and urban development to the south. The specific surrounding land uses consist of the following and are shown in Figure 12:

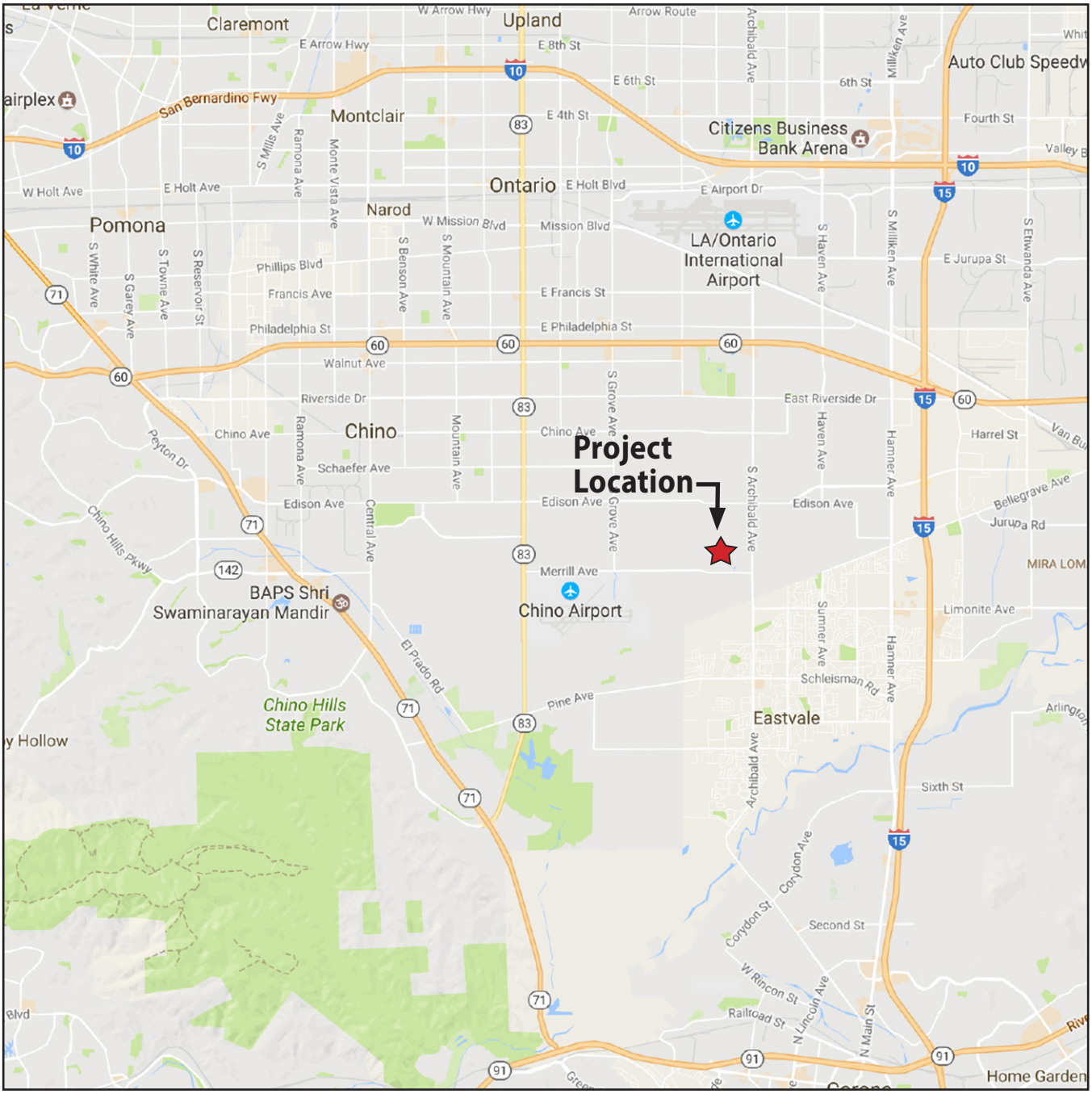
- North: Row crops with the Parkside Specific Plan;
- East: Cucamonga Creek Channel and vacant undeveloped land (Subarea 29 Specific Plan) east of the channel;
- South: Vacant undeveloped land, a single-family residence, and proposed industrial development (Caprock); and
- West: Dairy with single-family residences, vacant undeveloped land, and a trucking company.

The Cucamonga Creek Channel that extends along and forms the east Project boundary is a County open concrete-lined flood control channel. This channel carries regional drainage from developed areas north of the Site to the south. The Cucamonga Creek Channel was constructed approximately 35 years ago by the U.S. Army Corps of Engineers (USACOE) to serve as a primary drainage facility for the City. The channel extends south of the Site and empties into the Prado Flood Control Basin approximately two and a half miles southwest of the Site.

1.0.4 PUBLIC CIRCULATION OF DRAFT EIR

The Draft EIR was circulated for a 45-day public review period pursuant to CEQA Guideline §15105(a) from March 16, 2018 to April 30, 2018. The notice of availability of the Draft EIR was published in the Inland Valley Daily Bulletin, which is a newspaper of local circulation and filed with the San Bernardino County Clerk Recorder.

The Draft EIR is an informational document, intended to disclose the environmental consequences of approving and constructing the proposed West Ontario Commerce Center Specific Plan. All written comments received during the 45-day public review period are addressed in the Final EIR.



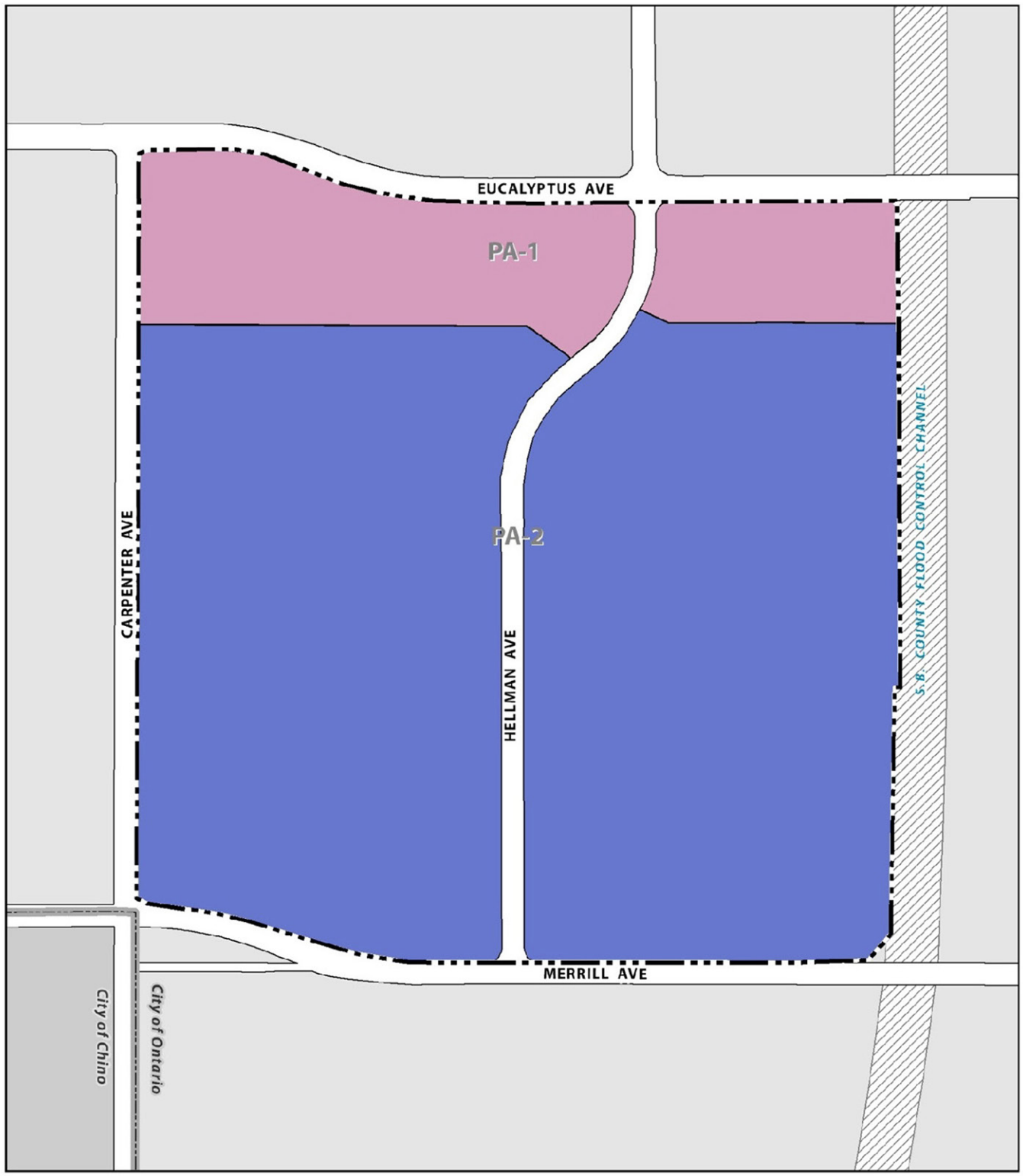
Source: Google Maps, 2017

Figure 1.0-1
Local Vicinity Map

Source: Google Earth, 2017

N

Figure 1.0-2
Aerial Photo



Source: West Ontario Commerce Specific Plan

Figure 1.0-3
West Ontario Commerce Center Land Use Plan

1.0.5 RESPONSES

Responses to comments received on the DEIR during the public review period are presented in Chapter 3, Response to Comments. Each comment letter received is numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is designated a number with the letter number appearing first, followed by the comment number. For example, the first comment in Letter 1 would have the following format: 1-1. The bracketed letter precedes responses to the letter's comments in Chapter 2 of this Final EIR.

The comments received to the DEIR by the City of Ontario have been carefully reviewed. As required by CEQA Guidelines section 15088, all comments received from public agencies, individuals, and organizations were evaluated based on environmental issues raised. The information provided in the responses to comments provides clarifications and additional information necessary for the decision makers and the public to understand the environmental consequences of the proposed project and for the decision makers to act on the project. As required by CEQA Guidelines section 15204, the responses to comments focus on significant environmental issues raised by the comments. All responses to comments contain a good faith reasoned effort at full disclosure regarding the disposition of these significant environmental issues.

1.0.6 LIST OF COMMENTERS

The following is a list of letters received on the Draft EIR with identifying letter numbers, agency or person submitting the letter, and the date of the letter. The letters are shown in Appendix A.

1. Letter A1 – California Department of Fish and Wildlife, letter dated April 30, 2018.
2. Letter A2 – California Department of Transportation, letter dated April 25, 2018.
3. Letter A3 – City of Chino, letter dated April 27, 2018.
4. Letter A4 - San Bernardino County Department of Public Works, letter dated April 27, 2018.
5. Letter 01 – Golden State Environmental Justice Alliance, letter dated April 27, 2018.
6. Letter 02 – Southwest Regional Council of Carpenters, letter dated April 30, 2018.

2.0 ERRATA - REVISIONS TO DRAFT EIR

2.0.1 INTRODUCTION

This chapter presents the text changes that were made to the Draft EIR. The following sections contain revisions to information in the Draft EIR (March 2018) based upon revised and supplemental information required to prepare a response to a specific comment. Given the minor changes associated with the document, the information added to the EIR does not meet the requirements for recirculation pursuant to State CEQA Guidelines section 15088.5.

New text is underlined and deleted test is ~~struck through~~. Text changes are presented in the page order in which they appear in the Draft EIR.

2.0.2 TEXT CHANGES

The text of the following DEIR sections were changed as noted.

Chapter 2 PROJECT DESCRIPTION

As stated in Response O1-23, the text on pages 2-18 and 3.10-4 (Land Use) have been revised: In order to implement the Specific Plan land use plan shown in Figure 2-12 and Table 2-2, the Project includes a General Plan Amendment and Zone Change to: 1) decrease the designated Business Park area by 40-acres to a total of 21.09-acres; 2) increase the designated Industrial land use by 40-acres to a total of 98.09-acres~~; and 3) change the designation of approximately 2.49-gross acres (1.41-net acres) within the Parkside Specific Plan north of the Project from the Parkside Specific Plan to Business Park to utilize the area of the realignment of Eucalyptus Avenue.~~

3.3 AIR QUALITY (p. 3.3-28)

The Draft EIR is clear that the Project would result in a significant and unavoidable impact (See ES Page 2). This is also made clear in section 3.3.5. The final sentence on page 3.3-28 of the Draft EIR included a typo and has been revised to note that NOx emissions would be significant and unavoidable.

Mitigation Measure AQ-1 will reduce ROG construction emissions to less than significant. While Mitigation Measure AQ-2 is recommended to reduce NOx emissions, no feasible mitigation measure has been identified that would mitigate NOx emissions associated with Impact AQ-2 and AQ-3 to below a level of significance due to the volume of vehicular trips that would result from the Project. Therefore, operational NOx emissions, even with Mitigation Measure AQ-2, would remain significant and unavoidable. ~~AQ-1 would mitigate NOx emissions associated with AQ-1, AQ-2 and AQ-3 to below a level of significance.~~

As stated in Response O2-2, the Draft EIR is clear that the Project would result in a significant and unavoidable impact (See ES Page 2). This is also made clear in section 3.3.5. The final sentence on page 3.3-28 of the Draft EIR included a typo and has been revised to note that NOx emissions would be significant and unavoidable as identified in the paragraph above.

3.4 BIOLOGICAL RESOURCES

As stated in Response A4-1, the EIR on page 3.4-12 states the Project Site does not contain jurisdictional waters or wetlands that are regulated by the ACOE. The EIR has been revised to

analyze offsite improvement areas, including the Cucamonga Creek Channel, which is under ACOE jurisdiction and will require a 408 permit. The Project is within the District's right-of-way and plans will be submitted for an encroachment permit.

3.6 GEOLOGY AND SOILS

As stated in Response A4-2, the paragraph on page 3.6.3 has been revised to correctly state the acreage as follows: These regulations prohibit the discharge of storm water from construction projects that disturb 1~~5~~ acres or more of land, unless the discharge complies with the National Pollutant Discharge Elimination System (NPDES) Phase 1 General Permit.

3.8 HAZARDS AND HAZARDOUS MATERIALS (p. 3.8-14)

As stated on page 3.8-14 of the EIR, the Compatibility Zone D area airspace review is only required for objects and structures that are taller than seventy (70) feet in height. Architectural projections approved at 68.75 feet are below the 70-foot threshold. The reference to sixty-five (65) feet in the EIR has been corrected as follows: "This is pursuant to the 2008 Riverside County Airport Land Use Compatibility Plan (ALUCP), which provides guidance for development around the airport, including the Specific Plan area. The ALUCP provides guidance for measuring heights of buildings, which would be confirmed by the City during the building permit process."

Response O1-22: As stated in the WOCC Specific Plan (page 2-1), the Project Site is within Safety Zone 6 of the Chino Airport Overlay (Generic Safety Zones for General Aviation Airports from the Caltrans Division of Aeronautics – California Airport Land Use Planning Handbook). The Specific Plan was available to the public for review with the Draft EIR.

As stated on page 3.8-14 of the EIR, the Compatibility Zone D area airspace review is only required for objects and structures that are taller than seventy (70) feet in height. Architectural projections approved at 68.75 feet are below the 70-foot threshold. The reference to sixty-five (65) feet in the EIR has been corrected as follows: "This is pursuant to the 2008 Riverside County Airport Land Use Compatibility Plan (ALUCP), which provides guidance for development around the airport, including the Specific Plan area. The ALUCP provides guidance for measuring heights of buildings, which would be confirmed by the City during the building permit process."

In addition, the proposed Specific Plan would allow for a maximum building height of fifty-five (55) feet for main structures, and up to 68.75 feet for architectural projections and focal elements.

3.9 HYDROLOGY AND WATER QUALITY

As stated in Response A4-4, the paragraph on page 3.9.4 has been revised to correctly state the permit number and acreage as follows: The SWRCB has adopted a statewide General Permit (WQ Order No. R8-2010-003614-DWQ) for storm water discharges associated with construction activity, which includes site grading. These regulations prohibit the discharge of storm water from construction projects that disturb 1~~5~~ acres or more of land, unless the discharge complies with the National Pollutant Discharge Elimination System (NPDES) Phase 1 General Permit.

3.10 LAND USE

As stated in Response O1-23, the text on Page 3.10-5 (Land Use) has been revised: Consistent. The Project includes a General Plan Amendment and Zone Change to decrease the designated Business Park area by 40-acres and increase the designated Industrial land use by 40-acres~~; and change the land use designation of 2.49-gross acres within the Parkside Specific Plan from residential use to Business Park to allow for the realignment of Eucalyptus Avenue.~~

3.13 TRANSPORTATION/TRAFFIC

As stated in Response A2-1, the Traffic Impact Analysis (TIA) provides requires traffic analysis for State Route 60 (SR-60), State Route 71(SR-71) and Interstate 5 (I-5) for both directions as requested by the California Department of Transportation.

As stated in Response A2-5, the correct delay and LOS for the Existing (2017) condition is shown in TIA Table 2-2 (provided in Draft EIR Appendix I); the Existing (2017) LOS shown in Table 2-3 is incorrect and has been corrected. The conclusions of the analysis and the mitigation measures remain unchanged as a result. See Chapter 3, Revisions to the Draft EIR.

As stated in Response A2-9, the LOS analysis for all scenarios was rerun using a revised truck percentage of 4% instead of 15%. The revised analysis is provided in the errata and confirmed the finding that improvements are required for Opening Year (2023) Cumulative No Project conditions. The proposed mitigation remains to provide a south bound right-turn overlap phase at intersection No. 22 - SR-71/Grand Avenue, but implementation of the mitigation can be delayed from the Existing Plus Project condition to a 2023 timeframe.

As stated in Response A3-1, Merrill Avenue is anticipated to be constructed to a 4-lane roadway between Euclid Avenue and Archibald Avenue by Project Opening (Buildout) Year 2023. Both study roadway network TIA Figure 2-9A "Opening Year 2023 No Project – Study Area Circulation Network" and TIA Figure 4-2A "Opening Year 2023 with Project Mitigation Improvements" have been corrected as shown in Figure 2-9A to show Merrill Avenue as a 4-lane divided roadway and not a 3-lane divided roadway. New circulation maps are provided for Figures 2-9A and 4-2A of the TIA as stated above.

3.0 RESPONSE TO COMMENTS

3.0 Response to Comments

Section 15088 of the CEQA Guidelines requires the Lead Agency, the City of Ontario (City), to evaluate comments on environmental issues received from public agencies, organizations, and interested parties who reviewed the Draft EIR and prepare written responses. This section provides all written responses received on the Draft EIR and the City's responses to each comment of each comment letter. Comment letters and specific comments are numbered for reference purposes.

The following is a list of public agencies, organizations, and interested parties that submitted comments on the Draft EIR during and after the public review period. The comment letters received on the Draft EIR and responses to those comments are provided on the following pages.

Letter Number	Agency/Organization/Name	Comment Date
Agencies		
A1	California Department of Fish and Wildlife	April 30, 2018
A2	California Department of Transportation	April 25, 2018
A3	City of Chino	April 27, 2018
A4	San Bernardino County Department of Public Works	April 27, 2018
Interested Organizations		
O1	Golden State Environmental Justice Alliance	April 27, 2018
O2	Southwest Regional Council of Carpenters	April 30, 2018

LETTER A1: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE (20 PAGES)

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, CA 91764
(909) 484-0459
www.wildlife.ca.gov

EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

April 30, 2018
Sent via email

Mr. Richard Ayala
Senior Planner
City of Ontario
Planning Department
303 East "B" Street
Ontario, CA
rayala@ontario.ca.gov

Subject: Draft Environmental Impact Report
West Ontario Commerce Center Specific Plan Project
State Clearinghouse No. 2017041074

Dear Mr. Ayala:

The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the West Ontario Commerce Center Specific Plan Project (project) [State Clearinghouse No. 2017041074]. The Department is responding to the Notice of Availability of a DEIR as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1). A1-1

The project (project) is located south of Eucalyptus Avenue, north of Merrill Avenue, east of Carpenter Avenue, and west of the Cucamonga Creek channel (a San Bernardino County Flood Control Channel) in the City of Ontario (City). The Specific Plan includes two (2) Planning Areas (individually, PA) totaling approximately 120-net acres and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development of 2,905,510 square feet.

Conserving California's Wildlife Since 1870

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COMMENTS AND RECOMMENDATIONS

The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (i.e., biological resources); and administers the Natural Community Conservation Planning Program (NCCP Program). The Department offers the comments and recommendations presented below to assist the City of Ontario (City; the CEQA lead agency) in adequately identifying and/or mitigating the project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable the Department to adequately review and comment on the proposed project with respect to impacts on biological resources. A1-1 cont.

The Department recommends that the DEIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable Department staff to adequately review and comment on the project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. The Department recommends that the DEIR specifically include: A1-2

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. The Department recommends that floristic, alliance- and/or association based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. The Department's California Natural Diversity Database (CNDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDB@wildlife.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed project. The Department recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data

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Please note that the Department's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The Department recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas with the potential to be effected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the project area and should not be limited to resident species. Focused species-specific/MSHCP surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service, where necessary. Note that the Department generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed project may warrant periodic updated surveys for certain sensitive taxa, particularly if the project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

A1-2 cont.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://www.wildlife.ca.gov/Conservation/Plants);

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]);

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the project. To ensure that project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

A1-3

A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address project-related changes on drainage patterns and water quality within, upstream, and downstream of the project

site, including: volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site.

A discussion of potential indirect project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, vernal pools, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands). A1-3 cont.

Identify and Disclose Cumulative Impacts

A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on biological resources that are rare or unique to the region (CEQA Guidelines § 15125[c]) should be analyzed. More specifically, the Department believes that the burrowing owl and its habitat has, and continues to be, removed throughout the City of Ontario and the surrounding area. Within the DEIR [*Chapter 3 – Environmental Analysis 3.4.6 Cumulative Impacts* Page 3.4-19], it states: A1-4

> "*Due to the development potential in the immediate area, the cumulative analysis takes into account potential impacts that would occur as a result of development of the identified cumulative projects. The cumulative geographic context for the evaluation of impacts on biological resources is regional development, particularly in the southern portion of the City and adjacent portions of the cities of Chino and Eastvale as well as other areas of the El Prado Basin proper (the Region) which contains habitat very similar to the Project.*
>
> *The cumulative impacts are qualitatively based on assessments of the cumulative projects. The potential build out of the cumulative projects is approximately 3,795 acres (cumulative projects in cities of Ontario, Chino, and Eastvale). Mitigation measures have been or will be approved along with the Project approvals of the cumulative projects to mitigate the potential biological impacts of each project, thus the cumulative impacts have been reduced. The primary effects of the West Ontario Commerce Center Specific Plan, when considered with other projects in the Region (as defined above), would be the direct cumulative loss of open space, vegetation important to raptors and nesting birds, and the habitat of sensitive or special-status wildlife species. However, as discussed in the above biological analysis, the Project, after implementation of*

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mitigation measures, will not significantly impact any sensitive, rare, endangered, or threatened plant species or sensitive, endangered, or threatened animal species. Therefore, the Project will not have any significant cumulative biological impacts after implementation of mitigation.

The implementation of the Project-recommended mitigation measures will reduce the potential significant cumulative biological impacts to less than significant levels because the measures, when implemented, will reduce the Project's impacts to less than significant. However, the development of the Specific Plan in combination with the cumulative projects could lead to increased disturbance to burrowing owl, special-status or native nesting birds, and North American bats species and have cumulative biological impacts. Thus, even though the Project would have less than a significant cumulative impact, cumulative biological impacts could be significant."

The mitigation measures [*Section 3.4.7 Mitigation Measures*] proposed to offset the cumulative impacts are:

BIO-1 Prior to any demolition or grading on the Site and areas with off-site improvements, a qualified biologist shall conduct a focused survey for burrowing owl following CDFW's March 2012 recommended guidelines including conducting four visits between February 15 and July 15. If the species is found, an eviction plan shall be drafted and submitted to CDFW for approval. Eviction shall only occur when the owls are not nesting. If the species is not found during the focused survey and the focused survey is completed more than 14 days prior to ground disturbance, a preconstruction presence/absence survey for burrowing owl within 14 days prior to each phase of development (including clearing and grubbing) shall be completed to ensure no mortality to the species occurs. If burrowing owls are detected during the preconstruction survey, a mitigation and eviction plan for that phase shall be drafted and provided to the CDFW for approval. Eviction shall occur only when the owls are not nesting (CDFW 2012).

A1-4 cont.

BIO-2 The removal of any vegetation on the Site by the Project developer shall occur outside of the nesting season (January 1 through August 31). If avoidance of the nesting season is not feasible, a qualified biologist shall conduct a nesting bird survey within three days prior to the disturbance of any vegetation, including disking, demolition, grading or construction. If active nests of native bird species are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. The buffer shall be 300 feet for raptors and 150 feet for songbirds; unless specifically determined to be less by a qualified biologist that is familiar with the nesting phenology of the nesting species

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The project is located within the boundaries of Ontario Ranch (formerly known as New Model Homes), a new master-planned communities that spans over 8,000 acres and 13 square miles. Subsequent to the adoption of the Sphere of Influence (SOI) General Plan and DEIR, a lawsuit was filed against the City by the Endangered Habitats League, Inc. and Sierra Club challenging the City's California Environmental Quality Act (CEQA) compliance and approval of the SOI General Plan Amendment. A Settlement Agreement was reached and agreed to by all parties that set forth revised mitigation measures for potential impacts in the New Model Colony (NMC) (referred to as Annexation Area 163 in the Agreement). The measures are to be in effect until all of the developable acres within the NMC reach full build-out, as determined by the City. Further, a land trust, conservancy, or non-profit corporation or nonprofit entity (Land Trust) will be created or selected to carry out the responsibilities, goals, and objectives of the mitigation as set forth in the Settlement Agreement (The Ontario Plan DEIR Section 5 *Environmental Analysis*), including:

A1-4 cont.

- Prior to issuance of grading permits, Ontario shall impose a $2,000 per acre Mitigation Fee on proposed developments in Annexation Area 163 that require discretionary approval or permitting from the City.
- Ontario in consultation with the Department will identify through CEQA review, lands occupied by burrowing owl and suitable as long-term habitat. The City will require avoidance of those lands to maintain a viable territory and require long-term maintenance through dedication in fee or grant of easement to the Land Trust. If the site is not viable long-term habitat, the developer shall pay the mitigation fee and make provisions for relocation of the owls.
- All Mitigation Fees collected shall be used for the above-described purposes and may be used to purchase property, conservation easements, or other land with long-term conservation value for the environmental impacts; enhance/restore lands with such values; maintain and operates these lands; and pay for related administrative costs (not to exceed 10 percent of the total fees).
- Land/easements dedicated, conveyed, or purchased to benefit wildlife, waterfowl, raptors/and or burrowing owl must have long-term conservation value for those species and must be managed by the Land Trust. The parcels must be located within the Habitat Area designated as part of the Settlement Agreement. Unacceptable properties are those that would otherwise by purchased by another entity or group as open space mitigation for environmental impacts.

The Settlement Agreement also modified the provisions for the on-site 145-acre Waterfowl and Raptor Conservation Area (WRCA). The alternative provision for

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mitigation will allow the City to determine the area to be removed from the on-site WRCA. For each acre removed, the City will provide funding at the rate of $40,000 per acre for off-site mitigation of wildlife impacts, through an impact fee or other revenue-generating mechanism. The funding may cover preservation of the 160 acres of off-site mitigation for a total of up to 305 acres of off-site mitigation (which should be located within the designated Habitat Area).

Development impact fees for new development in the NMC were adopted on June 23, 2003, by the City Council. The NMC Development Impact Fees include a Habitat Mitigation fee of $4,320 per net acre for proposed residential, commercial, hotel and restaurant, office, and industrial development (City of Ontario 2005). Table 1 and Illustration 1 lists the projects, mitigation measures, and the potential fees collected within the NMC.

Immediately west of the project, the City of Chino placed the Dairy Preserve north of Merrill Avenue within the City of Ontario's Sphere of Influence and the remaining portion south of Merrill Avenue to the San Bernardino County line in the City of Chino's Sphere of Influence. Similar to the City, the City of Chino prepared a Resource Management Plan (Michael Brandman Associates, 2003), for the 7,235 acre 'Preserve' that identified mitigation measures (e.g. development fees, land acquisition, etc.) to compensate for cumulative impacts to the burrowing owl. To identify how the loss of habitat to date, as well as in the future, has affected the local burrowing owl population, a thorough analysis needs to be conducted of the cumulative impacts, as well as, the measures implemented in the Settlement Agreement to determine whether there has been adequate actions to reduce the local extirpation of the species.

A1-4 cont.

Within the DEIR, there were no record searches included of sensitive resource occurrences within the surrounding area. The Department performed a precursory California Natural Diversity Data Base (CNDDB) search for burrowing owl occupancy within, and immediately surrounding, the project (See Illustration 2 and Table 2). Please note CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. Given the type of habitat, known occurrences within the surrounding area, and the presence of ground squirrels and their burrows, the Department feels that the project has a high potential to provide burrowing owl nesting and foraging habitat. Since burrowing owls and/or their habitat may be impacted from the project, the Department recommends that the City include specific mitigation in the DEIR. CEQA Guidelines §15126.4, subdivision (a)(1)(8) states that formulation feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center* v. *County* of *Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete *(Sundstrom* v. *County* of

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Mendocino (1988) 202 Cal. App. 3d. 296; *Gentry* v. *City* of *Murrieta (1995)* 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc.* v. *County* of *Orange* (2005) 131 Cal. App. 4th 777).

The DEIR should specify mitigation that is roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). Furthermore, in order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. Current scientific literature supports the conclusion that mitigation for permanent burrowing owl habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow. A1-4 cont.

CDFW requests the DEIR include a full assessment of the cumulative impacts and full disclosure of the mitigation actions taken by the City to date.

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the project. When proposing measures to avoid, minimize, or mitigate impacts, the Department recommends consideration of the following:

1. *Sensitive Plant Communities*: The Department considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts. A1-5

2. *Mitigation*: The Department considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, including, but not limited to measures to ensure domestic animals (e.g., cats and dogs) cannot access mitigation areas, and removal procedures to implement if they do; proposed land dedications; long-term monitoring and management programs; control of illegal dumping; water pollution; and increased human intrusion, etc.

3. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought. A1-5 cont.

   The Department recommends that local onsite propagules from the project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

   Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

4. *Nesting Birds and Migratory Bird Treaty Act:* Please note that it is the project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or A1-6

eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

The Department recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed in the DEIR, the Department recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

A1-6 cont.

5. *Translocation of Species*: The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

A1-7

California Endangered Species Act

The Department is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). The Department recommends that a CESA ITP be obtained if the project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. The Department encourages early consultation, as significant modification to the proposed project and mitigation measures may be necessary to obtain a CESA ITP. Revisions to the California Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA ITP unless the Project CEQA document addresses all Project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit.

A1-8

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Lake and Streambed Alteration Program

Depending on how the project is designed and constructed, it is likely that the project applicant will need to notify the Department per Fish and Game Code section 1602. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream or use material from a streambed, the project applicant (or "entity") is required to provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code. Please note that streams include all those that flow at least episodically, including ephemeral streams, desert washes, and watercourses with subsurface flow. Based on the notification and supporting information, the Department determines if the proposed project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required.

The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). Therefore, to facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

A1-8 cont.

Additional Comments and Recommendations

To ameliorate the water demands of this project, the Department recommends incorporation of water-wise concepts in project landscape design plans. In particular the Department recommends xeriscaping with locally native California species, and installing water-efficient and targeted irrigation systems (such as drip irrigation). Local water agencies/districts, and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species, and some facilities display drought-tolerant locally native species demonstration gardens (for example the Riverside-Corona Resource Conservation District in Riverside). Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: http://saveourwater.com/conservation-lifestyle/

Further Coordination

The Department appreciates the opportunity to comment on the NOP of a DEIR for the Ontario Commerce Center Project (SCH No. 2017041074) and recommends that the City of Ontario address the Department's comments and concerns in the forthcoming DEIR. The Department also requests a meeting to assist in clarifying the cumulative impacts, and to assist in assessing the mitigation efforts to date. If you should have any questions pertaining to the comments provided in this letter, please contact Kim Romich at (909) 980-3818 or at kimberly.romich@wildlife.ca.gov.

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Sincerely,

For Scott Wilson
Environmental Program Manager

Attachments:

Illustration 1-Different Development Projects within the New Model Colony, Located Within the City of Ontario, California.

Illustration 2: California Natural Diversity Database (CNDDB) for Burrowing Owl within and immediately surrounding the New Model Colony located in the City of Ontario, San Bernardino County, California.

Table 1: Development projects, mitigation measures, and reference documents within the New Model Colony located in the City of Ontario, San Bernardino County, California.

Table 2: California Natural Database for Burrowing Owl within and immediately surrounding the New Model Colony located in the City of Ontario, San Bernardino County, California.

RESPONSE TO LETTER A1: CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, DATED APRIL 30, 2018.

Response A1-1: This comment provides background information related to biological resource regulations, a summary of the proposed Project, and the roles and responsibilities of the California Department of Fish and Wildlife (CDFW). This comment does not provide specific comments about the EIR, and no further response is required or provided. (CEQA Guidelines § 15088(c); *Flanders Found. v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.)

Response A1-2: This comment states that the Draft EIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint. The commenter is referred to Draft EIR section 3.4 *Biological Resources*, and Draft EIR Appendix D, *Biological Resource Technical Studies*. The EIR is in compliance with CEQA Guidelines section 15125(c). Additionally, it should be noted that the City is also not required to follow the recommendations of the CDFW on how impacts should be studied, provided that substantial evidence supports the City's chosen methodology, as is provided in the EIR. (*N. Coast Rivers Alliance v. Marin Mun. Water Dist.* (2013) 216 Cal.App.4th 614, 643.)

Response A1-3: This comment states that the Draft EIR should provide a thorough discussion of direct and indirect impacts that are expected to adversely affect biological resources, including lighting, noise, human activity, wildfire human interactions, invasive species, and drainage. The comment also states that the drainage analysis should include volume, velocity, polluted runoff, and soil erosion. The comment does not allege any specific inadequacy with the analysis of the Draft EIR, which properly considers all potential environmental impacts associated with the proposed project, including to biological resources, and, therefore, does not require a response. (*Citizens for E. Shore Parks v. State Lands Comm'n* (2011) 202 Cal.App.4th 549.)

However, in the interest of transparency, the City provides the following response. The Project Site is surrounded by roadways, agricultural uses, suburban uses, and other disturbed lands. Therefore, as discussed in the EIR, such edge effects to natural biological resources would not occur. In addition, the impacts of the Project on hydrology and drainage are described in Section 3.9, *Hydrology and Water Quality*, which describes that existing regulations and City Standard Conditions of approval, that would be implemented as part of the City's permitting process would reduce impacts to a less than significant level.

Response A1-4: The Draft EIR includes a discussion of all species that occur within the within the vicinity of the Specific Plan area, as found in the Draft EIR's discussion of nearby occurrence records. With respect to the burrowing owl (BUOW), the Draft EIR notes that there was a moderate potential for the species to occur within the study area, due to the presence of suitable habitat. The CNDDB data is provided to assist in assessing the likelihood of presence of special status species within and surrounding the Project Site. Due to the potential for BUOW to occur in the Project region, breeding season surveys were conducted in accordance with the CDFW's Staff Report on Burrowing Owl Mitigation (2012). Focused surveys were conducted to evaluate the presence/absence of the special-status BUOW. No direct BUOW observations were recorded during the September-December 2017 focused BUOW winter season surveys. Based on absence of BUOW observations and sign (feathers, pellets, fecal material, prey remains, etc.) at or near burrow entrances/aprons, none of the potential burrows inspected during the survey were determined to be currently occupied by BUOW. BUOW were also not observed utilizing the Project Site for foraging purposes on or adjacent to the Project Site (adjacent areas viewed by binocular only). Thus, although the Draft EIR acknowledged the potential for BUOW to be present on the Project Site, no BUOW or occupied habitat are anticipated to be impacted by the Project. However, mitigation measure MM BIO-1 Burrowing Owl would be implemented to provide for a focused survey to occur prior to a demolition or grading permit to ensure that ensure that impacts to burrowing BUOW would not occur from implementation of the Project. Impacts remain less than significant with mitigation, as disclosed in the Draft EIR. The results of the focused surveys are provided in Appendix A of this Final EIR.

As identified by commenter, the Project is also subject to specific conditions/measures that will further ensure less than significant impacts to BUOW within the Project Site and vicinity, such as the requirement to pay a mitigation fee that funds a land trust to acquire and protect habitat supporting, among other things, BUOW. This measure, along with specific requirements for the City, was imposed as part of a settlement agreement related to the approval of the New Model Colony (the Settlement Agreement). The Project Site is within the New Model Colony and, therefore, subject to the mitigation fee imposed by the City. Thus, although the fee was not specifically identified as a mitigation measure and was not required to reduce any Project impacts, the fee is part of the existing regulatory environment that applies to the Project and will be included as a condition of approval.

The majority of the Settlement Agreement's provisions are continuing requirements of the City (i.e., the establishment of a Land Trust), the implementation of which is unrelated to this specific Project. To the extent the commenter is requesting information about implementation of the Settlement Agreement that is beyond the scope of this Draft EIR. The Draft EIR includes substantial evidence supporting the conclusion that the Project Site, although it has some suitable BUOW habitat, does not currently support BUOW. Mitigation measure MM BIO-1 is imposed to ensure that impacts remain less than significant. Section 3.4, *Biological Resources*, of the Draft EIR describes the potential of special status species and their habitats to exist on site and provides mitigation measures to ensure that existing regulations related to biological resources are implemented and that potential impacts are reduced to a less than significant level. As detailed, the existing regulations would be implemented by the County of San Bernardino (County), the U.S. Army Corps of Engineers (ACOE), CDFW, and the Regional Water Quality Control Board; and ensured during the Project permitting process. As described in the Draft EIR, cumulative impacts would be less than significant with implementation of the Mitigation measures MM BIO-1 through MM BIO-3.

Response A1-5: This comment states that the Draft EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts to Biological Resources. Please refer to Response A1-3 and A1-4 regarding BUOW surveys that were completed, and BUOW mitigation that would occur prior to demolition or grading. As suggested in the comment, the Draft EIR does include appropriate and adequate avoidance, minimization, and/or mitigation measures for all potentially significant direct, indirect, and cumulative Biological Resources impacts.

Regarding the comment to provide measures to perpetually protect targeted habitat values, it is not warranted at this time due to the absence of special status biological resources at the Project Site. Regarding BUOW, the comment is correct in stating that pre-construction surveys, minimization measures, and/or mitigation will be implemented. As described previously in Response A1-4, no BUOW currently occur onsite. Additionally, mitigation measure MM BIO-1 includes provisions to prepare related mitigation plans to be approved by CDFW prior to their implementation and specifies standards and methods that must be followed if triggered by the presence of burrowing owls on-site. This does not constitute deferral. (See *Clover Valley Found. v. City of Rocklin* (2011) 197 Cal.App.4th 200, 237; *California Native Plant Soc'y v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 621; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794; Rialto Citizens for Responsible Growth v. City of Rialto (2012) 208 Cal.App.4th 899, 945 [court upheld mitigation measures that required consultation with appropriate agencies if the species was determined in preconstruction surveys to be located on the site].)

Response A1-6: See mitigation measure MM BIO-3 for MBTA mitigation.

Response A1-7: Comment noted. This comment does not provide specific comments about the EIR, and no further response is required or provided. (CEQA Guidelines § 15088(c); *Flanders Found. v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.)

Response A1-8: This comment summarizes the regulatory requirements and the agreement process of CDFW under the California Fish and Game Code section 1602. The Draft EIR acknowledges the requirements

related to the California Fish and Game Code. Furthermore, the Draft EIR thoroughly analyzes the Project's potential impacts to any river, stream or lake. Please refer to Draft EIR discussion of Impact BIO-2. The commenter does not allege any specific inadequacy with the analysis of the Draft EIR. This comment does not provide specific comments about the EIR, and no further response is required or provided. (CEQA Guidelines § 15088(c); *Flanders Found. v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.)

LETTER A2: CALIFORNIA DEPARTMENT OF TRANSPORTATION (2 PAGES)

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY EDMUND G. BROWN Jr., Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 725)
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SAN BERNARDINO, CA 92401-1400
PHONE (909) 388-7017
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Making Conservation a California Way of Life.

April 25, 2018

File: 08-SBd-60-PM R7.268
08-SBd-83-PM 3.977

Richard Ayala
City of Ontario
303 East B Street
Ontario, CA 91764

Subject: West Ontario Commerce Center Specific Plan – Traffic Impact Analysis

Dear Mr. Ayala:

Thank you for providing the California Department of Transportation (Caltrans) the opportunity to review and comment on the Traffic Impact Analysis (TIA) for the West Ontario Commerce Center Specific Plan (Project), located south of Eucalyptus Avenue, east of Carpenter Avenue, north of Merrill Avenue, and west of Cucamonga Creek, in the City of Ontario. The proposed plan includes two planning areas totaling approximately 120 acres and will allow the development of 555,505 square feet of Business Park use and 2,350,005 square feet of industrial.

A2-1

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when a proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act, it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Ontario, due to the project's potential impact to the State facilities, it is also subject to the policies and regulations that govern the SHS. We offer the following comments:

1) Include the ramp merge and diverge analysis at all intersections for SR-60, SR-71, I-15 within the study area for both directions.

2) Per the City of Ontario's circulation plan, there is a Planned Class II bike lane on Merrill Avenue adjacent to the project site. Any improvements should take future bike lane/paths into consideration.

A2-2

3) Mitigations must align with SCAG RTP project list.

A2-3

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4) The build-out horizon year study should be year 2045 instead of year 2040. The proposed project is anticipated to be completed in 2023 and therefore horizon year is based on the 20-year from the project completion year which would be 2043. A2-6

5) Table 2-3: AM Peak Hour and PM Peak Hour of Delay and LOS for the existing (2017) No Project are different than Existing (2017) in Table 2-2. Please verify with Appendix B. A2-5

6) Figures 2-5B, 2-5C, 2-5D and 2-5E: Opening Year 2023 AM and PM peak hour turning movement volumes have inconsistent growth rates applied from the existing year 2017. Notice that there are several turning movement volumes that have no growth rate (same volumes from year 2017) and others have applied growth rates per year that varies from 4% to 22% onto the turning movement within the same intersection study. Provide justification on those high growth rates applied at SR 71/Grand Ave., I-15/Cantu-Galleano Ranch Road, and I-15/Limonite Ave. A2-6

7) Provide detailed information about the growth factor from existing year 2017 to horizon year. Please note that current 2040 SBTAM model outpost is projected from the base year 2010 traffic data. A2-7

8) Table 4-7 (Horizon Year 2040 Level of Service at Study Area Intersections): Delay and LOS analyses results from No Project and With Project seem lower than Year 2023 (Table 4-4). Please Verify. A2-8

9) Appendix B (Level of Service Computation Reports): 15% for heavy vehicles percentage applied for the LOS analyses at the intersections 21 & 22 (SR 71 ramp at Grand Ave.) is a very high percentage. Please note that truck % for the SR 71 freeway is an average of 7%. Therefore, truck % for the ramps should be between 3% to 4% instead of 15% for truck. A2-9

These recommendations are preliminary and summarize our review of materials provided for our evaluation. If this project is later modified in any way, please forward copies of revised plans as necessary so that we may evaluate all proposed changes for potential impacts to the SHS. If you have any questions regarding this letter, please contact Jacob Mathew (909) 806-3928 or myself at (909) 383-4557.

Sincerely,

Mark Roberts

MARK ROBERTS
Office Chief, AICP
Intergovernmental Review, Community and Regional Planning

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

RESPONSE TO LETTER A2: CALIFORNIA DEPARTMENT OF TRANSPORTATION, DATED APRIL 25, 2018.

Response A2-1: The comment asks that the ramp merge and diverge analysis at all study intersections be provided for State Route 60 (SR-60), State Route 71 (SR-71), and Interstate 5 (I-15) for both directions.

The Traffic Impact Analysis (TIA) provides the requested analysis in both directions at the following locations:

- SR-60 at Euclid Avenue
- SR-60 at Archibald Avenue
- SR-60 at Grove Avenue
- I-15 at Cantu-Galleano Ranch Road
- I-15 at Limonite Avenue

The SR-71 ramp intersections on Grand Avenue were included in the traffic analysis; however, the merge/diverge segments on SR-71 at Grand Avenue were not evaluated. Stantec has prepared an analysis of the SR-71 Freeway mainline and merge-diverge segments between Grand Avenue and Chino Avenue. The analysis is provided in the errata. The freeway segments operate at level of service (LOS B) or better in the AM and PM peak hours in the existing (2017) condition. By 2040, the freeway mainline segment would deteriorate to LOS C during both peak hours and the merge/diverge segments would operate at LOS B or better during both peak hours. No new project impacts were identified as a result of the analysis.

Response A2-2: All improvements, including any on Merrill Avenue, will undergo design review and plan check with the City and will be designed to meet City standards, including provision of the Class II bike lane if required by the City.

Response A2-3: There are no mitigation measures that would preclude implementation of projects listed on the SCAG RTP project list.

Response A2-4: The first phase of the Project, which includes construction of more than 1,000,000 square feet, is expected to open in 2019. Therefore, analysis of a 2040 buildout year would be more than twenty (20) years past the project opening year. Furthermore, analysis of the 2040 buildout year is consistent with the buildout year of the SBTAM model and other traffic analyses prepared in the Project area.

Response A2-5: The correct delay and LOS for the Existing (2017) condition is shown in TIA Table 2-2 (provided in Draft EIR Appendix I); the Existing (2017) LOS shown in Table 2-3 is incorrect and has been corrected. The conclusions of the analysis and the mitigation measures remain unchanged as a result. See Chapter 3, *Revisions to the Draft EIR*.

Response A2-6: Page 10 of the TIA describes the methodology used to forecast Opening Year 2023 No Project traffic volumes. As stated in the TIA "Opening year traffic volumes have been developed by adding traffic from identified future cumulative development projects". No growth rate has been applied. The variation in growth observed at different intersections or at different turn movements at the same intersection results from the varying trip generation and distribution of cumulative development projects. Also, intersections that seemingly have no growth rate are not affected by the trips generated by cumulative development projects, as demonstrated in the TIA.

Response A2-7: The City required 2040 SBTAM model output be used as the basis for the horizon year analysis. As described in Response A2-6, Opening Year 2023 No Project traffic forecasts were developed by adding traffic from identified cumulative projects. This is considered appropriate because such a sizable portion of the study area is undeveloped and traffic growth will be primarily associated with future development. As a result, growth factors throughout the study area vary widely for 2023 (and 2040) volumes compared to existing 2017 volumes and no universal growth factor was applicable or necessary. It should be noted that the San Bernardino Association of Governments (SANBAG) provided the model 2040 daily volumes and Stantec processed this data to develop peak hour turning movement forecasts based on

existing and 2023 turning movement patterns, conservation of flow and balancing techniques, and calibration to forecasts in recent studies for adjacent projects as directed by the City

Response A2-8: Comparison of the no-project LOS in TIA Tables 4-4 and 4-7 shows that delay at some intersections is lower in 2040 than in 2023, however at some locations the delay is higher in 2040 than in 2023. The difference in forecasting methodologies is the cause of the varying results. Year 2023 volumes were forecast by manually adding traffic from cumulative development projects, while the 2040 volumes were forecast using the SBTAM traffic model, which distributes traffic from planned development projects at a finer level than the manual distribution process.

Response A2-9: As requested, the LOS analysis for all scenarios was rerun using a revised truck percentage of 4% instead of 15%. The revised analysis is provided in the errata and confirmed the finding that improvements are required for Opening Year (2023) Cumulative No Project conditions. The proposed mitigation remains to provide a south bound right-turn overlap phase at intersection No. 22 - SR-71/Grand Avenue, but implementation of the mitigation can be delayed from the Existing Plus Project condition to a 2023 timeframe.

LETTER A3: CITY OF CHINO (1 PAGE)

CITY of CHINO

April 27, 2018

Richard Ayala, Senior Planner
City of Ontario, Planning Department
303 East B Street
Ontario CA, 91764

Re: Notice of Availability of a Draft EIR West Ontario Commerce Center- State Clearinghouse #2017041074

Dear Mr. Ayala:

This letter is in response to the letter the City of Chino received on March 20, 2018 related to the Notice of Availability of a draft EIR for the West Ontario Commerce Center, State Clearinghouse #2017041074.

Outlined below are our comments:

Comments on the Traffic Impact Analysis

Table 1-1 "Summary of Improvements and Rough Order of Magnitude Costs" defines improvements necessary to mitigate impacts for intersections studied in various scenario time frames. Intersection No. 37 "Carpenter Avenue at Merrill Avenue" requires construction of a second westbound through lane on Merrill Avenue in the E+P (Project Buildout) Scenario. Intersection No. 36 "Grove Avenue at Merrill Avenue" indicates that in the 2023 Scenario "With/Without Project", second eastbound and westbound lanes are required to be constructed on Merrill Avenue between Euclid Avenue and Archibald Avenue.

A3-1

Figure 4-2A, Opening Year with Project Mitigation Improvements, defines the roadway network requirements for Opening Year 2023. Merrill Avenue in this scenario shows a 3 lane Divided Roadway from Euclid Avenue to Archibald Avenue. A 4-lane divided roadway is not shown in the study diagrams until Horizon Year With/Without Project Figure 4-3A. The study is not clear as to when Merrill Avenue will be constructed to a 4- lane roadway. Please provide clarification.

If you have any questions, please contact me by email at kle@cityofchino.org, or you can call me at (909) 334-3330.

Sincerely,

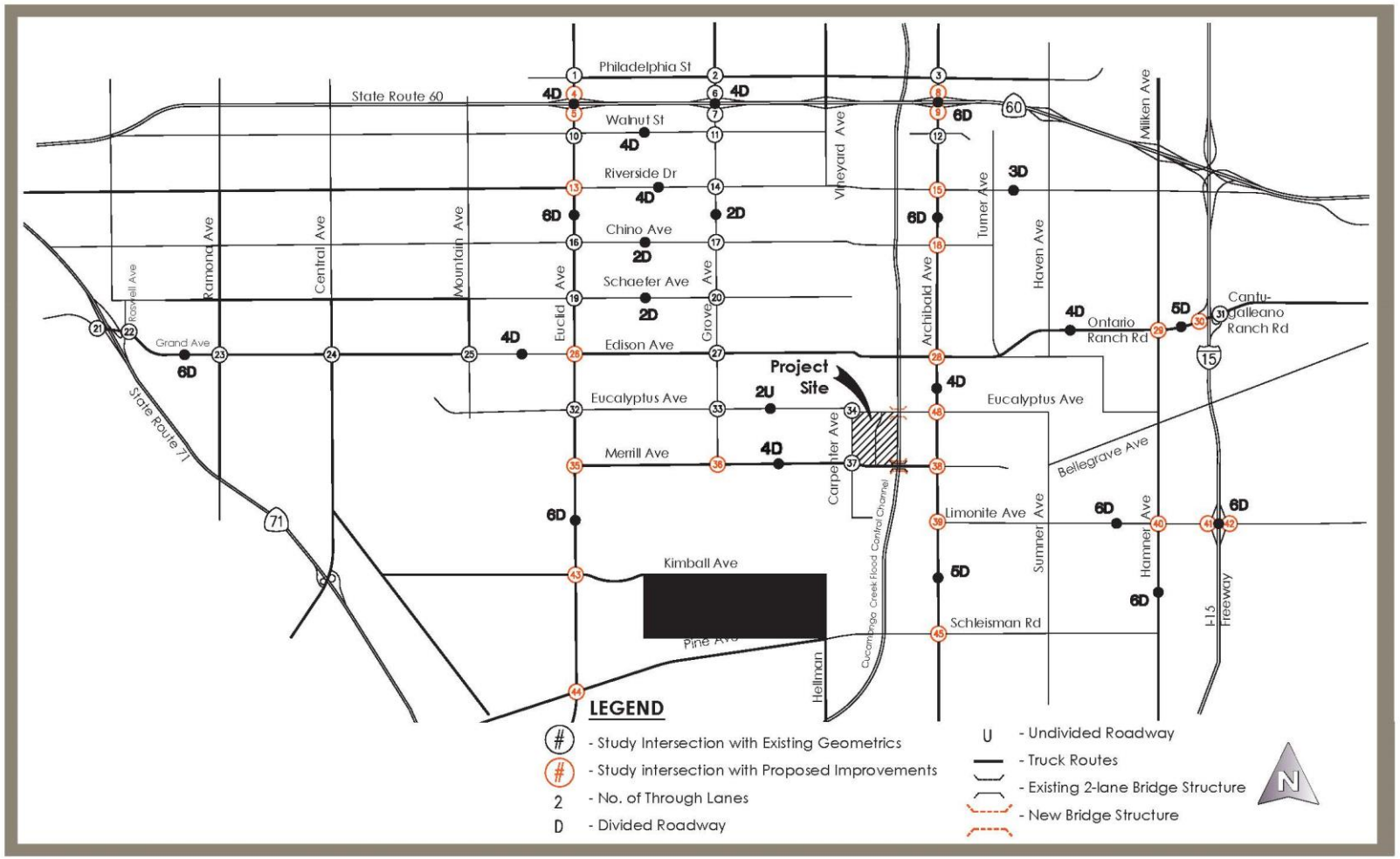
Kim Le
Associate Planner

cc: Karen Campbell, Associate Engineer

13220 Central Avenue, Chino, California 91710
Mailing Address: P.O. Box 667, Chino, California 91708-0667
(909) 334-3250 • (909) 334-3720 Fax
Web Site: www.cityofchino.org

Response to Letter A3: City of Chino, dated April 27, 2018.

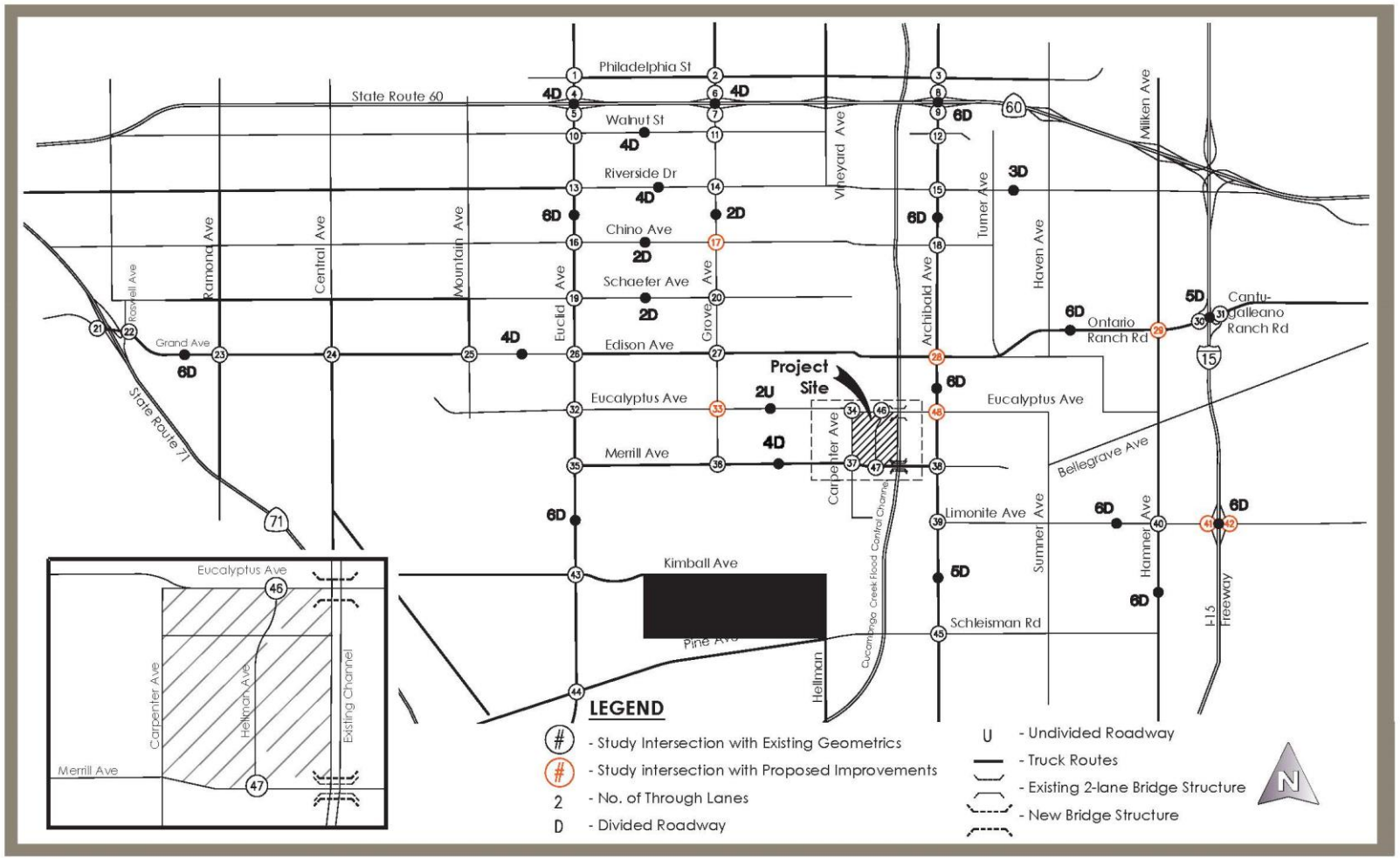
Response A3-1: Merrill Avenue is anticipated to be constructed to a 4-lane roadway between Euclid Avenue and Archibald Avenue by Project Opening (Buildout) Year 2023. Both study roadway network TIA Figure 2-9A "Opening Year 2023 No Project – Study Area Circulation Network" and TIA Figure 4-2A "Opening Year 2023 with Project Mitigation Improvements" have been corrected as shown in the following figures to show Merrill Avenue as a 4-lane divided roadway and not a 3-lane divided roadway.



Stantec

West Ontario Commerce Center
Specific Plan Traffic Study
Ontario, CA

Figure 2-9A
Opening Year 2023 No Project - Study Area Circulation Network
Key Map of Study Area Intersections and Number of Through Lanes on Roadways 42



Stantec

West Ontario Commerce Center
Specific Plan Traffic Study
Ontario, CA

Figure 4-2A
Opening Year 2023 with Project Mitigation Improvements
Key Map of Study Area Intersections and Number of Through Lanes on Roadways 95

LETTER A4: SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS (2 PAGES)

825 East Third Street, San Bernardino, CA 92415-0835 | Phone: 909.387.7910 Fax: 909.387.7876
www.SBCounty.gov

SAN BERNARDINO COUNTY

Department of Public Works
- Flood Control
- Operations
- Solid Waste Management
- Surveyor
- Transportation

Kevin Blakeslee, P.E.
Director

Transmitted Via Email

April 27, 2018

City of Ontario
Richard Ayala, Senior Planner
303 East "B" Street
Ontario, CA. 91764

File: 10(ENV)-4.01

RE: CEQA – NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE WEST COMMERCE CENTER SPECIFIC PLAN FOR THE CITY OF ONTARIO

Dear Mr. Ayala:

Thank you for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on March 20, 2018** and pursuant to our review, the following comments are provided:

Permits/Operations Support Division (Melissa Walker, Chief, 909-387-7995):

1. Since this project is near the San Bernardino County Flood Control District's (District) Cucamonga Creek facility, any proposed activity within the right-of-way would need a Flood Control Permit. Also, District facilities built by the United States Army Corps of Engineers (USACE) will require the District to obtain approval (408 Permit) from the USACE. If these permits are required, their necessity and any impacts associated with the construction should be addressed in the DEIR prior to certification. A4-1

Environmental Management Division (Diana Torres, PWE II, Stormwater Program, 909-387-1862):

1. On Page 3.6-3, State Agency Requirements – National Pollutant Discharge Elimination System (NPDES) Permit section, the first paragraph needs to be revised to correctly describe the proper language in regards to the Construction General Permit (CGP) Requirements. The CGP prohibit the discharge of storm water from construction projects that disturb 1 acre or more of land, not five acres as is showing on this section. A4-2

2. On Page 3.6-4, first paragraph needs to be revised to reflect the most recent Phase I NPDES MS4 Permit (Order Number: R8-2010-0036, Permit Number: CAS618036) approved by the California Regional Water Quality Control Board. A4-3

3. Page 3.9-4, first paragraph of the Federal and State - NPDES General Permit section needs to be revised to reflect the most recent Construction General Permit (Order No. 2010-0014-DWQ). In addition, please revise to correctly describe the proper language in regards to the CGP Requirements. The CGP prohibit the discharge of storm water from construction projects that disturb 1 acre or more of land, not five acres as is showing on this section. A4-4

4. On Page 3.9-5, the second paragraph of the Basin Plan section needs to be revised to address the 2014/2016 303(d) list approved by the California Regional Water Quality Control Board, which includes Cucamonga Creek. Please also confirm in the DEIR if the unknown non-point sources for Cucamonga Creek are due to high coliform counts, cadmium, copper, lead and zinc levels as mentioned in this section or if different pollutants need to be considered per the 2014/2016 303(d) list. A4-5

5. On Page 3.9-9, the second paragraph of the Potential Impacts from the Operational Activities section address the development of a Stormwater Quality Management Plan (SWQMP). The SWQMP is also referenced as a document for operation activities on Page 3.9-10, on the Cumulative Impacts section. Please specify if the SWQMP refers to an IGP SWPPP as there is also WQMP requirements for post-construction. A4-6

6. Appendix I, the Preliminary WQMPs attached reference the old Phase I NPDES MS4 Permit. Please revise the Plans to make reference of the latest Permit. A4-7

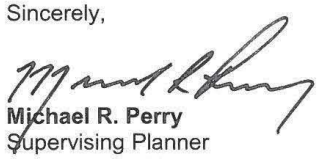
7. As a general comment, WQMPs are not required by the County of San Bernardino (County) Stormwater Program, they are a requirement of the NPDES MS4 Phase 1 permit issued by the Santa Ana River Water Quality Control Board. WQMPs are subject to approval only by the City of Ontario, not the County Stormwater Program. A4-8

Environmental Management Division (Patrick Egle, Planner III, 909-387-1865):

1. It appears that the proposed project will add storm drain inlets to Cucamonga Creek Channel, a District owned property. Please discuss and analyze the short and long term impacts to District facilities such as water quality, storm water discharge volume, and adequacy of Chris Basin to handle the proposed additional discharge. A4-9

We respectfully request to be included on the circulation list for all project notices, public reviews, or public hearings. In closing, I would like to thank you again for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. Should you have any questions or need additional clarification, please contact the individuals who provided the specific comment, as listed above.

Sincerely,



Michael R. Perry
Supervising Planner
Environmental Management

MRP:PE:sr
Email: rayala@ontarioca.gov

RESPONSE TO LETTER A4: SAN BERNARDINO COUNTY DEPARTMENT OF PUBLIC WORKS, DATED APRIL 27, 2018.

Response A4-1: As stated in the EIR on page 3.4-12, the Project Site does not contain jurisdictional waters or wetlands that are regulated by the ACOE. The EIR has been revised to analyze offsite improvement areas, including the Cucamonga Creek Channel, which is under ACOE jurisdiction and will require a 408 permit. The Project is within the District's right-of-way and plans will be submitted for encroachment permit.

Response A4-2: The paragraph on page 3.6.3 has been revised to correctly state the acreage as follows:

> These regulations prohibit the discharge of storm water from construction projects that disturb 1~~5~~ acres or more of land, unless the discharge complies with the National Pollutant Discharge Elimination System (NPDES) Phase 1 General Permit.

Response A4-3: The referenced permit number and sentence is a historic reference. The prior page (3.6.3) references the current permit number.

Response A4-4: The paragraph on page 3.9.4 has been revised to correctly state the permit number and acreage as follows:

> The SWRCB has adopted a statewide General Permit (WQ Order No. R8-2010-003614-DWQ) for storm water discharges associated with construction activity, which includes site grading. These regulations prohibit the discharge of storm water from construction projects that disturb 1~~5~~ acres or more of land, unless the discharge complies with the National Pollutant Discharge Elimination System (NPDES) Phase 1 General Permit.

Response A4-5: During the preparation of the Preliminary WQMP, the civil engineer, Thienes Engineering, was required to reference the current 303(d) list, particularly as they identified above and below ground infiltration Best Management Practices (BMPs), which are highly effective against the listed impairments for Cucamonga Creek: Cadmium, Copper, Lead and Zinc High Coliform Count. The current 303(d) list can be accessed at the following website link:
https://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/

Response A4-6: The Stormwater Quality Management Plan (SWQMP) referenced in the Draft EIR is a Water Quality Management Plan (WQMP). In addition, as stated in the EIR, a Stormwater Pollution Prevention Plan (SWPPP) is required.

Response A4-7: The referenced WQMPs are preliminary; therefore, the final WQMPs will be updated with the correct Municipal Separate Storm Sewer System (MS4) permit number.

Response A4-8: Comment noted. This comment does not provide specific comments about the EIR, and no further response is required or provided. (CEQA Guidelines § 15088(c); *Flanders Found. v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.)

Response A4-9: As mentioned in response A4-1, the Draft EIR has been revised to address offsite improvement areas, including the Cucamonga Creek Channel, and the associated analyses that have been completed for those improvements.

LETTER O1: GOLDEN STATE ENVIRONMENTAL JUSTICE ALLIANCE (40 PAGES)

P.O. Box 79222
Corona, CA 92877

April 27, 2018

VIA E-MAIL

Richard Ayala
Senior Planner
City of Ontario
303 East "B" Street
Ontario, CA 91764
RAyala@ontarioca.gov

Re: *West Ontario Commerce Center (SCH Number: 2017041074)*

Dear Mr. Ayala:

Thank you for the opportunity to comment on the Environmental Impact Report (EIR) for the proposed West Ontario Commerce Center project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance. Also, Golden State Environmental Justice Alliance formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

1.0 Summary

As we understand it, the project proposes the implementation of a Specific Plan which permits the development of a business park and industrial center on approximately 120 net acres. The Specific Plan includes two Planning Areas and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development footprint of 2,905,510 square feet. The Specific Plan has the flexibility to determine the individual building size based on the market conditions. The Business Park use will

accommodate industrial-serving commercial and office uses, very light industrial uses, and allow multi-tenant buildings and single-tenant buildings on the northern portion of the Site, PA 1. The Industrial use will allow storage and warehouse use, e-commerce, distribution, and a wide-range of manufacturing and assembly uses on the southern portion of the Site, PA 2.

An area totaling approximately 2.49-gross acres (1.41-net acres) that is off-site and north of the northwest corner of the Site is part of and located within the approved Parkside Specific Plan (PSP03-002). This triangular area will be part of the proposed re-alignment of Eucalyptus Avenue. The Project will include a portion of this re-alignment as an off-site improvement; however the area where the re-alignment will occur will remain within the jurisdiction of the Parkside Specific Plan and will not be subject to the Specific Plan.

The project site is currently used for agricultural purposes, including two active dairy farms, row crops, and a hay and alfalfa wholesaler. The remainder of the site consists of vacant land and has previously been used for agriculture.

Discretionary actions related to the development of the proposed project include General Plan Amendment and Zone Change to: 1) decrease the designated Business Park area by 40-acres to a total of 21.09 acres; and 2) increase the designated Industrial land use by 40-acres to a total of 98.09 acres; and 3) change the designation of approximately 2.49-gross acres (1.41-net acres) within the Parkside Specific Plan north of the Project from the Parkside Specific Plan to Business Park to utilize the area for the realignment of Eucalyptus Avenue.

3.3 Air Quality

It must first be noted that the Air Quality Analysis does not provide any information or analysis regarding the potentially significant impacts associated with the proposed off-site re-alignment of Eucalyptus Avenue. The EIR must be revised to accurately analyze this improvement as part of the Air Quality modeling and include it for review in the cumulative impacts analysis. O1-1

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The EIR for the Project relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2016.3.1 ("CalEEMod").[1] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project O1-2

[1] CalEEMod website, *available at*: http://www.caleemod.com/

information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[2] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollutant and greenhouse gas (GHG) emissions, and make known which default values were changed as well as provide a justification for the values selected.[3]

O1-2 cont.

When reviewing the Project's CalEEMod output files, located in Appendix C, we found that several of the values inputted into the model are not consistent with information disclosed in the EIR and are not consistent with guidance set forth by the South Coast Air Quality Management District (SCAQMD) for industrial projects. As a result, emissions associated with the Project are greatly underestimated. A revised EIR should be prepared that adequately assesses the potential impacts that operation of the Project may have on regional and local air quality and global climate change.

O1-3

Incorrectly Assumes Construction of Exclusively Unrefrigerated Warehouse Land Uses

The EIR's Phase 1A and Phase 1B construction CalEEMod models assume that the Project's proposed warehouses will be exclusively unrefrigerated, and as a result, the Project's operational emissions may be underestimated.

According to the EIR, the "air quality analysis assumed that up to 100,000 square feet of warehouse space would be refrigerated" (p. 3.3-17). Therefore, in order to be consistent with what is proposed in the EIR, the Project's Phase 1 construction emissions should have been estimated assuming that 100,000 square feet of the proposed warehouse space would be refrigerated. However, review of the Phase 1A and Phase 1B construction CalEEMod output files demonstrate that all of the Project's proposed warehouse land use was modeled as "Unrefrigerated Warehouse-No Rail" (see excerpt below) (Appendix C, pp. 30, pp. 49).

O1-4

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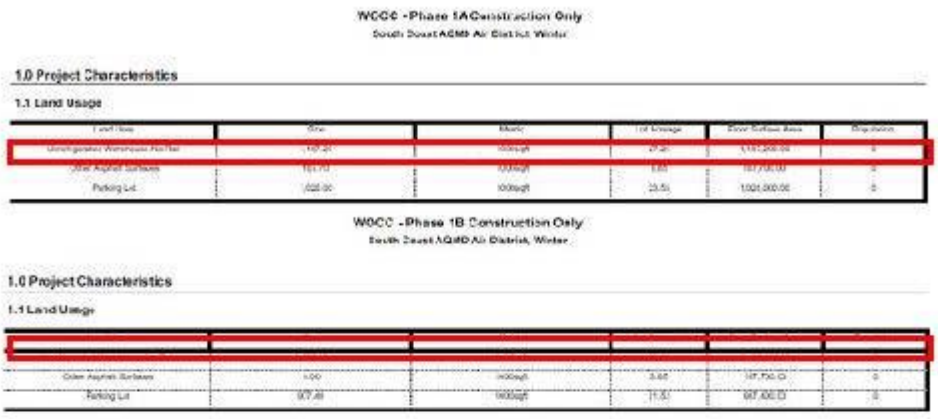
[2] CalEEMod User Guide, p. 2, 9, *available at:* http://www.caleemod.com/

[3] CalEEMod User Guide, p. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)



WCCC -Phase 1A Construction Only

1.0 Project Characteristics

1.1 Land Usage

WCCC -Phase 1B Construction Only

1.0 Project Characteristics

1.1 Land Usage

As you can see in the excerpt above, the Project Applicant modeled construction emissions assuming only unrefrigerated warehouse land uses would be constructed. As previously stated, the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[1] Refrigerated warehouses release more air pollutants and GHG emissions when compared to unrefrigerated warehouses for several reasons. First, warehouses equipped with cold storage (refrigerators and freezers, for example) are known to consume more energy when compared to warehouses without cold storage.[2] Second, warehouses equipped with cold storage typically require refrigerated trucks, which are known to idle for much longer, even up to an hour, when compared to unrefrigerated hauling trucks.[3] Lastly, according to a July 2014 *Warehouse Truck Trip Study Data Results and Usage* presentation prepared by the SCAQMD, it was found that hauling trucks that require refrigeration result in greater truck trip rates when compared to non-refrigerated hauling trucks.[4] By failing to model the 100,00 square feet of refrigerated warehouses space in the air quality model, the Project's emissions may be grossly underestimated.

O1-4 cont.

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[1] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

[2] Managing Energy Costs in Warehouses, Business Energy Advisor, *available at:* http://bizenergyadvisor.com/warehouses

[3] "Estimation of Fuel Use by Idling Commercial Trucks," p. 8, *available at:* http://www.transportation.anl.gov/pdfs/TA/373.pdf

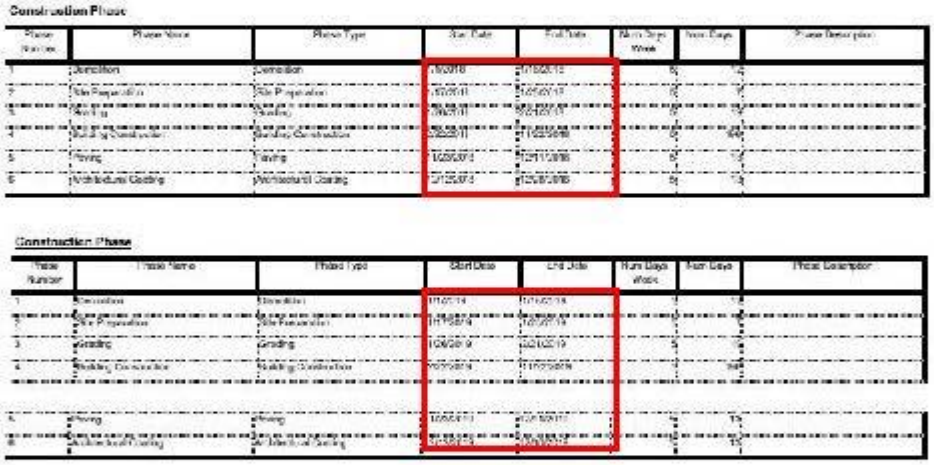
[4] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 7, 9

Use of Incorrect Construction Schedule

Review of the CalEEMod output files for Phase 1 of construction demonstrates that the model uses a construction schedule that is inconsistent with what is stated in the EIR to model the Project's emissions.

According to the EIR, "The construction of Phase 1 is anticipated to start mid-March 2018 and end December 2019" (p. 2-27). In order to be consistent with what is proposed within the EIR, the CalEEMod model should have modeled the Phase 1 construction emissions over an approximate 1.79-year period. Review of the Phase 1A and Phase 1B construction CalEEMod output files, however, demonstrates that construction was modeled over a total of two years, in which Phase 1A was modeled from 1/1/2018 to 12/28/2018 and Phase 1B was modeled from 1/1/2019 to 12/30/2019 (see excerpts below) (Appendix C, pp. 34, pp. 52-53).

O1-5



As you can see in the excerpt above, the CalEEMod model overestimates the construction duration of Phase 1. As a result, the CalEEMod model estimates that construction emissions from Phase 1 will occur over an extended period of time, **effectively diluting the criteria air pollutant emissions that will be emitted during the construction phase.** This discrepancy between the construction duration outlined in the EIR and the one modeled for presents a significant issue, resulting in an underestimation of the Project's construction emissions.

Further, Section 5-29.09 of the Ontario Municipal Code permits construction activity between the hours of 7:00 A.M. and 6:00 P.M. Monday through Friday, and between 9:00 A.M and 6:00 P.M. on Saturday and Sunday. The EIR does not provide a "worst-case scenario" analysis of construction equipment emitting pollutants for the legal 11 hours per weekday plus 9 hours on

O1-6

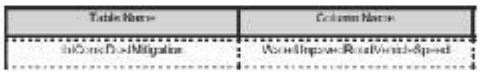
Saturday and Sunday. It is legal for construction to occur for much longer hours and two additional days (7 days per week including Saturday and Sunday) than modeled in the Air Quality Analysis. The Air Quality modeling must be revised to account for these legally possible longer construction days and increased number of construction days. This is especially necessary since the Noise Analysis utilizes these hours of construction within the construction impact analysis and states that the project will comply with this ordinance. If shorter hours of construction are proposed, this must be included as an enforceable mitigation measure with field verification by an enforcement entity of the lead agency (CEQA § 21081.6 (b)). O1-6 cont.

Incorrectly Applied Mitigation Measure to Project Emissions

Our review indicates that the EIR not only incorrectly applied a construction-related mitigation measure to the Project's construction emissions, but the EIR also changed the CalEEMod default value for this proposed measure within the model without providing substantial reasoning for doing so. The application of this measure to the Project's unmitigated construction emissions, in addition to the unsubstantiated decrease in the mitigation measure's CalEEMod default value results in an underestimation of the Project's construction-related emissions. As a result, we find the EIR's air model to be incorrect and unreliable, and maintain that it should not be relied upon to determine Project significance.

O1-7

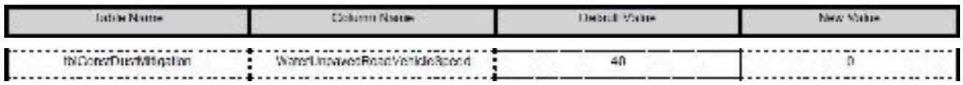
As stated above, a construction-related mitigation measure was identified by the EIR and was applied to the Project's construction emissions. Specifically, the mitigation measure that was incorrectly applied to the model would limit the construction vehicle speed on unpaved roads as a way to reduce the Project's construction-related fugitive dust emissions (see excerpt below) (Appendix C, pp. 30, pp. 49, pp. 69).



The application of this mitigation measure to the Project's construction emissions, however, is entirely incorrect, as the EIR fails to discuss or even mention the implementation of this mitigation measure during Project construction anywhere in the report or associated attachments. Therefore, the application of this mitigation measure to the Project's construction emissions is completely unsubstantiated.

Not only was this measure incorrectly applied to the Project's construction emissions, even though it's not identified as a mitigation measure within the EIR, but the speed value assigned to this measure within the model was also changed from the default value without providing

substantial evidence to justify this change. The CalEEMod default speed value for a vehicle speed limit on unpaved is usually 40 miles per hour (mph), but as you can see in the excerpt below, this value was adjusted from 40 mph to 0 mph within the model without providing a reason for doing so (see excerpt below) (Appendix C, pp. 30, pp. 49, pp. 69).



Again, the application of this mitigation measure to the Project's construction emissions, however, is entirely incorrect. Inputting a speed of 0 mph into the CalEEMod model means that the construction vehicle is stationary, and therefore, the CalEEMod model is estimating Project construction emissions assuming that there will be no vehicles driving on unpaved roads on the Project site. However, according to the EIR, as a result of the debris resulting from the demolition of existing residences on the Project site, it can reasonably assumed that vehicles will be traversing back and forth across the Project site in order to remove all of the debris (p. 3.5-12). Therefore, it is incorrect to model Project emissions assuming there will be no vehicles driving on unpaved roads, as it is clear that vehicles will be driving throughout the Project site during construction to remove soil and debris. O1-7 cont.

For these reasons, we find the Project's air quality impacts to be inadequately evaluated, and require that an updated EIR be prepared that adequately evaluates and mitigates the Project's air quality impacts to a less-than-significant level.

Failure to Assess the Feasibility of Obtaining Tier 4 Final Equipment

The EIR incorrectly applies another construction-related mitigation measure to the Project's construction emissions. According to the EIR's CalEEMod output files, the Project proposes to equip all construction equipment during Phase 1A, 1B, and 2 with Tier 4 Final engines (Appendix C, pp. 30-31, pp. 49-50, pp. 69). Review of the EIR's Mitigation Monitoring Program (MMP), however, demonstrates that the EIR failed to include this as a construction-related mitigation measure (p. ES Page 2). As a result, modeling emissions with an entire fleet of Tier 4 Final engines is completely incorrect and unsubstantiated, as the use of this mitigated equipment is entirely unenforceable, and thus, the Project cannot claim the emissions reductions resulting from use of this equipment. O1-8

Furthermore, regardless of the EIR's failure to include this as a mitigation measure, there is a limited number of Tier 4 Final construction equipment available for use within the state of California. Therefore, not only is this mitigation measure completely unsubstantiated, it is not

actually feasible to assume that the Project can obtain an entire fleet of Tier 4 Final construction equipment. As a result, emissions are significantly underestimated.

The United States Environmental Protection Agency's (USEPA) 1998 nonroad engine emission standards were structured as a three-tiered progression. Tier 1 standards were phased-in from 1996 to 2000 and Tier 2 emission standards were phased in from 2001 to 2006. Tier 3 standards, which applied to engines from 37-560 kilowatts (kW) only, were phased in from 2006 to 2008. The Tier 4 emission standards were introduced in 2004, and were phased in from 2008 to 2015. [8] These tiered emission standards, however, are only applicable to newly manufactured nonroad equipment. According to the USEPA, "if products were built before EPA emission standards started to apply, they are generally not affected by the standards or other regulatory requirements."[9] Therefore, pieces of equipment manufactured prior to 2000 are not required to adhere to Tier 2 emission standards, and pieces of equipment manufactured prior to 2006 are not required to adhere to Tier 3 emission standards. Construction equipment often lasts more than 30 years; as a result, Tier 1 equipment and non-certified equipment are currently still in use.[10] It is estimated that of the two million diesel engines currently used in construction, 31 percent were manufactured before the introduction of emissions regulations.[11]

O1-8 cont.

Although Tier 4 Final engines are currently being produced and installed in new off-road construction equipment, the vast majority of existing diesel off-road construction equipment in California is not equipped with either Tier 4 Final engines.[12] In a 2010 white paper, the California Industry Air Quality Coalition estimated that approximately 7% and less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 2 and Tier 3 engines, respectively.[13] Similarly, based on information and data provided in the *San Francisco*

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[8] Emission Standards, Nonroad Diesel Engines, *available at:* https://www.dieselnet.com/standards/us/nonroad.php#tier3

[9] "Frequently Asked Questions from Owners and Operators of Nonroad Engines, Vehicles, and Equipment Certified to EPA Standards." United States Environmental Protection Agency, August 2012. *Available at:* http://www.epa.gov/oms/highway-diesel/regs/420f12053.pdf

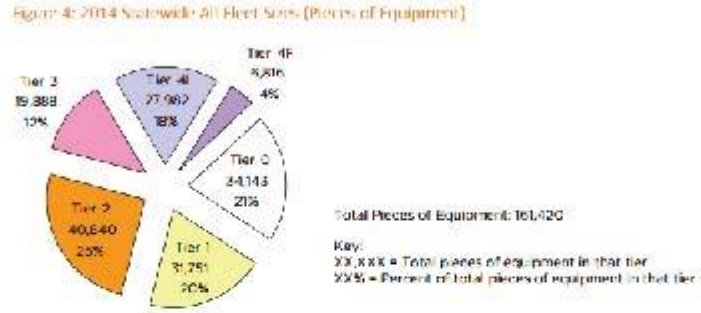
[10] "Best Practices for Clean Diesel Construction." Northeast Diesel Collaborative, August 2012. *Available at:* http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[11] Northeast Diesel Collaborative Clean Construction Workgroup, *available at:* http://northeastdiesel.org/construction.html

[12] California Industry Air Quality Coalition White Paper, p. 3, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White_Paper_CARB_OffRoad.pdf

[13] "White Paper: An Industry Perspective on the California Air Resources Board Proposed Off-Road Diesel Regulations." Construction Industry Air Quality Coalition, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White_Paper_CARB_OffRoad.pdf

Clean Construction Ordinance Implementation Guide for San Francisco Public Projects, the availability of Tier 4 Final equipment is extremely limited. In 2014, 25% of all off-road equipment in the state of California were equipped with Tier 2 engines, approximately 12% were equipped with Tier 3 engines, approximately 18% were equipped with Tier 4 Interim engines, and only 4% were equipped with Tier 4 Final engines (see excerpt below).[1]



O1-8 cont.

As demonstrated in the figure above, Tier 4 Final equipment only accounts for 4% of all off-road equipment currently available in the state of California. Thus, by modeling for Tier 4 Final equipment during construction, the EIR is relying on obtaining on obtaining an entire fleet of construction equipment that only accounts for 4% of all off-road equipment currently available in the state of California. Therefore, obtaining an entire fleet of Tier 4 Final equipment is unlikely. Furthermore, as previously mentioned, this mitigation measure is completely unenforceable as the use of Tier 4 Final engines is not included as a mitigation measure. For these reasons, we find the emissions calculations contained within the EIR's CalEEMod output files to be incorrect and should not be relied upon to determine Project significance.

Failure to Include All Land Uses in Operational Emissions

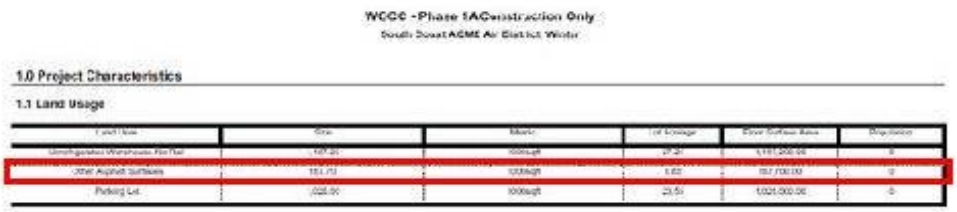
Review of the Project's operational CalEEMod output files demonstrates that the Project Applicant failed to model to emissions from all land uses.

O1-9

According to the EIR, "the Project includes two PAs and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development of 2,905,510 square feet" (p. 2-1). Furthermore, the Phase 1A, Phase 1B, and Phase 2 construction CalEEMod output files indicate that 167,700 square feet of "Other Asphalt

[1] "San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects." August 2015, *available at:* https://www.sfdph.org/dph/files/EHSdocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6

Surfaces" will be constructed during each phase, for a total of 503,100 square feet of asphalt surface (see excerpts below) (Appendix C, pp. 30, pp. 49, pp. 68).



WOCC - Phase 1A Construction Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

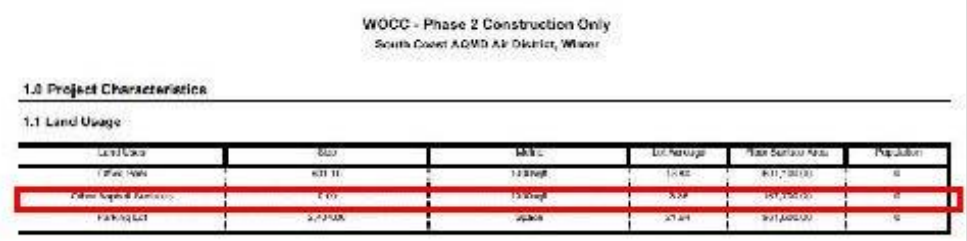
Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,991.00	1000sqft	45.71	1,991,000.00	0
Other Asphalt Surfaces	111.72	1000sqft	3.83	167,580.00	0
Parking Lot	355.40	1000sqft	23.51	355,400.00	0

WOCC - Phase 1B Construction Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,991.00	1000sqft	45.71	1,991,000.00	0
Other Asphalt Surfaces	111.72	1000sqft	3.83	167,580.00	0
Parking Lot	355.40	1000sqft	23.51	355,400.00	0



WOCC - Phase 2 Construction Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	167.58	1000sqft	3.84	167,580.00	0

O1-9 cont.

Therefore, in order to be consistent with the information disclosed in the EIR and the Project's construction CalEEMod models, the Project Applicant should have modeled the following: (1) Phase 1 operational emissions with a total of 2,350,005 square feet of warehouse and 355,400 square feet of "Other Asphalt Uses"; and (2) Phase 2 operational emissions with 167,700 square feet of "Other Asphalt Uses." However, the Phase 1 operational CalEEMod output files demonstrate that the model only included 2,215,600 square feet of warehouse and completely omitted the asphalt land use (see excerpt below) (Appendix C, pp. 93, pp. 120, 170).

WOCC-Phase 1 Opening Year w/Refrig-Operation Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	2,215.60	1000sqft	50.85	2,215,600.00	0
Parking Lot	355.40	1000sqft	8.16	355,400.00	0

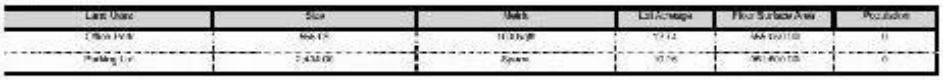
Additionally, the Phase 2 operational CalEEMod output files demonstrate that the models completely omitted the asphalt land use (see excerpt below) (Appendix C, pp. 147, pp. 197).

O1-9 cont.

WOCC-Phase 2 2023 Year-Operation Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage



The omission of 134,405 square feet of unrefrigerated warehouse space from Phase 1 and the complete omission of asphalt land use from both operational phases present significant issues. As previously stated, the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations. [15] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Similarly, the acreage is used to determine the amount of ground to be prepared, graded, paved, etc.[16] Furthermore, CalEEMod assigns each land use type with its own set of energy usage emission factors.[17] By omitting a portion of the unrefrigerated warehouse land use and completely omitted all asphalt land use from the models, the emissions that would be produced during construction and operation of the proposed conference center are unaccounted for, and as a result, the Project's emissions are greatly underestimated.

O1-10

Incorrect Usage of Fontana Truck Trip Study for Fleet Mix

The EIR relies upon an artificially low truck trip rate and truck fleet mix percentage to model Project the Project's operational emissions, and as a result, the Project's mobile-source emissions are greatly underestimated.

O1-11

According to the Traffic Impact Analysis (TIA), found in Appendix L, the Project relies on the August 2003 City of Fontana *Truck Trip Generation Study* ("Fontana Study")[18] and the 2012

[·] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

[··] CalEEMod User's Tips, available at: http://www.aqmd.gov/docs/default-source/caleemod/Model/2013.2.2/caleemod-usertips-april2014.pdf?sfvrsn=0, p. 27, p. 11

[·] CalEEMod User's Guide, Appendix D, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2

[^] "Truck Trip Generation Study." City of Fontana, County of San Bernardino, State of California, August 2003, *available at:* http://www.fontana.org/DocumentCenter/Home/View/622

Institute of Transportation Engineers 9th Edition *Trip Generation Manual* ("Trip Generation Manual") to determine the number of passenger car and heavy-duty truck trips the Project will generate during operation (Appendix L, pp. 2869).

However, the South Coast Air Quality Management District's (SCAQMD) staff has determined that the Fontana Study has limited applicability to warehouse projects. As a result, the Fontana Study should not be relied upon to determine the Project's mobile-source emissions.

The Project Applicant is proposing to construct 2,350,005 square feet of industrial land uses during Phase 1 that can be used for warehousing use (p. 2-1). According to the SCAQMD this qualifies as a high cube warehouse.[19] According to the SCAQMD staff, the "Fontana Study, by itself, is not characteristic of high cube warehouses."[20] Furthermore, SCAQMD staff finds the following additional issues with the Fontana Study:[21] O1-11 cont.

- The overall trip rate is based on only four warehouses total, which includes two warehouses with zeros. In other words, the results of the Fontana Study were based on only two data points. As is disclosed in the Fontana Study, the daily trip rate was only based on data from a Target warehouse and a TAB warehouse.[22]
- The Fontana Study does not report any 24-hour daily truck trip rates. According to the Fontana Study, "Trip generation statistics for daily truck trips were not calculated because vehicle classifications counts could not be obtained from the driveway 24-hour counts."[23]
- The trip rates using the Fontana study are calculated based on a 20 percent truck fleet mix, which is inconsistent with SCAQMD's recommendation that agencies use a truck fleet mix of 40%.

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[19] "SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results," *SCAQMD*, June 2014, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf, p. 2

[20] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 10

[21] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 10

[22] "Truck Trip Generation Study." City of Fontana, County of San Bernardino, State of California, August 2003, *available at*: http://www.fontana.org/DocumentCenter/Home/View/622, p. 35

[23] "Truck Trip Generation Study." City of Fontana, County of San Bernardino, State of California, August 2003, *available at*: http://www.fontana.org/DocumentCenter/Home/View/622, p. 6

The EIR and associated appendices rely on a total truck fleet mix of approximately 20 percent, which is taken from the Fontana Study. As a result, the Project's CalEEMod model utilizes the following fleet mix: 79.6 percent cars, 3.5 percent 2-axle trucks, 4.6 percent 3-axle trucks and 12.3 percent 4-axle trucks (Appendix C, pp. 115). This fleet mix, however, is not consistent with recommendations set forth by SCAQMD, and does not accurately represent the percentage of trucks that access a high-cube warehouse on a daily basis. Rather, SCAQMD recommends that lead agencies assume a truck fleet mix of 40%. According to *Appendix E: Technical Source Documentation* of the CalEEMod User's Guide, "in order to avoid underestimating the number of trucks visiting warehouse facilities," SCAQMD staff "recommends that lead agencies conservatively assume that an average of 40% of total trips are truck trips [(0.48*10 + 0.2*4)/(10+4)=0.4)]."[24] If Project-specific data is not available, such as detailed trip rates based on a known tenant schedule, this average of 40% provides a reasonably conservative value based on currently available data. Since the future tenant is unknown, the tenant schedule is also likely not known; therefore, a 40% truck fleet mix should also be assumed.

The following fleet mix percentage should have been used within the Project's CalEEMod modeling.

O1-11 cont.

CalEEMod Parameter		EIR Model Input	SWAPE Model Input
Operational Mobile Fleet Mix	Passenger Cars (LDA)	79.6%	59.14%
	2 Axle Trucks (LHDT1)	3.5%	6.92%
	3 Axle Trucks (MHD)	4.6%	9.28%
	4+ Axle Trucks (HHDT)	12.3%	24.66%

The "Operational Mobile Fleet Mix" percentages for trucks (LHDT1, MHD, and HHDT) in the table above were adjusted to reflect a truck trip percentage of approximately 40 percent, which is consistent with recommended procedures set forth by SCAQMD staff. This fleet mix more accurately represents the number of trips that are likely to occur during Project operation. As

[24] "Appendix E Technical Source Documentation." CalEEMod User's Guide, July 2013, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/high-cube-resource-caleemod-appendix-e.pdf?sfvrsn=2, pp. 15

such, an updated air quality analysis should be prepared in an updated EIR that adequately assesses the Project's air quality and GHG impacts.

Furthermore, the SCAQMD has also made similar comments regarding the use of the Fontana Truck Trip Study in other proposed land use development projects subject to CEQA. For example, the SCAQMD commented that the Addendum to the Heartland Specific Plan EIR, located in Beaumont, should have also used a "more typical 40% truck fleet mix" instead of the truck fleet mix utilized by the Addendum to the EIR.[25] Furthermore, proposed warehouses in the City of Fontana are using the truck fleet mixes recommended by the SCAQMD instead of the Fontana Study. According to the Traffic Impact Analysis prepared by Urban Crossroads for the West Valley Logistics Center, O1-11 cont.

> "The SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with their truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in effort to be consistent with other technical studies being prepared for the Project."[26]

Therefore, to demonstrate consistency with analyses for other warehouse projects within SCAQMD jurisdiction and the City of Fontana itself, the EIR should have used the truck fleet percentages recommended by the SCAQMD.

Updated Analysis Indicates Significant Criteria Air Pollutant Emissions

In an effort to accurately determine the Project's construction-related criteria air pollutant emissions, we prepared updated CalEEMod models for all phases of construction in order to include more site-specific information and corrected input parameters. Additionally, we assessed the impacts that would occur from overlap of Phase 1 operation and Phase 2 construction. The results of our analysis, discussed in the sections below, indicate that the EIR failed to accurately model and assess the Project's emissions and, as a result, the Project could cause more significant impacts than what was previously identified in the EIR. O1-12

Updated Construction Emissions Analysis Indicates Previously Unidentified Significant Impact

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[25] "Review of the Addendum to the Heartland Specific Plan Certified EIR," *SCAQMD*, June 2013, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2013/june/heartland-specific-plan.pdf, p. 3

[26] "Traffic Impact Analysis, West Valley Logistics Center," *Urban Crossroads*, October 2017, *available at:* https://www.fontana.org/DocumentCenter/View/24049, p. 100

In the Phase 1A and 1B construction models, we corrected the construction schedules so that each phase would occur over half of the approximate 1.79-year construction schedule identified by the EIR (see tables below).

SWAPE Phase 1 Construction Schedule

Model	Start Date	End Date	Number of Days
Phase 1A			
Demolition	1/1/2018	1/15/2018	14
Site Preparation	1/16/2018	1/23/2018	7
Grading	1/24/2018	2/17/2018	24
Building Construction	2/18/2018	10/27/2018	251
Paving	10/28/2018	11/14/2018	17
Architectural Coating	11/15/2018	11/30/2018	15
Phase 1B			
Demolition	1/1/2019	1/15/2019	14
Site Preparation	1/16/2019	1/23/2019	7
Grading	1/24/2019	2/17/2019	24
Building Construction	2/18/2019	10/27/2019	251
Paving	10/28/2019	11/14/2019	17
Architectural Coating	11/15/2019	11/30/2019	15

O1-12 cont.

Additionally, we modeled both Phase 1A and 1B with 50,000 square feet of refrigerated warehouse space, for a total of 100,000 square feet of refrigerated warehouse space constructed during Phase 1. Additionally, for all phases of construction, we assumed that Tier 4 Final equipment would not be used, as nothing in the EIR indicates that this cleaner burning equipment will actually be used during Project construction.

When correct, site-specific input parameters are used to model emissions we find that the Project's construction-related ROG emissions increase significantly during Phase 1A and 1B when compared to the EIR's CalEEMod model emissions estimates. Furthermore, ROG emissions exceed the 75 pounds per days (lbs/day) threshold set forth by the SCAQMD for Phase 1A, Phase 1B, and Phase 2 (see table below).

Maximum Daily Construction Emissions (lbs/day)	
Model	**ROG**
EIR Model	
Phase 1A	873.6
Phase 1B	873.4
Phase 2	291
SWAPE Model	
Phase 1A	946
Phase 1B	1,032
Phase 2	291
SCAQMD Regional Threshold (lbs/day)	**75**
Exceed?	***Yes***

O1-12 cont.

As you can see in the table above, when emissions are modeled correctly, ROG emissions during Phase 1A and Phase 1B increase significantly when compared to the EIR's Phase 1A and Phase 1B estimates. Our model demonstrates that when the Project's Phase 1 A and Phase 1B emissions are modeled correctly, the Phase 1 would result in a significant impact that would not be mitigated to a less than significant level even with implementation of the EIR's proposed mitigation measures. As a result, an updated EIR should be prepared that includes an updated air pollution model to adequately estimate the Project's emissions, and additional mitigation measures should be identified and incorporated to reduce these emissions to a less-than-significant level.[27]

Failure to Account for Overlap in Construction and Operational Emissions

Not only does the EIR incorrectly estimate the Project's emissions, but it also fails to account for the overlap in emissions that would occur once construction of Phase 1 is complete and operational, and once construction of Phase 2 begins. According to the EIR, Project construction is anticipated to occur in two phases, with Phase 2 starting immediately after Phase 1 is complete. Construction of Phase 1 would be completed by 2020 and would become fully operational once construction is complete (p. 3.3-20). Construction of Phase 2 would occur

O1-13

[27] See section titled "Mitigation Measures Available to Reduce Construction Emissions" on p. 25 of this letter. These measures would effectively reduce construction-related ROG emissions as well as DPM emissions resulting **from trucking activities.**

immediately after and would be completed in 2023 (p. 2-27). Based off of this information, from 2020 to 2023 operation of Phase 1 would overlap with construction of Phase 2. Due to this overlap, the EIR should have evaluated the Project's air quality impact during these two years assuming that construction of Phase 2 and operation of Phase 1 would occur concurrently. Review of the EIR, however, demonstrates that this is not the case.

As is demonstrated in Table 3.3-6 and Table 3.3-8, the EIR evaluated the Project's construction and operational emissions separately, and did not account for this overlap in activities (see excerpts below) (p. 3.3-18, p. 3.3-21).

Table 3.3-6
Peak Construction Regional Emissions for Project by Phase

	Pollutant Emissions (Pounds Per Day)					
Activity	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1A	*873.6*	75.0	76.1	0.2	20.8	12.4
Phase 1B	*873.4*	69.5	69.7	0.2	20.7	12.2
Phase 2	*797.8*	*634*	*643*	0.2	19.1	5.4
Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Would Phase Exceed Regional Threshold?	*Yes*	*No*	*No*	*No*	*No*	*No*

O1-13 cont.

Table 3.3-8
Project Operational Emissions (Pounds per Day)

	Daily Emissions (lbs./day)					
Source	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Opening Year for Phase 1 (2020)						
Phase 1 Operations	62.6	253.0	207.5	1.1	73.9	21.1
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	13.5	253.0	207.5	1.1	60.2	7.4
Opening Year for Phase 2 (2023)						
Phase 1 Operations	56.7	145.1	155.9	1.0	73.0	20.2
Phase 2 Operations	22.8	47.2	132.7	0.5	47.9	13.1
Total Operations	79.5	192.3	288.6	1.5	121.0	33.3
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	30.4	192.3	288.6	1.5	107.3	19.6
Full Operation (2040)						
Phase 1 Operations	52.3	121.7	91.5	0.8	72.5	19.8
Phase 2 Operations	18.3	38.1	71.4	0.4	47.7	12.9
Total Operation	70.6	159.8	162.9	1.3	120.2	32.7
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	21.5	159.8	162.9	1.3	106.5	19.0
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Regional Threshold?	*No*	*Yes*	*No*	*No*	*No*	*No*

Bold – exceed threshold

Since the EIR fails to evaluate the impacts that this overlap may result in, the Project's air quality impacts are significantly underestimated. In an effort to determine the air quality impacts that

construction of Phase 2 and operation of Phase 1 may result in, we conducted a simple analysis that combines the Phase 1 operational emissions from the EIR's air pollution model with the Phase 2 construction emissions from SWAPE's updated CalEEMod modeling.

When the Project's Phase 1 operational emissions and Phase 2 construction emissions are combined, we find that the Project's emissions would result in a potentially significant air quality impact that was not previously identified in the EIR (see table below).

2020-2023 Maximum Daily Emissions (lbs/day)

Activity	ROG	NOx	CO	Sox	PM10	PM2.5
Existing Emissions	49.1	0	0	0	13.7	13.7
Construction - Phase 2	291	51	51	0.18	20	12
Operation - Phase 1	62.6	253	207.5	1.1	73.9	21.1
Net Total 2020-2023 Emissions	**304.5**	**304**	**258.5**	**1.28**	**80.2**	**19.4**
SCAQMD Significance Thresholds (lbs/day)	**55**	**55**	**550**	**150**	**150**	**55**
Exceeded?	***Yes***	***Yes***	No	No	No	No

O1-13 cont.

Specifically, our analysis demonstrates that from 2020 to 2023, the Project's combined ROG emissions of 304.5 lbs/day and combined NOx emissions of 304 lbs/day would exceed the SCAQMD's significance thresholds of 55 lbs/day. These updated emission estimates demonstrate that when the overlap in construction and operational activity from construction of Phase 2 and operation of Phase 1 is accounted for, the Project would result in a potentially significant air quality impact due to ROG emissions that was not previously examined or identified in the EIR. Furthermore, the Project would result in higher daily NOx emissions during operation than was identified by the EIR. As a result, the EIR should be revised to include an updated model to adequately estimate the Project's emissions.

Failure to Implement All Feasible Mitigation to Reduce Emissions

The EIR's air quality analysis determines that the Project's operational emissions would exceed thresholds set forth by the SCAQMD (p. 3.3-20). As result, the Project proposes several mitigation measures to reduce the Project's criteria air pollutant emissions (p. ES Page 2). However, even after implementation of mitigation, the EIR concludes that the Project's operational air quality impacts would remain significant with respect to NOx (p. 3.3-21). While it

O1-14

is true that the Project would result in significant NOx emissions, the EIR's conclusion that these impacts are "significant and unavoidable" is entirely incorrect. According to CEQA,

> "CEQA requires Lead Agencies to mitigate or avoid significant environmental impacts associated with discretionary projects. Environmental documents for projects that have any significant environmental impacts must identify all feasible mitigation measures or alternatives to reduce the impacts below a level of significance. If after the identification of all feasible mitigation measures, a project is still deemed to have significant environmental impacts, the Lead Agency can approve a project, but must adopt a Statement of Overriding Consideration to explain why further mitigation measures are not feasible and why approval of a project with significant unavoidable impacts is warranted." [28]

O1-14

As you can see, an impact can only be labeled as significant and unavoidable after all available, feasible mitigation is considered. Review of the Project's proposed mitigation measures, however, demonstrates that not all feasible mitigation is being implemented. Therefore, the EIR's conclusion that impacts are significant and unavoidable is unsubstantiated. As a result, additional mitigation measures should be identified and incorporated in order to reduce the Project's air quality impacts to the maximum extent possible. Until all feasible mitigation is reviewed and incorporated into the Project's design, impacts from operational NOx emissions cannot be considered as significant and unavoidable.[29]

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The EIR fails to adequately evaluate the potential health risk impacts that the proposed Project would have on nearby sensitive receptors because: (1) the EIR fails to adequately evaluate the Project's construction-related health risk impact; and (2) the EIR's operational health risk assessment (HRA) fails to follow the Office of Environmental Health Hazard Assessment's (OEHHA) guidance when estimating the total cancer risk. As a result, the Project's overall health risk impact is greatly underestimated and misrepresented. Our analysis, discussed herein, provides substantial evidence that when the Project's construction-related health risk is properly evaluated, and when an updated operational HRA is prepared using the most up-to-date guidance, we find that the proposed Project would result in a potentially significant health-related impact that was not previously identified in the EIR. As a result, until a proper

O1-15

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[28] http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, p. 115 of 125

[29] See section titled "Feasible Mitigation Measures Available to Reduce Operational Emissions" on p. 30 of this letter. These measures would effectively reduce operational NOx and DPM emissions from trucking activities.

construction and operational HRA is prepared that adequately evaluates the Project's health-related impacts, the Project should not be approved.

Failure to Evaluate Health Risk Posed During Construction Activities

As previously stated, the EIR fails to properly evaluate the construction-related diesel particulate matter (DPM) emissions that will be emitted during Project construction. The EIR attempts to justify the omission of a quantified HRA by stating,

> "Construction of the Business Park could be spread out over 3 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from construction of the project are not expected to result in a significant impact" (Appendix C, pp. 14).

Simply stating that the Project's construction will have a "short duration" does not justify the omission of a construction HRA. According to the SCAQMD, it is recommended that health risk impacts from short-term projects also be assessed. The Guidance document states, O1-15 cont.

> "Since these short-term calculations are only meant for projects with limits on the operating duration, these short-term cancer risk assessments can be thought of as being the equivalent to a 30-year cancer risk estimate and the appropriate thresholds would still apply (i.e. for a 5-year project, the maximum emissions during the 5-year period would be assessed on the more sensitive population, from the third trimester to age 5, after which the project's emissions would drop to 0 for the remaining 25 years to get the 30-year equivalent cancer risk estimate)".[30]

Thus, a HRA is required to determine whether or not a Project would expose sensitive receptors to substantial air pollutants. The EIR should have conducted some sort of quantitative analysis and should have compared the results of this analysis to applicable thresholds.

Additionally, OEHHA, the organization responsible for providing recommendations and guidance on how to conduct health risk assessments in California, provides guidance for cancer risk evaluation in short term projects. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.[31] The guidance document states that "local air pollution

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[30] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2, p. IX-2

[31] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

control districts sometimes use the risk assessment guidelines for the Hot Spots program in permitting decisions for short-term projects such as construction or waste site remediation".[32] Furthermore, the guidance documents recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[33] Thus, the EIR should have conducted some sort of quantitative analysis of the Project's construction-related carcinogenic health risk impact and should have compared the results of this analysis to applicable thresholds. The SCAQMD provides a specific numerical threshold of 10 in one million for determining a project's health risk impact.[34] Therefore, the EIR should have conducted an assessment that compares the Project's construction health risk to this threshold in order to determine the Project's construction-related carcinogenic health risk impact. By failing to prepare a proper construction HRA, the EIR fails to provide a comprehensive analysis of the sensitive receptor impacts that may occur as a result of exposure to substantial air pollutants.

O1-15 cont.

Incorrect Methodology Used to Estimate Operational Health Risk Impact

In order to evaluate the Project's operational health-risk impact, the EIR uses the U.S. Environmental Protection Agency's (U.S. EPA) CAL3QHCR program to model the Project's emissions and evaluate whether mobile source DPM emissions resulting from Project operation would pose a significant health risk to nearby sensitive receptors (Appendix C, pp. 282). According to the EIR, the 70-year residential cancer risk posed to the nearest sensitive receptor is 0.7 in one million, which is below the SCAQMD's significance threshold of 10 in one million (see excerpt below) (Table 3.3-12, p. 3.3-25).

O1-16

Table 3.3-12
Cancer Risk Increase at Receptors

Receptor	Use	Annual DPM Conc. (µg/m³)	Increase in Cancer Risk Per Million	
			DPM	All TAC[1]
1	Resident	0.000355	0.15	0.22
2	Resident	0.000377	0.16	0.23
3	Resident	0.001140	0.48	0.70
3	Teacher	0.001140	0.06	0.08
3	Student	0.001140	0.05	0.07
4	Worker	0.001345	0.04	0.14
5	Resident	0.000311	0.13	0.19

[1] Estimated Assuming DPM Represents 70% of Total Cancer Risk

[32] *Ibid*, p. 8-17.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

[34] http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2

As a result, the EIR concludes that, "the Project would not result in a significant impact due to increased cancer risk from DPM emissions" (p. 3.3-25). This conclusion, however, is incorrect, as the EIR's HRA fails to utilize early-in-life exposure factors recommended by OEHHA. The omission of early life exposure adjustments when calculating a project's health risk has been shown to underestimate the lifetime exposure cancer risk for many carcinogens.[35] In its *Technical Support Document for Cancer Potency Factors* report, OEHHA's Air Hotspots Program determined that the lifetime cancer potency for carcinogens is underestimated when early-life susceptibility is not included in modeling, and therefore recommends the use of specific adjustment factors to account for third trimester fetuses, infants and children's increased sensitivity to carcinogens, regardless of the mode of action.[36]

Age Sensitivity Factors

OEHHA was tasked with developing guidelines for conducting health risk assessments under the Air Toxics Hot Spots Program (Health and Safety Code Section 43360(b)(2)). OEHHA initially developed Technical Support Documents (TSDs) in 1999-2000 in response to this statutory requirement. Since 2000, they have revised and adopted TSDs in an effort to present updated methodologies that reflect scientific knowledge and techniques developed since the previous guidelines were prepared; in particular, to explicitly include consideration of possible differential effects on the health of infants, children and other sensitive subpopulations, in accordance with the mandate of the Children's Environmental Health Protection Act (Senate Bill 25, Escutia, Chapter 731, Statutes of 1999, Health and Safety Code Sections 39669.5 et seq.).[37]

O1-16 cont.

In 2009 OEHHA assessed the impact of cancer potency on age of exposure and concluded that, "the potency of carcinogens, and thus cancer risk, varies based on the lifestage at exposure… accounting for effects of early-in- life exposure requires accounting for both the increased potency of early in life exposure to carcinogens and the greater exposure on a per kilogram body weight that occurs early in life due to behavioral and physiological differences between infants

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[35] "Review of EPA's Draft Supplemental Guidance For Assessing Cancer Susceptibility From Early-Life Exposure to Carcinogens." The Supplemental Guidance For Assessing Cancer Susceptibility Review Panel Of The EPA Science Advisory Board, March 2004, *available at*: https://yosemite.epa.gov/sab/sabproduct.nsf/658FD14F8F94C7E385256F0A006C94E0/$File/sab04003.pdf

[36] "Technical Support Document for Cancer Potency Factors." OEHHA, May 2009, *available at*: https://oehha.ca.gov/media/downloads/crnr/tsdcancerpotency.pdf, p. 51

[37] *Adoption of the Revised Air Toxics Hot Spots Program Technical Support Document for Cancer Potency Factors,* Office of Environmental Health Hazard Assessment, June 1, 2009, *available at*: http://www.oehha.ca.gov/air/hot_spots/tsd052909.html

and children, and adults".[38] The guidance document continues on to explain that "in the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, and an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood."[39] To address this issue, OEHHA released updated risk exposure guidelines requiring an Age Sensitivity Factors (ASF) to be applied to early life exposures in the absence of chemical-specific data.[40] These factors, as summarized in the table below, were incorporated into OEHHA's most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015 (see excerpt below).[41]

Table 8.3 Age Sensitivity Factors by Age Group for Cancer Risk Assessment

Age Group	Age Sensitivity Factor (unitless)
3rd Trimester	10
0<2 years	10
2<9 years	3
2<16 years	3
16<30 years	1
16-70 years	1

O1-16 cont.

Therefore, to provide an appropriate analysis of the increased sensitivity to carcinogens during early-in-life exposure, ASFs should have been applied to the Project's HRA at the time the analysis was conducted. Review of the EIR demonstrates that the HRA completely fails to include or even mention ASFs and, as a result, these factors were not applied to determine the lifetime residential cancer risk. OEHHA recommends the use of both ASFs as well as elevated breathing rates for children and infants (discussed below) in order to account for the heightened health effects of toxic air contaminant (TAC) concentrations on younger children relative to adults; as such, both factors should be used. According to OEHHA's updated guidance, "The age-specific groupings to determine dose (3rd trimester, 0<2 yrs, 2<9 yrs, 2<16 yrs, 16<30 yrs,

[38] *Technical Support Document for Exposure Assessment and Stochastic Analysis FINAL*, Office of Environmental Health Hazard Assessment, August 2012, *available at:* http://oehha.ca.gov/media/downloads/crnr/chapter32012.pdf

[39] *Ibid.*, p. 8-4

[40] Guidance *Manual for Preparation of Health Risk Assessments*, Office of Environmental Health Hazard Assessment, February 2015, *available at:* http://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

[41] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

or 16-70 yrs) is needed in order to properly use the age sensitivity factors for cancer risk assessment."[42] Therefore, the EIR's failure to apply ASFs is improper, and as a result, the potential excess cancer risk posed to children and infants is not accurately represented, and the HRA within the EIR should not be relied upon to determine Project significance.

Omission of Age-Specific Breathing Rates

Not only does the EIR's HRA fail to use the correct ASF when estimating the total residential cancer risk, but it also fails to use age-specific breathing rates for infants and children. The EIR states that "estimates for daily breathing rate from the OEHHA Hotspot guidelines" were used to determine the Project's health risk (Appendix C, pp. 285). Review of the EIR's HRA, however, demonstrates that this is not the case. Instead, the HRA applies an inhalation rate of 393 liters per kilogram body weight per day (L/kg-day) in order to estimate the total residential cancer risk, which is inconsistent with OEHHA guidance. By doing this, the HRA fails to account for the heightened susceptibility of infants and children to TAC emissions. As a result, we find the Project's health-related impact to be misrepresented and should not be relied upon to determine Project significance.

O1-16 cont.

In August of 2012, OEHHA formally adopted the *Technical Support Document for Exposure Assessment and Stochastic Analysis*.[43] Chapter three of this document discusses "age-specific breathing rates for use in health risk assessments for short-term exposure…and for long-term daily average exposures resulting from continuous or repeated 8-hour exposure."[44] OEHHA recommends the long-term daily breathing rates in Table 3.1 of this document (see excerpt below).

Table 3.1. Recommended Point Estimates for Long-Term Daily Breathing Rates

	3rd Trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
	L/kg-day					
Mean	225	658	535	452	210	185
95th Percentile	361	1090	861	745	335	290
	m³/day					
Mean	15.3	6.2	10.7	13.3	15.0	13.9
95th Percentile	23.4	11.2	16.4	22.6	23.5	22.9

[42] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessment." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/hotspots2015.html, p. 5-46

[43] https://oehha.ca.gov/media/downloads/crnr/chapter32012.pdf

[44] http://www.oehha.ca.gov/air/hot_spots/pdf/2012tsd/Chapter3_2012.pdf p. 3-1

Therefore, to provide an appropriate analysis of the health effects on infants and children, the 95th percentile breathing rates for infants and children should have been applied at the time the analysis was conducted. Review of the EIR and associated appendices, however, demonstrate that a breathing rate of 393 L/kg-day was used to estimate the Project's health risk impacts, rather than the 95th percentile breathing rates according to each age category (see excerpt below) (Table 3, Appendix C, pp. 287).

Table 3
Cancer Risk Parameters by Receptor Type

Receptor Type	Daily Breathing Rate (L/kg/day)	Inhalation Absorption Factor	Exposure Frequency (Days/Year)	Exposure Duration (Years)	Averaging Time Period (Days)
Resident	393	1	365	70	25,550
Worker	149	1	261	40	25,550
Teacher	149	1	190	40	25,550
Student	581	1	180	9	25,550

O1-16 cont.

As a result, the Project's health risk impacts are underestimated. These age specific breathing rates should be applied in an updated HRA in an effort to accurately determine the potential cancer risk posed to infants and children residing near the Project site. As a result, the potential excess cancer risk posed to children and infants is not accurately represented, and the HRA within the EIR should not be relied upon to determine Project significance.

Updated Health Risk Assessment Indicates Significant Health Impact

In an effort to demonstrate the potential risk posed by construction and operation of the proposed Project to nearby sensitive receptors, we prepared a simple screening-level HRA. The results of our assessment, as described in the sections below, provide substantial evidence demonstrating that potential health risk impacts associated with construction and operation of the proposed Project may result in a potentially significant health risk impact. As such, an updated EIR should be prepared to adequately evaluate the proposed Project's health risk impacts, and additional mitigation measures should be identified and incorporated into the Project design, where necessary.

Modeling Parameters

As of 2011, the Environmental Protection Agency (EPA) recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions

O1-17

based on simple input parameters.[45] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[46] and the California Air Pollution Control Officers Associated (CAPCOA)[47] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary health risk screening assessment of the Project's health-related impact to sensitive receptors using the annual construction and operational PM_{10} exhaust estimates from our SWAPE CalEEMod model and the EIR's CalEEMod model, respectively. According to the EIR, the closest sensitive receptor is 1,800 feet, or approximately 550 meters away from the Project site (p. 3.3-23). According to the EIR, construction of the Project would occur over two phases (with Phase 1 split into Phase 1A and Phase 1B) over the course of 5 years (p. 2-27). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the infantile stage of life. We also assumed that construction and operation of the Project would occur in quick succession, with no gaps between each Project phase. O1-17 cont.

The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emission sources. To account for the variability in construction equipment usage over the phases of Project construction and operation, we calculated an average DPM emission rate by the following equation for each of the phases of construction and operation.

$$Emission\ Rate\left(\frac{grams}{second}\right) = \frac{lbs\ of\ DPM}{Number\ of\ days} \times \frac{453.6\ grams}{lb} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds}$$

[45] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

[46] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[47] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

Because the duration, start year, year of completion, and activity type vary between each phase of construction and operation, we calculated a specific emission rate for each of the phases (see table below).

Project Phase Emission Rates

Phase	DPM Emissions (tons/year)[1]	Number of Days	Emission Rate (g/s)[2]
Phase 1A Construction	0.2237	328	0.007161
Phase 1B Construction	0.1930	328	0.006178
Phase 1 Operation & Phase 2 Construction	0.5619	1091	0.005408
Phase 1 & Phase 2 Operation	1.0513	365	0.01223

[1] Construction values representative of Exhaust PM10 Emissions taken from the SWAPE CalEEMod output files. Operational values representative of Exhaust PM10 Emissions at full Project build out from the EIR located in Appendix C of the EIR. Source: Appendix C, pp. 97 and 149

[2] Emission rate was calculated by dividing the annual emissions by the duration for each phase. 2,000 pounds/ton; 453.6 grams/pound; 24 hours/day; 3,600 seconds/hour

O1-17 cont.

Construction and operational activity was simulated as a 120-acre rectangular area source in AERSCREEN, with dimensions of 735 meters by 661 meters. A release height of three meters was selected to represent the height of exhaust stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

Modeling Outputs

The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%.[48] For example, for the Maximum Exposed Individual at an Existing Residential Receptor (MEIR) the single-hour concentration estimated by AERSCREEN for Project construction is approximately 0.6581 µg/m³ DPM at approximately 550 meters downwind. Multiplying this single-hour concentration by 10%, we get an annual average concentration of 0.06581 µg/m³ for Project construction at the MEIR. We estimated the

[48] http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

annualized average concentration for the remaining phases of construction and operation in this same fashion for the MEIR (see table below).

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Phase	Maximum Single Hour DPM Concentration (µg/m³)	Annualized Average DPM Concentration (µg/m³)
Phase 1A Construction	0.6581	0.06581
Phase 1B Construction	0.5679	0.05679
Phase 1 Operation & Phase 2 Construction	0.4969	0.04969
Phase 1 & Phase 2 Operation	1.124	0.1124

O1-17 cont.

Exposure Assumptions

We calculated the excess cancer risk for each sensitive receptor location, for adults, children, and infant receptors using applicable HRA methodologies prescribed by OEHHA. As mentioned the inspections above, OEHHA recommends the use of ASFs to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[49] According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the SCAQMD and OEHHA, we used 95th percentile breathing rates for infants and 80th percentile breathing rates for children and adults.[50] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days.

[49] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[50] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," SCAQMD, June 5, 2015, *available at*: http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6, p. 19

Health Risk at the Maximally Exposed Individual Receptor (MEIR)

OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the MEIR.[51] Consistent with OEHHA guidance, exposure to the MEIR was assumed to begin in the infantile stage of life to provide the most conservative estimate of air quality hazards. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)

Activity	Duration (years)	Concentration (µg/m³)	Breathing Rate (L/kg-day)	ASF	Cancer Risk
Phase 1A Construction	0.90	0.06581	1090	10	9.7E-06
Phase 1B Construction	0.90	0.05679	1090	10	8.4E-06
Phase 2 Construction, Phase 1 Operation	0.20	0.04969	1090	10	1.6E-06
Infant Exposure Duration	***2.00***			***Infant Exposure***	***2.0E-05***
Phase 2 Construction, Phase 1 Operation	2.80	0.04969	572	3	3.6E-06
Operation	11.20	0.1124	572	3	3.3E-05
Child Exposure Duration	***14.00***			***Child Exposure***	***3.6E-05***
Operation	14.00	0.1124	261	1	6.2E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***6.2E-06***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**6.2E-05**

O1-17 cont.

[51] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-1.

The excess cancer risk to adults, children, and infants at the MEIR located approximately 550 meters away, over the course of Project construction and operation are approximately 6.2, 36, and 20 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) at the MEIR is approximately 62 in one million. Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimates of air quality hazards. The infant, child, and lifetime cancer risks all exceed the SCAQMD's threshold of 10 in one million.

It should be noted that our analysis represents a screening-level HRA, which is known to be more conservative, and is aimed at health protection.[52] The purpose of a screening-HRA, however, is to determine if a more refined HRA needs to be conducted. If the results of a screening-level HRA are above applicable thresholds, then the Project needs to conduct a more refined HRA that is more representative of site specific concentrations. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. As a result, a refined HRA must be prepared to examine air quality impacts generated by Project construction and operation using site-specific meteorology and specific equipment usage schedules. An updated EIR must be prepared to adequately evaluate the Project's health risk impact and should include additional mitigation measures to reduce these impacts to a less-than-significant level.[53]

O1-17 cont.

Mitigation Measures Available to Reduce Construction Emissions

Our analysis demonstrates that the Project's construction-related DPM emissions may present a potentially significant impact that will not be mitigated to less than significant levels with implementation of the EIR's proposed mitigation measures (p. ES Page 2). Therefore, additional mitigation measures must be identified and incorporated in a revised EIR to reduce these emissions to a less than significant level.

O1-18

Additional mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures,* which attempt to reduce GHG levels, as well as reduce criteria air pollutants such as particulate matter.[54] DPM is a byproduct of diesel fuel combustion and are emitted by on-road vehicles and by off-road construction equipment. Mitigation for criteria

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[52] http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf p. 1-5

[53] See section titled "Feasible Mitigation Measures Available to Reduce Emissions" on pg. 20 of this letter. These measures would effectively reduce operational DPM emissions, as well as operational NOx and GHG emissions.

[54] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

pollutant emissions should include consideration of the following measures in an effort to reduce construction emissions.

Repower or Replace Older Construction Equipment Engines

The NEDC recognizes that availability of equipment that meets the EPA's newer standards is limited.[55] Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.[56] These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines.[57] Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section "Use Alternative Fuels for Construction Equipment" for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine's ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for DPM.[58]

O1-18 cont.

- Replacement of older equipment with equipment meeting the latest emission standards.

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling

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[55] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[56] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[57] Repair, Rebuild, and Repower, EPA, *available at*:https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#repair

[58] Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, *available at*:http://www2.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf

infrastructure.[59] Replacements often require some re-engineering work due to differences in size and configuration. Typically, there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.[60]

Install Retrofit Devices on Existing Construction Equipment

PM emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation. [61] It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

O1-18 cont.

Implement a Construction Vehicle Inventory Tracking System

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[62] report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring engine run time meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically, for each onroad construction vehicle, nonroad construction equipment, or generator, the contractor should submit to the developer's representative a report prior to bringing said equipment on site that includes:[63]

- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.
- The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.

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[59] Alternative Fuel Conversion, EPA, *available at:* https://www3.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm#fact

[60] Cleaner Fuels, EPA, *available at*:https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#cleaner

[61] Retrofit Technologies, EPA, *available at*:https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#retrofit

[62]http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[63] Diesel Emission Controls in Construction Projects, *available at*:http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

- The Certification Statement[64] signed and printed on the contractor's letterhead.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes: [65]

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.
- Certified copies of fuel deliveries for the time period that identify:
    - Source of supply
    - Quantity of fuel
    - Quality of fuel, including sulfur content (percent by weight).

O1-18 cont.

In addition to these measures, we also recommend that the Applicant implement the following mitigation measures, called "Enhanced Exhaust Control Practices,"[66] that are recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD):

1. The project representative shall submit to the lead agency a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.
    - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.
    - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
    - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.

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[64] Diesel Emission Controls in Construction Projects, *available at*:http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf The NEDC Model Certification Statement can be found in Appendix A.

[65] Diesel Emission Controls in Construction Projects, *available at*:http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

[66]http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf

- The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

2. The project representative shall provide a plan for approval by the lead agency demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.

    - This plan shall be submitted in conjunction with the equipment inventory.
    - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
    - The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

O1-18 cont.

3. The project representative shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.

    - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency monthly.
    - A visual survey of all in-operation equipment shall be made at least weekly.
    - A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

Finally, our air quality analysis demonstrated that construction-related ROG (also referred to as VOC) emissions will exceed SCAQMD daily thresholds. In an effort to mitigate these measures, the following mitigation measures should be considered.

Use of Zero-VOC Emissions Paint

The Project Applicant should consider the use of low VOC coatings. The use of zero-VOC emission paint has been required for numerous projects that have undergone CEQA review. Zero-VOC emission paints are commercially available. Other low-VOC standards should be incorporated into mitigation including use of "super-compliant" paints, which have a VOC standard of less than 10 g/L. [67]

Use of Material that Do Not Require Paint

Using materials that do not require painting is a common mitigation measure where VOC emissions are a concern. Interior and exterior surfaces, such as concrete, can be left unpainted.

Use of Spray Equipment with Greater Transfer Efficiencies

Various coatings and adhesives are required to be applied by specified methods such as electrostatic spray, high-volume, low-pressure (HVLP) spray, roll coater, flow coater, dip coater, etc. in order to maximize the transfer efficiency. Transfer efficiency is typically defined as the ratio of the weight of coating solids adhering to an object to the total weight of coating solids used in the application process, expressed as a percentage. When it comes to spray applications, the rules typically require the use of either electrostatic spray equipment or HVLP spray equipment. The SCAQMD is now able to certify HVLP spray applicators and other application technologies at efficiency rates of 65 percent or greater.[68]

O1-18 cont.

These measures offer a cost-effective, feasible way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently reduces DPM emissions released during Project construction. Furthermore, these measures also offer a feasible way to reduce the construction-related ROG emissions released from paints and architectural coatings. A revised EIR must be prepared to include additional mitigation measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval to ensure that the Project's construction-related emissions are reduced to the maximum extent possible.

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[67] http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings

[68] http://www.aqmd.gov/home/permits/spray-equipment-transfer-efficiency

Feasible Mitigation Measures Available to Reduce Operational Emissions

As previously stated, the EIR's air quality analysis concluded that the Project's operational NOx emissions would be "significant and unavoidable" (p. 3.3-21). Additionally, our HRA demonstrates that operational DPM emissions may presents a potentially significant impact. In an effort to reduce the Project's impacts, we identified several additional mitigation measures that are applicable to the Project. These measures would effectively reduce the Project's operational NO_X and DPM emissions. Measures recommended for the Waterman Logistic Center that are also applicable for the industrial portion of this Project include[69]:

- Limit the daily number of trucks allowed at the facility to levels analyzed in the Addendum. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the project through CEQA prior to allowing this higher activity level.

O1-19

- Design the site such that any check-in point for trucks is well inside the facility to ensure that there are no trucks queuing outside of the facility.
- Should the proposed Project generate significant emissions, the Lead Agency should require mitigation that requires accelerated phase-in for non-diesel powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in emissions, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Final CEQA document, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce project impacts.

Furthermore, the additional, feasible mitigation measures can be also found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures.*[70] These mitigation measures would effectively reduce the operational NOx and DPM emissions resulting from the Business Park portion of the project. Therefore, to reduce the Project's operational DPM emissions, consideration of the following measures should be made.

O1-20

- Incorporate Bike Lane Street Design (On-Site)
    - Incorporating bicycle lanes, routes, and shared-use paths into street systems, new subdivisions, and large developments can reduce VMTs. These improvements

[69] SCAQMD Comment Letter in Response to MND for the Waterman Logistic Center, January 2018, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2015/january/mndwaterman.pdf

[70] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

can help reduce peak-hour vehicle trips by making commuting by bike easier and more convenient for more people. In addition, improved bicycle facilities can increase access to and from transit hubs, thereby expanding the "catchment area" of the transit stop or station and increasing ridership. Bicycle access can also reduce parking pressure on heavily-used and/or heavily-subsidized feeder bus lines and auto-oriented park-and-ride facilities.

- Limit Parking Supply
    - This mitigation measure will change parking requirements and types of supply within the Project site to encourage "smart growth" development and alternative transportation choices by project residents and employees. This can be accomplished in a multi-faceted strategy:
        - Elimination (or reduction) of minimum parking requirements
        - Creation of maximum parking requirements
        - Provision of shared parking
- Implement Commute Trip Reduction Program- Voluntary or Required
    - Implementation of a Commute Trip Reduction (CTR) program with employers will discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The main difference between a voluntary and a required program is:
        - Monitoring and reporting is not required
        - No established performance standards (i.e. no trip reduction requirements)
    - The CTR program should provide employees with assistance in using alternative modes of travel, and provide both "carrots" and "sticks" to encourage employees. The CTR program should include all of the following to apply the effectiveness reported by the literature:
        - Carpooling encouragement
        - Ride-matching assistance
        - Preferential carpool parking
        - Flexible work schedules for carpools

O1-20 cont.

- Half time transportation coordinator
- Vanpool assistance
- Bicycle end-trip facilities (parking, showers and lockers)

- Provide Ride-Sharing Programs
  - Increasing the vehicle occupancy by ride sharing will result in fewer cars driving the same trip, and thus a decrease in VMT. The project should include a ride-sharing program as well as a permanent transportation management association membership and funding requirement. The project can promote ride-sharing programs through a multi-faceted approach such as:
    - Designating a certain percentage of parking spaces for ride sharing vehicles
    - Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles
    - Providing a web site or message board for coordinating rides

O1-20

- Implement Subsidized or Discounted Transit Program
  - This project can provide subsidized/discounted daily or monthly public transit passes to incentivize the use of public transport. The project may also provide free transfers between all shuttles and transit to participants. These passes can be partially or wholly subsidized by the employer, school, or development. Many entities use revenue from parking to offset the cost of such a project.

- Implement Commute Trip Reduction Marketing
  - The project can implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include:
    - New employee orientation of trip reduction and alternative mode options
    - Event promotions
    - Publications

- Implement Preferential Parking Permit Program
    - The project can provide preferential parking in convenient locations (such as near public transportation or building front doors) in terms of free or reduced parking fees, priority parking, or reserved parking for commuters who carpool, vanpool, ride-share or use alternatively fueled vehicles. The project should provide wide parking spaces to accommodate vanpool vehicles.
- Implement Car-Sharing Program
    - This project should implement a car-sharing project to allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees. The car-sharing program could be created through a local partnership or through one of many existing car-share companies. Car-sharing programs may be grouped into three general categories: residential- or citywide-based, employer-based, and transit station-based. Transit station-based programs focus on providing the "last-mile" solution and link transit with commuters' final destinations. Residential-based programs work to substitute entire household based trips. Employer-based programs provide a means for business/day trips for alternative mode commuters and provide a guaranteed ride home option.

O1-20 cont.

- Provide Employer-Sponsored Vanpool/Shuttle
    - This project can implement an employer-sponsored vanpool or shuttle. A vanpool will usually service employees' commute to work while a shuttle will service nearby transit stations and surrounding commercial centers. Employer-sponsored vanpool programs entail an employer purchasing or leasing vans for employee use, and often subsidizing the cost of at least program administration, if not more. The driver usually receives personal use of the van, often for a mileage fee. Scheduling is within the employer's purview, and rider charges are normally set on the basis of vehicle and operating cost.
- Price Workplace Parking
    - The project should implement workplace parking pricing at its employment centers. This may include: explicitly charging for parking for its employees, implementing above market rate pricing, validating parking only for invited guests, not providing employee parking and transportation allowances, and educating employees about available alternatives.

- Though similar to the Employee Parking "Cash-Out" strategy, this strategy focuses on implementing market rate and above market rate pricing to provide a price signal for employees to consider alternative modes for their work commute.

- Implement Employee Parking "Cash-Out"
  - The project can require employers to offer employee parking "cash-out." The term "cash-out" is used to describe the employer providing employees with a choice of forgoing their current subsidized/free parking for a cash payment equivalent to the cost of the parking space to the employer.

In addition to the mobile source mitigation measures above, the Lead Agency should incorporate the following on-site area source mitigation measures below, as suggested by the SCAQMD, to reduce the Project's regional air quality impacts from NO_X emissions during operation.[71]

- Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or the Project side to generate solar energy for the facility.

O1-20 cont.

- Limit the use of outdoor lighting to only that needed for safety and security purposes.
- Install solar lights or light-emitting diodes (LEDs) for outdoor lighting.
- Require use of electric or alternatively fueled sweepers with HEPA filters.

Finally, the Kimball Business Park Project Final Environmental Impact Report includes various feasible mitigation measures that would reduce on-site area emissions that are applicable to the proposed Project and include, but are not limited to: [72]

- Increase in insulation such that heat transfer and thermal bridging is minimized.
- Limit air leakage through the structure and/or within the heating and cooling distribution system.
- Use of energy-efficient space heating and cooling equipment.
- Installation of dual-paned or other energy efficient windows.

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[71] SCAQMD Comment Letter in Response to MND for the Waterman Logistic Center, January 2018, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2015/january/mndwaterman.pdf

[72] Mitigation Monitoring Plan for the Kimball Business Park Project Final Environmental Impact Report, July 2016, *available at*: http://www.cityofchino.org/home/showdocument?id=13244

- Use of interior and exterior energy efficient lighting that exceeds the California Title 24 Energy Efficiency performance standards.
- Installation of automatic devices to turn off lights where they are not needed.
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings.
- Installation of a photo-voltaic electrical generation system (PV system) capable of generating 565,000 kilowatt hours per year on the roofs of project buildings. The developer(s) may install the required PV system in phases on a pro rata square foot basis as each building is completed; or if the PV system is to be installed on a single building, all of the PV system necessary to supply the PV estimated electrical generation shall be installed within two years (24 months) of the first building that does not include a PV system receives a certificate of occupancy.

O1-20 cont.

When combined, these measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces emissions released during Project operation. An updated EIR must be prepared to include additional mitigation measures, as well as include an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce operational emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible.

3.7 Greenhouse Gas Emissions

Failure to Adequately Evaluate Greenhouse Gas Impact

The EIR concludes that the Project's GHG impacts would be less than significant, yet fails to provide proper justification to support this claim. As a result, the Project's GHG impacts are inadequately addressed.

O1-21

The EIR relies upon the City of Ontario's Community Climate Action Plan (CCAP) to determine the significance of the Project's GHG impact (p. 3.7-10). Specifically, the Project uses the City's CCAP GHG Screening Table to identify which reduction measures the Project will implement to reduce emissions (p. 3.7-10). According to the EIR, "projects that garner a minimum of 100 points are consistent with the CAP, and result in less than significant impacts related to GHG emissions" (p. 3.7-11). Using this significance criteria, the EIR concludes that the Project would obtain a total of 123 points on the GHG Screening Threshold Table and states,

"Because the Project will reduce GHG emissions in compliance with the CCAP and provide employment in an area that could reduce VMT and VHT, the Project would result in a less than significant impact related to GHG emissions" (p. 3.7-13).

This conclusion, however, as well as the justification provided in the EIR to support this significance determination, are incorrect and inadequate.

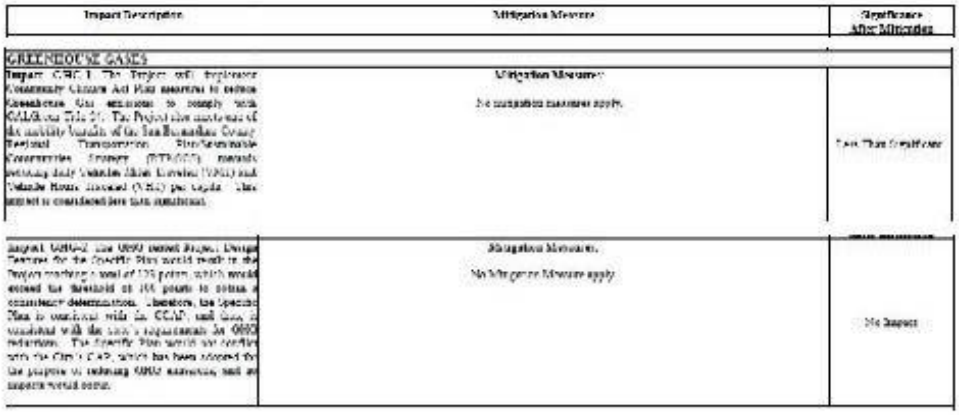
While the EIR states that the Project would be consistent with the CCAP, the EIR fails to actually demonstrate compliance with all of the applicable criteria disclosed in the City's CCAP. Specifically, the EIR fails to comply with the following requirement, as required by Section 15183.5 *Tiering and Streamlining the Analysis of Greenhouse Gas Emissions* of the CEQA guidelines,

O1-21 cont.

"An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project."[73]

As stated above, CEQA requires the EIR to identify which requirements apply to the Project and requires the EIR make these requirements binding and enforceable to the Project by listing them as mitigation measures, if that are not already binding and enforceable in the City's CCAP. However, review of the EIR demonstrates that the Project fails to include any of the CCAP's measures that the EIR claims the Project would be consistent with as mitigation measures or as mandatory conditions of Project approval (see excerpt below) (p. ES Page 6 - ES Page 7).

[73] https://govt.westlaw.com/calregs/Document/I872A68805F7511DFBF66AC2936A1B85A?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=%28sc.Default%29



Impact Description	Mitigation Measures	Significance After Mitigation
GREENHOUSE GASES		
Impact GHG-1 The Project will implement Community Climate Action Plan measures to reduce greenhouse gas emissions to comply with GAIA and Title 24. The Project also meets most of the mobility benefits of the San Bernardino County Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) towards reducing daily Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) per capita. This impact is considered less than significant.	Mitigation Measures No mitigation measures apply.	Less Than Significant
Impact GHG-2 The GHG impact Project Design Features for the Cimarite Site would result in the Project reaching a total of 135 points, which would exceed the threshold of 100 points to obtain a consistency determination. Therefore, the Specific Plan is consistent with its CCAP, and GHG [illegible] considered with the less than significant for GHG reduction. The Specific Plan would be consistent with the City's CAP, which has been adopted for the purpose of reducing GHG emissions, and would impacts would occur.	Mitigation Measures No Mitigation Measure apply	No Impact

As you can see in the excerpt above, the EIR determines that "no mitigation measures apply" to the Project, and therefore does not include any of the CCAP's measures within its list of proposed mitigation measures. As a result, the EIR fails to show compliance with the City of Ontario's CCAP and should not be used to determine the Project's significance. A revised EIR should be prepared with an updated GHG analysis in order to adequately assess and address the Project's potential GHG impact.

O1-21 cont.

Failure to Demonstrate Compliance with Executive Order B-30-15

According to the EIR, the Project would not interfere with the implementation of Executive Order B-30-15 and would comply with the GHG reduction goals for 2030, 2040, and 2050. Specifically, the EIR states,

"The CAP target is to reduce City emissions by the amount recommended in the ARB Scoping Plan for local government and includes a commitment to update the CAP beginning in 2018. The new plan would include a specific target for 2030, 2040, and 2050. The targets will be consistent with broader state and federal reduction targets with the scientific understanding of the needed reductions by 2050" (p. 3.7-13).

However, because the EIR was proposed after certification of the CCAP, the CCAP Screening Threshold Table only accounts for reductions required to meet the 2020 emissions reductions set forth by AB 32. Governor Brown recently issued an executive order to establish an even more ambitious GHG reduction target for 2030, which is not addressed in the City's CCAP. By failing to demonstrate consistency with the reduction targets set forth by Executive Order B-30-15 for 2030, the Project may conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, the Project may have a potentially significant

impact that was not previously addressed in the Project's GHG analysis, and as such, a revised EIR should be prepared.

Executive Order B-30-15 requires emissions reductions above those mandated by AB 32 to reduce GHG emissions 40 percent below their 1990 levels by 2030.[74] 1990 statewide GHG emissions are estimated to be approximately 431 million $MTCO_2e$ ($MMTCO_2e$).[75] Therefore, by 2030 California will be required to reduce statewide emissions by 172 $MMTCO_2e$ (431 x 40%), which results in a statewide limit on GHG emissions of 259 $MMTCO_2e$. 2020 "business-as-usual" levels are estimated to be approximately 509 $MMTCO_2e$.[76] In order to successfully reach the 2030 statewide goal of 259 $MMTCO_2e$, California would have to reduce its emissions by 49 percent below the "business-as-usual" levels. This reduction target is consistent with goals set forth by other recently passed legislature, such as SB 32,[77] indicating that compliance with these more aggressive reduction goals, beyond what is mandated by AB 32, will be necessary.

This 49 percent reduction target should be considered as a threshold of significance against which to measure Project impacts. Because the proposed Project is unlikely to be redeveloped again prior to 2030, the 2030 goals are applicable to any evaluation of the Project's impacts. A revised EIR should be prepared to demonstrate the Project's compliance with these more aggressive measures specified in Executive Order B-30-15. Specifically, the Project should demonstrate, at a minimum, a reduction of 49 percent below "business-as-usual" levels. It should be noted that this reduction percentage is applicable to statewide emissions, which is not directly applicable to a project-level analysis. As a result, an additional analysis would need to be conducted to translate the new statewide targets into a project-specific threshold against which Project GHG emissions can be compared. A revised EIR should be prepared to quantify any reductions expected to be achieved by mitigation measures, shown by substantial evidence that such measures will be effective, and should demonstrate how these measures will reduce the emissions below the new 2030 significance threshold.

O1-21 cont.

[74] http://gov.ca.gov/news.php?id=18938

[75] http://www.arb.ca.gov/cc/inventory/data/bau.htm

[76] http://energyinnovation.org/wp-content/uploads/2015/04/CA_CapReport_Mar2015.pdf

[77] http://www.latimes.com/politics/la-pol-ca-jerry-brown-signs-climate-laws-20160908-snap-story.html

3.8 Hazards and Hazardous Materials

The EIR identifies the Specific Plan area as "within Compatibility Zone D, which is identified as an area for primary traffic patterns and runway buffer area." However, the EIR does not provide a reference to substantiate this claim or state where the information was obtained from. The Chino Airport Land Use Compatibility Plan does not include a map for compatibility zones which indicates to the public that this is not the source of the information given[78]. CEQA § 15150 (f) states that incorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand. The document creating the compatibility zones utilized for analysis in the EIR contribute directly to the analysis of the problem at hand. Not including information, meaningful details, or the document creating the compatibility zones for public review is in violation of CEQA § 15150 (f).

The EIR continues by stating that the proposed development standards of the Specific Plan "allow for a maximum building height of 55 feet for main structures, and up to 65 feet for architectural projections and focal elements." Subsequently, "implementation of the proposed Specific Plan structures would not exceed the 70-foot high airspace review criteria, and the height of the proposed structures would not result in a hazard to flight or a safety hazard for people in the Project area." The EIR has not provided evidence to support the 70 ft high airspace review criteria utilized for analysis. The EIR is inadequate as an informational document and must be substantially amended and recirculated in order to provide the public and decision makers with accurate information. O1-22

Further, the proposed maximum height in the specific plan development standards are described in the Project Description as "allowed to exceed the maximum height up to 25 percent above the prescribed height limit", which in this case is 55 feet. A 25 percent addition to 55 feet is 68.75 feet, not 65 feet as described in the EIR. Also, the EIR does not indicate where the measurement of building and permitted projections height will be taken from. Where the datum is set can have a potentially significant impact on height measurement. For example, setting datum at site grade versus setting datum at the highest adjacent curb may result in different measurements of height.

3.10 Land Use

The EIR concludes that the project is consistent with the TOP due to the proposed GPA and Zone Change request. However, the EIR does not analyze the proposed project in conjunction with the O1-23

[78] Chino Airport Land Use Compatibility Plan http://www.sbcounty.gov/Uploads/lus/Airports/Chino.pdf

existing General Plan and Zoning Destination. The project as proposed requires a GPA and Zone Change to be implemented. This indicates that the project is not consistent with the current General Plan and Zoning Designations, and findings of significance must be made. This point is further illustrated by the EIR's Alternative Projects section. An Alternative Project analyzed is a project consistent with the existing General Plan and Zoning Designations. If the proposed project is consistent with the existing General Plan and Zoning Designations, a GPA and Zone Change would not be requested. Findings of significance regarding this impact to land use must be made as part of the EIR.

O1-23 cont.

Further, the EIR does not provide any analysis regarding the proposed change to the land use designation of approximately 2.49-gross acres (1.41 net acres) within the Parkside Specific Plan north of the Site from Parkside Specific Plan (residential use) to Business Park to allow for the realignment of Eucalyptus Avenue. The EIR is inadequate as an informational document and must be revised to include analysis regarding this proposed change in order to comply with CEQA.

3.11 Noise

Existing Noise Measurements

The Noise Study (Appendix K) does not present a detailed analysis of existing noise and vibration conditions at the project site or in the project vicinity. The analysis was only conducted off-site and no existing noise measurements at the project site were provided. The noise measurements do not include a location at the nearest sensitive receptor, which is identified as a residence approximately 100 feet south of the site in the Air Quality analysis. Only modeling at the other receptors, located much further away from the site (0.2 miles west and 0.4 miles southeast), are presented for analysis. The Noise Analysis is misleading to the public and decision makers by excluding the closest sensitive receptor for analysis. The EIR is inadequate as an informational document and must be revised to include analysis regarding the closest sensitive receptor in order to comply with CEQA.

O1-24

Further, the analysis was taken only in the morning and does not present existing conditions for PM peak times. The Noise Analysis must be revised to include this information for analysis in order for the EIR to be an adequate informational document.

Potential Impacts from On-Site Operation Activities

Table 10
Noise Levels for Warehousing Activities

Distance from Facility (ft.)	Noise Level (dBA Leq) No Barrier	With 12' Barrier
200 (Closest House)	44.9	38.4
1,300 (Second Closest Resy. Area)	28.6	23.5

West Ontario Commerce Center SPECIFIC PLAN EIR Chapter 3 Environmental Analysis

Table 3.11-6
Estimated Noise Levels for Warehousing Activities

Distance from Facility (feet)	Noise Level (dBA Leq) No Barrier	With 12-foot Barrier
250	42.9	36.9
500	36.9	31.5
1,300 (Nearest Residential)	28.6	23.5

The Noise Ordinance requires that noise levels remain below 45 dBA (Leq) during nighttime hours. As shown in Table 3.11-6, the projected noise level at the nearest residence is estimated to be 28.6 dBA (Leq), which is below the City 45 dBA noise level limit. Therefore, the noise impacts from on-site activities during the operation of the Project would be less than significant.

O1-24

Noise levels were measured at similar facilities to determine representative noise levels that might be generated by the type of activity associated with the Project. Noise measurements were taken at two facilities: 1) Lowes Distribution Center (3984 Indian Avenue, Perris, California); and 2) Ross Distribution Center (3404 Indian Avenue, Perris, California). The Lowes facility is approximately 1.6 million square feet and was very busy during the time of the noise consultant's measurements, thus the Lowes measurements are utilized for analysis in the EIR. However, the Noise Analysis omits pertinent information regarding the Lowes measurements. Three measurements were taken, but only two locations are described as positions for analysis. Also, there is no specific time of day given for each of the measurements, only that they were during the afternoon hours, which does not reflect AM or PM peak times. The EIR must be revised to include this information for analysis.

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The Lowes Analysis is utilized to predict nighttime noise levels for the proposed project at three different distances. The tables presented in the EIR and the Noise Analysis are vastly inconsistent.

The Noise Analysis (Appendix K) indicates that the nearest sensitive receptor is 200 feet from the site, while the EIR indicates that the nearest sensitive receptor is 1,300 feet from the site. To add to this error, the nearest sensitive receptor is identified as 100 feet from the site in the Air Quality Analysis. The Noise tables are not only inconsistent, they both are incorrect regarding the closest sensitive receptor, which is misleading to the public and decision makers. Further, the EIR presents information regarding noise levels 250 ft and 500 ft from the site, while the Noise Analysis modeled only 200 ft and 1,300 ft from the site. The EIR does not provide supporting evidence regarding where the information in the EIR is from. Further, these tables are utilized for nighttime maximum noise level analysis. The EIR states that the measurements were taken during the afternoon hours, which is not nighttime hours. The EIR presents skewed information in order for the noise impacts to appear less significant than they actually may be, requiring the EIR to be substantially revised and recirculated pursuant to CEQA.

O1-24

Noise Impacts from Construction Activities

The Noise Analysis (Appendix K) states that in regard to sensitive receptors, "Construction could occur as close as 100 feet, but probably only very briefly." The Noise Analysis and EIR do not provide any information or analysis to support this statement. The EIR must be revised to include noise analysis modeling at 100 feet from the site, which is the worst case scenario as stated in Appendix K.

Appendix K also states that "the average noise levels (L50) are typically 15 dB lower than the peak (Lmax) noise levels. The 15 dB value is based on our general observations during construction noise measurements over the past 20 years." The Appendix does not provide a list of similar projects analyzed to support this assertion. The EIR must be revised to provide supporting evidence regarding the 15 dB value difference between Leq and Lmax noise levels utilized for analysis.

Additionally, the complete Lowes and Ross Noise Analysis conducted on March 13, 2012 must be included in the EIR. CEQA § 15150 (f) states that incorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand. The Lowes and Ross Noise Analysis conducted on March 13, 2012 utilized for analysis in the EIR contributes directly to the analysis of the problem at hand. Not including information, meaningful details, or

the Lowes and Ross Noise Analysis conducted on March 13, 2012 for public review is in violation of CEQA § 15150 (f).

Cumulative Impacts

O1-24

The cumulative noise impact analysis of the EIR must be revised to reflect the inconsistencies stated above. Further, this section of the EIR again erroneously states that "the operational noise from onsite activities at Specific Plan buildout at the closest sensitive receptor would be 28.6 dBA Lmax, which is less than the noise standards and the existing ambient noise in the Project vicinity." This information is misleading to the public and decision makers, requiring the EIR to be substantially revised and recirculated in order to comply with CEQA's requirements for meaningful disclosure.

3.13 Transportation/Traffic

It must be noted that the Traffic Analysis does not provide any information or analysis regarding the potentially significant impacts associated with the proposed off-site re-alignment of Eucalyptus Avenue. The EIR must be revised to accurately analyze this improvement as part of the Traffic modeling and include it for review in the cumulative impacts analysis.

O1-25

Conclusion

For the foregoing reasons, GSEJA believes the EIR is flawed and an amended EIR must be prepared for the proposed project and recirculated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

Sincerely,

Board of Directors
Golden State Environmental Justice Alliance

RESPONSE TO LETTER O1: GOLDEN STATE ENVIRONMENTAL JUSTICE ALLIANCE, DATED APRIL 27, 2018.

Introduction: Letter O1 contains a lengthy introduction that does not provide specific comments about the EIR, and, therefore, does not require further response. (CEQA Guidelines § 15088(c); *Flanders Found. v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.)

Response O1-1: Construction emissions associated with off-site infrastructure improvements may occur; however, at this time, a specific schedule of off-site utility and infrastructure improvements is unknown. Therefore, a determination of related impacts is too speculative, and not required to be included in the EIR. (CEQA Guidelines § 15145; *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1993) 6 Cal.4th 1112, 1137; *Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1370; *Alliance of Small Emitters/Metals Indus. v. S. Coast Air Quality Mgmt. Dist.* (1997) 60 Cal.App.4th 55, 66.)

Nevertheless, the Road Construction Emissions Model (RCEM) developed by Sacramento Metropolitan Air Quality Management District (SMAQMD) and recommended for use by South Coast Air Quality Management District (SCAQMD) has been used to estimate potential emissions from the realignment. Assuming that the realignment would occur over an approximate three-month duration, with a project length of approximately 0.5 miles, a total project area of approximately 2.4 acres, and a daily maximum disturbed area of 0.25 acres, the off-site infrastructure activity would result in the following emissions:

Daily Emission Estimates for ->				Total	Exhaust	Fugitive Dust	Total	Exhaust	Fugitive Dust
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM 10 (lbs/day)	PM 10 (lbs/day)	PM 10 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)	PM2.5 (lbs/day)
Grubbing/Land Clearing	0.64	13.41	2.14	2.62	0.12	2.50	0.61	0.09	0.52
Grading/Excavation	2.95	56.72	6.75	2.90	0.40	2.50	0.84	0.32	0.52
Drainage/Utilities/Sub-Grade	1.63	34.29	4.40	2.76	0.26	2.50	0.73	0.21	0.52
Paving	0.83	19.53	2.51	0.15	0.15	0.00	0.11	0.11	0.00
Maximum (pounds/day)	2.95	56.72	6.75	2.90	0.40	2.50	0.84	0.32	0.52
Total (tons/construction project)	0.07	1.35	0.16	0.08	0.01	0.07	0.02	0.01	0.01

As shown, construction emissions associated with off-site infrastructure improvements are negligible and would not exceed any of the applicable thresholds. Even if these emissions are added to the peak daily emissions in the Draft EIR, there would be no new significant impacts and no change to the findings and conclusions of the Draft EIR. As such, no further analysis is warranted.

Response O1-2: This is a statement summarizing the model used in the Draft EIR, and does not provide specific comments about the EIR. Therefore, no further response is required or provided. (CEQA Guidelines § 15088(c); *Flanders Found. v. City of Carmel-by-the-Sea* (2012) 202 Cal.App.4th 603, 615; *Rural Landowners Ass'n v. City Council* (1983) 143 Cal.App.3d 1013, 1020.)

Response O1-3: This comment including conclusory statements and claims there are errors in the modeling that are discussed in subsequent comments. Responses to these specific environmental concerns are addressed below.

The role of the lead agency is to determine the methodology for assessing impacts, not third parties. Court cases affirm and defer to a public agency's chosen methodology. (*Citizens for Responsible Equitable Envtl. Dev. v. City of Chula Vista* (2011) 197 Cal.App.4th 327, 335-6 [court upheld City's significance threshold despite opponent's claim that the project exceeded three well-recognized significance thresholds the City should have used because CEQA Guidelines § 15064(b) provides that "[t]he determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data").] Pursuant to CEQA, a lead agency may adopt the environmental conclusions reached by the experts that prepared the EIR even though others may disagree with the underlying data, analysis, or conclusions. (*Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 408; *State Water Res. Control Bd. Cases* (2006) 136 Cal.App.4th 674, 795.) Discrepancies in results arising from different methods for assessing environmental

issues do not undermine the validity of the analysis as long as a reasonable explanation supporting the EIR's analysis is provided. (*Planning & Conserv. League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, 243.)

CEQA also calls for an adequate, good faith analysis by the lead agency, not an analysis that is exhaustive or perfect in the eyes of every person commenting on an EIR. (CEQA Guidelines § 15151; *City of Long Beach v. Los Angeles Unified Sch. Dist.* (2009) 176 Cal.App.4th 889, 898; *Ass'n of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, 1390; *Dry Creek Citizens Coal. V. County of Tulare* (1999) 70 Cal.App.4th 20, 26. *Planning & Conserv. League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, 242; *Sierra Club v. City of Orange* (2008) 163 Cal.App.4th 523, 544; *Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1265; *Chaparral Greens v. City of Chula Vista* (1996) 50 Cal.App.4th 1134, 1145; *Found. for San Francisco's Architectural Heritage v. City & County of San Francisco* (1980) 106 Cal.App.3d 893, 910.) As one court noted, "it is doubtful that any agency, however objective, however sincere, however well-staffed, and however well-financed, could come up with a perfect environmental impact statement in connection with any major project." (*Residents Ad Hoc Stadium Comm. v. Bd. of Trustees* (1979) 89 Cal.App.3d 274, 285.) Many of the comments in Letter O1 merely assert different assumptions or order the City to perform additional analysis they believe is more precise, rather than explain why the City's analysis is not an adequate, good faith analysis.

Moreover, an EIR's impact analysis may be based on informed judgments by experts, including the consultants who prepare the EIR and make reasonable estimates and assumptions in the analysis. (*Saltonstall v. City of Sacramento* (2015) 234 Cal.App.4th 549, 583 [lead agency entitled to rely on traffic methodology and conclusions in EIR traffic study]; *Banning Ranch Conserv. v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233 [biologist's opinion supported determination that no significant impact on habitat would result].) The fact that the commenter may disagree with the consultants who prepared the EIR does not mean the work performed by the EIR's consultants fails to constitute substantial evidence.

Response O1-4: The commenter is incorrect in the assertion that refrigerated uses were not evaluated. The pages cited by the commenter are focused on construction impacts, not operational impacts. The increased impacts associated with refrigerated uses noted by the commenter occur only during operations. The appendices of the Air Quality report demonstrate refrigerated uses were in fact modeled appropriately (See Air Quality Assessment [AQA], pg. 93.) The trip generation rates used in the AQA are based on the Project's traffic study, which uses a conservative estimate of trips. Operational emissions runs for the Project correctly include refrigerated uses as shown in the excerpt below:

CalEEMod Version: CalEEMod.2016.3.1 Page 1 of 1 Date: 11/6/2017 4:05 PM

WOCC-Phase 1 Opening Year w/Refrig-Operation Only - South Coast AQMD Air District, Winter

WOCC-Phase 1 Opening Year w/Refrig-Operation Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	100.00	1000sqft	2.30	100,000.00	0
Unrefrigerated Warehouse-No Rail	2,115.60	1000sqft	66.60	2,115,600.00	0
Parking Lot	1,963.50	1000sqft	45.08	1,963,500.00	0

Response O1-5: Since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent, the construction schedule utilized in the analysis represents a "worst-case" analysis scenario should construction occur any time after the respective dates. As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2016.3.2,

Section 4.3 "OFFROAD Equipment", as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements. As such, the AQA and Draft EIR purposely took a conservative approach and likely overstate potential impacts rather than understate impacts as is suggested by the commenter.

Response O1-6: While the commenter is correct that construction activities are permitted to occur up to eleven (11) hours per day pursuant to City's zoning code, the identified construction equipment would not be used during every hour of the day. Rather, the AQA, consistent with industry standards and typical construction practices, assumes that each piece of equipment listed in AQA would operate up to a total of eight (8) hours per day, or approximately two-thirds (2/3) of the period during which construction activities are allowed pursuant to the zoning code. CEQA does not require common industry standards and practice, like hours of construction equipment operation, to be included as a mitigation measure.

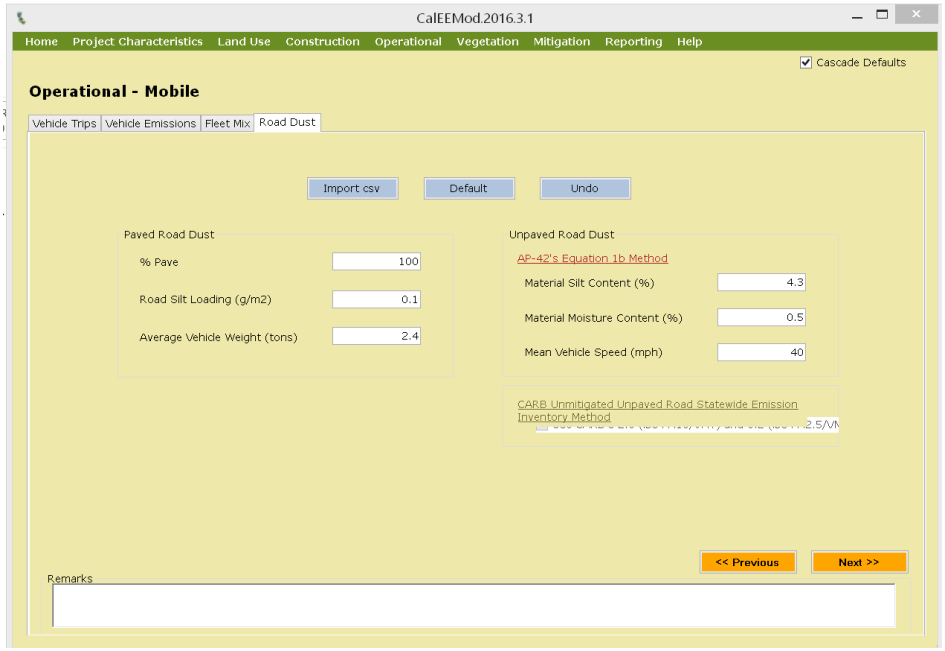
For example, during grading operations water trucks would not operate continuously over an 11-hour period but would instead be used as necessary to minimize fugitive dust. In fact, most pieces of equipment likely would operate for fewer hours per day than indicated in Draft EIR. With respect to weekends, the South Coast Air Quality Management District (SCAQMD) thresholds of significance are based on daily emissions; thus, air quality effects during weekends would be the same as during the normal work week. Accordingly, the City finds that the assumptions used in the Project's AQA and the Draft EIR properly disclose a reasonable, and likely overstated, evaluation of the Project's potential impacts related to air quality emissions;. No revision to the AQA or Draft EIR is warranted.

Response O1-7: The commenter incorrectly insinuates that the construction emissions would somehow limit construction vehicles on unpaved roads during construction activity. The specific reference that the commenter points to is a known deficiency in CalEEMod, which inappropriately reports that a change to the "mitigation screen" has been made, when in fact, no change has been made. The electronic modeling files for the Project have been made available and corroborate that no reductions for this have been taken. For reference, the following is a screenshot (Figure 1) from the CalEEMod input screen for the Project, which clearly shows that the unpaved road mitigation option IS NOT selected or enabled.

Figure 1

Furthermore, the comment about vehicle miles per hour on unpaved roads is not correct and no changes were made to the default modeling parameters in this regard. Specifically, the operational mobile emissions calculation screen, shown on Figure 2, clearly shows that the mean vehicle speed of forty (40) miles per hour (mph) which is a default value is unchanged in the analysis.

Figure 2



As such, the Draft EIR and underlying technical air quality emissions calculations are correct and do not inappropriately take credit for mitigation or change default values that would inappropriately reduce project emissions from construction.

Response O1-8: Tier 4 construction equipment was not required in order to reduce the Project's construction impacts to less than significant levels. The Draft EIR and underlying AQA do not report emission values taking credit for Tier 4 construction equipment as such no further changes are necessary.

Response O1- 9: It appears the commenter has incorrectly interpreted the technical appendix related to Air Quality in the Draft EIR. The AQA pages cited by the commenter include all land use inputs, including other asphalt surfaces *and* parking lots. The parking lot inputs includes numerous surfaces that will be asphalt. As shown below, separate model runs were conducted for all land uses, including business park, as follows:

WOCC-Phase 2 2023 Year-Operation Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	555.05	1000sqft	12.74	555,050.00	0
Parking Lot	2,404.00	Space	10.26	961,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
Land Use - Acreage assigned to Business Park
Construction Phase - Construction data is just placeholder. See other runs for construction emissions.
Off-road Equipment -
Vehicle Trips - Trip generation based on traffic study.
Area Coating -
Fleet Mix - Fleet mix adjusted to match traffic study.
Vehicle Emission Factors -
Vehicle Emission Factors -
Vehicle Emission Factors -

Furthermore, with respect to other asphalt surfaces, this land use category does not affect the operational emissions calculations. As previously stated, all of the Projects land uses were appropriately modeled as shown in the technical appendix.

Response O1-10: See Response to Comment O1-4 and O1-9 above.

Response O1-11: See Response to Comment O1-3 above as it relates to deference due to a lead agency's methodology decisions.

The comment asserts that because truck splits from the Fontana *Truck Trip Generation Study* were used to forecast truck percentages, the overall trip generation of the Project, as well as trucks generated by the Project, have been underestimated and, therefore, traffic and air quality impacts are underestimated as well. According to the SCAQMD, 2,350,005 square feet of the Project would be considered High Cube Warehouse. The trip generation for this portion of the project was calculated using the trip rates for Warehouse, which are significantly higher than the trip rates for High Cube Warehouse. If the trip generation had been calculated using the High Cube Warehouse trip rates, the warehouse portion of the Project would generate 3,290 total daily, 188 total AM peak hour and 235 total PM peak hour trips (without consideration of passenger car equivalent [PCE]). When the high-cube trip generation is adjusted to account for forty percent (40%) trucks, the PCE trip generation would be 5,346 daily, 305 PM peak hour and 382 PM peak hour PCE trips. The warehouse trip rates, along with twenty percent (20%) factor, utilized in the TIA resulted in a PCE trip generation of 10,215 daily, 722 AM peak hour and 668 PM peak hour PCE trips, which is approximately double the trips that would be generated if the Project was analyzed as a High Cube Warehouse. The increased trips resulting from use of a very conservative trip rate would more than account for the minor increase in trucks that would result from increasing the truck split to forty percent (40%),

as requested by the commenter. Therefore, the traffic and air quality analyses provide an overly conservative analysis of overall trips and truck trip generation for a High Cube Warehouse and no modification of the analysis is required.

Response O1-12: See Response to Comment O1-4, O1-5, and O1-8.

Response O1-13: Page 12 of the AQA clearly states that there would be no overlap between construction phases. With respect to overlap of construction and operational phases it should be noted that SCAQMD does not have different thresholds for overlapping construction and operational activities. Rather, SCAQMD evaluates these activities and their significance independently, which is why there are separate thresholds for construction and operations.

Response O1-14: An agency may reject mitigation measures if it finds them to be "infeasible." (Pub. Res. Code § 21081(a)(3); CEQA Guideline s §15091(c)(3).) "Feasible" is defined as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, technological, and legal factors. (Pub. Res. Code § 21061.1; CEQA Guidelines § 15364.) The statute also provides that "other considerations" may provide the basis for an infeasibility finding. (Pub. Res. Code § 21081(a)(3); CEQA Guidelines §15091(a)(3); Cal. Native Plant Soc'y v. City of Santa Cruz (2009) 177 Cal.App.4th 957, 1002; No Slo Transit, Inc. v. City of Long Beach (1987) 197 Cal.App.3d 241, 257 [consideration of feasibility of mitigation measures may be based on various factors, including practicality].) To determine whether a mitigation measure or alternative is infeasible, as that term is used in CEQA and the CEQA Guidelines, an agency must necessarily weigh and balance its pros and cons taking account of a broad range of factors. (Pub. Res. Code §§ 21061.1, 21081(a)(3); CEQA Guidelines §§ 15091(a)(3), 15364.) After weighing these factors, an agency may conclude that a mitigation measure is impractical or undesirable from a policy standpoint and reject it as infeasible on that ground.

Mitigation measure MM AQ-2 from the Draft EIR implements all feasible mitigation that will be required. No feasible mitigation beyond what is proposed in MM AQ-2 exists because the majority of NOx emissions would occur from trucks accessing the Project and no feasible mitigation beyond what is identified in MM AQ-2 would substantively reduce the impacts.

Response O1-15: A health risk assessment (HRA) analyzing the Project's construction emissions of diesel particulate matter is not warranted. The primary purpose of an HRA is to determine long-term health risks, such as cancer risks over, for example, a 30-year residency or 70-year lifetime. As discussed in the Draft EIR, construction of the Project would cease upon completion of each respective phase and not last 30-years. Exposure of such duration would not create long-term health effects to adjacent receptors. Additionally, the City follows SCAQMD guidance for air quality analysis. SCAQMD's HRA procedures recommend evaluating risk from extended exposures measured across several years and not for short term construction exposures or for infrequent operational exposure to diesel truck deliveries or trash hauling.

SCAQMD uses HRAs for compliance with AB 2588, SCAQMD Rule 1401 and Rule 1402, which regulate facility emissions. SCAQMD's Procedures for Rules 1401 and 212 includes guidance for short-term project HRAs (Tier 2 analysis); however, these recommendations are for emissions from such sources as portable equipment, like generators, or air pollution control equipment used for soil remediation projects, not for short-term construction projects. SCAQMD has also adopted guidance on the use of HRAs for analyzing mobile source emissions. However, this guidance refers to emissions associated with facilities such as truck stops and distribution centers that attract large volumes of daily heavy-duty diesel truck trips, creating a long-term emission source. Therefore, the HRA guidance for mobile source emissions is not relevant for the project's short-term construction activities.

Notwithstanding, the Draft EIR does include a HRA for operational emissions associated with heavy-duty diesel trucks accessing the Project Site, contained as DEIR *Technical Appendix* C. Results of the HRA

demonstrate that impacts are less than significant, as identified in the Draft EIR. No further evaluation is necessary.

Response O1-16: The Air Toxics "Hot Spots" Information and Assessment Act requires stationary sources (facilities) to report the type and quantity of substances they routinely release into the air. The regulation requires that toxic air emissions from facilities be quantified and compiled into an inventory according to criteria and guidelines developed by California Air Resources Board (CARB), that each facility be prioritized to determine whether a risk assessment is conducted, that risk assessments be conducted according to methods developed by the Office of Environmental Health Hazard Assessment (OEHHA) and that the public be notified of significant risks. OEHHA clarifies its risk assessment's applicability by stating that "roadways are not part of the Hot Spots program because the program only addresses stationary sources."

Neither SCAQMD nor any other air agency in the Southern California region has adopted guidance on the applicability/use of Age Sensitivity Factors (ASFs) under CEQA.

At the June 5, 2015 SCAQMD Board Meeting, SCAQMD adopted the 2015 OEHHA guidelines for use in their permitting process. Notwithstanding, SCAQMD acknowledged in their response to comments received on the revised permitting rules that:

> "The Proposed Amended Rules are separate from the CEQA significance thresholds. The SCAQMD staff is currently evaluating how to implement the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will evaluate a variety of options on how to evaluate health risks under the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will conduct public workshops to gather input before bringing recommendations to the Governing Board. In the interim, staff will continue to use the previous guidelines for CEQA determinations."

Further at a June 18, 2015 Association of Environmental Professionals Meeting, SCAQMD staff (Ms. Jillian Wong, Ph.D.) stated that any new guidance regarding ASFs under CEQA for projects where SCAQMD is not the lead agency, will not be adopted until there is completion of a public process. At this time, no such process has commenced and no formal guidance has been adopted.

Lastly, as previously noted, SCAQMD is in the process of evaluating how the Revised OEHHA Guidelines will be applied to CEQA projects under their jurisdiction and currently recommends continued use of previous guidelines for CEQA determinations. In the rulemaking activity for the 2015 OEHHA guidelines as they apply to permitting projects, SCAQMD also recommends use of the previous version of the OEHHA guidelines for spray booths and retail gasoline stations.

Similarly, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has adopted a new significance threshold in conjunction with the 2015 OEHHA guidelines. More specifically, in recognition of the impact that the 2015 OEHHA guidelines would have on CEQA, SJVAPCD has adopted a new maximally exposed individual risk numeric significance threshold of twenty (20) in 1,000,000, which is two (2) times the prior SJVAPCD threshold of ten (10) in 1,000,000. It should be noted that the SJVAPCD's adoption of the 2015 OEHHA guidelines for CEQA was part of a public process.

Given that there is no available guidance that has been adopted by SCAQMD for CEQA purposes and the fact that the Project does not emit any pollutants that elicit a primary mutagenic mode of action, the use of the 2015 OEHHA guidelines would not be appropriate and therefore was not undertaken in the Draft EIR.

Response O1-17: Please see Response to Comment O1-3 related to deference due to a lead agency's methodology assessment. See also Response to Comment O1-15.

The commenter's modeling assumptions are incorrect and flawed. First, the commenter inappropriately averages the DPM from construction-related activity over a 24-hour period. Actual construction activities will not occur twenty-four (24) hours per day during any phase of construction. Second, the commenter uses a screening dispersion model in lieu of a more appropriate and refined dispersion model (discussed further below).

It is the City's expert opinion that such screening health risk from construction activity is not warranted due to the relative short-term duration of exposure.

The commenter used the AERSCREEN model to perform a screening health risk calculation for construction activities and operational activities, which is not the appropriate modeling tool that should have been used if a HRA was warranted. Unlike AERSCREEN, CAL3QHC estimates the air quality impacts of single or multiple sources using actual meteorological conditions and, therefore, provides more precise results than AERSCREEN. It should be noted that the Draft EIR appropriately utilized the CAL3QHC dispersion model in the HRA for operational activities and appropriately does not evaluate construction-related health risks as they would not occur.

Response O1-18: An EIR must propose mitigation measures that will minimize the project's significant impacts by reducing or avoiding them. (Pub. Res. Code §§ 21002, 21100.) Deference is due to an agency's assessment of the effectiveness of the mitigation measures proposed in an EIR. (*Sacramento Old City Ass'n v. City Council* (1991) 229 Cal.App.3d 1011, 1027 *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 407 [reviewing courts do not weigh conflicting evidence on effectiveness of mitigation; EIR's conclusion that adverse impacts of relocated biomedical laboratory would be mitigated was supported by evidence in record and inferences from it]; *Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 526; *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233 [courts do not weigh expert evidence on effectiveness of mitigation measures; city was not required to acquiesce to mitigation measures for habitat impacts proposed by regulatory agency].)

This commenter recommends several mitigation measures related to the Project's construction activity. As identified in the Draft EIR and AQA the only construction-related impact that would occur is with respect to ROG emissions during painting. The Draft EIR includes a mitigation measure to reduce these impacts to less than significant (MM AQ-1). As shown on page 25 of the AQA, and discussed in Section 3.3.5 of the EIR, with implementation of MM AQ-1, ROG impacts would be reduced to less than significant levels. As such, none of the mitigation measures recommended by the commenter are required since there would be no nexus to require mitigation.

Response O1-19: See Response to Comment O1-14.

The number of daily truck trips has been reasonably estimated based on data from the Institute of Transportation Engineers (ITE) as discussed in the HRA and AQA. Imposing a cap on daily trucks at the facility will not "avoid or substantially" lessen the estimated emissions because limiting daily truck visits could result in the unintended adverse effect of trucks idling and queuing outside of the facility until the following day if the facility's limit is reached on a given day. This would result in increased emissions, and potentially added traffic congestion around the facility. Therefore, this would not mitigate estimated emissions. Further, changing the location of where trucks are queuing would not result in a noticeable change in emission. Furthermore, MM AQ-2 already includes provisions to limit idling and to require all fleets to conform to 2010 or better engine standards.

Response O1-20: See Response to Comment O1-14 and Response to Comment O1-18.

Additionally, none of the recommended measures here would substantively reduce emissions associated with project operations since the majority of emissions are from the trucks accessing the Project Site. The measures proposed by the commenter only apply to non-truck emissions, which represent a negligible amount of

emissions when compared to the total. As such, implementation of these measures would have no substantive reduction in emissions and are therefore rejected.

Response O1-21: The commenter takes issue with the Draft EIR's analysis of greenhouse gas (GHG) emissions and the conclusion that compliance with the City's Climate Action Plan (CAP) reduces impacts to a less than significant level. The California Supreme Court has expressly stated that compliance with the reduction measures of an adopted CAP is a reasonable basis upon which to conclude that GHG impacts are less than significant. (*Ctr. for Biological Diversity v. Cal. Dept. of Fish and Wildlife* (2015) 62 Cal.4th 204; CEQA Guidelines § 15183.5(b)(1) [.) Thus, the Draft EIR's conclusion that compliance with the City's CAP would reduce Project impacts to a less than significant level is reasonable and complies with CEQA. Furthermore, the Project will be required to achieve 100 points pursuant to the City's CAP as a condition of approval, the ultimate implementation measures may vary at the time of physical building construction due to changes in technology and availability of materials. As such, the City will be required to review the individual measures that satisfy the City's CAP prior to building occupancy.

Consistency with SB 32

Senate Bill 32 (SB 32) requires the state to reduce statewide GHG emissions to forty percent (40%) below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal of 1990 levels by 2020 and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of eighty percent (80%) below 1990 levels by 2050.

According to research conducted by the Lawrence Berkeley National Laboratory and supported by the CARB, California, under its existing and proposed GHG reduction policies, is on track to meet the 2020 reduction targets under AB 32 and could achieve the 2030 goals under SB 32.

The Project reduces its GHG emissions to the maximum extent feasible as discussed in this document. Additionally, the Applicant would not actively interfere with any future City-mandated, state-mandated, or federally-mandated retrofit obligations enacted or promulgated to legally require development City-wide, state-wide, or nation-wide to assist in meeting state-adopted GHG emissions reduction targets, including that established under Executive Order S-3-05, Executive Order B-30-15, or SB 32.

The Project does not interfere with the state's implementation of (i) Executive Order B-30-15 and SB 32's target of reducing statewide GHG emissions to forty percent (40%) below 1990 levels by 2030 or (ii) Executive Order S-3-05's target of reducing statewide GHG emissions to eighty percent (80%) below 1990 levels by 2050 because it does not interfere with the state's implementation of GHG reduction plans described in the CARB's Updated Scoping Plan, including the state providing for 12,000 megawatts (MW) of renewable distributed generation by 2020, the California Building Commission mandating net zero energy homes in the building code after 2020, or existing building retrofits under AB 758. Therefore, the Project's impacts on GHG emissions in the 2030 and 2050 horizon years are less than significant.

Response O1-22: As stated in the WOCC Specific Plan (page 2-1), the Project Site is within Safety Zone 6 of the Chino Airport Overlay (Generic Safety Zones for General Aviation Airports from the Caltrans Division of Aeronautics – California Airport Land Use Planning Handbook). The Specific Plan was available to the public for review with the Draft EIR.

As stated on page 3.8-14 of the EIR, the Compatibility Zone D area airspace review is only required for objects and structures that are taller than seventy (70) feet in height. Architectural projections approved at 68.75 feet are below the 70-foot threshold. The reference to sixty-five (65) feet in the EIR has been corrected as follows: "This is pursuant to the 2008 Riverside County Airport Land Use Compatibility Plan (ALUCP), which provides guidance for development around the airport, including the Specific Plan area. The

ALUCP provides guidance for measuring heights of buildings, which would be confirmed by the City during the building permit process."

In addition, the proposed Specific Plan would allow for a maximum building height of fifty-five (55) feet for main structures, and up to 68.75 feet for architectural projections and focal elements.

Response O1-23: Deference is owed the public agency when making land use plan consistency determinations. As one court noted, "[o]nce a General Plan is in place, it is the province of elected city officials to examine the specifics of a proposed project to determine whether it would be 'in harmony' with the policies started in the plan. It is emphatically not the role of the courts to micromanage these development decisions." (*Sequoyah Hills Homeowners Ass'n v. City of Oakland* (1993) Cal.App.4th 704, 719.) Indeed, in that case the project was found to be inconsistent with three (3) of seventeen (17) policies yet still overall consistent with the General Plan. (*Id.*) This is because, the law does not require there to be an "exact match" between a project and a particular land use policy. (*Id.*) Courts understand that "because policies in a general plan reflect a range of competing interests, the governmental agency must be allowed to weigh and balance plan policies when applying them, and it has broad discretion to construe its policies in light of the plan's purposes." (*Save Our Peninsula Comm. v. Monterey County Bd. Of Supervisors* (2001) 87 Cal.App.4th 99, 142.) Here, the City has determined the Project will be consistent with land use plans.

To implement the Project, the proposed General Plan Amendment (GPA) and Zone Change would need to be approved first. Therefore, the City Council would need to make a determination on the GPA and Zone Change before approving the Specific Plan, Development Plan and other project entitlements. There is no scenario in which the Project would be implemented under the current General Plan land use designation and zoning, which would create the conflict referenced in the comment. Therefore, no further analysis is required. The City is not required to develop the alternative that does not require a GPA or Zone Change if it does not fully satisfy project objectives, which is supported by substantial evidence in the record. (*San Diego Citizenry Group v. County of San Diego* (2013) 219 Cal.App.4th 1, 18; *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 947; *Cal. Native Plant Soc'y v City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1002; *Sierra Club v County of Napa* (2004) 121 Cal.App.4th 1490, 1503.)

A change to the land use is not required to allow for the proposed alignment of Eucalyptus Avenue; therefore, the EIR has been modified as follows. As shown in Figure 01-1, the TOP currently identifies the area of the proposed Eucalyptus Avenue alignment as Business Park, which is the same as the northern areas of the WOCC Project Site. The Parkside Specific Plan has been prepared pursuant to this land use and with consideration for the future alignment of the Eucalyptus Avenue. The Parkside Specific Plan also considers modifications to road alignments conceptually planned in the Specific Plan as more detailed construction design plans are implemented. Therefore, no further analysis is required.

> Pages 2-18 and 3.10-4:
> In order to implement the Specific Plan land use plan shown in Figure 2-12 and Table 2-2, the Project includes a General Plan Amendment and Zone Change to: 1) decrease the designated Business Park area by 40-acres to a total of 21.09-acres; 2) increase the designated Industrial land use by 40-acres to a total of 98.09-acres~~; and 3) change the designation of approximately 2.49-gross acres (1.41-net acres) within the Parkside Specific Plan north of the Project from the Parkside Specific Plan to Business Park to utilize the area for the realignment of Eucalyptus Avenue~~.
>
> Page 3.10-5:
> **Consistent.** The Project includes a General Plan Amendment and Zone Change to decrease the designated Business Park area by 40-acres and increase the designated Industrial land use by 40-acres~~; and change the land use designation of 2.49-gross acres within the Parkside Specific Plan from residential use to Business Park to allow for the realignment of Eucalyptus Avenue~~.

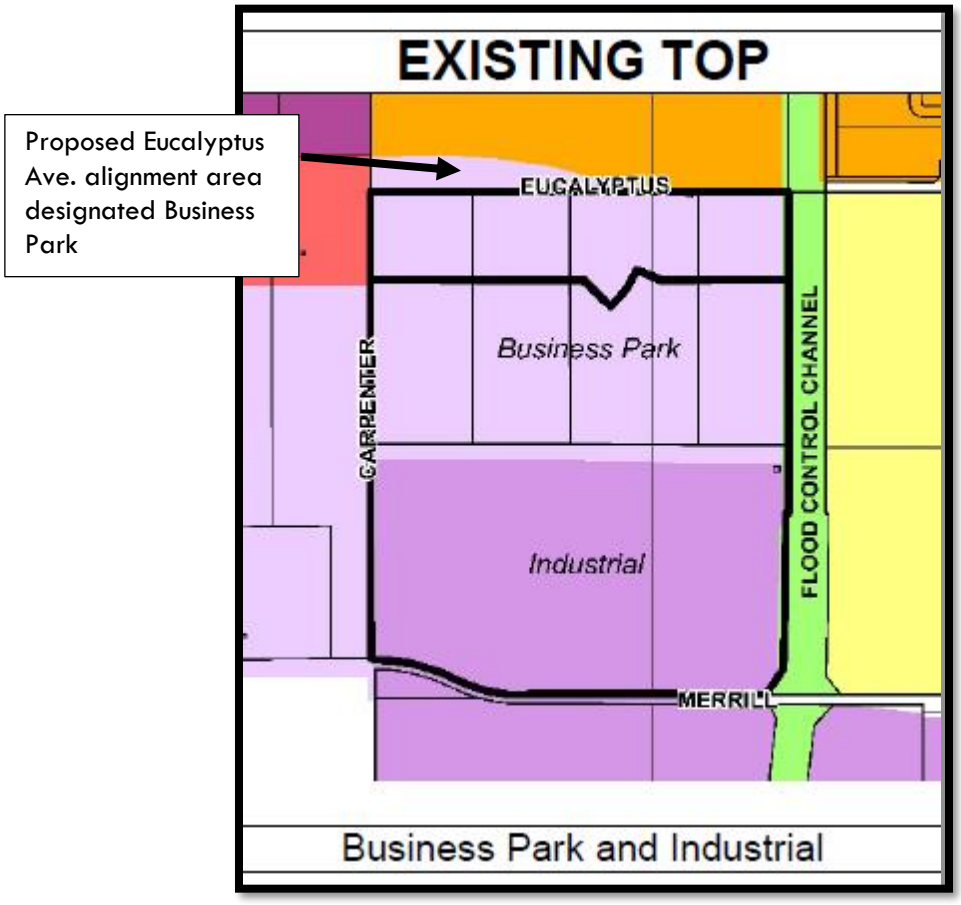


Figure 01- 1 Existing TOP Land Use

Response O1-24: See Response to Comment O1-3 related to deference due to a lead agency chosen methodology. Contrary to the commenter's statement, the Noise Analysis prepared by Greve & Associates, LLC addresses construction noise levels at 100 feet (see page 19), future truck noise levels (project build out and in 2040) nearest the project site (see pages 21 – 28) and operational noise levels based on a representative case study project at 30 feet from operations at their peak noise levels (see pages 29- 30). The Noise Analysis correctly identifies the worst-case noise levels that could be experienced at the nearest sensitive receptor.

Response 1-25: The proposed off-site realignment of Eucalyptus Avenue does not propose any modifications that would affect the ultimate capacity or operations of the roadway. The realignment is intended to reduce the curve radius adjacent to the Project and would, therefore, improve operations and safety of the roadway. Including the realignment in the traffic modeling would not affect the future traffic volume development or results of the traffic analysis.

LETTER O2: WITTWER PARKIN, LLP ON BEHALF OF SOUTHWEST REGIONAL COUNCIL OF CARPENTERS, DATED APRIL 30, 2018 (30 PAGES)

wittwer / parkin

April 30, 2018

VIA EMAIL

Mr. Richard Ayala
Senior Planner
City of Ontario
303 East B Street
Ontario, CA 91764
RAyala@ontarioca.gov

Re: West Ontario Commerce Center Specific Plan Project DEIR (State Clearinghouse No. 2017041074)

Dear Mr. Ayala:

This law firm represents the Southwest Regional Council of Carpenters (Southwest Carpenters) and submits this letter on the above-referenced project on its behalf.

Southwest Carpenters represents 50,000 union carpenters in six states, including in Southern California, and has a strong interest in addressing the environmental impacts of development projects such as the West Ontario Commerce Center Specific Plan Project (Project). The City of Ontario (City) released a Draft Environmental Impact Report (DEIR) detailing the impacts of the Project in March 2018.

The proposed Project consists of two planning areas, totaling 120 acres. The Project would permit development of 2,905,510 square feet, including (1) 555,505 square feet of Business Park space, and (2) 2,350,005 square feet of Industrial space. In addition, the Project will involve the following approvals: O2-1

- Adoption of the West Ontario Center Specific Plan;
- General Plan Amendment;
- Zone Change;
- Development Agreement;
- Development Plans; and
- Tentative Parcel/Tract Map

Below, we present our comments to specific aspects of the DEIR.

WITTWER PARKIN LLP / 147 S. RIVER ST., STE. 221 / SANTA CRUZ, CA / 95060 / 831.429.4055

WWW.WITTWERPARKIN.COM / LAWOFFICE@WITTWERPARKIN.COM

Greenhouse Gases

The City determined, "[s]ince no significant greenhouse gas emission impacts have been identified, no mitigation measures are required." Yet, the Greenhouse Gas section of the DEIR states the Project would emit over 20,000 metric tons of CO_2-equivalent ($MTCO_2e$) of greenhouse gases annually, 17,000 $MTCO_2e$ over the City's threshold of significance for greenhouse gases. The City does not quantify the proposed mitigation, but it is highly unlikely to reduce Project-related impacts to less than significant by the City's own standards.

The City has determined that "projects with emissions that exceed 3,000 MT CO2EQ can demonstrate compliance with Title 24 by implementing measures from the Screening Tables presented in Appendix B of the CCAP. Per Appendix B of the CCAP, a proposed project would not result in a significant individual or cumulative impact if it implements 100 points worth of GHG reduction measures."

The City cannot ignore the quantitative significance thresholds it has set. CEQA Guidelines define a threshold of significance as "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant." 14 Cal. Code Regs. § 15064.7. Unless the Project's impacts are reduced to a level below the City's significance threshold of 3,000 $MTCO_2e$, they will remain significant after mitigation. The City's conclusion that "points," which will result in negligible reductions in the Project's greenhouse gas emissions, could somehow reduce the Project's impacts to less than significant, while still greatly outstripping the City's own significance threshold of 3,000 $MTCO_2e$ runs counter to state standards set for CEQA impacts analysis, including those used by the City throughout the rest of the Project DEIR. It should be noted that, while the City states most of the greenhouse gas emissions will be caused by mobile sources, the City considers no mobile source mitigation measures to reduce these impacts. The City's significance conclusions cannot be supported by substantial evidence.

O2-1 cont.

To provide a meaningful greenhouse gas impacts analysis, please quantify the greenhouse gas emissions reductions proposed for the Project, as reflected in Table 3.7-1. Further, please explain how the Project can be consistent with the City's Community Climate Action Plan, while at the same time running counter the central purpose of this plan. The Project greatly increases local greenhouse gas emissions, in direct conflict with the only real goal of the Climate Action Plan, to reduce "community" greenhouse gas emissions by nearly 1 million $MTCO_2e$ annually. Please discuss how the Project, combined with other nearby projects which will have comparable increases in greenhouse gas emissions, can be found consistent with the goals of the City's Climate Action Plan. In your response to these comments, please specify if the City has

determined whether it is on track to achieve its greenhouse gas reduction goals reflected in its Community Climate Action Plan, and provide information regarding the estimated greenhouse gas emissions from all projects identified in the Table 2.20 of the DEIR. If the City can claim all of these projects individually and cumulatively comply with its Climate Action Plan, while at the same time greatly increasing (as opposed to reducing) the City's total greenhouse gas emissions, then the City's efforts at reducing greenhouse gas emissions, and its Climate Action Plan, are a farce. O2-1 cont.

Air Quality

It is unclear whether the City has concluded the Project's air quality impacts will be significant and unavoidable. In its conclusion regarding air quality impacts, the City seems to provide conflicting analysis:

> While Mitigation Measure AQ-2 is recommended to reduce NOx emissions, no feasible mitigation measure has been identified that would mitigate NOx emissions associated with Impact AQ-2 and AQ-3 to below a level of significance due to the volume of vehicular trips that would result from the Project. Therefore, operational NOx emissions, even with Mitigation Measure AQ-2, would remain significant and unavoidable. AQ-1 would mitigate NOx emissions associated with AQ-1, AQ-2 and AQ-3 to below a level of significance.

O2-2

Please clearly state whether the City has determined whether the Project will have a significant impact on air quality. It should be noted that the rest of the City's air quality analysis suggests the Project's air quality impacts would be significant and unavoidable, even after mitigation.

The City concludes that the Project's "emissions are largely related to vehicular emissions, and neither the applicant nor the City have the ability to reduce emissions from vehicles." Please explain the City's reasoning for arriving at this conclusion. The Project applicant and the City are in a perfect position to reduce emissions from vehicles. Although the City does not have authority to set vehicle emissions standards, it is in a position to regulate the specific conditions of use for the Project, which could include a myriad of measures designed to reduce Project emissions, including:

- Requiring the exclusive use of newer model-year vehicles transportation (the City seems to have required this);
- Reducing daily or yearly vehicle-miles traveled, including by (1) limiting the maximum number of permitted daily Project trips or vehicle-miles traveled, (2) ensuring transportation to and from the Project site is taking the shortest possible routes, and (3) requiring rideshare and mass transit incentives;

- installing several free EV charging stations (the City states the applicant has only committed to installing one);
- Conditioning approval on the installation of solar panels on the roofs of the two main structures, and installation of solar shade parking structures; and
- Requiring the Project applicant to purchase greenhouse gas offsets

The City must adopt all feasible mitigation measures. "CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible . . . A public agency shall not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment." 14 Cal. Code Regs. §§ 15021(a), 15065(c)(3). Please explain why additional mitigation measures, including those listed above, are not feasible, or would otherwise not lessen the significant air quality impacts of the Project. O2-2 cont.

The City's cumulative air quality impacts analysis is deeply flawed. The City states, "[a]ccording to SCAQMD's methodology, if an individual project results in criteria pollutant emissions (ROG, CO, NOx, SOx, PM10, and PM2.5) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the proposed project region is in non-attainment under an applicable federal or state ambient air quality standard." Please provide an exact reference to this supposed SCAQMD methodology to Southwest Carpenters so they can independently review it. Also, in the City's response to these comments, please disclose whether this "SCAQMD methodology" was adopted pursuant to noticed rulemaking, or whether it can in any way be considered an authoritative interpretation of SCAQMD's CEQA guidance. O2-3

The City has taken an illegal approach towards its cumulative impacts analysis for air quality impacts. The City has determined that, so long as the Project-level thresholds are not surpassed, the Project will not have significant cumulative impacts. This approach impermissibly writes the cumulative impacts analysis out of CEQA. CEQA Guidelines define "cumulative impacts" as "two or more individual effects, [which] when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines § 15355. Critically, "Cumulative impacts can result from ***individually minor but collectively significant projects*** taking place over a period of time." *Ibid.* (emphasis added).

The City turns the basic principle and directive of the cumulative impacts analysis on its head by equating the Project's direct impact thresholds to cumulative impact thresholds. As plainly stated in the definition of cumulative impacts, a project-related impact may be individually less than significant but cumulatively significant. CEQA Guidelines § 15355. The City's approach towards its cumulative impacts analysis defeats the purpose of this analysis and must be revised. According to the City's approach, cumulative impacts will never be significant

so long as Project-level impacts are less than significant. This runs directly counter to the definition of cumulative impacts. As stated above, we request that the City provide a legal and factual basis for the City's use of this flawed approach. O2-3 cont.

Agricultural Resources

Ontario and the region surrounding it is in the midst of a severe agricultural crisis, resulting in the loss of thousands of acres of arable land, primarily as a result of policies such as those adopted by the City. Facing the loss of essentially all of its agricultural lands, the City simply shrugs its shoulders and states that nothing can be done about it.

The City seems intent on eradicating the last vestiges of agricultural uses within the City and greater region. Figure 2.20 shows that, within 5 years, it intends to lose over half of its remaining farmland, including most of its prime farmland. The only mitigation the City proposes is to provide notice of nearby agricultural activities, which the city is actively eliminating. As the City is well aware, this mitigation does not even put a dent in the impacts arising from the City's policies designed to phase out these agricultural lands.

It is difficult to understate the significance of the loss of this and nearby farmland. In 2012, the County of San Bernardino reported the total gross value of its agricultural production to be roughly $387 million. By contrast,

> The total production value for the "west end south" County region, which includes the City of Chino Hills and portions of the cities of Ontario and Chino, was estimated at approximately $280 million in 2013, which represents nearly three quarters (72.3%) of the County's total gross value of agricultural production for 2013. The livestock and poultry commodity group, which includes milk, eggs, and chicken, accounted for 88.2% of the production value in the "west end south" County region, and over half (63.7%) of the production value for the County. O2-4

Ontario is the home of the majority of these agricultural lands. The Project site and surrounding lands is the last remaining agricultural pocket in Ontario, and represents a disproportionately high share of the value and productivity of all of the agricultural output of the county. Rather than staunch the bleeding from this loss of farmland, the City is doing its level best to facilitate it. To add insult to injury, the City has proposed the weakest of all possible measures to "mitigate" this irreplaceable, irreversible loss of farmland, including the loss of prime farmland and the cancellation of Williamson Act contracts:

> AG-1 Deed Disclosure - In order to reduce conflicting issues between sensitive receptors and agricultural uses, all property owners in the West Ontario Commerce

> Center Specific Plan shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. . . . . The content and text of the disclosure shall be approved by the City Attorney and shall include language to inform new residents that existing agricultural uses may create nuisances such as flies, odors, dust, night-light, and chemical spraying.

The City, conveniently, has determined all other mitigation to be infeasible because "avoidance (retention of the agricultural uses on the site) is inconsistent with the City's General Plan designations for the area that have been assigned to the properties because agricultural production in the region continues to decline due to economic viability." The City's analysis is a fait accompli: because the City is actively encouraging the conversion of its remaining farmland into more urbanized uses, it states in essence that no other nearby farmland is safe from its chopping block. No farmland can be saved, primarily because the City has made development within its final agricultural corridor so attractive.

It should be noted, however, that countless other urban jurisdictions have successfully saved tens of thousands of acres of farmland by requiring mitigation from developers who wish to develop this land in turn. The primary difference between the City and these other jurisdictions is not the feasibility of mitigation—jurisdictions with some of the highest real estate values, such as Santa Clara County, are actively working to ensure the preservation of their remaining farmland. Rather, the main difference appears to be that the City prioritizes conversion of this land, whereas other jurisdictions encourage its preservation. This is a political preference, not an issue of feasibility, as the City suggests. O2-4 cont.

Notwithstanding the economic viability of nearby agricultural practices, the City seems to ignore the open space benefits of these farmlands. Even absent active use, these lands can, and should, be preserved as wildlife habitat. Once preserved, the land can be leased for subsidized cultivation. Please explain why the City has not considered preserving nearby farmland as open space and wildlife habitat.

Biological Resources

The City does not provide an adequate baseline for biological resources. The baseline for the Project consists of "a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published." 14 Cal. Code Regs. § 15125(a). O2-5

The City states it conducted "incidental" nesting bird surveys during its surveys for burrowing owls. Please describe what was involved in these incidental surveys. It does not appear that the City truly attempted to catalogue or survey on-site nesting activities. The City

further requires the Project applicant to supply the results of bat surveys sometime after Project approval. However, the City is required to disclose whether bat species are present on site as part of its baseline discussion. Excluding this information does not permit interested members of the public to fully understand what species will be impacted by the Project, and in what manner.

Information available from the United States Fish and Wildlife Service suggests the Project site is likely to host a variety of migratory birds and one threatened plant the DEIR does not consider. These species include:

- Thread-leaved brodiaea
- Clark's grebe
- Costa's hummingbird
- Long-billed curlew
- Marbled godwit
- Rufous hummingbird
- Song sparrow
- Whimbrel

O2-5 cont.

The DEIR does not suggest the City ever considered or conducted surveys for these species. Please confirm whether the City has conducted site surveys and other studies to discover the presence of these protected species.

The City's discussion of cumulative impacts to wildlife is deficient. As mentioned previously, CEQA Guidelines define "cumulative impacts" as "two or more individual effects, [which] when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines § 15355. "Cumulative impacts can result from ***individually minor but collectively significant projects*** taking place over a period of time." *Ibid.* (emphasis added).

The City states, "[t]he potential build out of the cumulative projects is approximately 3,795 acres." However, the City reasons that, because the Project will not have any significant *individual* direct impacts after mitigation "the Project will not have any significant cumulative biological impacts after implementation of mitigation." The City, again, equates direct and cumulative Project impacts, despite their fundamental differences. This analytical approach violates CEQA. Further, it defies credibility to conclude the loss of thousands of acres, including over half of the remaining contiguous open space in the region, can have a less than significant impact on wildlife populations. The City's own admitted loss of the majority of this remaining habitat runs directly counter to its claim that impacts are cumulatively less than significant. This conclusion cannot be supported by substantial evidence, as the only evidence the City provides

O2-6

suggests catastrophic cumulative impacts. Please provide further explanation and justification to support the City's contention that species impacts are less than significant. O2-6 cont.

Hazards and Hazardous Materials

While the City seems to believe soils at the Project site have a high probability of being contaminated, it does not appear to have conducted testing to confirm this theory. Instead of requiring this analysis up front and disclosing it as part of its baseline discussion, it permits the applicant to defer discovery of these site conditions until after the Project is approved, or to not discover these site conditions at all.

As mentioned, above, "[a]n EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published." 14 Cal. Code Regs. § 15125(a). In contrast, the City would permit delayed soils testing:

> Prior to approval of grading permits, the project applicant shall hire a qualified environmental consultant to conduct a limited soils investigation to identify the hazards related to the soils near the pumping equipment for the holding ponds on the GH Dairy site . . . . The Soil Management Plan shall include methodology and procedures to perform additional testing during soil disturbance activities if unknown potentially hazardous materials are identified. O2-7

There are multiple concerns with this approach. First, the City seems to ignore the potential contaminants in the soils of row crops. These crops often contain decades' worth of hazardous contaminants. Although more modern pesticides tend not to persist as long in soils, or to contain as many toxic or carcinogenic substances, the same cannot be said of older pesticides. Potentially toxic and carcinogenic remnants of these pesticides likely persist within these agricultural soils. These chemicals may be released into the air or handled during construction and, thus, pose a danger to workers.

Next, the City's approach toward discovering potential site hazards would require the ability to identify potentially hazardous materials on site. When these materials are found in the environment, they are hardly ever labeled, and most tend to provide no warning or indication of their presence. Thus, the City's approach avoids studying whether soils are contaminated at the outset, as required by CEQA, and essentially guarantees no one will do so at a later time.

Further, the City's approach appears to constitute deferred mitigation. "Formulation of mitigation measures should not be deferred until some future time." 14 Cal. Code Regs. § 15126.4(a)(1)(B). The City must formulate binding mitigation measures prior to Project

approval, which should be further informed by any baseline studies the City conducts on the Project site. Absent conducing these studies, the City should proceed under the assumption that all Project soils contain harmful contaminants and require mitigation accordingly.

O2-7 cont.

SW Carpenters takes the health and safety of workers and future users of the Project site seriously. The City should take all possible precautions to ensure a safe work site.

Hydrology and Water Quality

The City concludes "[t]he project will maintain the overall existing drainage pattern of the Site." This conclusion seems odd, in light of the Project's creation of hundreds of thousands of square feet of impervious surfaces, where no impervious surfaces currently exist. Please explain how the Project will maintain the overall drainage pattern, while, at the same time, entirely changing the physical properties of the Project site.

In its discussion of hydrological impacts, as reflected in HYD-1 and HYD-2, the City concludes that no mitigation is necessary. However, at the same time City states that the Project will be adopting a bevvy of measures, which, by all appearances, are aimed at mitigating the impacts of the Project on hydrology and water quality:

> Landscaped areas would also be designed to receive and infiltrate runoff water from impervious surfaces. Use of the underground stormwater retention chambers and landscaping areas would regulate the rate and velocity of stormwater flows and would control the amount of discharge through the proposed drainage system into the County Line Channel. In addition, the drainage facilities proposed, have been sized to adequately accommodate the stormwater flows from the Specific Plan area, and are consistent with the City's Storm Drainage Master Plan.
>
> In addition, the City requires a hydrology study and drainage analysis be prepared by a state registered civil engineer in accordance with the San Bernardino County Hydrology Manual and the City of Ontario's Standards and Guidelines, prior to permitting, to ensure the drainage design would accommodate the Specific Plan development. As a result, implementation of the Specific Plan would not result in alteration of any stream or river, or the potential for on- or off-site flooding and impacts would be less than significant.

O2-8

The City seems to be short circuiting the impacts analysis. The City states Project hydrology and water quality impacts will be less than significant prior to mitigation, but only *after* the Project implements several measures aimed to reduce these impacts. Please discuss whether the Project will have significant impacts on the environment *prior* to the above mitigation, so the public can better understand the true impacts of the Project.

Conclusion

Southwest Carpenters thanks the City for the opportunity to comment on the DEIR and looks forward to commenting on the City's subsequent environmental review documents when these documents are released for public review. Moving forward, please send all future notices relating to the Project to Nicholas Whipps at nwhipps@wittwerparkin.com. Thank you for your consideration of these comments. O2-9

Very truly yours,
WITTWER PARKIN LLP

Nicholas Whipps

Attachment A: USFWS, Information for Planning and Conservation Report
Attachment B: Cornell Waste Management Institute, Sources and Impacts of Contaminants in the Soils

Attachment A

IPaC **U.S. Fish & Wildlife Service**

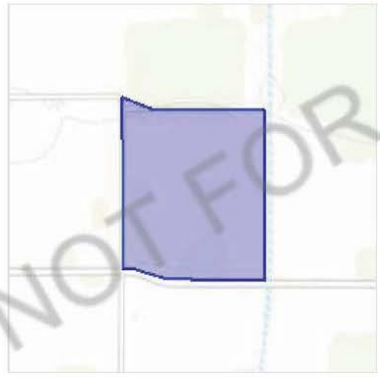
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Bernardino County, California



Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly Rhaphiomidas terminatus abdominalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
San Diego Ambrosia Ambrosia pumila There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8287	Endangered

Santa Ana River Woolly-star Eriastrum densifolium ssp. sanctorum — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6575

Thread-leaved Brodiaea Brodiaea filifolia — Threatened
There is final critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6087

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip:

enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Burrowing Owl Athene cunicularia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the conlinental USA https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the conlinental USA and Alaska.	Breeds Jan 1 to Dec 31
Costa's Hummingbird Calypte costae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the conlinental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the conlinental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the conlinental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the conlinental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in parlicular Bird Conservation Regions (BCRs) in the conlinental USA

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the conlinental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the conlinental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (▦)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that

week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

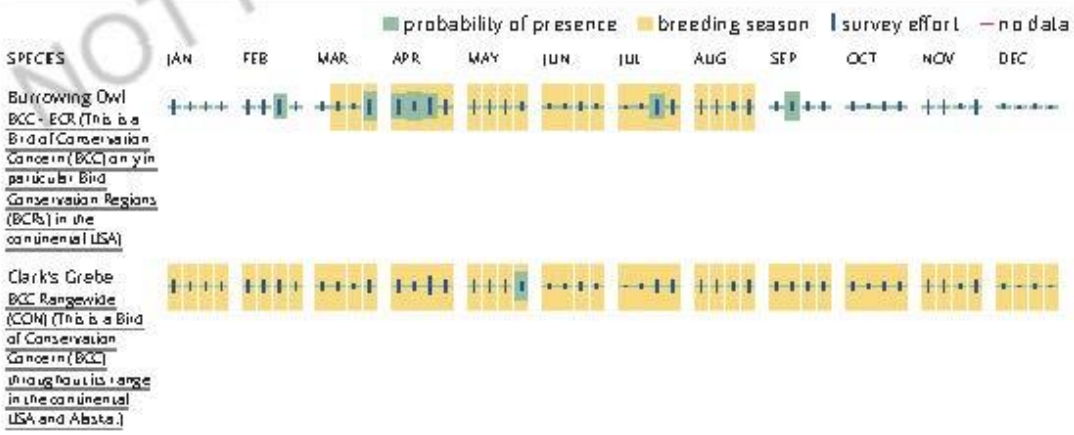
Breeding Season (▮)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

PUBFx
PUSAx
PUSCx

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment B

Cornell Waste Management Institute

Department of Crop & Soil Sciences
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Sources and Impacts of Contaminants in Soils

Soils Overview

Soils are formed by the decomposition of rock and organic matter over many years. Soil properties vary from place to place with differences in bedrock composition, climate, and other factors. At times, the amounts of some soil elements and other substances may exceed levels recommended for the health of humans, animals, or plants. Certain chemical elements occur naturally in soils as components of minerals, yet may be toxic at some concentrations. Other potentially harmful substances may end up in soils through human activities.

In some regions of the United States, naturally occurring concentrations of certain chemicals may be higher than those in other areas. For example, typical levels of arsenic in the soils of some regions of New York State can exceed recommended values. At times this results in groundwater arsenic concentrations above US Environmental Protection Agency (USEPA) limits for drinking water, requiring treatment to ensure a safe water supply. In New York State, the naturally occurring concentrations of potentially toxic elements in soils are otherwise generally not a problem.

Soil properties are affected by past land use, current activities on the site, and nearness to pollution sources. Human activities have intentionally added substances such as pesticides, fertilizers and other amendments to soils. Accidental spills and leaks of chemicals used for commercial or industrial purposes have also been sources of contamination. Some contaminants are moved through the air and deposited as dust or by precipitation.

CWMI Resources for Healthy Soils

http://cwmi.css.cornell.edu/soilquality.htm

- **Sources and Impacts of Contaminants in Soils**
- **Guide to Soil Testing and Interpreting Results**
- **Best Practices for Healthy Gardens**
- **More Information about Arsenic and Lead**

This document provides background information about soil contaminants and their impacts on human health and the environment. It is part of a series of CWMI resources intended to help people who are interested in soil testing, interpreting test results, and best practices for healthy soils.

What Happens to Contaminants in Soils?

Once contaminants are in soils, where they go and how quickly they travel depends on many factors. Some organic (carbon-based) contaminants can undergo chemical changes or degrade into products that may be more or less toxic than the original compound. Note that chemical elements (such as metals) cannot break down, but their characteristics may change so that they can be more or less easily taken up by plants or animals. Different contaminants vary in their tendency to:

- End up in water held in the soil or in the underlying groundwater (by leaching through the soil);
- Volatilize (evaporate) into the air; or
- Bind tightly to the soil.

The characteristics of the soil also affect the fate of contaminants and whether they can be readily taken up by plants or animals. Site management and land use (such as gardening practices) can affect some soil characteristics. Important soil characteristics that may affect the behavior of contaminants include:

- Soil mineralogy and clay content (soil texture);
- pH (acidity) of the soil;
- Amount of organic matter in the soil;
- Moisture levels;
- Temperature; and
- Presence of other chemicals.

Cornell University
College of Agriculture and Life Sciences
Department of Crop and Soil Sciences

Are Contaminants Biologically Available?

The bioavailable portion is the amount of a substance that can cause direct effects on plants, animals or humans because it can be taken up by their bodies. Usually, not all of a contaminant found in soil is biologically available. The bioavailability of a contaminant depends on many characteristics of the soil and of the site. Site conditions affect how tightly the contaminant is held by soil particles and its solubility (how much of it will dissolve in water). Greater solubility usually means that more of the contaminant is bioavailable, but this also means that the contaminant is more likely to leach out of the soil. Certain chemicals show an "aging effect" and can become less bioavailable the longer they remain in soils.

Most commonly available soil tests measure a large part of the total amount of a particular contaminant in the sample, not just the bioavailable portion. The bioavailable portion may be only a small fraction of the total amount. Changes in site conditions, such as soil acidity or organic matter content, can change the bioavailability of a contaminant. There is no easy way to know what portion may be bioavailable. Using bioassay tests to measure uptake of contaminants by plants or soil organisms is the most direct way to estimate bioavailability. Unfortunately, bioassay tests are slow and expensive and are not generally available. For this reason, only the total levels or chemically extractable amounts (commonly used to approximate the total amount) of a particular contaminant are usually measured.

How are Contaminants Distributed in Soils?

The distribution of contaminants released to soils by human activities is related to how and where they are added. For instance, the amount of contaminants in the soils of an industrially-contaminated site may vary depending on the activities conducted on the site. The movement of air and water will also affect how soil contaminants move throughout a site. Chemicals may be carried by winds and deposited on the surface of soils; tilling can then mix these surface deposits into the soil. The movement of groundwater or surface water may also affect how contaminants spread from the source.

Many pesticides and soil amendments used for agricultural, industrial, or commercial activities may be found in residential soils. This could happen if former industrial or agricultural lands are later used for residential properties, and contaminants remain in the soil. Spills, runoff, or aerial deposition of chemicals used for agriculture or industry can also result in contamination of the soils of residential sites.

For example, arsenic and lead were once used as pesticides on a number of crops, including orchards, throughout the United States. Sodium arsenate was also commonly used on potato crops in eastern Long Island. Therefore, old orchards, farms, and adjacent areas are places where testing for arsenic and lead might be advisable. Within an orchard, the distribution of these contaminants may be very spotty since individual trees may have been treated, resulting in higher residues under each tree. Collecting multiple soil samples from such an area would help to determine the pattern of contamination.

What are Some Common Sources of Soil Contaminants?

Due to the wide array of contaminants, soils and site conditions, the levels of possible contaminants will depend on the specific conditions of a particular property. If the answer to any of the following questions is "yes," soil testing can help provide more information about the levels of a particular contaminant (or contaminants).

♦**Lead Paint:** *Has lead paint been used on the outside of homes or other buildings on or near the property?*

Some paints manufactured before 1978 are likely to contain lead. As lead paint ages and peels off or is intentionally removed through activities such as stripping, scraping or sandblasting, lead can make its way into the soil surrounding homes or other buildings. The concentrations of lead in soil are usually highest right near a building, and tend to decrease with distance away from the contamination source. See more information from the Cornell Waste Management Institute (CWMI) at: *http://cwmi.css.cornell.edu/soilquality.htm*.

♦ **Pesticides:** *Are pesticide chemicals currently used on the property? Were pesticides used in the past, such as for old orchards or farms?*

Pesticides include chemicals used as insecticides, herbicides, fungicides, rodent poisons and some other kinds of poisons. When testing for pesticides in soil, there is no single test to see if there are pesticide residues. It is necessary to test for specific chemicals, and unfortunately, there are hundreds of pesticides from which to choose. The best way to proceed is to consider if and how pesticides might have been used on your property, and to try to get information on what might have been used and where. For example, chlordane, a persistent chemical, was often used for termite control around foundations in the past. Pesticide mixing areas are often "hot spots" of contamination. Fact sheets providing more information about specific pesticide chemicals and their uses are available from the National Pesticide Information Center at: *http://npic.orst.edu/npicfact.htm.*

♦ **Industrial / Commercial Site Use:** *Is the property near an industrial or commercial site that may be using chemicals or might have used chemicals in the past? Was the property formerly the site of industrial or commercial activity?*

The particular chemicals that may be present due to industrial or commercial activities will depend on the type of industry and the specific procedures used on site. If commercial or industrial activities are currently occurring on or near the property, or may have occurred in the past, it may be helpful to research what chemicals might have been used for a specific activity. The level of contamination will depend on many factors, such as how close to the property a particular activity occurred, and how long it has been since chemicals were used. The USEPA (*http://www.epa.gov/*) and the Agency for Toxic Substances and Disease Registry (ATSDR, *http://www.atsdr.cdc.gov/*) may have more information about specific chemicals and contaminated sites.

♦ **High Traffic Areas:** *Is the property located near a roadway with frequent traffic?*

A property's distance from roadways and traffic can affect the amounts of certain chemicals in the soil, especially lead. Lead compounds were used in gasoline until the late 1970s; after this time their use was phased out. Even though the use of leaded gasoline has now been discontinued, the highest concentrations of lead in soils are still generally found adjacent to busy roadways. Polyaromatic hydrocarbons (PAHs) are chemicals associated with the incomplete combustion of fossil fuels and with coal tars and asphalt. The levels of PAHs and some other chemicals may also be higher in high traffic areas as compared to other areas. The lowest levels of contamination would be expected in the areas of the property farthest away from traffic.

♦ **Treated Lumber:** *Were decks, swing sets, playscapes, or other structures on the property built from pressure treated wood?*

Arsenic, in the form of chromated copper arsenate or CCA, has been used in wood preservatives to make pressure-treated lumber. CCA-treated lumber is no longer available in the US for residential uses, but it can still be used for industrial purposes. Some of the arsenic in CCA-treated wood can move from the wood to nearby soil, although it does not travel far from the wood structure. The ATSDR provides more information to answer common questions about CCA and arsenic (*http://www.atsdr.cdc.gov/cabs/arsenic/*), while Pennsylvania State University offers additional information about garden use of treated lumber (*http://pubs.cas.psu.edu/freepubs/pdfs/uc173.pdf*). Also see more information from CWMI at: *http://cwmi.css.cornell.edu/soilquality.htm.*

♦ **Petroleum Spills:** *Is there a history of spills or leaks of fuel oil, gasoline or other petroleum products on or near the property?*

Petroleum leaks or spills from gas stations, fuel tanks, or other activities can result in elevated levels of contaminants such as benzene, toluene, and xylene in the soil. Some of these chemicals (especially volatiles) are unlikely to remain in the surface soil where they would be taken up by plants or be in direct contact with humans, unless the spill was very recent or large. However, this is not true for all contaminants or all spills, especially for some underground spills that may result in vapors that make their way to the surface soil. If the source is a leaking underground heating oil tank, it is unlikely that the surface soil would be contaminated with these chemicals. However, these spills should be reported to the NYS Department of Environmental Conservation (NYS Spill Hotline: 1-800-457-7362)

It is particularly important to find out if contaminants are a problem in areas where children play or in gardens where fruits or vegetables are grown for food.

♦ **Automobile or Machine Repair / Junk Vehicle Storage:** *Has automobile or other machine repair work been done that may have resulted in chemical spills or dumping on or near the property? Are junk vehicles stored on or near the property?*

Automobile or machine repair activities may result in accidental spills or intentional dumping of chemicals into residential or community soils. Many possible contaminants could be associated with these activities, including petroleum products, PAHs (particularly from motor oil), solvents like trichloroethylene (TCE), used tires and rubber products, metals (used engine oil may contain chromium, lead, molybdenum, or nickel from engine wear), or used batteries (which may release lead or mercury). Junk vehicles may also be a source of these chemicals or other contaminants, depending on their condition and how and where they are stored.

♦ **Furniture Refinishing:** *Has furniture been refinished on or near the property?*

Some chemical strippers used in furniture refinishing contain methylene chloride and other solvents, including toluene and methanol. These substances can contaminate the soil and groundwater if handled improperly during commercial operations or projects by a home hobbyist. Note that a variety of chemical strippers are available commercially, some of which do not contain these toxic substances.

♦ **Landfills / Garbage Dumps:** *Is the property near a landfill or garbage dump? Was it formerly the site of a landfill or garbage dump?*

Many different soil contaminants can leach from landfills or other garbage disposal sites, including petroleum products, solvents, pesticides, lead and other heavy metals. The chemicals that may be present in soils near locations used for waste disposal (currently or in the past) will depend on the specific conditions of a particular site, and on what types of materials were disposed of at that site.

♦ **Fires:** *Have materials been burned on or near the property? Has there been an accidental fire?*

The intentional or accidental burning of materials can produce and release PAHs, dioxins or other chemicals into soils, depending on what was burned and how long ago. Burning yard wastes, such as tree branches, is much less likely to release harmful contaminants than intentional or accidental fires that burn garbage, buildings or their contents, or other synthetic substances.

♦ **Fertilizers:** *Are fertilizers used for lawns or gardens on the property? Is the property near farmland or was it formerly used for agriculture?*

The use of some fertilizers based on waste materials, particularly sewage biosolids or fly ash, may result in the addition of heavy metals (such as copper, zinc, cadmium and lead) and PBTs (persistent, bioaccumulative, toxic chemicals) to soils. Products made from cement kiln dust may also contain heavy metals and dioxins. The use of animal manure or chemical fertilizers may result in higher levels of some soil contaminants. Phosphate fertilizers are known to contain some cadmium (from the rock phosphate), and manures are sometimes relatively high in copper or zinc.

How are People Exposed to Soil Contaminants?

Generally, people can be exposed to contaminants in soil through ingestion (eating or drinking), dermal exposure (skin contact) or inhalation (breathing). The route of human exposure to a soil contaminant will vary with the contaminant and with the conditions and activities at a particular site.

Many people, especially children, accidentally ingest small amounts of soil as part of their normal activities, such as performing yard work, gardening or playing. Young children usually ingest more soil than older children and adults because of their frequent hand-to-mouth behavior. Children and adults may also ingest soil while indoors if soil is transported into homes or other buildings, such as on shoes, clothing, or pets. Some contaminants, such as many pesticides, can pass through the skin and enter the body. People may also inhale contaminants bound to soil particles that become airborne (such as in windblown dust), or contaminants that vaporize from soil.

People can be exposed to contaminants in soil particles that stick to edible parts of garden produce or get taken up into garden plants from the soil. Animals raised for food may also take in contaminants from soil, and people may be exposed to these contaminants by eating animal products such as meat, eggs and milk. Drinking water may contain contaminants that were directly discharged into the water source or entered the surface water through runoff, or had leached from the soil into groundwater. In some situations, a contaminant may vaporize from the underlying groundwater and become part of the air that people breathe.

What are the Possible Health Effects of Exposure?

For any exposure to a contaminant, the likelihood that health effects will occur depends on the toxicity of the contaminant (how harmful it is to humans), how much of the contaminant is in contact with humans, and how long and how often the exposure occurs. Other potentially important factors include how healthy the person is, and his or her age, diet, gender, family traits and lifestyle. Differences in these factors may affect how people will respond to a given level of exposure to a particular contaminant. Children are generally more vulnerable because they ingest more soil, absorb more of the ingested contaminants, and eat, drink and breathe more in relation to their body size than adults. The bodies of unborn babies, infants, and children are also still developing and are more vulnerable to contaminants.

Information about the health effects of a particular contaminant may be available through the ATSDR (*http://www.atsdr.cdc.gov*), the USEPA (*http://www.epa.gov*), or other sources.

What are the Possible Effects on Ecosystem Health?

In addition to possible effects on human health, elevated levels of soil contaminants can negatively affect plant vigor, animal health, microbial processes, and overall soil health. Some contaminants may change plants' metabolic processes and reduce yields or cause visible damage to crops. Even relatively low concentrations of certain contaminants can alter soil chemistry and impact organisms that depend on the soil or plants for their nutrition and habitat. The effects on plants, animals, microbes, and soils within a given system will depend on the properties of the soil, the levels of contamination, the specific contaminants present, and the sensitivity of a particular organism to existing contamination.

For example, legume plants are able to fix nitrogen in the soil through a symbiotic relationship with *Rhizobium* bacteria in their root nodules. Such crops (including beans, lentils, peas, and peanuts) are often used to replenish nitrogen levels in depleted soils. However, these bacteria are sensitive to zinc contamination, which can disrupt the nitrogen fixation process. Nitrogen, a key nutrient for plant growth, may then no longer be available to the plant or to the rest of the system.

What Resources are Available to Help Locate Site History Information?

Finding site history information may be easier for some properties than others. Any information will help to address questions about the past and present uses of a site, and how the site history may have affected the current soil quality or the levels of contamination. Local libraries, historical societies, or map archives are good places to begin to track down site history information. Searchable Internet resources, such as *http://www.propertyshark.com*, may provide additional information.

Gathering information about soil conditions and past and present uses of a property can clarify whether soil testing is needed.

To assess whether contamination problems are likely at a particular site, try to find out:

- *What activities took place on this site?*
- *What chemicals were used?*
- *Where, and how much, were chemicals applied?*

What if a Property is Bought or Sold?

New York State Property Law requires a seller to disclose the results of any environmental testing (including soil and water tests) when a property is sold in the Property Condition Disclosure Statement. Property laws may differ in different states.

If a property is being bought or sold and there are questions or concerns about soil contaminants, soil testing may provide information to help identify if and where problems occur, and to what degree contamination may be present.

Where Can I Get More Information?

Cornell Waste Management Institute Resources for Healthy Soils: *http://cwmi.css.cornell.edu/soilquality.htm*

♦ Sources and Impacts of Contaminants in Soils ♦ Guide to Soil Testing and Interpreting Results

♦ Soil Contaminants and Best Practices for Healthy Gardens ♦ More Information about Arsenic and Lead

Other Resources

Agency for Toxic Substances and Disease Registry, Department of Health and Human Services, Atlanta. Provides information to prevent harmful exposures and diseases related to toxic substances. Accessible at: *http://www.atsdr.cdc.gov/*

California Office of Environmental Health Hazard Assessment. A database with toxicity information on many chemicals. Accessible at: *http://www.oehha.ca.gov/risk/ChemicalDB/index.asp*

Cleanup Levels for hazardous waste sites. Links to many federal, state and international websites that address soil clean up levels. Accessible at: *http://cleanuplevels.com/*

National Pesticide Information Center. Provides information about pesticides and related topics. Accessible at: *http://npic.orst.edu/*

New York State Department of Environmental Conservation. Brownfield and Superfund Regulation, 6 NYCRR Part 375 - Environmental Remediation Programs. Accessible at: *http://www.dec.ny.gov/chemical/34189.html*

Penn State University. Agronomy Fact Sheets: Environmental Soil Issues. Information about lead in residential soils, garden use of treated lumber, and other issues. Accessible at: *http://cropsoil.psu.edu/extension/esi.cfm*

US Environmental Protection Agency. Office of Solid Waste and Emergency Response. Soil Screening Guidance: Quick Reference Fact Sheet, EPA/540/F-95/041. Accessible at: *http://www.epa.gov/superfund/health/conmedia/soil/pdfs/fact_sht.pdf*

US Environmental Protection Agency. US Office of Solid Waste and Emergency Response. Superfund Soil Screening Guidance: Technical Background Document, EPA/540/R95/128. Accessible at: *http://www.epa.gov/oerrpage/superfund/health/conmedia/soil/introtbd.htm*

US Environmental Protection Agency. Integrated Risk Information System (IRIS). Searchable database with information on the toxicity of numerous chemicals. Accessible at: *http://cfpub.epa.gov/ncea/iris/index.cfm*

Washington State University Cooperative Extension. Gardening on Lead- and Arsenic-Contaminated Soils. Additional information about arsenic and lead in garden soils. Accessible at: *http://cru.cahe.wsu.edu/CEPublications/eb1884/eb1884.pdf*

Special Thanks to Contributors and Supporters

We greatly appreciate the ongoing insights and feedback provided by the New York State Department of Environmental Conservation and the New York State Department of Health, our colleagues at Cornell University and Cornell University Cooperative Extension-NYC, collaborators in the New York City urban soils group, and the many others whose questions, concerns, and experiences have led to the development of these documents.

RESPONSE TO LETTER O2: SOUTHWEST REGIONAL COUNCIL OF CARPENTERS, DATED APRIL 30, 2018.

Response O2-1: See Response to Comment O1-21. Because the impact would be less than significant, no further mitigation is required.

Response O2-2: The Draft EIR is clear that the Project would result in a significant and unavoidable impact (See ES Page 2). This is also made clear in section 3.3.5. The final sentence on page 3.3-28 of the Draft EIR included a typo and has been revised to note that NOx emissions would be significant and unavoidable.

MM AQ-2 from the Draft EIR identifies feasible mitigation that will be required by the Project. No feasible mitigation beyond what is proposed in MM AQ-2 exists because the majority of NOx emissions would occur from trucks accessing the Project and no feasible mitigation beyond what is identified in MM AQ-2 would substantively reduce the impacts. Please see Response to Comment O1-14.

The commenter states that they have identified several additional mitigation measures that the Draft EIR failed to incorporate, which would further reduce the Project's operational-related NOx emissions, potentially to a less-than-significant level. These include solar panels, purchasing GHG offsets, installing electric vehicle charging stations, limiting passenger vehicle-miles traveled and requiring rideshare and mass transit incentives.

The commenter does not present any evidence that the proffered measures would reduce the Project's significant and unavoidable NOx impact, which results primarily from truck emissions, not passenger vehicles and energy consumption. The commenter also only describes the measures generally, but does not present any evidence as to their feasibility.

Response O2-3: The City has properly exercised its discretion to use a threshold of significance adopted by SCAQMD (a public agency that has jurisdiction over regional air quality) for evaluating the Project's cumulative air quality impacts. (CEQA Guidelines § 15064.7(c).) The SCAQMD's White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (White Paper) provides that the SCAQMD "uses the same significance thresholds for project specific and cumulative impacts." (White Paper, p. D-3.) "Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same." (White Paper, p. D-3.)

Therefore, the analysis in the Draft EIR provides that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the South Coast Air Basin is in nonattainment and, therefore, would not have a significant cumulative air quality impact. Conversely, projects exceeding the project-specific thresholds would result in a potentially cumulative impact.

Consequently, the project-level threshold is already acting as a cumulative impact threshold. Therefore, given that the Project complies with the SCAQMD Threshold, there is substantial evidence that the Project does not result in significant cumulative impacts.

Response O2-4: This comment summarizes the commenter's opinions about the loss of agricultural land in the City and County. The commenter states that mitigation included in the Draft EIR is not sufficient to offset impacts and generally infers that numerous mitigation measures are feasible to mitigate the project's significant and unavoidable agricultural impacts. The commenter fails to acknowledge the significant analysis of infeasibility of retention of farmland either onsite or offsite, and fails to provide any substantive discussion of why the commenter's proposed measures are feasible. (*Santa Clarita Org. for Planning the Env't v. City of Santa Clarita* (2011) 197 Cal.App.4th 1042, 1055 [An EIR need not explain why suggested mitigation measures that are described in general terms and are not specific to the project are infeasible]; Please see

Response to Comment O1-14 re infeasibility.) Nevertheless, each of the proposed mitigation measures is addressed.

The conversion contemplated by the General Plan was thoroughly analyzed and addressed in the General Plan EIR. The commenter does not provide any mitigation measured or evidence why any other mitigation measures are feasible in light of the general infeasibility of agricultural/dairy uses within the Project vicinity contained in the Draft EIR. As detailed in Section 3.2, Agriculture of the Draft EIR, agricultural preserves and mitigation fees for agriculture were considered by the Draft EIR at a project-level. First, preservation on-site (through avoidance) would be infeasible because it is inconsistent with the General Plan, which facilitates conversion to urban uses. Any avoidance would obstruct implementation of the General Plan, and would also create conflicts with future and existing residential and commercial uses in the area. With respect to the preservation of agricultural/dairy resources through mitigation (either onsite or offsite), the Draft EIR contains substantial evidence that agricultural/dairy resources are no longer financially viable within the County. Between 2000 and 2016, important farmland in the County decreased by more than fifty percent (50%). Likewise, dairy resources have also decreased (to a greater extent than farmland, in fact). This lack of financial viability is the result of a number of factors, including the high cost of land incentivizing selling, the high costs of regulation, and inconsistency with General Plans and zoning.[1] To support the project-specific analysis, the Draft EIR incorporates relevant discussion from the General Plan EIR. This is appropriate, and permitted by CEQA. (CEQA Guidelines § 15130(b)(1)(B).) As described, the potential to provide offsite mitigation for the loss of agricultural land and agricultural uses was considered but rejected as infeasible in the General Plan EIR. Offsite mitigation within the region is considered infeasible due to the decreasing economic vitality of agriculture in Ontario Ranch and surrounding area and increased urbanization pressures on existing agricultural lands. Also, the extremely high cost of land and unavailability of important farmland within the County makes the purchase and establishment of an agricultural easement infeasible. Only approximately 2.2% of the County's agricultural land consists of important farmland (with the remainder consisting of grazing land). Thus, the extremely limited availability of important farmland, coupled with the high per acre costs of such land, make the establishment of an agricultural conservation easement infeasible. The continued encroachment of urban uses on agricultural lands throughout the County likewise make conservation easements infeasible.

The City has considered but rejected the collection of fees for offsite mitigation of agricultural impacts because there are no viable agricultural mitigation programs in the region, and the imposition of fees would not serve to mitigate the impacts of the project as required by CEQA Guidelines section 15370. The City has no program to accept mitigation fees to be used for the purchase of agricultural land. Also, the high cost of land in the area makes this measure infeasible. The same factors that make onsite mitigation infeasible would apply offsite in the region as well. The donation of fees to a local, regional, or statewide organization for the purpose of establishing and holding a conservation easement (e.g., Rivers and Lands Conservancy[2]) is infeasible because, as discussed above: (i) there is little important farmland left within the County, and distant easements would not mitigate the impact (loss of farmland in the project region) (ii) the high cost of land in the area makes the establishment of such an easement unlikely; and (iii) the regulatory hurdles and costs associated with agricultural operations in the County make an agricultural easement not financially viable. Here, a mitigation measure requiring the payment or donation of fees to an organization is infeasible because, for the aforementioned reasons, there is no evidence that any actual mitigation would occur. (Pub. Res. Code § 21061.1 [feasible means "capable of being accomplished in a successful manner within a reasonable period of time…"].) The challenges to continued agricultural production in the Chino Basin area, also challenge agriculture throughout Southern California. (*Defend the Bay v. City of Irvine* [2004] 119 Cal.App.4th 1261, 1270-72.) Thus, the Draft EIR determined that no feasible mitigation measures would

[1] Please refer to the Los Angeles Times article entitled, *Dairies Moving Out of Inland Empire*, which notes that the high cost of land ($400,000 to $500,000 an acre, sometimes more) and regulation have caused dairy farmers to move to the San Joaquin Valley. Available at http://www.latimes.com/business/la-fi-dairy9jan09-story.html.

[2] A review of the Rivers and Land Conservancy's properties shows that the majority of their properties are for habitat conservation, not agricultural lands. Please see https://riversandlands.org/our-work/#projects

reduce the Specific Plan's impacts related to loss of agricultural land. These findings are consistent with the finding in the City of Ontario General Plan EIR.

Response O2-5: See Responses to Comment Letter A1, particularly Responses A1-4, A1-5, and A1-6. As explained in Section 3.4.4 of the EIR, site analysis of Biological Resources included a literature search and information review (including the USFWS Information, Planning, and Conservation System Database), and multiple field surveys to characterize the on-site habitats and to evaluate their potential to support sensitive biological resources. As concluded in the EIR, after mitigation, the Project would not result in any significant impacts to biological resources.

Response O2-6: See Response to Comment A1-4 and A1-5. The Project's potential cumulative Biological Resource impacts are fully analyzed in Section 3.4.6 of the Draft EIR.

Response O2-7: The commenter is referred to the three site-specific Environmental Site Assessments (ESA) for the Project Site, provided in Appendix Draft EIR. As described Draft EIR, page 3.8-11, the Project Site has been used and continues to be used for dairy farm and agricultural activities. The Phase I and Limited Phase II ESAs that were prepared for the Project Site identified Recognized Environmental Concerns on the property that include an existing debris pile and areas of stained soil near the holding ponds on the southeastern portion of the Project Site. Soils testing included as mitigation measure MM HM-1 is for that specific area, to identify levels of soils contamination, and implement removal pursuant to existing federal and state regulations if soils exceed human screening levels once onsite operations have ceased. This does not constitute deferred mitigation. (*POET, LLC v. State Air Res. Bd.* (2013) 218 Cal.App.4th 681, *735*; CEQA Guidelines § 15126.4(a)(1)(B) [mitigation measures may specify performance standards for mitigating a significant impact that might be accomplished in various ways]; *Sacramento Old City Ass'n v. City Council* (1991) 229 Cal.App.3d 1011; *Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1275 [court found no improper deferral of mitigation even though future investigations and consultation with regulatory agencies were required]; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th *777*, 794.) With implementation of mitigation measure MM HM-1, impacts related to contaminated soils would be reduced to a less than significant level.

Response O2-8: The commenter claims the Project's hydrology and water quality impacts are not properly disclosed on the basis that the Draft EIR doesn't include mitigation measures requiring the applicant to comply with existing State, County and City regulations. As is required in the City, approval of the Project will be conditioned upon compliance with all applicable existing regulations.

The California Regional Water Quality Control Board requires projects to retain and treat all onsite drainage. The Project's numerous water quality control features, including onsite stormdrain, onsite detention basins, and bioswales, are outlined in the Preliminary Water Quality Management, circulated with the Draft EIR as Appendix I. As stated on page 3.9-9 of the Draft EIR, the Project is complying with existing regulations (Ontario Municipal Code Title 6, Article 5) that require the preparation SWQMP and a WQMP approved by the City Engineer, which include Low Impact Development (LID) and Best Management Practices (BMPs) and other design features to minimize excess runoff. LID's proposed for the Project include the installation of underground stormwater retention chambers, which would retain, slow, and filter runoff, ensuring the Project would not result in erosion or siltation. The water quality control features are physical components of the Project included on the Project's plans that prevent impacts from occurring; therefore, there are no significant impacts and mitigation measures are not warranted.

Response O2-9: The commenter has been added to project's interest list.

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.0 MITIGATION MONITORING AND REPORTING PROGRAM

4.0.1 Introduction

This is the Mitigation Monitoring and Reporting Program (MMRP) for the West Ontario Commerce Center Specific Plan project. It has been prepared pursuant to the requirements of Public Resources Code §21081.6 which, among other things, states that when a governmental agency adopts or certifies a CEQA document that contains the environmental review of a proposed project, "The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation."

The City of Ontario is the lead agency for the project, and is therefore, responsible for administering and implementing of the MMRP. The decision-makers must define specific reporting and/or monitoring requirements to be enforced during project implementation prior to final approval of the proposed project.

4.0.2 Monitoring and Reporting Procedures

This MMRP includes the following information: (1) mitigation measures that will either eliminate or lessen the potential impact from the project; (2) the monitoring milestone or phase during which the measure should be complied with or carried out; (3) the enforcement agency responsible for monitoring mitigation measure compliance; and (4) the initials of the person verifying the mitigation measure was completed and the date of verification.

The MMRP will be in place through all phases of a project including project design (preconstruction), project approval, project construction, and operation (both prior to and post-occupancy). The City will ensure that monitoring is documented through periodic reports and that deficiencies are promptly corrected. The designated environmental monitor will track and document compliance with mitigation measures, note any problems that may result, and take appropriate action to rectify problems.

Each mitigation measure is listed and categorized by impact area, with an accompanying discussion of:

- The phase of the project during which the measure should be monitored;
  - Project review and prior to project approval
  - During grading or building plan check review and prior to issuance of a grading or building permit
  - On-going during construction
  - Throughout the life of the project
- The enforcement agency; and
- The initials of the person verifying completion of the mitigation measure and date. The MMRP is provided as **Table 4-1** (Mitigation Monitoring and Reporting Program).

Table 4.0-1
West Ontario Commerce Center Specific Plan Mitigation Monitoring and Reporting Program

Impact Category	Impact/Issue	Mitigation Measures	Implementation Timing	Responsible Party	Verification of Compliance		
					Signature	Date	Remarks
Agricultural Resources	The project would result in the conversion of Prime Farmland to non-agricultural uses. The project could impact existing agricultural operations and project residents in the future. This is considered a significant and unavoidable impact.	AG-1 Deed Disclosure - In order to reduce conflicting issues between sensitive receptors and agricultural uses, all property owners in the West Ontario Commerce Center Specific Plan shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. This disclosure shall be applied at the tentative map stage to the affected properties, or otherwise prior to finalizing the sale or rental agreement of any property. The written disclosure shall be supplied to the property purchaser or renter by the vendor or vendor's agent. The content and text of the disclosure shall be approved by the City Attorney, and shall include language to inform new residents that existing agricultural uses may create nuisances such as flies, odors, dust, night-light, and chemical spraying.	Prior to approval of each tentative parcel/tract map.	City Attorney and developer.			
Air Quality	ROG emissions would exceed SCAQMD regional significance thresholds during the painting phase of project construction. This impact is considered significant. The project would generate ROG and NOx emissions during the life of the project that exceed SCAQMD thresholds for these emissions. Even with mitigation, this impact is considered significant and unavoidable.	AQ-1 Prior to the issuance of building permits, the developer shall provide to the City for its review and approval a Painting Plan that provides evidence that only paints with a volatile organic content (VOC) of 50 grams per liter (g/l) or less shall be used for the painting of all buildings. Additionally, the area that can be painted combined inside and out shall not exceed: 150,000 square feet for Phase 1A; 150,000 square feet for Phase 1B; and 700,000 square feet for Phase 2. A Painting Plan shall be provided to the City indicating the areas that will be painted and the total area to be painted for each phase. The paints to be used along with their VOC ratings shall be included in the Painting Plan. AQ-2 Prior to the issuance of building permits, the developer shall submit to the Planning Director for review and approval a plan that states the following NOx reduction measures shall be incorporated via such mechanisms as conditions of approval for sales or conditions of leases into the operations of the Project: • All fleet vehicles to conform to 2010 air quality standards or better. Users shall maintain compliance through normal course of business. • All space utilizing refrigerated storage, including restaurants and food or beverage stores, shall provide an electrical hookup for refrigeration units on delivery trucks. Trucks incapable of utilizing the electrical hookup for powering refrigeration shall be prohibited from accessing the site. • Install catalytic converters on gasoline-powered equipment. • Electrical powered equipment shall be used in-lieu of gasoline-powered engines when available. • Electrical equipment shall be used for landscape maintenance. • All forklifts shall be electric or natural gas powered. • Prohibit idling of trucks for periods exceeding three minutes. • The project plans and specifications shall include signs at loading dock facilities that identify CARB anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for trucks drivers to restrict idling to no more than 3 minutes once the vehicle is stopped, the transmission is set to "neutral" or "park", and	Prior to the issuance of building permits.	City of Ontario Building Department.			

		the parking brake is engaged; and 3) telephone numbers of the building facilities manager and CARB to report violations.					
Biological Resources	The project has the potential to impact active native bird nests if existing on-site vegetation is removed during the nesting season, which typically extends from January 1 to August 31. Impacts to nesting native birds are prohibited by the Migratory Bird Treaty Act (MBTA) and California Fish and Wildlife Code. The project could also impact the Western Burrowing Owl and North American bat species that may be present on the site. This impact is considered potentially significant.	BIO-1 Prior to any demolition or grading on the Site and areas with off-site improvements, a qualified biologist shall conduct a focused survey for burrowing owl following CDFW's March 2012 recommended guidelines including conducting four visits between February 15 and July 15. If the species is found, an eviction plan shall be drafted and submitted to CDFW for approval. Eviction shall only occur when the owls are not nesting. If the species is not found during the focused survey and the focused survey is completed more than 14 days prior to ground disturbance, a preconstruction presence/absence survey for burrowing owl within 14 days prior to each phase of development (including clearing and grubbing) shall be completed to ensure no mortality to the species occurs. If burrowing owls are detected during the preconstruction survey, a mitigation and eviction plan for that phase shall be drafted and provided to the CDFW for approval. Eviction shall occur only when the owls are not nesting (CDFW 2012). BIO-2 The removal of any vegetation on the Site by the Project developer shall occur outside of the nesting season (January 1 through August 31). If avoidance of the nesting season is not feasible, a qualified biologist shall conduct a nesting bird survey within three days prior to the disturbance of any vegetation, including disking, demolition, grading or construction. If active nests of native bird species are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. The buffer shall be 300 feet for raptors and 150 feet for songbirds; unless specifically determined to be less by a qualified biologist that is familiar with the nesting phenology of the nesting species. BIO-3 Prior to any site clearing, demolition, or grading, the Project developer shall provide evidence to the City of Ontario that a qualified biologist shall conduct North American bat surveys. If bats are determined to be present, the applicant or developer shall submit a mitigation plan by a qualified biologist that defines measures to protect the bat species in compliance with established protocols and regulations. The plan shall be reviewed and approved by CDFW prior to submittal to the City for approval.	BIO-1 and BIO-3 shall occur prior to the start of clearing, demolition or grading. BIO-2 shall occur prior to the removal of any on-site vegetation.	City of Ontario Planning Department and Developer.			
Cultural Resources	Earth-disturbing activities associated with implementation of the project could potentially disturb or damage undocumented archaeological resources, if present. This impact is considered potentially significant.	CUL-1 Prior to the issuance of the first grading permit, the applicant shall provide a letter to the City of Ontario Building Department, or designee, from a qualified professional archeologist meeting the Secretary of Interior's Professional Qualifications for Archaeology as defined at 36 CFR Part 61, Appendix A stating that the archeologist has been retained to provide on-call services in the event archeological resources are discovered. The archeologist shall be present at the pre-grading conference to establish procedures for archeological resource surveillance. In the event a previously unrecorded archaeological deposit is encountered during construction, all activity within 50 feet of the area of discovery shall cease and the City shall be immediately notified. The archeologist shall be contacted to flag the area in the field and determine if the archaeological deposits meet the CEQA definition of historical (State CEQA Guidelines 15064.5(a)) and/or unique archaeological resource (Public Resources	Prior to the issuance of the first grading permit.	City of Ontario Planning Department.			

			Code 21083.2(g)). If the find is considered a "resource" the archaeologist shall pursue either protection in place or recovery, salvage and treatment of the deposits. A qualified archaeologist and a Native American Monitor of Gabrieleño Ancestry shall evaluate all archaeological resources unearthed by project construction activities. If the resources are Native American in origin, they shall have the opportunity to consult with the City and/or project developer on appropriate treatment and curation of these resources. If unique archaeological resources cannot be preserved in place or left in an undisturbed state, recovery, salvage and treatment shall be required at the applicant's expense. Recovery, salvage and treatment protocols shall be developed in accordance with applicable provisions of Public Resource Code Section 21083.2 and State CEQA Guidelines 15064.5 and 15126.4. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the archaeologist. Resources shall be identified and curated into an established accredited professional repository. The archaeologist shall have a repository agreement in hand prior to initiating recovery of the resource. Excavation as a treatment option will be restricted to those parts of the unique archaeological resource that would be damaged or destroyed by the project.					
Cultural Resources	Earth-disturbing activities associated with implementation of the project could potentially disturb or damage undocumented paleontological resources, if present. This impact is considered potentially significant.	CUL-2	Prior to the issuance of the first grading permit, the applicant shall provide a letter to the City of Ontario Building Department, or designee, from a paleontologist selected from the roll of qualified paleontologists maintained by San Bernardino County, stating that the paleontologist has been retained to provide services for the project. The paleontologist shall develop a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the City. The PRIMP shall require that the paleontologist be present at the pre-grading conference to establish procedures for paleontological resource surveillance. The PRIMP shall require paleontological monitoring of excavation that exceeds depths of five feet. The PRIMP shall state that the project paleontologist may re-evaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations deeper than four feet have been completed. In the event that paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discard of specific fossil specimens will be made explicit. If a qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of the fossiliferous material prior to construction, monitoring work and halting construction if an important fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at the applicant's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.	Prior to the issuance pf the first grading permit.	City of Ontario Building Department.			

Hazards and Hazardous Materials	Development of the project could release existing hazardous materials on the site to the environment. This impact is considered potentially significant.	HM-1 Prior to approval of grading permits, the project applicant shall hire a qualified environmental consultant to conduct a limited soils investigation to identify the hazards related to the soils near the pumping equipment for the holding ponds on the GH Dairy site (APNs 0218-261-32 and 0218-271-08, -10, -13). Soil remediation and/or export of hazardous materials must be performed in accordance with applicable regulatory requirements from the Regional Water Quality Control Board, Department of Toxic Substances Control, and the South Coast Air Quality Management District requirements. A Soil Management Plan shall be prepared to ensure the appropriate reporting, oversight, and protocols used during construction to protect the health and safety of workers and the environment. The Soil Management Plan shall include methodology and procedures to perform additional testing during soil disturbance activities if unknown potentially hazardous materials are identified. If additional contamination is discovered, soil disturbance activities within the area shall be temporarily halted and redirected around the area until the appropriate evaluation and follow-up remedial measures in accordance with the Soil Management Plan are completed.	Prior to the approval of grading permits.	City of Ontario Building Department.			
Transportation/Traffic	The Project will impact the intersection of Grove Avenue and Edison Avenue in the existing plus Project condition. For the Opening Year 2023 condition, the Project would have a cumulative impact at fourteen study area intersections that are forecast to operate at LOS E. In the Horizon Year 2040 with Project and cumulative conditions the weekday 24-hour volumes on roadway segments and volume-to-capacity (v/c) ratios, two study area roadway segments would operate with a v/c ratio greater than 1.0 (LOS F). The recommended improvements for the impacted intersections for the Opening Year 2023 Project and cumulative condition would also reduce impacts at the two roadway segments. However, the intersection improvements are dependent upon the payment of similar fees by other projects that contribute to the impact. To implement the Opening Year 2023 intersection improvements,	TR-1 The Project developer shall pay the cost to signalize the intersection of Grove Avenue/Edison Avenue prior to the issuance of the first building permit. TR-2 The Project developer shall pay a City required Development Impact Fee (DIF) prior to the issuance of the first building permit toward construction of the traffic improvements listed below. For those required traffic improvements listed below that are not paid by DIF, the Project developer shall pay its fair share towards the cost of the required street improvements prior to the issuance of the first building permit. Improvements to Signalized Intersections • #16. Euclid Avenue/Chino Avenue (City of Chino) – Add westbound left-turn lane. • #21. SR-71 SB Ramp/Grand Avenue (City of Chino, Caltrans) – Work with City of Chino and Caltrans to identify feasible improvements and pay fair share. • #22. SR-71 NB Ramp/Grand Avenue (City of Chino, Caltrans) – Add southbound right turn overlap phasing. • #24. Central Avenue/Edison Avenue (City of Chino) – Work with City of Chino to identify feasible improvements and pay fair share. • #28. Archibald Avenue/Edison Avenue (City of Ontario) – Add a 2nd northbound left-turn lane, 3rd northbound through lane, 3rd southbound through lane, 3rd eastbound through lane, 2nd westbound through lane, 2nd southbound left-turn lane, 3rd westbound through lane. • #29. Hamner Avenue/Cantu-Galleano Ranch Road/Ontario Ranch Road (City of Ontario, City of Eastvale) – Add a 2nd northbound through lane, northbound right-turn lane with overlap phasing, 2nd southbound left-turn lane, 2nd southbound through lane, 2nd eastbound through lane, 2nd westbound left-turn lane, 2nd westbound through lane, westbound right-turn overlap phasing, 3rd southbound through lane, 3rd eastbound through lane, 3rd westbound through lane, eastbound right-turn with overlap phasing, southbound right-turn lane with overlap phasing.	Prior to the issuance of the first building permit.	City of Ontario Building Department			

	fair share contribution is required by the Project towards various traffic improvements. However, the City cannot guarantee that these improvements would be funded and completed prior to the Project's contribution to the cumulative traffic impacts. Further, many intersections are under the jurisdiction of Caltrans or the Cities of Chino and Eastvale and the City of Ontario cannot guarantee the implementation of the traffic improvements within these jurisdiction. Also, as to the improvements within the City of Ontario that are not part of an adopted plan or program, the City cannot guarantee the construction of the traffic improvements with a specified period. As a result, traffic impacts would be significant and unavoidable.	• #30. I-15 SB Ramp/Cantu-Galleano Ranch Road (City of Eastvale, Caltrans) – Restripe #2 southbound left-turn lane to a shared left-right-turn lane to provide a southbound left-turn lane, southbound shared left-right-turn lane and a southbound right-turn lane. • #31. I-5 NB Ramp/Cantu-Galleano Ranch Road (City of Eastvale, Caltrans) – Optimize signal timing to improve operations. • #35. Euclid Avenue/Merrill Avenue (City of Chino, City of Ontario, Caltrans) – Add a 3rd northbound through lane, 2nd southbound left-turn lane, 3rd southbound through lane, 2nd westbound left-turn lane, westbound right-turn lane with overlap phasing. • #39. Archibald Ave./Limonite Ave. (City of Eastvale) - Add 2nd westbound right turn, 2nd northbound through lane, 2nd southbound left-turn lane, 2nd southbound through lane, 2nd westbound left-turn lane, 3rd northbound through lane. • #40. Hamner Avenue/Limonite Avenue (City of Eastvale) – Add right-turn overlap phasing in all directions, 3rd westbound through l, 3rd southbound through lane. • #41. I-15 SB Ramp/Limonite Avenue (City of Eastvale, Caltrans) – Add a 3rd eastbound and 3rd westbound through lane, redesign interchange to a partial cloverleaf. • #42. I-15 NB Ramp/Limonite Avenue (City of Eastvale, Caltrans) – Add a 3rd eastbound and 3rd westbound through lane, redesign interchange to a partial cloverleaf. • #48. Archibald Avenue/Eucalyptus Avenue (City of Ontario) – Add a northbound left-turn lane, 3rd northbound through Lane, 3rd southbound through lane, eastbound left-turn lane, eastbound through lane, eastbound right-turn lane, 2nd northbound left-turn lane. Improvements to Unsignalized Intersections • #17. Grove Avenue/Chino Avenue (City of Ontario) – Signalize Intersection. • #27. Grove Avenue/Edison Avenue (City of Ontario) – Signalize Intersection. • #33. Grove Avenue/Eucalyptus Avenue (City of Ontario) – Signalize Intersection. • #36. Grove Ave./Merrill Ave. (City of Chino, City of Ontario) - Add eastbound left-turn lane, 2nd eastbound through lane, 2nd westbound through lane, signalize intersection. • #37. Carpenter Avenue/Merrill Avenue (City of Ontario, City of Chino) – add southbound left-turn lane, 2nd westbound through lane, westbound left-turn lane and signalize intersection.				
Tribal Cultural Resources	No substantial evidence exists that TCRs are present in the Specific Plan area. Although, no TCRs have been identified, during the AB 52 consultation, the Gabrieleño Band of Mission Indians – Kizh Nation requested the presence of Native American monitors	TCR-1 Prior to the start of any demolition or project grading, whichever occurs first, the Project developer shall implement the following: • The Project developer shall retain a Native American Monitor of Gabrieleño Ancestry to conduct a Native American Indian Sensitivity Training for construction personnel prior to commencement of any excavation activities. The training session shall include a handout and focus on how to identify Native American resources encountered during earthmoving activities and the procedures followed if resources are discovered, the duties of the Native	Prior to the start of demolition or project grading, whichever occurs first.	City of Ontario Building Department.			

	during the grading process to identify tribal cultural resources, should any be discovered. The project would be subject to the requirements of the California Health and Safety Code Section 7050.5, to properly recover and evaluate any TCR related to human remains if encountered. The impact to TCRs is potentially significant.	American Monitor of Gabrieleño Ancestry and the general steps the Monitor would follow in conducting a salvage investigation. • The Project developer shall retain a Native American Monitor of Gabrieleño Ancestry to be on-site during all project-related, ground-disturbing construction activities (e.g., pavement removal, auguring, boring, grading, excavation, potholing, trenching, grubbing, and weed abatement) of previously undisturbed native soils to a maximum depth of 30 feet below ground surface. At their discretion, a Native American Monitor of Gabrieleño Ancestry can be present during the removal of dairy manure to native soil, but not at the developers' expense. • A qualified archaeologist and a Native American Monitor of Gabrieleño Ancestry shall evaluate all archaeological resources unearthed by Project construction activities. If the resources are Native American in origin, the Tribe shall coordinate with the developer regarding treatment and curation of these resources. Typically, the Tribe will request reburial or preservation for educational purposes. If archeological features are discovered, the archeologist shall report such findings to the City Planning Director. If the archeological resources are found to be significant, the archeologist shall determine the appropriate actions, in cooperation with the City that shall be taken for exploration and/or salvage in compliance with CEQA Guidelines section 15064.5(f). • Prior to the start of ground disturbing activities, the Project developer shall arrange a designated site location within the footprint of the Project for the respectful reburial of Tribal human remains and/or ceremonial objects. All human skeletal material discoveries shall be reported immediately to the County Coroner. The Native American Monitor shall immediately divert work a minimum of 50 feet from the discovery site and place an exclusion zone around the burial. The Native American Monitor shall notify the construction manager who shall contact the County Coroner. All construction activity shall be diverted while the County Coroner determines if the remains are Native American. The discovery shall be confidential and secure to prevent further disturbance. If Native American, the County Coroner shall notify the NAHC as mandated by state law who will then appoint a MLD. In the case where discovered human remains cannot be documented and recovered on the same day, the remains shall be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard shall be posted outside working hours. The Tribe shall make every effort to recommend diverting the Project and keep the remains in situ and protected. If the Project cannot be diverted, it may be determined that burials will be removed. If data recovery is approved by the Tribe, documentation shall be taken, which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or means necessary to ensure complete recovery of all material. If the discovery of human remains includes four or more burials, the location is considered a cemetery and a separate treatment plan shall be created. The Project developer shall consult with the Tribe regarding					

		avoidance of all cemetery sites. Once complete, a final report of all activities shall be submitted to the NAHC. • No scientific study or the utilization of any invasive diagnostics shall be allowed to any Native American human remains. • If the County Coroner determines the remains represent a historic non-Native American burial, the burial shall be treated in the same manner of respect with agreement of the County Coroner. Reburial will be in an appropriate setting. If the County Coroner determines the remains to be modern, the County Coroner shall take custody of the remains. • Each occurrence of human remains and associated funerary objects shall be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony shall be removed to a secure container on site if possible. These items shall be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site, but at a location agreed upon between the Tribe and the developer and protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.					

APPENDIX A

West Ontario Commerce Center Specific Plan
Draft EIR Comment Letters

State of California - Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Inland Deserts Region
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Ontario, CA 91764
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EDMUND G. BROWN, Jr., Governor
CHARLTON H. BONHAM, Director

April 30, 2018
Sent via email

Mr. Richard Ayala
Senior Planner
City of Ontario
Planning Department
303 East "B" Street
Ontario, CA
rayala@ontario.ca.gov

Subject: Draft Environmental Impact Report
West Ontario Commerce Center Specific Plan Project
State Clearinghouse No. 2017041074

Dear Mr. Ayala:

The Department of Fish and Wildlife (Department) appreciates the opportunity to comment on the Draft Environmental Impact Report (DEIR) for the West Ontario Commerce Center Specific Plan Project (project) [State Clearinghouse No. 2017041074]. The Department is responding to the Notice of Availability of a DEIR as a Trustee Agency for fish and wildlife resources (California Fish and Game Code Sections 711.7 and 1802, and the California Environmental Quality Act [CEQA] Guidelines Section 15386), and as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement (California Fish and Game Code Sections 1600 *et seq.*) and/or a California Endangered Species Act (CESA) Permit for Incidental Take of Endangered, Threatened, and/or Candidate species (California Fish and Game Code Sections 2080 and 2080.1).

The project (project) is located south of Eucalyptus Avenue, north of Merrill Avenue, east of Carpenter Avenue, and west of the Cucamonga Creek channel (a San Bernardino County Flood Control Channel) in the City of Ontario (City). The Specific Plan includes two (2) Planning Areas (individually, PA) totaling approximately 120-net acres and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development of 2,905,510 square feet.

COMMENTS AND RECOMMENDATIONS

The Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (i.e., biological resources); and administers the Natural Community Conservation Planning Program (NCCP Program). The Department offers the comments and recommendations presented below to assist the City of Ontario (City; the CEQA lead agency) in adequately identifying and/or mitigating the project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable the Department to adequately review and comment on the proposed project with respect to impacts on biological resources.

The Department recommends that the DEIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable Department staff to adequately review and comment on the project, the DEIR should include a complete assessment of the flora and fauna within and adjacent to the project footprint, with particular emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. The Department recommends that the DEIR specifically include:

1. An assessment of the various habitat types located within the project footprint, and a map that identifies the location of each habitat type. The Department recommends that floristic, alliance- and/or association based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions;

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the project. The Department's California Natural Diversity Database (CNDDB) in Sacramento should be contacted at (916) 322-2493 or CNDDB@wildlife.ca.gov to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed project. The Department recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data

Please note that the Department's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The Department recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the project site.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas with the potential to be effected, including California Species of Special Concern (CSSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the project area and should not be limited to resident species. Focused species-specific/MSHCP surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with the Department and the U.S. Fish and Wildlife Service, where necessary. Note that the Department generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed project may warrant periodic updated surveys for certain sensitive taxa, particularly if the project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought.

4. A thorough, recent, floristic-based assessment of special status plants and natural communities, following the Department's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see https://www.wildlife.ca.gov/Conservation/Plants);

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]);

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the project. To ensure that project impacts to biological resources are fully analyzed, the following information should be included in the DEIR:

A discussion of potential impacts from lighting, noise, human activity (e.g., recreation), defensible space, and wildlife-human interactions created by zoning of development projects or other project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address project-related changes on drainage patterns and water quality within, upstream, and downstream of the project

site, including: volume, velocity, and frequency of existing and post-project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-project fate of runoff from the project site.

A discussion of potential indirect project impacts on biological resources, including resources in areas adjacent to the project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, vernal pools, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

Identify and Disclose Cumulative Impacts

A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on biological resources that are rare or unique to the region (CEQA Guidelines § 15125[c]) should be analyzed. More specifically, the Department believes that the burrowing owl and its habitat has, and continues to be, removed throughout the City of Ontario and the surrounding area. Within the DEIR [*Chapter 3 – Environmental Analysis 3.4.6 Cumulative Impacts* Page 3.4-19], it states:

> "*Due to the development potential in the immediate area, the cumulative analysis takes into account potential impacts that would occur as a result of development of the identified cumulative projects. The cumulative geographic context for the evaluation of impacts on biological resources is regional development, particularly in the southern portion of the City and adjacent portions of the cities of Chino and Eastvale as well as other areas of the El Prado Basin proper (the Region) which contains habitat very similar to the Project.*
>
> *The cumulative impacts are qualitatively based on assessments of the cumulative projects. The potential build out of the cumulative projects is approximately 3,795 acres (cumulative projects in cities of Ontario, Chino, and Eastvale). Mitigation measures have been or will be approved along with the Project approvals of the cumulative projects to mitigate the potential biological impacts of each project, thus the cumulative impacts have been reduced. The primary effects of the West Ontario Commerce Center Specific Plan, when considered with other projects in the Region (as defined above), would be the direct cumulative loss of open space, vegetation important to raptors and nesting birds, and the habitat of sensitive or special-status wildlife species. However, as discussed in the above biological analysis, the Project, after implementation of*

mitigation measures, will not significantly impact any sensitive, rare, endangered, or threatened plant species or sensitive, endangered, or threatened animal species. Therefore, the Project will not have any significant cumulative biological impacts after implementation of mitigation.

The implementation of the Project-recommended mitigation measures will reduce the potential significant cumulative biological impacts to less than significant levels because the measures, when implemented, will reduce the Project's impacts to less than significant. However, the development of the Specific Plan in combination with the cumulative projects could lead to increased disturbance to burrowing owl, special-status or native nesting birds, and North American bats species and have cumulative biological impacts. Thus, even though the Project would have less than a significant cumulative impact, cumulative biological impacts could be significant."

The mitigation measures [*Section 3.4.7 Mitigation Measures*] proposed to offset the cumulative impacts are:

BIO-1 Prior to any demolition or grading on the Site and areas with off-site improvements, a qualified biologist shall conduct a focused survey for burrowing owl following CDFW's March 2012 recommended guidelines including conducting four visits between February 15 and July 15. If the species is found, an eviction plan shall be drafted and submitted to CDFW for approval. Eviction shall only occur when the owls are not nesting. If the species is not found during the focused survey and the focused survey is completed more than 14 days prior to ground disturbance, a preconstruction presence/absence survey for burrowing owl within 14 days prior to each phase of development (including clearing and grubbing) shall be completed to ensure no mortality to the species occurs. If burrowing owls are detected during the preconstruction survey, a mitigation and eviction plan for that phase shall be drafted and provided to the CDFW for approval. Eviction shall occur only when the owls are not nesting (CDFW 2012).

BIO-2 The removal of any vegetation on the Site by the Project developer shall occur outside of the nesting season (January 1 through August 31). If avoidance of the nesting season is not feasible, a qualified biologist shall conduct a nesting bird survey within three days prior to the disturbance of any vegetation, including disking, demolition, grading or construction. If active nests of native bird species are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. The buffer shall be 300 feet for raptors and 150 feet for songbirds; unless specifically determined to be less by a qualified biologist that is familiar with the nesting phenology of the nesting species

The project is located within the boundaries of Ontario Ranch (formerly known as New Model Homes), a new master-planned communities that spans over 8,000 acres and 13 square miles. Subsequent to the adoption of the Sphere of Influence (SOI) General Plan and DEIR, a lawsuit was filed against the City by the Endangered Habitats League, Inc. and Sierra Club challenging the City's California Environmental Quality Act (CEQA) compliance and approval of the SOI General Plan Amendment. A Settlement Agreement was reached and agreed to by all parties that set forth revised mitigation measures for potential impacts in the New Model Colony (NMC) (referred to as Annexation Area 163 in the Agreement). The measures are to be in effect until all of the developable acres within the NMC reach full build-out, as determined by the City. Further, a land trust, conservancy, or non-profit corporation or nonprofit entity (Land Trust) will be created or selected to carry out the responsibilities, goals, and objectives of the mitigation as set forth in the Settlement Agreement (The Ontario Plan DEIR Section 5 *Environmental Analysis*), including:

- Prior to issuance of grading permits, Ontario shall impose a $2,000 per acre Mitigation Fee on proposed developments in Annexation Area 163 that require discretionary approval or permitting from the City.
- Ontario in consultation with the Department will identify through CEQA review, lands occupied by burrowing owl and suitable as long-term habitat. The City will require avoidance of those lands to maintain a viable territory and require long-term maintenance through dedication in fee or grant of easement to the Land Trust. If the site is not viable long-term habitat, the developer shall pay the mitigation fee and make provisions for relocation of the owls.
- All Mitigation Fees collected shall be used for the above-described purposes and may be used to purchase property, conservation easements, or other land with long-term conservation value for the environmental impacts; enhance/restore lands with such values; maintain and operates these lands; and pay for related administrative costs (not to exceed 10 percent of the total fees).
- Land/easements dedicated, conveyed, or purchased to benefit wildlife, waterfowl, raptors/and or burrowing owl must have long-term conservation value for those species and must be managed by the Land Trust. The parcels must be located within the Habitat Area designated as part of the Settlement Agreement. Unacceptable properties are those that would otherwise by purchased by another entity or group as open space mitigation for environmental impacts.

The Settlement Agreement also modified the provisions for the on-site 145-acre Waterfowl and Raptor Conservation Area (WRCA). The alternative provision for

mitigation will allow the City to determine the area to be removed from the on-site WRCA. For each acre removed, the City will provide funding at the rate of $40,000 per acre for off-site mitigation of wildlife impacts, through an impact fee or other revenue-generating mechanism. The funding may cover preservation of the 160 acres of off-site mitigation for a total of up to 305 acres of off-site mitigation (which should be located within the designated Habitat Area).

Development impact fees for new development in the NMC were adopted on June 23, 2003, by the City Council. The NMC Development Impact Fees include a Habitat Mitigation fee of $4,320 per net acre for proposed residential, commercial, hotel and restaurant, office, and industrial development (City of Ontario 2005). Table 1 and Illustration 1 lists the projects, mitigation measures, and the potential fees collected within the NMC.

Immediately west of the project, the City of Chino placed the Dairy Preserve north of Merrill Avenue within the City of Ontario's Sphere of Influence and the remaining portion south of Merrill Avenue to the San Bernardino County line in the City of Chino's Sphere of Influence. Similar to the City, the City of Chino prepared a Resource Management Plan (Michael Brandman Associates, 2003), for the 7,235 acre 'Preserve' that identified mitigation measures (e.g. development fees, land acquisition, etc.) to compensate for cumulative impacts to the burrowing owl. To identify how the loss of habitat to date, as well as in the future, has affected the local burrowing owl population, a thorough analysis needs to be conducted of the cumulative impacts, as well as, the measures implemented in the Settlement Agreement to determine whether there has been adequate actions to reduce the local extirpation of the species.

Within the DEIR, there were no record searches included of sensitive resource occurrences within the surrounding area. The Department performed a precursory California Natural Diversity Data Base (CNDDB) search for burrowing owl occupancy within, and immediately surrounding, the project (See Illustration 2 and Table 2). Please note CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. Given the type of habitat, known occurrences within the surrounding area, and the presence of ground squirrels and their burrows, the Department feels that the project has a high potential to provide burrowing owl nesting and foraging habitat. Since burrowing owls and/or their habitat may be impacted from the project, the Department recommends that the City include specific mitigation in the DEIR. CEQA Guidelines §15126.4, subdivision (a)(1)(8) states that formulation feasible mitigation measures should not be deferred until some future date. The Court of Appeal in *San Joaquin Raptor Rescue Center* v. *County* of *Merced* (2007) 149 Cal.App.4th 645 struck down mitigation measures which required formulating management plans developed in consultation with State and Federal wildlife agencies after Project approval. Courts have also repeatedly not supported conclusions that impacts are mitigable when essential studies, and therefore impact assessments, are incomplete *(Sundstrom* v. *County* of

Mendocino (1988) 202 Cal. App. 3d. 296; *Gentry* v. *City* of *Murrieta (1995)* 36 Cal. App. 4th 1359; *Endangered Habitat League, Inc.* v. *County* of *Orange* (2005) 131 Cal. App. 4th 777).

The DEIR should specify mitigation that is roughly proportional to the level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (CEQA Guidelines, §§ 15126.4(a)(4)(B), 15064, 15065, and 16355). Furthermore, in order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. Current scientific literature supports the conclusion that mitigation for permanent burrowing owl habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow.

CDFW requests the DEIR include a full assessment of the cumulative impacts and full disclosure of the mitigation actions taken by the City to date.

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the project. When proposing measures to avoid, minimize, or mitigate impacts, the Department recommends consideration of the following:

1. *Sensitive Plant Communities*: The Department considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from project-related direct and indirect impacts.

2. *Mitigation*: The Department considers adverse project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, including, but not limited to measures to ensure domestic animals (e.g., cats and dogs) cannot access mitigation areas, and removal procedures to implement if they do; proposed land dedications; long-term monitoring and management programs; control of illegal dumping; water pollution; and increased human intrusion, etc.

3. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in southern California ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

   The Department recommends that local onsite propagules from the project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various project components as appropriate.

   Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the project; examples could include retention of woody material, logs, snags, rocks, and brush piles.

4. *Nesting Birds and Migratory Bird Treaty Act:* Please note that it is the project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or

eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

The Department recommends that the DEIR include the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: project phasing and timing, monitoring of project-related noise (where applicable), sound walls, and buffers, where appropriate. The DEIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the project site. If pre-construction surveys are proposed in the DEIR, the Department recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

5. *Translocation of Species*: The Department generally does not support the use of relocation, salvage, and/or transplantation as mitigation for impacts to rare, threatened, or endangered species as studies have shown that these efforts are experimental in nature and largely unsuccessful.

California Endangered Species Act

The Department is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). The Department recommends that a CESA ITP be obtained if the project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of State-listed CESA species, either through construction or over the life of the project. CESA ITPs are issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. The Department encourages early consultation, as significant modification to the proposed project and mitigation measures may be necessary to obtain a CESA ITP. Revisions to the California Fish and Game Code, effective January 1998, require that the Department issue a separate CEQA document for the issuance of a CESA ITP unless the Project CEQA document addresses all Project impacts to listed species and specifies a mitigation monitoring and reporting program that will meet the requirements of a CESA permit.

Lake and Streambed Alteration Program

Depending on how the project is designed and constructed, it is likely that the project applicant will need to notify the Department per Fish and Game Code section 1602. For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream or use material from a streambed, the project applicant (or "entity") is required to provide written notification to the Department pursuant to Section 1602 of the Fish and Game Code. Please note that streams include all those that flow at least episodically, including ephemeral streams, desert washes, and watercourses with subsurface flow. Based on the notification and supporting information, the Department determines if the proposed project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required.

The Department's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). Therefore, to facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with the Department is recommended, since modification of the proposed project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain a Lake or Streambed Alteration notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

Additional Comments and Recommendations

To ameliorate the water demands of this project, the Department recommends incorporation of water-wise concepts in project landscape design plans. In particular the Department recommends xeriscaping with locally native California species, and installing water-efficient and targeted irrigation systems (such as drip irrigation). Local water agencies/districts, and resource conservation districts in your area may be able to provide information on plant nurseries that carry locally native species, and some facilities display drought-tolerant locally native species demonstration gardens (for example the Riverside-Corona Resource Conservation District in Riverside). Information on drought-tolerant landscaping and water-efficient irrigation systems is available on California's Save our Water website: http://saveourwater.com/conservation-lifestyle/

Further Coordination

The Department appreciates the opportunity to comment on the NOP of a DEIR for the Ontario Commerce Center Project (SCH No. 2017041074) and recommends that the City of Ontario address the Department's comments and concerns in the forthcoming DEIR. The Department also requests a meeting to assist in clarifying the cumulative impacts, and to assist in assessing the mitigation efforts to date. If you should have any questions pertaining to the comments provided in this letter, please contact Kim Romich at (909) 980-3818 or at kimberly.romich@wildlife.ca.gov.

Sincerely,

For Scott Wilson
Environmental Program Manager

Attachments:

Illustration 1-Different Development Projects within the New Model Colony, Located Within the City of Ontario, California.

Illustration 2: California Natural Diversity Database (CNDDB) for Burrowing Owl within and immediately surrounding the New Model Colony located in the City of Ontario, San Bernardino County, California.

Table 1: Development projects, mitigation measures, and reference documents within the New Model Colony located in the City of Ontario, San Bernardino County, California.

Table 2: California Natural Database for Burrowing Owl within and immediately surrounding the New Model Colony located in the City of Ontario, San Bernardino County, California.

ILLUSTRATION 1- DIFFERENT DEVELOPMENT PROJECTS WITHIN THE NEW MODEL COLONY LOCATED IN THE CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA.

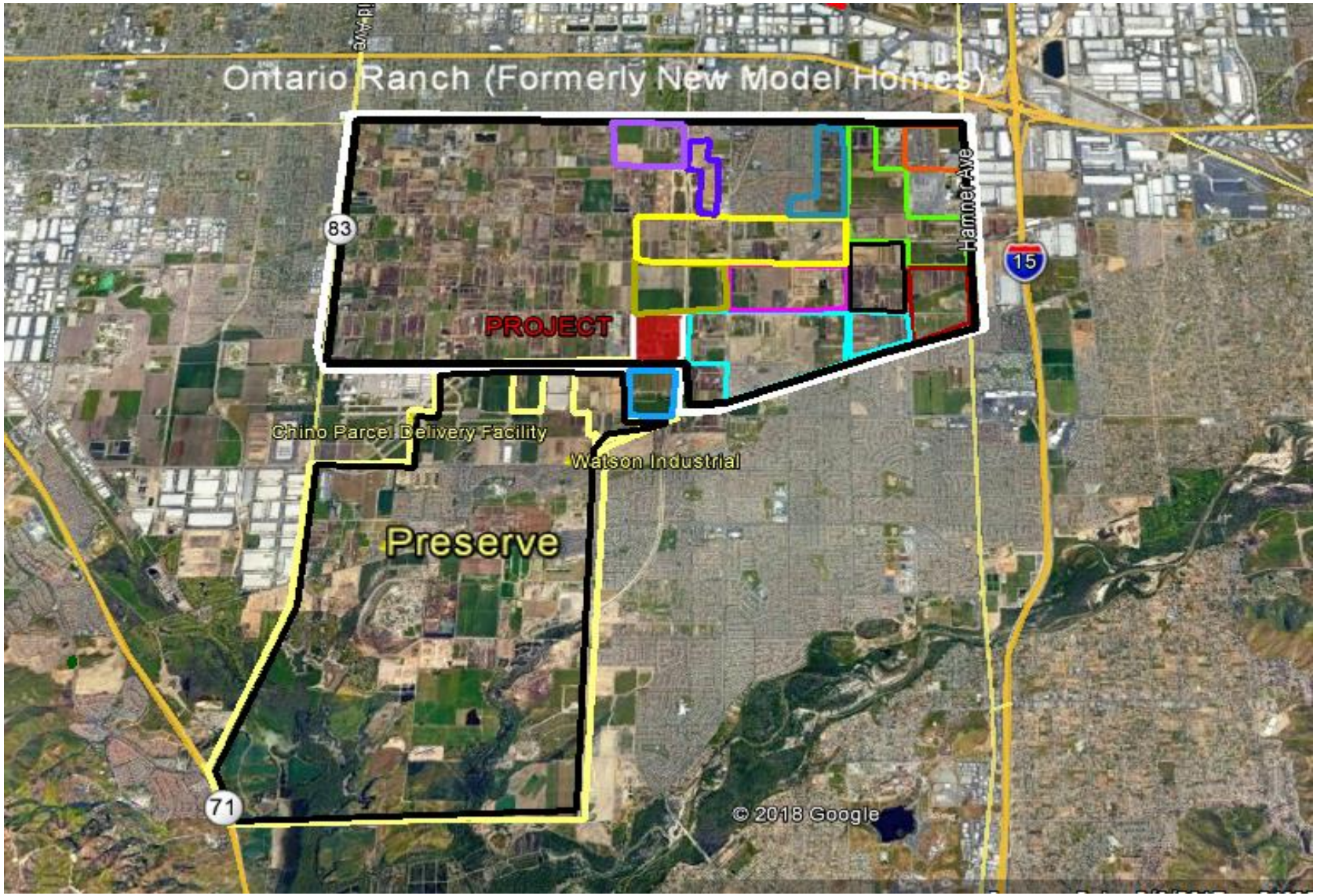

TABLE 1: DEVELOPMENT PROJECTS, MITIGATION MEASURES, AND REFERENCE DOCUMENTS WITHIN THE NEW MODEL COLONY LOCATED IN THE CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA.

DEVELOPMENT	PROJECT IMPACTS	DEVELOPER	MITIGATION MEASURE(S)	REFERENCE DOCUMENT	NOTES
NEW MODEL HOMES (ONTARIO RANCH)					
Armstrong Ranch	199 Acres 994 single family units	CVRC Ontario Investments	**Burrowing Owl**. A focused burrowing owl survey was performed for the area controlled by the applicant (PAs 2, 3, 4, 5) and the species was confirmed absent. A visual off-site focused survey was performed for PAs 6A, 6B and 7 that are not controlled by the applicant. No burrowing owls were detected during the visual survey. While no burrowing owls were present during the onsite surveys and none were visually observed on lands where physical access was not provided (PAs 1, 6A, 6B and 7), owls could be present at the time of project grading and construction. If present, the DEIR disturbance could have a significant impact. **BIO-1-SP** A preconstruction presence/absence burrowing owl survey shall be conducted within 14 days prior to the start of any demolition, grading or construction of each phase of development (including clearing and grubbing). Each pre-construction survey shall include the land proposed for development within the phase and any associated off-site improvements. If burrowing owls are detected, a mitigation and eviction plan consistent with CDFW protocol for that phase shall be provided to CDFW for approval. **BIO-3-SP** Prior to the demolition or grading within PA's 1, 6A, 6B or 7 that have not been surveyed to date, a qualified biologist shall conduct a focused survey for burrowing owl following CDFW's March 2012 recommended guidelines and shall consist of four visits between February 15 and July 15. If the species is found, an eviction plan shall be drafted and submitted to CDFW for approval. Eviction shall only occur when the owls are not nesting. If the species is not found during the focused survey, and the focused survey is completed more than 14 days prior to ground disturbance, a preconstruction presence/absence survey for burrowing owl within 14 days prior to each phase of development (including clearing and grubbing) shall be completed to ensure no mortality to the species occurs (CDFW 2012). If burrowing owls are detected, a mitigation and eviction plan for that phase will be drafted and provided to the CDFW for approval. Eviction shall occur only when the owls are not nesting.	Specific Plan DEIR Phil Martin & Associates, Inc. (Sept 2016)	COST: $859,680
Colony Commerce Center	123 Acres 2,951,146 s.f. industrial	CDFI Remington	The subsequent surveys did not identify burrowing owls, burrowing owl burrows, or signs of burrowing owls within the study area or within approximately 500 feet of the project as required by the survey protocol (PCR 2015). The project will comply with the Colony Commerce Center Specific Plan and the City of Ontario NMC General Plan and, as such, no cumulative impacts are expected assuming project approval under those plans. No mitigation measures were proposed for burrowing owl.	DEIR (2015061023) AECOM (2016)	COST: $531,360

Countryside	178 acres 819 single family units	Foremost Communities	To offset potentially significant cumulative impacts, the proposed project would adhere to the terms of the 2001 settlement agreement that were designed to mitigate for potential impacts to sensitive species and habitats within the Sphere of Influence (SOI) area. The terms were specifically designed to "*cover potential environmental impacts in [the SOI Amendment Area] to the burrowing owl, the Delhi sands flower-loving fly, raptor foraging and wildlife habitat, loss of open space, and actual and potential habitat and agricultural lands*." The proposed project would also implement mitigation measures MM BIO-1(a-b)-SP, MM BIO-2 (a-f)-SP, MM BIO-3-SP, MM BIO-4-SP, and MM BIO-5-SP, which would further reduce cumulative impacts of the proposed project within the SOI area to ***less than significant*** levels. **MM BIO-2(a)-SP Prior to any groundbreaking within the Specific Plan Area, mitigation fees shall be paid to a land conservancy selected to oversee habitat land acquisition in accordance with the settlement agreement between the City, Sierra Club and Endangered Habitat League.** MM BIO-2(f)-SP The City shall enter into consultation with appropriate California Department of Fish and Game personnel before and during the establishment of the offsite mitigation areas, whether land purchased by fee or under conservation easement. MM BIO-4-SP Based on approval by the CDFG, preconstruction and non-breeding season exclusion measures may be implemented to preclude burrowing owl occupation of the project site prior to project related disturbance (such as grading).	Specific Plan Final DEIR (2004071001) EIP EIP Associates (March 2006)	COST: $752,940
Edenglen	160 acres 310 single family units 274 multi-family units 217,520 s.f. commercial 550,000 s.f. business park	Brookfield Homes	**BR-1** Not less than two weeks and not more than four weeks prior to the commencement of any ground-disturbing activities, a survey for burrowing owls will be conducted to document the DEIR presence or absence. If burrowing owls are documented to be present on the project site, they will be physically relocated to an established preserve relocation site. **BR-4 Require the developer of the Edenglen Project to pay a Habitat Mitigation Fee of $4,320 per net acre to the City of Ontario toward the development of the Waterfowl and Raptor Conservation Area, which would be based on the percentage of land area of the NMC that is occupied by the project site, as approved by the City of Ontario.**	Specific Plan Final DEIR (2004051108) MBA (July 2005)	COST: $691,200
Esperanza	233 acres 914 single family units 496 multi-family units	GDCI-RCCD, GDC Investments	One special-status species was recorded on site; the loggerhead shrike and two other species burrowing owl and white-tailed kite were previously recorded (L&L Environmental 2001), but were not recorded during more recent surveys conducted in 2002, 2003, or 2005. **MM Bio 1**: There is a possibility of owl colonization within the project site prior to site grading. To ensure that no direct loss of individuals occurs, mitigation will be carried prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls shall be conducted by a qualified biologist. The survey shall be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed for owls. If owls are determined to be present within the construction footprint, they shall be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The preconstruction survey and any relocation activity shall be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. **MM Bio 2: The project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Community and impacts to existing open space," according to the City of Ontario Development Impacts Fee Calculation Report and the**	FDEIR (2002061047) Albert Webb Associates (December 2006)	COST: $1,006,560

			Settlement and general Release Agreement. Development is currently required to pay $4,320 per acre. Therefore, the proposed project will pay approximately $963,360 for open space acquisition based upon the current fee.		
Grand Park	320 Acres 740 single family units 587 multi-family units	Richland Communities Distinguished Homes	Per MBA's 2012 Biological Resources Study, suitable habitat occurs on the site and burrowing owl has been recorded (CNDDB record from 1921) as occurring immediately adjacent to the site. In addition, burrowing owl has been observed on the site during previous surveys conducted by AMEC in 2003, 2006, and 2007. Therefore, this species has high potential to occur on site. Thus, mitigation is recommended for potential project impacts to this species. **BIO-1** Suitable habitat for burrowing owl (BUOW) is present on the site, therefore, prior to issuance of a grading permit; the project applicant shall have a biologist conduct focused protocol surveys for BUOW to map the location of suitable burrows, if any, and to formally determine presence or absence on the project site. ***Off-site mitigation***: If the project will impact suitable habitat on-site below the threshold level of 6.5 acres per relocated pair or single bird, the habitat should be replaced off-site. Off-site habitat must be suitable and approved by CDFG, and the land should be placed in a conservation easement in perpetuity and managed for BUOW habitat. **Prior to issuance of grading permit(s), Project applicant(s) shall pay thDEIR fair share towards the $22.7 million for the habitat land acquisition within the Chino/El Prado Basin Area that shall serve as the designated Waterfowl and Raptor Conservation Area (WRCA). The fee shall be paid in accordance with the September 10, 2002 modification to NMC GPA Policy 18.1.12 and Implementation Measure I-6, that state a 145-acre WRCA shall be provided through either a mitigation land bank, or by purchasing a property through development mitigation/impact fees. The habitat land acquisition shall be managed by Land Conservancy, a non-profit organization selected by the City and The Endangered Habitat's League and the Sierra Club.**	DEIR (2012061057) MBA (August 2013)	COST: $1,353,600
Parkside	250 acres 437 single family units 1,510 multi-family units 115,000 s.f. commercial	SC Ontario Development	**MM Bio 1:** There may be a probability of owl colonization within the project site considering the presence of foraging habitat and previous records of presence. To ensure that no direct loss of individuals occurs, mitigation shall be completed prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls will be conducted by a qualified biologist. The survey will be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site should be resurveyed for owls. If owls are determined to be present within the construction footprint, they will be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The pre-construction survey and any relocation activity will be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. **MM Bio 2: The project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Colony and impacts to existing open space," according to the City of Ontario Development Impacts Fee Calculation Report and the Settlement and general Release Agreement Development is currently required to pay $4,320 per acre. Therefore, the proposed project will pay approximately$2,298,240 for open space acquisition based upon the current fee.**	DEIR Specific Plan (2004011008) Albert A. Webb Associates (July 2006)	COST: $1,057,500

Rich Haven	510 acres 1,553 single family units 2,703 multi-family units 889,200 s.f. commercial	Richland Communities Brookfield Homes	Focused biological surveys of the project site for the Western burrowing owl and for the Delhi Sands flower loving fly (DSF) were prepared by Bonterra Consulting in August 2005 and November 2005, respectively. The results of the burrowing owl survey indicate that five active and inactive burrows were found on site. Six adult and four juvenile burrowing owls were observed during the surveys. **BR-1** Not less than two weeks and not more than four weeks prior to the commencement of any ground-disturbing activities, a survey for burrowing owls will be conducted by a qualified biologist to document the DEIR presence or absence. If burrowing owls are documented to be present on the project site, they will be physically relocated to an established preserve relocation site. **BR-2** A focused survey by a qualified biologist for burrowing owl shall be conducted each year that the property remains in an undeveloped state to confirm the current number of owls occupying the site. Focused surveys would follow accepted burrowing owl protocol, which includes a nesting season survey. During the nesting season survey, four site visits are conducted between March 1 and August 31. Surveys should be conducted from two hours before sunset to one hour after, or from one hour before to two hours after sunrise. **BR-3 B**urrowing owl inside the project site will be passively relocated prior to construction activity in order to avoid direct impacts of burrow destruction. Once all burrows on the project site are confirmed to be absent of owls, they will be systematically collapsed. Where possible, burrows will be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible plastic pipe or burlap bags will be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. **BR-5** Prior to issuance of permits, the Applicant and the City of Ontario shall hire a qualified biologist to develop a mitigation plan to compensate for the loss of burrowing owl occupied habitat to the satisfaction of the CDFG. **BR-7 Require the developer of the Rich Haven Project to pay a Habitat Mitigation Fee of 4,320 per net acre to the City of Ontario toward the development of the Waterfowl and Raptor Conservation Area, which would be based on the percentage of land area of the NMC that is occupied by the project site, as approved by the City of Ontario.**	Draft DEIR State Clearinghouse No. 2006-051081 MBA (July 2007)	COST: $2,157,300
Subarea 29	539 acres 2,392 single family units 87,000 s.f. commercial	SL Ontario Development Richland Communities Brookfield Homes Lewis Homes (Park Place)	No burrowing owls were observed during the biological resources survey and, according to the biological resources report (see Appendix D), the burrowing owl is considered to have a low probability of occurrence on site and a therefore, low potential of being directly impacted by development of the proposed project. While not observed during the field survey, this species has been observed at other locations in the Chino Basin and the site could be colonized by this species in the future; therefore, future development could potentially result in significant impacts. Although the burrowing owl has a low probability of occurring onsite any loss of owls or active nests during project implementation is considered significant pursuant to the CEQA and Fish and Game Code. Site grading and construction could result in the loss of individual owls and eggs or young if this species occupies the site and grading occurs during the breeding season (generally March through August). With mitigation measures included in this DEIR incorporated into development of the Specific Plan, however, any potential impacts are reduced to a less than significant level. **MM Bio 1:** There may be a probability of owl colonization within the project site considering the presence of foraging habitat and previous records of presence. To ensure that no direct loss of individuals occurs, mitigation shall be completed prior to initiation of on-site grading activities for each development phase. A pre-construction survey for resident burrowing owls will be conducted by a qualified biologist. The survey will be conducted 30 days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site should be resurveyed for owls. If owls are determined to be present within the construction	Subarea 29 (Hettinga) Specific Plan (2004011009) Albert Webb (June 2006)	COST: $1,080,000

			footprint, they will be captured and relocated. If non-breeding owls must be moved away from the disturbance area, passive relocation techniques will be used. The pre-construction survey and any relocation activity will be conducted in accordance with the CDFG Report on Burrowing Owl Mitigation, 1995. According to CDFG guidelines, mitigation actions will be conducted from September 1 to January 31, which is prior to the nesting season. However, burrowing owl nesting activity is variable, and as such the time frame will be adjusted accordingly. Should eggs or fledglings be discovered in any owl burrow, the burrow cannot be disturbed (pursuant to CDFG guidelines) until the young have hatched and fledged (matured to a stage that they can leave the nest on thDEIR own). **MM Bio 2: To mitigate for potential impacts to loss of nesting and foraging habitat, the project proponent shall be required to pay City of Ontario open space mitigation fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Colony and impacts to existing open space," according to the City of Ontario Development Impacts Fee Calculation Report and the Settlement and general Release Agreement. Development is currently required to pay $4,320 per acre. Therefore, the proposed project will pay approximately $1,080,000 for open space acquisition based upon the current fee.**		
Subarea 29 Amendment	25 Acres 574 single family units	SL Ontario Development Corporation	Coming Soon		COST:$112,320
The Avenue	569 acres 2,606 residential units 250,000 s f of retail space	Brookfield Homes Richland Communities Distinguished Homes Lewis Companies	BR-1 No less than two weeks and not more than four weeks prior to the commencement of any ground-disturbing activities, a preconstruction survey for burrowing owls shall be conducted by a qualified biologist. If ground-disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, the site shall be resurveyed for owls. If owls are determined to be present within the construction footprint, they will be relocated in accordance with current California Department Fish and Game protocol. **BR-4 The Project proponent shall be required to pay City of Ontario development impact fees. Fees collected will be used "to acquire and restore mitigation lands to offset impacts to species now living in the New Model Colony and impacts to existing open space," according to the City of Ontario Development Impact Fee Calculation Report and the Settlement and General Release Agreement. This fee is currently $4,320 per acre.** BR-5 To avoid direct impacts to burrowing owls, a pre-construction survey will be conducted by a qualified biologist no more than 30 days prior to any ground-disturbing activities, including demolition, manure clean up, and site grading. If burrowing owls are detected on site, they will be relocated in accordance with current protocols recognized by the CDFG. If present on site, burrowing owls must be relocated outside of the nesting season (February 1 through August 31), unless a qualified biologist confirms that the burrowing owls are not nesting, and CDFG approves in writing the relocation during the nesting season. If ground disturbing activities are delayed or suspended for more than 30 days after the preconstruction survey, then the site shall be resurveyed for burrowing owls. **Given the current degradation of the existing habitat onsite, development impact fees will help acquire, at least, an equivalent or greater level of habitat. The proposed Project will be required to pay these fees. Cumulative loss of habitat is therefore considered less than significant. Cumulative impacts to the direct loss of species are reduced to less than significant levels with**	SDEIR Stantec (Oct 2008)	COST: $2,406,870

			the implementation of Mitigation Measures listed in the previously approved FDEIR and in this SDEIR and through consultation with the appropriate regulatory agencies as necessary.		
The Lakes			Proposed		
West Haven	199 acres 753 single family units 87,000 s.f. commercial	Stratham Homes Richland Communities Lewis Companies CV Communities	**B-1 Prior to issuance of grading permit(s), a habitat land acquisition fee of $4,320 per acre shall be paid by Project applicant(s); and placed into a trust account for use upon Project development and construction activities, for the restoration and rehabilitation of the WRCA agreed to be provided at the 145-acres within the El Prado/Chino Basin. The fee shall be paid in accordance with the September 10, 2002 modification to NMC GPA Policy 18.1.12 and Implementation Measure I-6, that states a 145-acre WRCA shall be provided through either a mitigation land bank, or by purchasing a property through development mitigation/impact fees.**	Specific Plan Final DEIR (2004071095) URS (2005)	COST: $841,770
OTHER NON NEW MODEL HOME AREAS					

California Commerce Center	26.49 Acres		The Project Site contained 16 individuals, with seven observed pairs and one other individual that may be paired (Tom Dobson 2005). In 2006, four BUOW territories – three pairs and one individual (MBA, 2006). Prior to the passive relocation, approximately eight temporary artificial burrows (a ratio of 2:1 for occupied burrows) will be constructed along the southern boundary of the project site. The particulars of the conservation land acquired will be detailed in a report submitted to the City of Ontario and CDFG once the final parcel(s) has been identified for purchase. Information will include the location of the parcel(s), the onsite conditions at the time of conservation, the level of management activity required to create suitable BUOW habitat, the management activities completed to date, and the presence of BUOW. The conservation land will be periodically visited for the next 3 years (12 visits) to collect data on BUOW that occupy the site, including survival, pair bonds, nest success, fidelity to the conservation site, and other relevant information. Each of the BUOW that occupy the conservation area would be color-banded to allow unique identification. An effort would also be made to color-band all the young produced by owls on the conservation area.	SDEIR (2006061102) Not on website MBA (April 2007)	
Guasti Plaza	175,000 square feet of historical buildings 300,000 square feet of Class-A office space, two hotels 250,000 square feet of distinctive retail space	Oliver McMillan	It is generally acceptable to have a qualified biologist passively/exclude burrowing owls that are not currently nesting from an occupied site. Nesting burrowing owls must be left unmolested until such time that young have fledged or a qualified biologist has determined the nest is no longer active. The northeastern corner of the project site is located in areas identified as potential BUOW habitat, as shown in Figure 5 of the Redevelopment Plan DEIR. Based on the discussion above, this mitigation remains applicable to future residential development under the proposed Specific Plan Amendment. 4.9.1To adequately determine the presence/absence of the burrowing owl on the project site, winter and breeding season surveys for the burrowing owl, as well as pre-construction surveys would have to be conducted. In the event that burrowing owls are determined to occur on the project site, mitigation for habitat loss shall be implemented as set forth in the prevailing guidance document for the species**. If burrowing owls are determined to occur within the project site during either focused or preconstruction surveys, mitigation shall include the acquisition and protection of off-site habitat to offset the loss of foraging and burrowing/breeding habitat on the project site. A minimum of 6.5 acres of foraging habitat (based on providing a 100-yard foraging radius around the burrow) per pair or unpaired resident bird shall be permanently protected. The protected lands shall be within the vicinity of the project site and in suitable habitat at a location approved by the CDFG. Any occupied burrows within the project site that will be destroyed shall be mitigated through enhancement of existing unsuitable burrows or creation of artificial burrows at a ratio of 2:1 on the protected land site.**	SDEIR (SCH 2008111072) David Evans and Associates (May 2011)	
	250-acre	Saris-Regis	No burrowing owls were detected during the site visit. Numerous suitable burrows were present on site and there are several CNDDB records for burrowing owl within four miles of the site (although none from the actual site itself), (CNDDB 2014). In July 2014, CDFW documented several owls in the project vicinity and it is possible that these owls utilize the project site (Harmsworth 2014). 4.9.2 Burrowing Owl Avoidance: Breeding season avoidance measures for the burrowing owl including, but not limited to, those that follow shall be implemented. A preconstruction survey for resident burrowing owls shall be conducted by a qualified Project Biologist within **14** days prior to construction activities. If ground-disturbing activities are delayed or suspended for more than **14** days after the pre-construction survey, the site will be resurveyed for owls. 4.9.3 Burrowing Owl Passive Exclusion: During the nonbreeding season (September 1 through January 31), if burrows occupied by migratory or non-migratory resident burrowing owls are detected during a pre-construction survey, then burrow exclusion and/or closure may be used to passively exclude owls	Specific Plan (2014051020) Applied Planning (March 2015)	

Meredith International Center			from those burrows. Burrow exclusion and/or closure shall only be conducted by the Project Biologist in consultation and coordination with CDFW employing incumbent CDFW guidelines. **4.9.4 Mitigation for Displaced Owls: In consultation with the City, Project Applicant, Project Biologist, and CDFW, and consistent with mitigation strategies outlined in the CDFW Burrowing Owl Mitigation Staff Report, a mitigation plan shall be developed for the "take" of any owls displaced through Project construction activities. Strategies may include, but are not limited to, participation in the permanent conservation of off-site habitat replacement area(s), and/or purchase of available burrowing owl conservation bank credits.**		
Ontario Gateway	Mixed-use project to include two hotels, a 10-story Class-A office building, a Mercedes-Benz dealership and a hospital	Leasing- Lee & Associates	There are 10 recent records of this species within 5 miles of the project site. Suitable foraging and nesting habitat for burrowing owl occurs over much of the project site, within the nonnative grassland and ruderal habitats. Thus, while burrowing owls were not observed on-site, they may forage and nest within the site. Mitigation Measure 4.9.1: The project site shall be surveyed for the presence of the burrowing owl during the winter season (between December 1 and January 31) to determine whether wintering burrowing owls occur on the site, and during the peak of the breeding season (between April 15 and July 15) to determine whether burrowing owls nest on the site. The surveys shall be conducted within one calendar year before the initiation of ground-disturbing activities associated with future residential development. Regardless of the results of the focused surveys, a preconstruction survey for burrowing owls shall also be conducted within 30 days of the initiation of ground-disturbing activities on the site, per the guidelines of the CDFG. **If burrowing owls are determined to occur within the project site during either focused or preconstruction surveys, mitigation shall include the acquisition and protection of off-site habitat to offset the loss of foraging and burrowing/breeding habitat on the project site. A minimum of 6.5 acres of foraging habitat (based on providing a 100-yard foraging radius around the burrow) per pair or unpaired resident bird shall be permanently protected. The protected lands shall be within the vicinity of the project site and in suitable habitat at a location approved by the CDFG. Any occupied burrows within the project site that will be destroyed shall be mitigated through enhancement of existing unsuitable burrows or creation of artificial burrows at a ratio of 2:1 on the protected land site**	Final SDEIR (SCH 2008111072) David Evans and Associates (May 2003)	
UPS		Ware Malcomb	Multiple CNDDB recorded occurrences are in the vicinity of the Project area; however, no sign of burrowing owl (pellets, whitewash, burrows, etc.) were observed during the biological survey. Due to lack of observation of sign and owl, this species has low potential to occur on site.	Addendum to the 1988 UPS Ontario Air Cargo Hub Specific Plan and 1992 Acco Airport Center Specific Plan Final DEIR Rincon (2015)	

ILLUSTRATION 2: CALIFORNIA NATURAL DIVERSITY DATABASE (CNDDB) FOR BURROWING OWL WITHIN AND IMMEDIATELY SURROUNDING THE NEW MODEL COLONY LOCATED IN THE CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA.

TABLE 2: CALIFORNIA NATURAL DATABASE FOR BURROWING OWL WITHIN AND IMMEDIATELY SURROUNDING THE NEW MODEL COLONY LOCATED IN THE CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA.

Occurrence Number	Site Date	UTM	General
1	20060521	Zone-11 N3760386 E440988	1 ADULT OBSERVED AND 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 21 MAY 2006; THIS PAIR WAS PROFESSIONALLY RELOCATED TO AN ARTIFICIAL BURROW DUE TO AIRPORT CONSTRUCTION.
2	20110724	Zone-11 N3763324 E444654	3 OBS, 1992. UNK # OBS 2000. 8 ADULTS (A) (LIKELY 4 PAIR) & 3 JUVENILES (J) OBS 21 MAY & 3A (INCL. LIKELY PAIR) 26 JUN 2006. 2A & 6J AT BURROW 2 SEP 2008. AT LEAST 4 PAIRS & 3J, 2010. 8 NESTS, 13 ACTIVE BURROWS, 38 DETECTIONS DOCUMENTED 2011.
3	20060621	Zone-11 N3761387 E439410	3 ADULTS AND 7 JUVENILES OBSERVED; 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 21 JUN 2006.
4	20060509	Zone-11 N3760942 E446144	ON 9 MAY 2006, 4 ADULTS WERE OBSERVED, 3 ACTIVE BURROWS WERE FOUND ON THE BERMS WITHIN THE DRY SETTLING POND, AND 1 ACTIVE NEST BURROW WAS FOUND BENEATH A CONCRETE SLAB.
5	20000917	Zone-11 N3761897 E448959	2-3 OWLS OBSERVED IN 1 OR 2 BURROWS ON 4 OF 13 SURVEY DAYS IN AUG AND SEP 2000.
6	20050422	Zone-11 N3762209 E446303	1 NESTING BURROW AND 2 OTHER ACTIVE BURROWING OWLS WERE OBSERVED ON SITE DURING APR-JUN 2005.
7	20110815	Zone-11 N3763368 E442978	2 ADULTS OBSERVED; 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 21 MAY 2006. 1 PAIR & FLEDGLINGS (1ST CLUTCH FAILED?) OBS AT MULTIPLE BURROWS; POSSIBLE 2ND PAIR DETECTED 7 MAR-15 AUG 2011.
8	20110321	Zone-11 N3762678 E448178	UP TO 15 DETECTIONS OF OWLS, 5 OCCUPIED BURROWS, & 1 PAIR W/2 YOUNG OBSERVED IN 2010. 14+ DETECTIONS, & AT LEAST 2 OCCUPIED BURROWS & 1 NESTING PAIR OBSERVED IN 2011.
9	20060505	Zone-11 N3761020 E445509	THIS MALE OWL WAS OBSERVED REPEATEDLY, ON DIFFERENT DAYS DURING 2006; JUDGING BY THE SEASON OF THE OBSERVATION AND THE BIRD'S BEHAVIOR, A FEMALE WAS LIKELY INSIDE THE BURROW.
10	20090915	Zone-11 N3762683 E441037	10 ADULTS AND 10 ACTIVE BURROWS OBSERVED ON 15 SEP 2009.
11	20110706	Zone-11 N3763246 E446357	8 ADULTS OBSERVED 26 JUN 2006; LIKELY BREEDING COLONY (CALPHOTO#: 0000 0000 0706 0816). 9 DETECTIONS OF OWLS, 2 NEST SITES RECORDED DURING CONSTRUCTION MONITORING 14 DEC 2010 - 6 JUL 2011.
12	20110308	Zone-11 N3763835 E448293	2 OWLS AT A BURROW OBSERVED 28 JAN, 1 AT (POSSIBLY A SECOND) BURROW 18 FEB, & 2 AT BURROW 8 MAR 2011.
13	20060606	Zone-11 N3759336 E443359	2 ADULTS AND 1 JUVENILE DETECTED; 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 6 JUN 2006.
14	20060521	Zone-11 N3764436 E440832	2 ADULTS OBSERVED AND 1 BREEDING PAIR ESTIMATED TO OCCUR IN AREA ON 21 MAY 2006.

DEPARTMENT OF TRANSPORTATION
DISTRICT 8
PLANNING (MS 725)
464 WEST 4th STREET, 6th FLOOR
SAN BERNARDINO, CA 92401-1400
PHONE (909) 388-7017
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TTY 711
www.dot.ca.gov/dist8

Making Conservation a California Way of Life.

April 25, 2018

File: 08-SBd-60-PM R7.268
08-SBd-83-PM 3.977

Richard Ayala
City of Ontario
303 East B Street
Ontario, CA 91764

Subject: West Ontario Commerce Center Specific Plan – Traffic Impact Analysis

Dear Mr. Ayala:

Thank you for providing the California Department of Transportation (Caltrans) the opportunity to review and comment on the Traffic Impact Analysis (TIA) for the West Ontario Commerce Center Specific Plan (Project), located south of Eucalyptus Avenue, east of Carpenter Avenue, north of Merrill Avenue, and west of Cucamonga Creek, in the City of Ontario. The proposed plan includes two planning areas totaling approximately 120 acres and will allow the development of 555,505 square feet of Business Park use and 2,350,005 square feet of industrial.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when a proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act, it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Ontario, due to the project's potential impact to the State facilities, it is also subject to the policies and regulations that govern the SHS. We offer the following comments:

1) Include the ramp merge and diverge analysis at all intersections for SR-60, SR-71, I-15 within the study area for both directions.

2) Per the City of Ontario's circulation plan, there is a Planned Class II bike lane on Merrill Avenue adjacent to the project site. Any improvements should take future bike lane/paths into consideration.

3) Mitigations must align with SCAG RTP project list.

4) The build-out horizon year study should be year 2045 instead of year 2040. The proposed project is anticipated to be completed in 2023 and therefore horizon year is based on the 20-year from the project completion year which would be 2043.

5) Table 2-3: AM Peak Hour and PM Peak Hour of Delay and LOS for the existing (2017) No Project are different than Existing (2017) in Table 2-2. Please verify with Appendix B.

6) Figures 2-5B, 2-5C, 2-5D and 2-5E: Opening Year 2023 AM and PM peak hour turning movement volumes have inconsistent growth rates applied from the existing year 2017. Notice that there are several turning movement volumes that have no growth rate (same volumes from year 2017) and others have applied growth rates per year that varies from 4% to 22% onto the turning movement within the same intersection study. Provide justification on those high growth rates applied at SR 71/Grand Ave., I-15/Cantu-Galleano Ranch Road, and I-15/Limonite Ave.

7) Provide detailed information about the growth factor from existing year 2017 to horizon year. Please note that current 2040 SBTAM model outpost is projected from the base year 2010 traffic data.

8) Table 4-7 (Horizon Year 2040 Level of Service at Study Area Intersections): Delay and LOS analyses results from No Project and With Project seem lower than Year 2023 (Table 4-4). Please Verify.

9) Appendix B (Level of Service Computation Reports): 15% for heavy vehicles percentage applied for the LOS analyses at the intersections 21 & 22 (SR 71 ramp at Grand Ave.) is a very high percentage. Please note that truck % for the SR 71 freeway is an average of 7%. Therefore, truck % for the ramps should be between 3% to 4% instead of 15% for truck.

These recommendations are preliminary and summarize our review of materials provided for our evaluation. If this project is later modified in any way, please forward copies of revised plans as necessary so that we may evaluate all proposed changes for potential impacts to the SHS. If you have any questions regarding this letter, please contact Jacob Mathew (909) 806-3928 or myself at (909) 383-4557.

Sincerely,

Mark Roberts

MARK ROBERTS
Office Chief, AICP
Intergovernmental Review, Community and Regional Planning

CITY of CHINO

April 27, 2018

Richard Ayala, Senior Planner
City of Ontario, Planning Department
303 East B Street
Ontario CA, 91764

Re: Notice of Availability of a Draft EIR West Ontario Commerce Center- State Clearinghouse #2017041074

Dear Mr. Ayala:

This letter is in response to the letter the City of Chino received on March 20, 2018 related to the Notice of Availability of a draft EIR for the West Ontario Commerce Center, State Clearinghouse #2017041074.

Outlined below are our comments:

Comments on the Traffic Impact Analysis

Table 1-1 "Summary of Improvements and Rough Order of Magnitude Costs" defines improvements necessary to mitigate impacts for intersections studied in various scenario time frames. Intersection No. 37 "Carpenter Avenue at Merrill Avenue" requires construction of a second westbound through lane on Merrill Avenue in the E+P (Project Buildout) Scenario. Intersection No. 36 "Grove Avenue at Merrill Avenue" indicates that in the 2023 Scenario "With/Without Project", second eastbound and westbound lanes are required to be constructed on Merrill Avenue between Euclid Avenue and Archibald Avenue.

Figure 4-2A, Opening Year with Project Mitigation Improvements, defines the roadway network requirements for Opening Year 2023. Merrill Avenue in this scenario shows a 3 lane Divided Roadway from Euclid Avenue to Archibald Avenue. A 4-lane divided roadway is not shown in the study diagrams until Horizon Year With/Without Project Figure 4-3A. The study is not clear as to when Merrill Avenue will be constructed to a 4- lane roadway. Please provide clarification.

If you have any questions, please contact me by email at kle@cityofchino.org, or you can call me at (909) 334-3330.

Sincerely,

Kim Le
Associate Planner

cc: Karen Campbell, Associate Engineer

13220 Central Avenue, Chino, California 91710
Mailing Address: P.O. Box 667, Chino, California 91708-0667
(909) 334-3250 • (909) 334-3720 Fax
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SAN BERNARDINO COUNTY

Department of Public Works

- Flood Control
- Operations
- Solid Waste Management
- Surveyor
- Transportation

Kevin Blakeslee, P.E.
Director

Transmitted Via Email

April 27, 2018

City of Ontario
Richard Ayala, Senior Planner
303 East "B" Street
Ontario, CA. 91764

File: 10(ENV)-4.01

RE: CEQA – NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE WEST COMMERCE CENTER SPECIFIC PLAN FOR THE CITY OF ONTARIO

Dear Mr. Ayala:

Thank you for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. **We received this request on March 20, 2018** and pursuant to our review, the following comments are provided:

Permits/Operations Support Division (Melissa Walker, Chief, 909-387-7995):

1. Since this project is near the San Bernardino County Flood Control District's (District) Cucamonga Creek facility, any proposed activity within the right-of-way would need a Flood Control Permit. Also, District facilities built by the United States Army Corps of Engineers (USACE) will require the District to obtain approval (408 Permit) from the USACE. If these permits are required, their necessity and any impacts associated with the construction should be addressed in the DEIR prior to certification.

Environmental Management Division (Diana Torres, PWE II, Stormwater Program, 909-387-1862):

1. On Page 3.6-3, State Agency Requirements – National Pollutant Discharge Elimination System (NPDES) Permit section, the first paragraph needs to be revised to correctly describe the proper language in regards to the Construction General Permit (CGP) Requirements. The CGP prohibit the discharge of storm water from construction projects that disturb 1 acre or more of land, not five acres as is showing on this section.

2. On Page 3.6-4, first paragraph needs to be revised to reflect the most recent Phase I NPDES MS4 Permit (Order Number: R8-2010-0036, Permit Number: CAS618036) approved by the California Regional Water Quality Control Board.

3. Page 3.9-4, first paragraph of the Federal and State - NPDES General Permit section needs to be revised to reflect the most recent Construction General Permit (Order No. 2010-0014-DWQ). In addition, please revise to correctly describe the proper language in regards to the CGP Requirements. The CGP prohibit the discharge of storm water from construction projects that disturb 1 acre or more of land, not five acres as is showing on this section.

4. On Page 3.9-5, the second paragraph of the Basin Plan section needs to be revised to address the 2014/2016 303(d) list approved by the California Regional Water Quality Control Board, which includes Cucamonga Creek. Please also confirm in the DEIR if the unknown non-point sources for Cucamonga Creek are due to high coliform counts, cadmium, copper, lead and zinc levels as mentioned in this section or if different pollutants need to be considered per the 2014/2016 303(d) list.

5. On Page 3.9-9, the second paragraph of the Potential Impacts from the Operational Activities section address the development of a Stormwater Quality Management Plan (SWQMP). The SWQMP is also referenced as a document for operation activities on Page 3.9-10, on the Cumulative Impacts section. Please specify if the SWQMP refers to an IGP SWPPP as there is also WQMP requirements for post-construction.

6. Appendix I, the Preliminary WQMPs attached reference the old Phase I NPDES MS4 Permit. Please revise the Plans to make reference of the latest Permit.

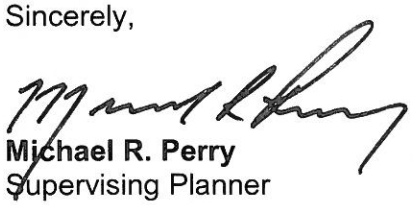
7. As a general comment, WQMPs are not required by the County of San Bernardino (County) Stormwater Program, they are a requirement of the NPDES MS4 Phase 1 permit issued by the Santa Ana River Water Quality Control Board. WQMPs are subject to approval only by the City of Ontario, not the County Stormwater Program.

Environmental Management Division (Patrick Egle, Planner III, 909-387-1865):

1. It appears that the proposed project will add storm drain inlets to Cucamonga Creek Channel, a District owned property. Please discuss and analyze the short and long term impacts to District facilities such as water quality, storm water discharge volume, and adequacy of Chris Basin to handle the proposed additional discharge.

We respectfully request to be included on the circulation list for all project notices, public reviews, or public hearings. In closing, I would like to thank you again for allowing the San Bernardino County Department of Public Works the opportunity to comment on the above-referenced project. Should you have any questions or need additional clarification, please contact the individuals who provided the specific comment, as listed above.

Sincerely,



Michael R. Perry
Supervising Planner
Environmental Management

MRP:PE:sr
Email: rayala@ontarioca.gov

Golden State Environmental Justice Alliance
Green Jobs & Clean Communities
P.O. Box 79222
Corona, CA 92877

April 27, 2018

VIA E-MAIL

Richard Ayala
Senior Planner
City of Ontario
303 East "B" Street
Ontario, CA 91764
RAyala@ontarioca.gov

Re: *West Ontario Commerce Center (SCH Number: 2017041074)*

Dear Mr. Ayala:

Thank you for the opportunity to comment on the Environmental Impact Report (EIR) for the proposed West Ontario Commerce Center project. Please accept and consider these comments on behalf of Golden State Environmental Justice Alliance. Also, Golden State Environmental Justice Alliance formally requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

1.0 Summary

As we understand it, the project proposes the implementation of a Specific Plan which permits the development of a business park and industrial center on approximately 120 net acres. The Specific Plan includes two Planning Areas and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development footprint of 2,905,510 square feet. The Specific Plan has the flexibility to determine the individual building size based on the market conditions. The Business Park use will

accommodate industrial-serving commercial and office uses, very light industrial uses, and allow multi-tenant buildings and single-tenant buildings on the northern portion of the Site, PA 1. The Industrial use will allow storage and warehouse use, e-commerce, distribution, and a wide-range of manufacturing and assembly uses on the southern portion of the Site, PA 2.

An area totaling approximately 2.49-gross acres (1.41-net acres) that is off-site and north of the northwest corner of the Site is part of and located within the approved Parkside Specific Plan (PSP03-002). This triangular area will be part of the proposed re-alignment of Eucalyptus Avenue. The Project will include a portion of this re-alignment as an off-site improvement; however the area where the re-alignment will occur will remain within the jurisdiction of the Parkside Specific Plan and will not be subject to the Specific Plan.

The project site is currently used for agricultural purposes, including two active dairy farms, row crops, and a hay and alfalfa wholesaler. The remainder of the site consists of vacant land and has previously been used for agriculture.

Discretionary actions related to the development of the proposed project include General Plan Amendment and Zone Change to: 1) decrease the designated Business Park area by 40-acres to a total of 21.09 acres; and 2) increase the designated Industrial land use by 40-acres to a total of 98.09 acres; and 3) change the designation of approximately 2.49-gross acres (1.41-net acres) within the Parkside Specific Plan north of the Project from the Parkside Specific Plan to Business Park to utilize the area for the realignment of Eucalyptus Avenue.

3.3 Air Quality

It must first be noted that the Air Quality Analysis does not provide any information or analysis regarding the potentially significant impacts associated with the proposed off-site re-alignment of Eucalyptus Avenue. The EIR must be revised to accurately analyze this improvement as part of the Air Quality modeling and include it for review in the cumulative impacts analysis.

Unsubstantiated Input Parameters Used to Estimate Project Emissions

The EIR for the Project relies on emissions calculated from the California Emissions Estimator Model Version CalEEMod.2016.3.1 ("CalEEMod").[1] CalEEMod provides recommended default values based on site specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project

[1] CalEEMod website, *available at*: http://www.caleemod.com/

information is known, the user can change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence.[2] Once all the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollutant and greenhouse gas (GHG) emissions, and make known which default values were changed as well as provide a justification for the values selected.[3]

When reviewing the Project's CalEEMod output files, located in Appendix C, we found that several of the values inputted into the model are not consistent with information disclosed in the EIR and are not consistent with guidance set forth by the South Coast Air Quality Management District (SCAQMD) for industrial projects. As a result, emissions associated with the Project are greatly underestimated. A revised EIR should be prepared that adequately assesses the potential impacts that operation of the Project may have on regional and local air quality and global climate change.

Incorrectly Assumes Construction of Exclusively Unrefrigerated Warehouse Land Uses

The EIR's Phase 1A and Phase 1B construction CalEEMod models assume that the Project's proposed warehouses will be exclusively unrefrigerated, and as a result, the Project's operational emissions may be underestimated.

According to the EIR, the "air quality analysis assumed that up to 100,000 square feet of warehouse space would be refrigerated" (p. 3.3-17). Therefore, in order to be consistent with what is proposed in the EIR, the Project's Phase 1 construction emissions should have been estimated assuming that 100,000 square feet of the proposed warehouse space would be refrigerated. However, review of the Phase 1A and Phase 1B construction CalEEMod output files demonstrate that all of the Project's proposed warehouse land use was modeled as "Unrefrigerated Warehouse-No Rail" (see excerpt below) (Appendix C, pp. 30, pp. 49).

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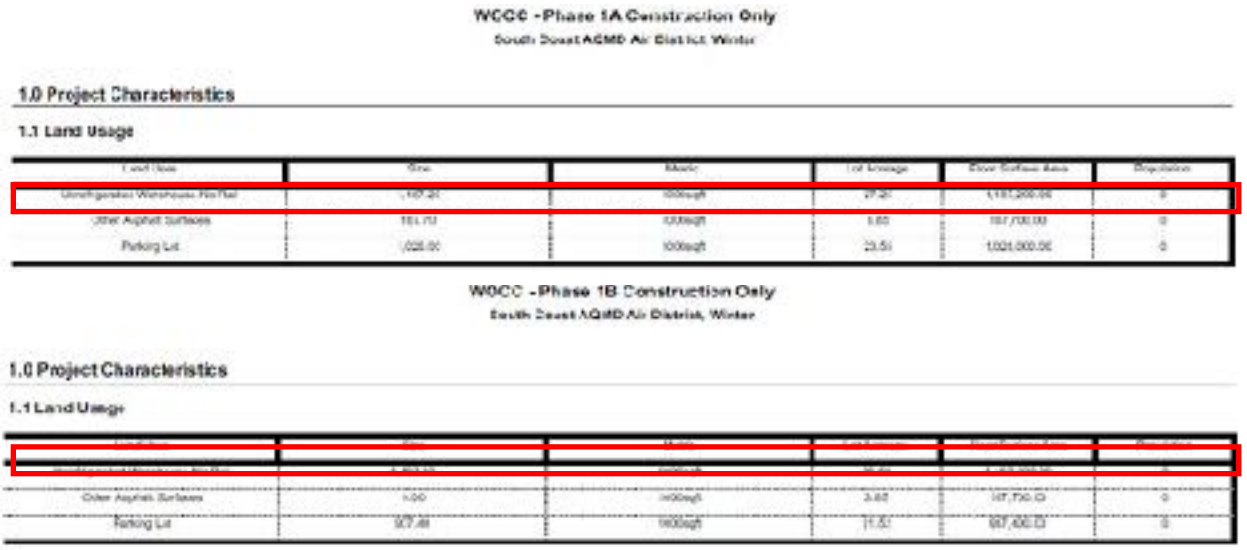
[2] CalEEMod User Guide, p. 2, 9, *available at:* http://www.caleemod.com/

[3] CalEEMod User Guide, p. 7, 13, *available at:* http://www.caleemod.com/ (A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.)



WCCC - Phase 1A Construction Only

1.0 Project Characteristics

1.1 Land Usage

WCCC - Phase 1B Construction Only

1.0 Project Characteristics

1.1 Land Usage

As you can see in the excerpt above, the Project Applicant modeled construction emissions assuming only unrefrigerated warehouse land uses would be constructed. As previously stated, the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations.[4] Refrigerated warehouses release more air pollutants and GHG emissions when compared to unrefrigerated warehouses for several reasons. First, warehouses equipped with cold storage (refrigerators and freezers, for example) are known to consume more energy when compared to warehouses without cold storage.[5] Second, warehouses equipped with cold storage typically require refrigerated trucks, which are known to idle for much longer, even up to an hour, when compared to unrefrigerated hauling trucks.[6] Lastly, according to a July 2014 *Warehouse Truck Trip Study Data Results and Usage* presentation prepared by the SCAQMD, it was found that hauling trucks that require refrigeration result in greater truck trip rates when compared to non-refrigerated hauling trucks.[7] By failing to model the 100,00 square feet of refrigerated warehouses space in the air quality model, the Project's emissions may be grossly underestimated.

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[4] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

[5] Managing Energy Costs in Warehouses, Business Energy Advisor, *available at*: http://bizenergyadvisor.com/warehouses

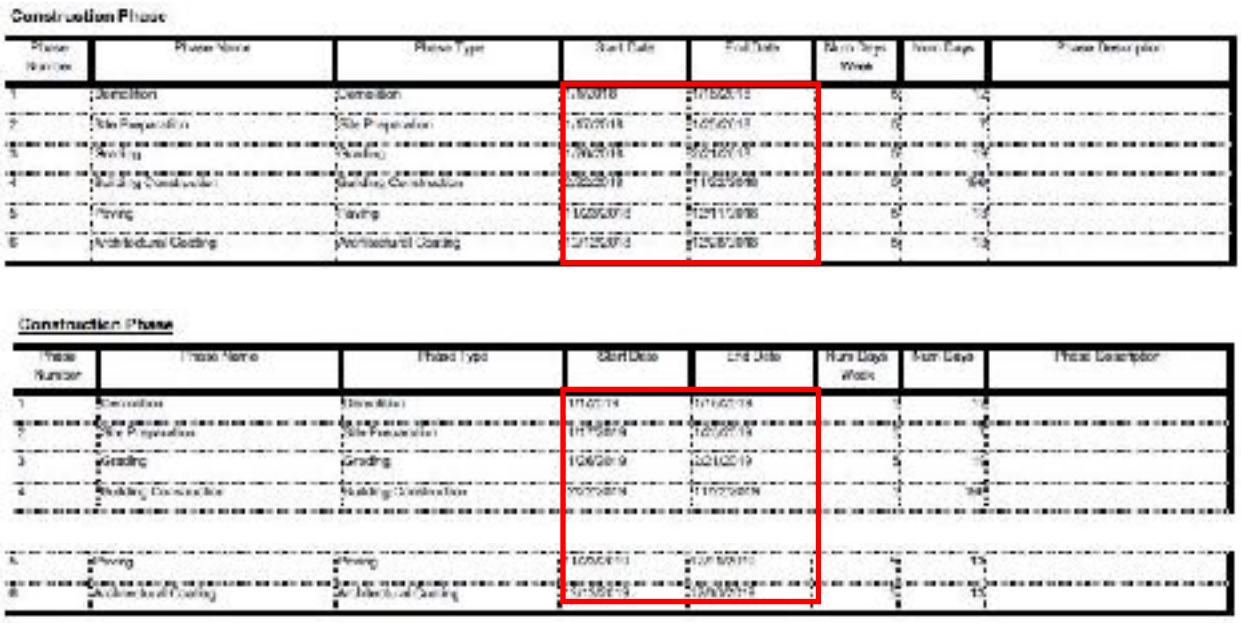
[6] "Estimation of Fuel Use by Idling Commercial Trucks," p. 8, *available at:* http://www.transportation.anl.gov/pdfs/TA/373.pdf

[7] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 7, 9

Use of Incorrect Construction Schedule

Review of the CalEEMod output files for Phase 1 of construction demonstrates that the model uses a construction schedule that is inconsistent with what is stated in the EIR to model the Project's emissions.

According to the EIR, "The construction of Phase 1 is anticipated to start mid-March 2018 and end December 2019" (p. 2-27). In order to be consistent with what is proposed within the EIR, the CalEEMod model should have modeled the Phase 1 construction emissions over an approximate 1.79-year period. Review of the Phase 1A and Phase 1B construction CalEEMod output files, however, demonstrates that construction was modeled over a total of two years, in which Phase 1A was modeled from 1/1/2018 to 12/28/2018 and Phase 1B was modeled from 1/1/2019 to 12/30/2019 (see excerpts below) (Appendix C, pp. 34, pp. 52-53).



As you can see in the excerpt above, the CalEEMod model overestimates the construction duration of Phase 1. As a result, the CalEEMod model estimates that construction emissions from Phase 1 will occur over an extended period of time, **effectively diluting the criteria air pollutant emissions that will be emitted during the construction phase.** This discrepancy between the construction duration outlined in the EIR and the one modeled for presents a significant issue, resulting in an underestimation of the Project's construction emissions.

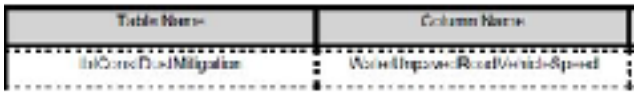
Further, Section 5-29.09 of the Ontario Municipal Code permits construction activity between the hours of 7:00 A.M. and 6:00 P.M. Monday through Friday, and between 9:00 A.M. and 6:00 P.M. on Saturday and Sunday. The EIR does not provide a "worst-case scenario" analysis of construction equipment emitting pollutants for the legal 11 hours per weekday plus 9 hours on

Saturday and Sunday. It is legal for construction to occur for much longer hours and two additional days (7 days per week including Saturday and Sunday) than modeled in the Air Quality Analysis. The Air Quality modeling must be revised to account for these legally possible longer construction days and increased number of construction days. This is especially necessary since the Noise Analysis utilizes these hours of construction within the construction impact analysis and states that the project will comply with this ordinance. If shorter hours of construction are proposed, this must be included as an enforceable mitigation measure with field verification by an enforcement entity of the lead agency (CEQA § 21081.6 (b)).

Incorrectly Applied Mitigation Measure to Project Emissions

Our review indicates that the EIR not only incorrectly applied a construction-related mitigation measure to the Project's construction emissions, but the EIR also changed the CalEEMod default value for this proposed measure within the model without providing substantial reasoning for doing so. The application of this measure to the Project's unmitigated construction emissions, in addition to the unsubstantiated decrease in the mitigation measure's CalEEMod default value results in an underestimation of the Project's construction-related emissions. As a result, we find the EIR's air model to be incorrect and unreliable, and maintain that it should not be relied upon to determine Project significance.

As stated above, a construction-related mitigation measure was identified by the EIR and was applied to the Project's construction emissions. Specifically, the mitigation measure that was incorrectly applied to the model would limit the construction vehicle speed on unpaved roads as a way to reduce the Project's construction-related fugitive dust emissions (see excerpt below) (Appendix C, pp. 30, pp. 49, pp. 69).



The application of this mitigation measure to the Project's construction emissions, however, is entirely incorrect, as the EIR fails to discuss or even mention the implementation of this mitigation measure during Project construction anywhere in the report or associated attachments. Therefore, the application of this mitigation measure to the Project's construction emissions is completely unsubstantiated.

Not only was this measure incorrectly applied to the Project's construction emissions, even though it's not identified as a mitigation measure within the EIR, but the speed value assigned to this measure within the model was also changed from the default value without providing

substantial evidence to justify this change. The CalEEMod default speed value for a vehicle speed limit on unpaved is usually 40 miles per hour (mph), but as you can see in the excerpt below, this value was adjusted from 40 mph to 0 mph within the model without providing a reason for doing so (see excerpt below) (Appendix C, pp. 30, pp. 49, pp. 69).

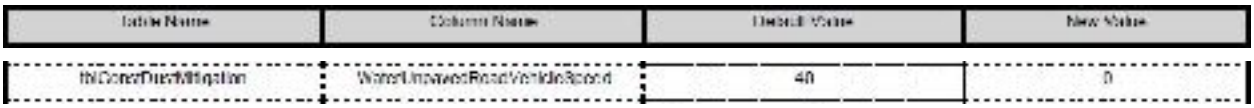


Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0

Again, the application of this mitigation measure to the Project's construction emissions, however, is entirely incorrect. Inputting a speed of 0 mph into the CalEEMod model means that the construction vehicle is stationary, and therefore, the CalEEMod model is estimating Project construction emissions assuming that there will be no vehicles driving on unpaved roads on the Project site. However, according to the EIR, as a result of the debris resulting from the demolition of existing residences on the Project site, it can reasonably assumed that vehicles will be traversing back and forth across the Project site in order to remove all of the debris (p. 3.5-12). Therefore, it is incorrect to model Project emissions assuming there will be no vehicles driving on unpaved roads, as it is clear that vehicles will be driving throughout the Project site during construction to remove soil and debris.

For these reasons, we find the Project's air quality impacts to be inadequately evaluated, and require that an updated EIR be prepared that adequately evaluates and mitigates the Project's air quality impacts to a less-than-significant level.

Failure to Assess the Feasibility of Obtaining Tier 4 Final Equipment

The EIR incorrectly applies another construction-related mitigation measure to the Project's construction emissions. According to the EIR's CalEEMod output files, the Project proposes to equip all construction equipment during Phase 1A, 1B, and 2 with Tier 4 Final engines (Appendix C, pp. 30-31, pp. 49-50, pp. 69). Review of the EIR's Mitigation Monitoring Program (MMP), however, demonstrates that the EIR failed to include this as a construction-related mitigation measure (p. ES Page 2). As a result, modeling emissions with an entire fleet of Tier 4 Final engines is completely incorrect and unsubstantiated, as the use of this mitigated equipment is entirely unenforceable, and thus, the Project cannot claim the emissions reductions resulting from use of this equipment.

Furthermore, regardless of the EIR's failure to include this as a mitigation measure, there is a limited number of Tier 4 Final construction equipment available for use within the state of California. Therefore, not only is this mitigation measure completely unsubstantiated, it is not

actually feasible to assume that the Project can obtain an entire fleet of Tier 4 Final construction equipment. As a result, emissions are significantly underestimated.

The United States Environmental Protection Agency's (USEPA) 1998 nonroad engine emission standards were structured as a three-tiered progression. Tier 1 standards were phased-in from 1996 to 2000 and Tier 2 emission standards were phased in from 2001 to 2006. Tier 3 standards, which applied to engines from 37-560 kilowatts (kW) only, were phased in from 2006 to 2008. The Tier 4 emission standards were introduced in 2004, and were phased in from 2008 to 2015. [8] These tiered emission standards, however, are only applicable to newly manufactured nonroad equipment. According to the USEPA, "if products were built before EPA emission standards started to apply, they are generally not affected by the standards or other regulatory requirements."[9] Therefore, pieces of equipment manufactured prior to 2000 are not required to adhere to Tier 2 emission standards, and pieces of equipment manufactured prior to 2006 are not required to adhere to Tier 3 emission standards. Construction equipment often lasts more than 30 years; as a result, Tier 1 equipment and non-certified equipment are currently still in use.[10] It is estimated that of the two million diesel engines currently used in construction, 31 percent were manufactured before the introduction of emissions regulations.[11]

Although Tier 4 Final engines are currently being produced and installed in new off-road construction equipment, the vast majority of existing diesel off-road construction equipment in California is not equipped with either Tier 4 Final engines.[12] In a 2010 white paper, the California Industry Air Quality Coalition estimated that approximately 7% and less than 1% of all off-road heavy duty diesel equipment in California was equipped with Tier 2 and Tier 3 engines, respectively.[13] Similarly, based on information and data provided in the *San Francisco*

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[8] Emission Standards, Nonroad Diesel Engines, *available at:* https://www.dieselnet.com/standards/us/nonroad.php#tier3

[9] "Frequently Asked Questions from Owners and Operators of Nonroad Engines, Vehicles, and Equipment Certified to EPA Standards." United States Environmental Protection Agency, August 2012. *Available at:* http://www.epa.gov/oms/highway-diesel/regs/420f12053.pdf

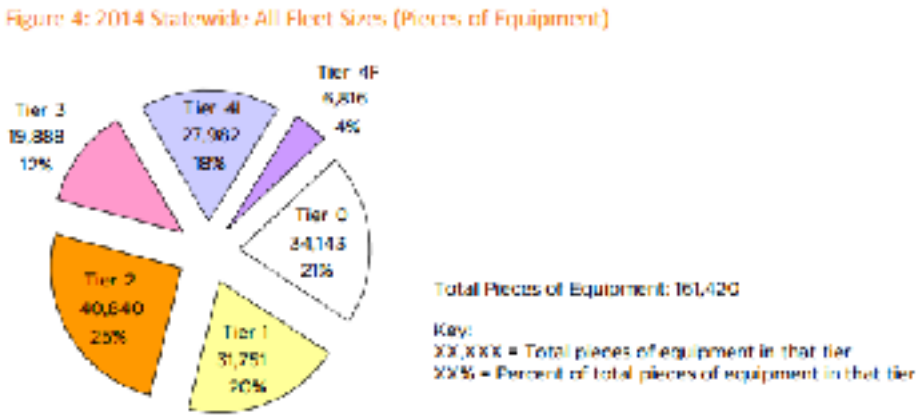
[10] "Best Practices for Clean Diesel Construction." Northeast Diesel Collaborative, August 2012. *Available at:* http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[11] Northeast Diesel Collaborative Clean Construction Workgroup, *available at:* http://northeastdiesel.org/construction.html

[12] California Industry Air Quality Coalition White Paper, p. 3, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White_Paper_CARB_OffRoad.pdf

[13] "White Paper: An Industry Perspective on the California Air Resources Board Proposed Off-Road Diesel Regulations." Construction Industry Air Quality Coalition, *available at:* http://www.agc-ca.org/uploadedFiles/Member_Services/Regulatory-Advocacy-Page-PDFs/White_Paper_CARB_OffRoad.pdf

Clean Construction Ordinance Implementation Guide for San Francisco Public Projects, the availability of Tier 4 Final equipment is extremely limited. In 2014, 25% of all off-road equipment in the state of California were equipped with Tier 2 engines, approximately 12% were equipped with Tier 3 engines, approximately 18% were equipped with Tier 4 Interim engines, and only 4% were equipped with Tier 4 Final engines (see excerpt below).[14]



As demonstrated in the figure above, Tier 4 Final equipment only accounts for 4% of all off-road equipment currently available in the state of California. Thus, by modeling for Tier 4 Final equipment during construction, the EIR is relying on obtaining on obtaining an entire fleet of construction equipment that only accounts for 4% of all off-road equipment currently available in the state of California. Therefore, obtaining an entire fleet of Tier 4 Final equipment is unlikely. Furthermore, as previously mentioned, this mitigation measure is completely unenforceable as the use of Tier 4 Final engines is not included as a mitigation measure. For these reasons, we find the emissions calculations contained within the EIR's CalEEMod output files to be incorrect and should not be relied upon to determine Project significance.

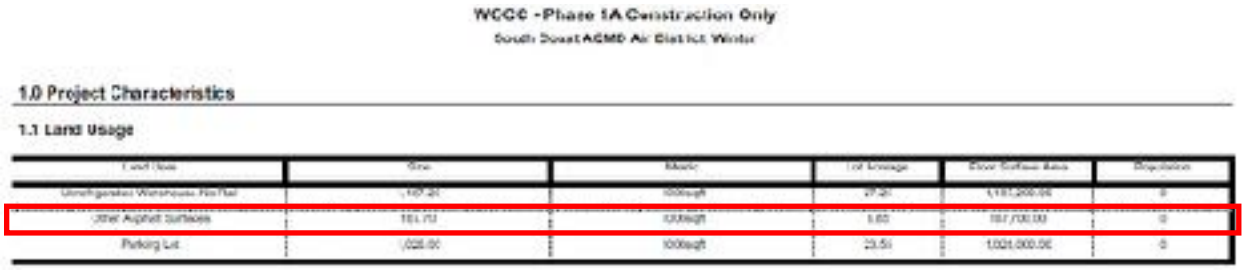
Failure to Include All Land Uses in Operational Emissions

Review of the Project's operational CalEEMod output files demonstrates that the Project Applicant failed to model to emissions from all land uses.

According to the EIR, "the Project includes two PAs and will allow a maximum development of 555,505 square feet of Business Park use and 2,350,005 square feet of Industrial use with a total development of 2,905,510 square feet" (p. 2-1). Furthermore, the Phase 1A, Phase 1B, and Phase 2 construction CalEEMod output files indicate that 167,700 square feet of "Other Asphalt

[14] "San Francisco Clean Construction Ordinance Implementation Guide for San Francisco Public Projects." August 2015, *available at:* https://www.sfdph.org/dph/files/EHSdocs/AirQuality/San_Francisco_Clean_Construction_Ordinance_2015.pdf, p. 6

Surfaces" will be constructed during each phase, for a total of 503,100 square feet of asphalt surface (see excerpts below) (Appendix C, pp. 30, pp. 49, pp. 68).

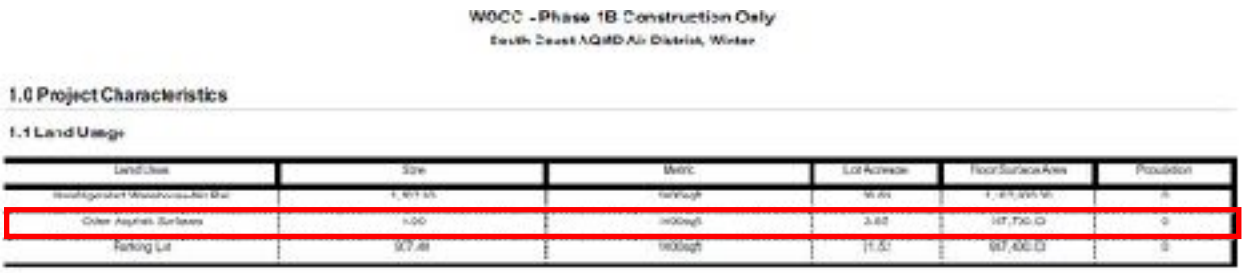


WOCC - Phase 1A Construction Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,167.20	1000sqft	26.80	1,167,200.00	0
Other Asphalt Surfaces	181.70	1000sqft	3.83	167,700.00	0
Parking Lot	1,026.00	1000sqft	23.55	1,026,000.00	0

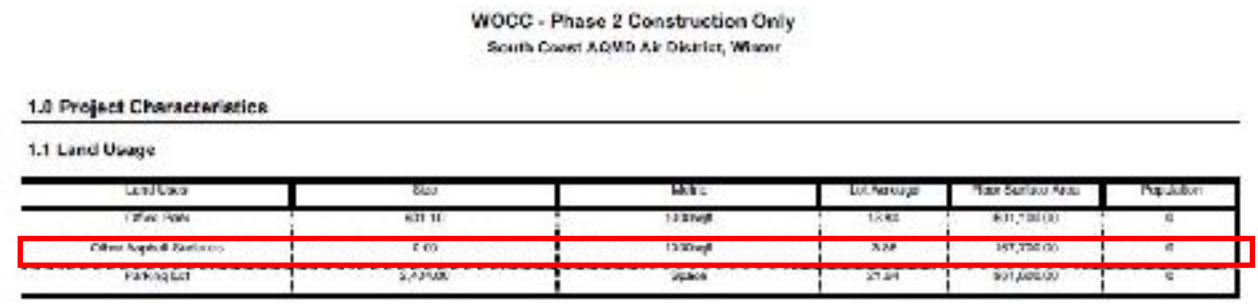


WOCC - Phase 1B Construction Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,167.20	1000sqft	26.80	1,167,200.00	0
Other Asphalt Surfaces	1.00	1000sqft	3.83	167,700.00	0
Parking Lot	927.00	1000sqft	21.30	927,000.00	0



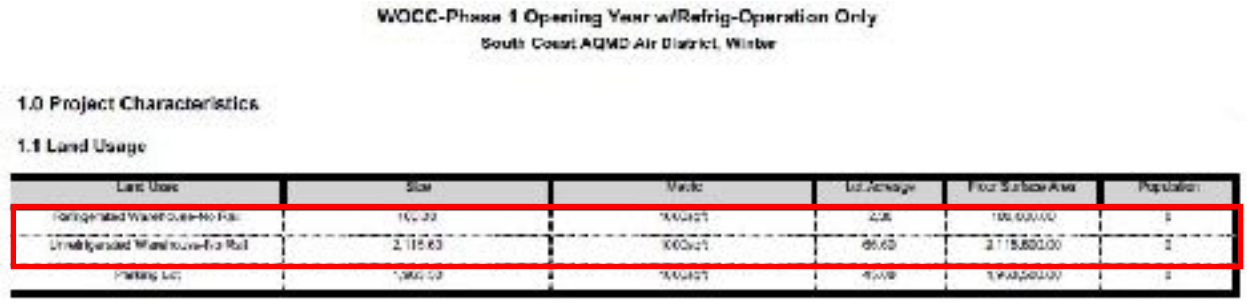
WOCC - Phase 2 Construction Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	167.70	1000sqft	3.83	167,700.00	0
Parking Lot	2,215.60	1000sqft	50.86	2,215,600.00	0

Therefore, in order to be consistent with the information disclosed in the EIR and the Project's construction CalEEMod models, the Project Applicant should have modeled the following: (1) Phase 1 operational emissions with a total of 2,350,005 square feet of warehouse and 355,400 square feet of "Other Asphalt Uses"; and (2) Phase 2 operational emissions with 167,700 square feet of "Other Asphalt Uses." However, the Phase 1 operational CalEEMod output files demonstrate that the model only included 2,215,600 square feet of warehouse and completely omitted the asphalt land use (see excerpt below) (Appendix C, pp. 93, pp. 120, 170).



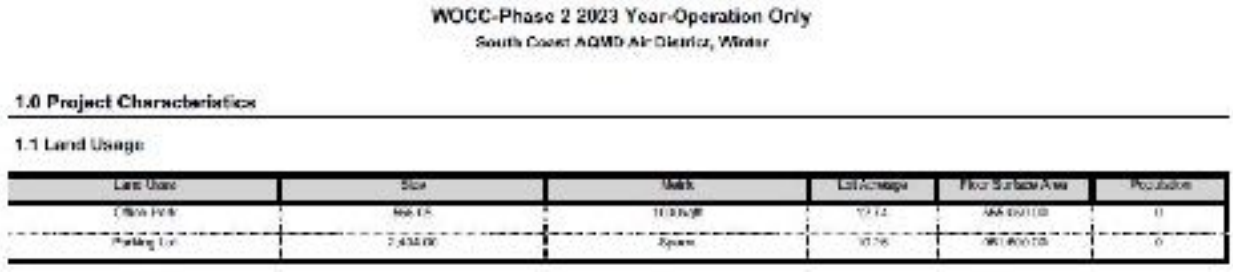
WOCC-Phase 1 Opening Year w/Refrig-Operation Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	350.00	1000sqft	8.04	350,000.00	0
Unrefrigerated Warehouse-No Rail	2,215.60	1000sqft	50.86	2,215,600.00	0
Parking Lot	1,950.00	1000sqft	44.78	1,950,000.00	0

Additionally, the Phase 2 operational CalEEMod output files demonstrate that the models completely omitted the asphalt land use (see excerpt below) (Appendix C, pp. 147, pp. 197).


WOCC-Phase 2 2023 Year-Operation Only
South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

The omission of 134,405 square feet of unrefrigerated warehouse space from Phase 1 and the complete omission of asphalt land use from both operational phases present significant issues. As previously stated, the land use type and size features are used throughout CalEEMod to determine default variable and emission factors that go into the model's calculations. [15] For example, the square footage of a land use is used for certain calculations such as determining the wall space to be painted (i.e., VOC emissions from architectural coatings) and volume that is heated or cooled (i.e., energy impacts). Similarly, the acreage is used to determine the amount of ground to be prepared, graded, paved, etc.[16] Furthermore, CalEEMod assigns each land use type with its own set of energy usage emission factors.[17] By omitting a portion of the unrefrigerated warehouse land use and completely omitted all asphalt land use from the models, the emissions that would be produced during construction and operation of the proposed conference center are unaccounted for, and as a result, the Project's emissions are greatly underestimated.

Incorrect Usage of Fontana Truck Trip Study for Fleet Mix

The EIR relies upon an artificially low truck trip rate and truck fleet mix percentage to model Project the Project's operational emissions, and as a result, the Project's mobile-source emissions are greatly underestimated.

According to the Traffic Impact Analysis (TIA), found in Appendix L, the Project relies on the August 2003 City of Fontana *Truck Trip Generation Study* ("Fontana Study")[18] and the 2012

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[15] CalEEMod User's Guide, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/01_user-39-s-guide2016-3-1.pdf?sfvrsn=2, p. 17

[16] CalEEMod User's Tips, available at: http://www.aqmd.gov/docs/default-source/caleemod/Model/2013.2.2/caleemod-usertips-april2014.pdf?sfvrsn=0, p. 27, p. 11

[17] CalEEMod User's Guide, Appendix D, *available at:* http://www.aqmd.gov/docs/default-source/caleemod/upgrades/2016.3/05_appendix-d2016-3-1.pdf?sfvrsn=2

[18] "Truck Trip Generation Study." City of Fontana, County of San Bernardino, State of California, August 2003, *available at*: http://www.fontana.org/DocumentCenter/Home/View/622

Institute of Transportation Engineers 9th Edition *Trip Generation Manual* ("Trip Generation Manual") to determine the number of passenger car and heavy-duty truck trips the Project will generate during operation (Appendix L, pp. 2869).

However, the South Coast Air Quality Management District's (SCAQMD) staff has determined that the Fontana Study has limited applicability to warehouse projects. As a result, the Fontana Study should not be relied upon to determine the Project's mobile-source emissions.

The Project Applicant is proposing to construct 2,350,005 square feet of industrial land uses during Phase 1 that can be used for warehousing use (p. 2-1). According to the SCAQMD this qualifies as a high cube warehouse.[19] According to the SCAQMD staff, the "Fontana Study, by itself, is not characteristic of high cube warehouses."[20] Furthermore, SCAQMD staff finds the following additional issues with the Fontana Study:[21]

- The overall trip rate is based on only four warehouses total, which includes two warehouses with zeros. In other words, the results of the Fontana Study were based on only two data points. As is disclosed in the Fontana Study, the daily trip rate was only based on data from a Target warehouse and a TAB warehouse.[22]
- The Fontana Study does not report any 24-hour daily truck trip rates. According to the Fontana Study, "Trip generation statistics for daily truck trips were not calculated because vehicle classifications counts could not be obtained from the driveway 24-hour counts."[23]
- The trip rates using the Fontana study are calculated based on a 20 percent truck fleet mix, which is inconsistent with SCAQMD's recommendation that agencies use a truck fleet mix of 40%.

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[19] "SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results," *SCAQMD,* June 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf, p. 2

[20] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 10

[21] "Warehouse Truck Trip Study Data Results and Usage" Presentation. SCAQMD Mobile Source Committee, July 2014, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/finaltrucktripstudymsc072514.pdf?sfvrsn=2, p. 10

[22] "Truck Trip Generation Study." City of Fontana, County of San Bernardino, State of California, August 2003, *available at*: http://www.fontana.org/DocumentCenter/Home/View/622, p. 35

[23] "Truck Trip Generation Study." City of Fontana, County of San Bernardino, State of California, August 2003, *available at*: http://www.fontana.org/DocumentCenter/Home/View/622, p. 6

The EIR and associated appendices rely on a total truck fleet mix of approximately 20 percent, which is taken from the Fontana Study. As a result, the Project's CalEEMod model utilizes the following fleet mix: 79.6 percent cars, 3.5 percent 2−axle trucks, 4.6 percent 3−axle trucks and 12.3 percent 4−axle trucks (Appendix C, pp. 115). This fleet mix, however, is not consistent with recommendations set forth by SCAQMD, and does not accurately represent the percentage of trucks that access a high-cube warehouse on a daily basis. Rather, SCAQMD recommends that lead agencies assume a truck fleet mix of 40%. According to *Appendix E: Technical Source Documentation* of the CalEEMod User's Guide, "in order to avoid underestimating the number of trucks visiting warehouse facilities," SCAQMD staff "recommends that lead agencies conservatively assume that an average of 40% of total trips are truck trips [(0.48*10 + 0.2*4)/(10+4)=0.4)]."[24] If Project-specific data is not available, such as detailed trip rates based on a known tenant schedule, this average of 40% provides a reasonably conservative value based on currently available data. Since the future tenant is unknown, the tenant schedule is also likely not known; therefore, a 40% truck fleet mix should also be assumed.

The following fleet mix percentage should have been used within the Project's CalEEMod modeling.

CalEEMod Parameter		EIR Model Input	SWAPE Model Input
Operational Mobile Fleet Mix	Passenger Cars (LDA)	79.6%	59.14%
	2 Axle Trucks (LHDT1)	3.5%	6.92%
	3 Axle Trucks (MHD)	4.6%	9.28%
	4+ Axle Trucks (HHDT)	12.3%	24.66%

The "Operational Mobile Fleet Mix" percentages for trucks (LHDT1, MHD, and HHDT) in the table above were adjusted to reflect a truck trip percentage of approximately 40 percent, which is consistent with recommended procedures set forth by SCAQMD staff. This fleet mix more accurately represents the number of trips that are likely to occur during Project operation. As

[24] "Appendix E Technical Source Documentation." CalEEMod User's Guide, July 2013, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/high-cube-resource-caleemod-appendix-e.pdf?sfvrsn=2, pp. 15

such, an updated air quality analysis should be prepared in an updated EIR that adequately assesses the Project's air quality and GHG impacts.

Furthermore, the SCAQMD has also made similar comments regarding the use of the Fontana Truck Trip Study in other proposed land use development projects subject to CEQA. For example, the SCAQMD commented that the Addendum to the Heartland Specific Plan EIR, located in Beaumont, should have also used a "more typical 40% truck fleet mix" instead of the truck fleet mix utilized by the Addendum to the EIR.[25] Furthermore, proposed warehouses in the City of Fontana are using the truck fleet mixes recommended by the SCAQMD instead of the Fontana Study. According to the Traffic Impact Analysis prepared by Urban Crossroads for the West Valley Logistics Center,

> "The SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with their truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in effort to be consistent with other technical studies being prepared for the Project."[26]

Therefore, to demonstrate consistency with analyses for other warehouse projects within SCAQMD jurisdiction and the City of Fontana itself, the EIR should have used the truck fleet percentages recommended by the SCAQMD.

Updated Analysis Indicates Significant Criteria Air Pollutant Emissions

In an effort to accurately determine the Project's construction-related criteria air pollutant emissions, we prepared updated CalEEMod models for all phases of construction in order to include more site-specific information and corrected input parameters. Additionally, we assessed the impacts that would occur from overlap of Phase 1 operation and Phase 2 construction. The results of our analysis, discussed in the sections below, indicate that the EIR failed to accurately model and assess the Project's emissions and, as a result, the Project could cause more significant impacts than what was previously identified in the EIR.

Updated Construction Emissions Analysis Indicates Previously Unidentified Significant Impact

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[25] "Review of the Addendum to the Heartland Specific Plan Certified EIR," *SCAQMD*, June 2013, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2013/june/heartland-specific-plan.pdf, p. 3

[26] "Traffic Impact Analysis, West Valley Logistics Center," *Urban Crossroads*, October 2017, *available at:* https://www.fontana.org/DocumentCenter/View/24049, p. 100

In the Phase 1A and 1B construction models, we corrected the construction schedules so that each phase would occur over half of the approximate 1.79-year construction schedule identified by the EIR (see tables below).

SWAPE Phase 1 Construction Schedule

Model	Start Date	End Date	Number of Days
Phase 1A			
Demolition	1/1/2018	1/15/2018	14
Site Preparation	1/16/2018	1/23/2018	7
Grading	1/24/2018	2/17/2018	24
Building Construction	2/18/2018	10/27/2018	251
Paving	10/28/2018	11/14/2018	17
Architectural Coating	11/15/2018	11/30/2018	15
Phase 1B			
Demolition	1/1/2019	1/15/2019	14
Site Preparation	1/16/2019	1/23/2019	7
Grading	1/24/2019	2/17/2019	24
Building Construction	2/18/2019	10/27/2019	251
Paving	10/28/2019	11/14/2019	17
Architectural Coating	11/15/2019	11/30/2019	15

Additionally, we modeled both Phase 1A and 1B with 50,000 square feet of refrigerated warehouse space, for a total of 100,000 square feet of refrigerated warehouse space constructed during Phase 1. Additionally, for all phases of construction, we assumed that Tier 4 Final equipment would not be used, as nothing in the EIR indicates that this cleaner burning equipment will actually be used during Project construction.

When correct, site-specific input parameters are used to model emissions we find that the Project's construction-related ROG emissions increase significantly during Phase 1A and 1B when compared to the EIR's CalEEMod model emissions estimates. Furthermore, ROG emissions exceed the 75 pounds per days (lbs/day) threshold set forth by the SCAQMD for Phase 1A, Phase 1B, and Phase 2 (see table below).

Maximum Daily Construction Emissions (lbs/day)	
Model	**ROG**
EIR Model	
Phase 1A	873.6
Phase 1B	873.4
Phase 2	291
SWAPE Model	
Phase 1A	946
Phase 1B	1,032
Phase 2	291
SCAQMD Regional Threshold (lbs/day)	**75**
Exceed?	***Yes***

As you can see in the table above, when emissions are modeled correctly, ROG emissions during Phase 1A and Phase 1B increase significantly when compared to the EIR's Phase 1A and Phase 1B estimates. Our model demonstrates that when the Project's Phase 1 A and Phase 1B emissions are modeled correctly, the Phase 1 would result in a significant impact that would not be mitigated to a less than significant level even with implementation of the EIR's proposed mitigation measures. As a result, an updated EIR should be prepared that includes an updated air pollution model to adequately estimate the Project's emissions, and additional mitigation measures should be identified and incorporated to reduce these emissions to a less-than-significant level.[27]

Failure to Account for Overlap in Construction and Operational Emissions

Not only does the EIR incorrectly estimate the Project's emissions, but it also fails to account for the overlap in emissions that would occur once construction of Phase 1 is complete and operational, and once construction of Phase 2 begins. According to the EIR, Project construction is anticipated to occur in two phases, with Phase 2 starting immediately after Phase 1 is complete. Construction of Phase 1 would be completed by 2020 and would become fully operational once construction is complete (p. 3.3-20). Construction of Phase 2 would occur

[27] See section titled "Mitigation Measures Available to Reduce Construction Emissions" on p. 25 of this letter. These measures would effectively reduce construction-related ROG emissions as well as DPM emissions resulting **from trucking activities.**

immediately after and would be completed in 2023 (p. 2-27). Based off of this information, from 2020 to 2023 operation of Phase 1 would overlap with construction of Phase 2. Due to this overlap, the EIR should have evaluated the Project's air quality impact during these two years assuming that construction of Phase 2 and operation of Phase 1 would occur concurrently. Review of the EIR, however, demonstrates that this is not the case.

As is demonstrated in Table 3.3-6 and Table 3.3-8, the EIR evaluated the Project's construction and operational emissions separately, and did not account for this overlap in activities (see excerpts below) (p. 3.3-18, p. 3.3-21).

Table 3.3-6
Peak Construction Regional Emissions for Project by Phase

	Pollutant Emissions (Pounds Per Day)					
Activity	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Phase 1A	*873.5*	75.0	76.1	0.2	20.8	12.4
Phase 1B	*873.4*	69.5	69.7	0.2	20.7	12.2
Phase 2	*797.8*	*684*	*64.5*	*0.2*	*19.1*	*5.4*
Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Would Phase Exceed Regional Threshold?	*Yes*	*No*	*No*	*No*	*No*	*No*

Table 3.3-8
Project Operational Emissions (Pounds per Day)

	Daily Emissions (lbs./day)					
Source	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Opening Year for Phase 1 (2020)						
Phase 1 Operations	62.6	253.0	207.5	1.1	73.9	21.1
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	13.5	253.0	207.5	1.1	60.2	7.4
Opening Year for Phase 2 (2023)						
Phase 1 Operations	56.7	145.1	155.9	1.0	75.0	20.2
Phase 2 Operations	22.8	47.2	132.7	0.5	47.9	13.1
Total Operations	79.5	192.3	288.6	1.5	123.0	33.3
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	30.4	192.3	288.6	1.5	107.3	19.6
Full Operation (2040)						
Phase 1 Operations	52.3	121.7	91.5	0.8	72.5	19.8
Phase 2 Operations	18.3	38.1	71.4	0.4	47.7	12.9
Total Operation	70.6	159.8	162.9	1.3	120.2	32.7
Less Cow Emissions	49.1	0.0	0.0	0.0	13.7	13.7
Net Emissions	21.5	159.8	162.9	1.3	106.5	19.0
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Exceed Regional Threshold?	*No*	*Yes*	*No*	*No*	*No*	*No*

Bold – exceed threshold

Since the EIR fails to evaluate the impacts that this overlap may result in, the Project's air quality impacts are significantly underestimated. In an effort to determine the air quality impacts that

construction of Phase 2 and operation of Phase 1 may result in, we conducted a simple analysis that combines the Phase 1 operational emissions from the EIR's air pollution model with the Phase 2 construction emissions from SWAPE's updated CalEEMod modeling.

When the Project's Phase 1 operational emissions and Phase 2 construction emissions are combined, we find that the Project's emissions would result in a potentially significant air quality impact that was not previously identified in the EIR (see table below).

2020-2023 Maximum Daily Emissions (lbs/day)						
Activity	**ROG**	**NOx**	**CO**	**Sox**	**PM10**	**PM2.5**
Existing Emissions	49.1	0	0	0	13.7	13.7
Construction - Phase 2	291	51	51	0.18	20	12
Operation - Phase 1	62.6	253	207.5	1.1	73.9	21.1
Net Total 2020-2023 Emissions	**304.5**	**304**	**258.5**	**1.28**	**80.2**	**19.4**
SCAQMD Significance Thresholds (lbs/day)	**55**	**55**	**550**	**150**	**150**	**55**
Exceeded?	***Yes***	***Yes***	No	No	No	No

Specifically, our analysis demonstrates that from 2020 to 2023, the Project's combined ROG emissions of 304.5 lbs/day and combined NOx emissions of 304 lbs/day would exceed the SCAQMD's significance thresholds of 55 lbs/day. These updated emission estimates demonstrate that when the overlap in construction and operational activity from construction of Phase 2 and operation of Phase 1 is accounted for, the Project would result in a potentially significant air quality impact due to ROG emissions that was not previously examined or identified in the EIR. Furthermore, the Project would result in higher daily NOx emissions during operation than was identified by the EIR. As a result, the EIR should be revised to include an updated model to adequately estimate the Project's emissions.

Failure to Implement All Feasible Mitigation to Reduce Emissions

The EIR's air quality analysis determines that the Project's operational emissions would exceed thresholds set forth by the SCAQMD (p. 3.3-20). As result, the Project proposes several mitigation measures to reduce the Project's criteria air pollutant emissions (p. ES Page 2). However, even after implementation of mitigation, the EIR concludes that the Project's operational air quality impacts would remain significant with respect to NOx (p. 3.3-21). While it

is true that the Project would result in significant NOx emissions, the EIR's conclusion that these impacts are "significant and unavoidable" is entirely incorrect. According to CEQA,

> "CEQA requires Lead Agencies to mitigate or avoid significant environmental impacts associated with discretionary projects. Environmental documents for projects that have any significant environmental impacts must identify all feasible mitigation measures or alternatives to reduce the impacts below a level of significance. If after the identification of all feasible mitigation measures, a project is still deemed to have significant environmental impacts, the Lead Agency can approve a project, but must adopt a Statement of Overriding Consideration to explain why further mitigation measures are not feasible and why approval of a project with significant unavoidable impacts is warranted." [28]

As you can see, an impact can only be labeled as significant and unavoidable after all available, feasible mitigation is considered. Review of the Project's proposed mitigation measures, however, demonstrates that not all feasible mitigation is being implemented. Therefore, the EIR's conclusion that impacts are significant and unavoidable is unsubstantiated. As a result, additional mitigation measures should be identified and incorporated in order to reduce the Project's air quality impacts to the maximum extent possible. Until all feasible mitigation is reviewed and incorporated into the Project's design, impacts from operational NOx emissions cannot be considered as significant and unavoidable.[29]

Diesel Particulate Matter Health Risk Emissions Inadequately Evaluated

The EIR fails to adequately evaluate the potential health risk impacts that the proposed Project would have on nearby sensitive receptors because: (1) the EIR fails to adequately evaluate the Project's construction-related health risk impact; and (2) the EIR's operational health risk assessment (HRA) fails to follow the Office of Environmental Health Hazard Assessment's (OEHHA) guidance when estimating the total cancer risk. As a result, the Project's overall health risk impact is greatly underestimated and misrepresented. Our analysis, discussed herein, provides substantial evidence that when the Project's construction-related health risk is properly evaluated, and when an updated operational HRA is prepared using the most up-to-date guidance, we find that the proposed Project would result in a potentially significant health-related impact that was not previously identified in the EIR. As a result, until a proper

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[28] http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf, p. 115 of 125

[29] See section titled "Feasible Mitigation Measures Available to Reduce Operational Emissions" on p. 30 of this letter. These measures would effectively reduce operational NOx and DPM emissions from trucking activities.

construction and operational HRA is prepared that adequately evaluates the Project's health-related impacts, the Project should not be approved.

Failure to Evaluate Health Risk Posed During Construction Activities

As previously stated, the EIR fails to properly evaluate the construction-related diesel particulate matter (DPM) emissions that will be emitted during Project construction. The EIR attempts to justify the omission of a quantified HRA by stating,

> "Construction of the Business Park could be spread out over 3 years. Because of the relatively short duration of construction compared to a 70-year lifespan, diesel emissions resulting from construction of the project are not expected to result in a significant impact" (Appendix C, pp. 14).

Simply stating that the Project's construction will have a "short duration" does not justify the omission of a construction HRA. According to the SCAQMD, it is recommended that health risk impacts from short-term projects also be assessed. The Guidance document states,

> "Since these short-term calculations are only meant for projects with limits on the operating duration, these short-term cancer risk assessments can be thought of as being the equivalent to a 30-year cancer risk estimate and the appropriate thresholds would still apply (i.e. for a 5-year project, the maximum emissions during the 5-year period would be assessed on the more sensitive population, from the third trimester to age 5, after which the project's emissions would drop to 0 for the remaining 25 years to get the 30-year equivalent cancer risk estimate)".[30]

Thus, a HRA is required to determine whether or not a Project would expose sensitive receptors to substantial air pollutants. The EIR should have conducted some sort of quantitative analysis and should have compared the results of this analysis to applicable thresholds.

Additionally, OEHHA, the organization responsible for providing recommendations and guidance on how to conduct health risk assessments in California, provides guidance for cancer risk evaluation in short term projects. In February of 2015, OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015.[31] The guidance document states that "local air pollution

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[30] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/riskassprocjune15.pdf?sfvrsn=2, p. IX-2

[31] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

control districts sometimes use the risk assessment guidelines for the Hot Spots program in permitting decisions for short-term projects such as construction or waste site remediation".[32] Furthermore, the guidance documents recommends that all short-term projects lasting at least two months be evaluated for cancer risks to nearby sensitive receptors.[33] Thus, the EIR should have conducted some sort of quantitative analysis of the Project's construction-related carcinogenic health risk impact and should have compared the results of this analysis to applicable thresholds. The SCAQMD provides a specific numerical threshold of 10 in one million for determining a project's health risk impact.[34] Therefore, the EIR should have conducted an assessment that compares the Project's construction health risk to this threshold in order to determine the Project's construction-related carcinogenic health risk impact. By failing to prepare a proper construction HRA, the EIR fails to provide a comprehensive analysis of the sensitive receptor impacts that may occur as a result of exposure to substantial air pollutants.

Incorrect Methodology Used to Estimate Operational Health Risk Impact

In order to evaluate the Project's operational health-risk impact, the EIR uses the U.S. Environmental Protection Agency's (U.S. EPA) CAL3QHCR program to model the Project's emissions and evaluate whether mobile source DPM emissions resulting from Project operation would pose a significant health risk to nearby sensitive receptors (Appendix C, pp. 282). According to the EIR, the 70-year residential cancer risk posed to the nearest sensitive receptor is 0.7 in one million, which is below the SCAQMD's significance threshold of 10 in one million (see excerpt below) (Table 3.3-12, p. 3.3-25).

Table 3.3-12
Cancer Risk Increase at Receptors

Receptor	Use	Annual DPM Conc. (µg/m³)	Increase in Cancer Risk Per Million	
			DPM	All TAC[1]
1	Resident	0.000355	0.15	0.22
2	Resident	0.000377	0.16	0.23
3	Resident	0.001140	0.48	0.70
3	Teacher	0.001140	0.05	0.08
3	Student	0.001140	0.05	0.07
4	Worker	0.001595	0.04	0.14
5	Resident	0.000311	0.13	0.19

[1] Estimated Assuming DPM Represents 70% of Total Cancer Risk

[32] *Ibid,* p. 8-17.

[33] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-18

[34] http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2

As a result, the EIR concludes that, "the Project would not result in a significant impact due to increased cancer risk from DPM emissions" (p. 3.3-25). This conclusion, however, is incorrect, as the EIR's HRA fails to utilize early-in-life exposure factors recommended by OEHHA. The omission of early life exposure adjustments when calculating a project's health risk has been shown to underestimate the lifetime exposure cancer risk for many carcinogens.[35] In its *Technical Support Document for Cancer Potency Factors* report, OEHHA's Air Hotspots Program determined that the lifetime cancer potency for carcinogens is underestimated when early-life susceptibility is not included in modeling, and therefore recommends the use of specific adjustment factors to account for third trimester fetuses, infants and children's increased sensitivity to carcinogens, regardless of the mode of action.[36]

Age Sensitivity Factors

OEHHA was tasked with developing guidelines for conducting health risk assessments under the Air Toxics Hot Spots Program (Health and Safety Code Section 43360(b)(2)). OEHHA initially developed Technical Support Documents (TSDs) in 1999-2000 in response to this statutory requirement. Since 2000, they have revised and adopted TSDs in an effort to present updated methodologies that reflect scientific knowledge and techniques developed since the previous guidelines were prepared; in particular, to explicitly include consideration of possible differential effects on the health of infants, children and other sensitive subpopulations, in accordance with the mandate of the Children's Environmental Health Protection Act (Senate Bill 25, Escutia, Chapter 731, Statutes of 1999, Health and Safety Code Sections 39669.5 et seq.).[37]

In 2009 OEHHA assessed the impact of cancer potency on age of exposure and concluded that, "the potency of carcinogens, and thus cancer risk, varies based on the lifestage at exposure… accounting for effects of early-in- life exposure requires accounting for both the increased potency of early in life exposure to carcinogens and the greater exposure on a per kilogram body weight that occurs early in life due to behavioral and physiological differences between infants

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[35] "Review of EPA's Draft Supplemental Guidance For Assessing Cancer Susceptibility From Early-Life Exposure to Carcinogens." The Supplemental Guidance For Assessing Cancer Susceptibility Review Panel Of The EPA Science Advisory Board, March 2004, *available at*: https://yosemite.epa.gov/sab/sabproduct.nsf/658FD14F8F94C7E385256F0A006C94E0/$File/sab04003.pdf

[36] "Technical Support Document for Cancer Potency Factors." OEHHA, May 2009, *available at:* https://oehha.ca.gov/media/downloads/crnr/tsdcancerpotency.pdf, p. 51

[37] *Adoption of the Revised Air Toxics Hot Spots Program Technical Support Document for Cancer Potency Factors*, Office of Environmental Health Hazard Assessment, June 1, 2009, *available at*: http://www.oehha.ca.gov/air/hot_spots/tsd052909.html

and children, and adults".[38] The guidance document continues on to explain that "in the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age 2 years, and an ASF of 3 for ages 2 through 15 years to account for potential increased sensitivity to carcinogens during childhood."[39] To address this issue, OEHHA released updated risk exposure guidelines requiring an Age Sensitivity Factors (ASF) to be applied to early life exposures in the absence of chemical-specific data.[40] These factors, as summarized in the table below, were incorporated into OEHHA's most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, which was formally adopted in March of 2015 (see excerpt below).[41]

Table 8.3 Age Sensitivity Factors by Age Group for Cancer Risk Assessment

Age Group	Age Sensitivity Factor (unitless)
3rd Trimester	10
0<2 years	10
2<9 years	3
2<16 years	3
16<30 years	1
16-70 years	1

Therefore, to provide an appropriate analysis of the increased sensitivity to carcinogens during early-in-life exposure, ASFs should have been applied to the Project's HRA at the time the analysis was conducted. Review of the EIR demonstrates that the HRA completely fails to include or even mention ASFs and, as a result, these factors were not applied to determine the lifetime residential cancer risk. OEHHA recommends the use of both ASFs as well as elevated breathing rates for children and infants (discussed below) in order to account for the heightened health effects of toxic air contaminant (TAC) concentrations on younger children relative to adults; as such, both factors should be used. According to OEHHA's updated guidance, "The age-specific groupings to determine dose (3rd trimester, 0<2 yrs, 2<9 yrs, 2<16 yrs, 16<30 yrs,

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[38] *Technical Support Document for Exposure Assessment and Stochastic Analysis FINAL*, Office of Environmental Health Hazard Assessment, August 2012, *available at:* http://oehha.ca.gov/media/downloads/crnr/chapter32012.pdf

[39] *Ibid.*, p. 8-4

[40] Guidance *Manual for Preparation of Health Risk Assessments*, Office of Environmental Health Hazard Assessment, February 2015, *available at: http://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf*

[41] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/hotspots2015.html

or 16-70 yrs) is needed in order to properly use the age sensitivity factors for cancer risk assessment."[42] Therefore, the EIR's failure to apply ASFs is improper, and as a result, the potential excess cancer risk posed to children and infants is not accurately represented, and the HRA within the EIR should not be relied upon to determine Project significance.

Omission of Age-Specific Breathing Rates

Not only does the EIR's HRA fail to use the correct ASF when estimating the total residential cancer risk, but it also fails to use age-specific breathing rates for infants and children. The EIR states that "estimates for daily breathing rate from the OEHHA Hotspot guidelines" were used to determine the Project's health risk (Appendix C, pp. 285). Review of the EIR's HRA, however, demonstrates that this is not the case. Instead, the HRA applies an inhalation rate of 393 liters per kilogram body weight per day (L/kg-day) in order to estimate the total residential cancer risk, which is inconsistent with OEHHA guidance. By doing this, the HRA fails to account for the heightened susceptibility of infants and children to TAC emissions. As a result, we find the Project's health-related impact to be misrepresented and should not be relied upon to determine Project significance.

In August of 2012, OEHHA formally adopted the *Technical Support Document for Exposure Assessment and Stochastic Analysis*.[43] Chapter three of this document discusses "age-specific breathing rates for use in health risk assessments for short-term exposure…and for long-term daily average exposures resulting from continuous or repeated 8-hour exposure."[44] OEHHA recommends the long-term daily breathing rates in Table 3.1 of this document (see excerpt below).

Table 3.1. Recommended Point Estimates for Long-Term Daily Breathing Rates

	3rd Trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
	L/kg-day					
Mean	225	658	535	452	210	185
95th Percentile	361	1090	861	745	335	290
	m³/day					
Mean	15.3	6.2	10.7	13.3	15.0	13.9
95th Percentile	23.4	11.2	16.4	22.6	23.5	22.9

[42] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessment." OEHHA, February 2015, *available at*: http://oehha.ca.gov/air/hot_spots/hotspots2015.html, p. 5-46

[43] https://oehha.ca.gov/media/downloads/crnr/chapter32012.pdf

[44] http://www.oehha.ca.gov/air/hot_spots/pdf/2012tsd/Chapter3_2012.pdf p. 3-1

Therefore, to provide an appropriate analysis of the health effects on infants and children, the 95th percentile breathing rates for infants and children should have been applied at the time the analysis was conducted. Review of the EIR and associated appendices, however, demonstrate that a breathing rate of 393 L/kg-day was used to estimate the Project's health risk impacts, rather than the 95th percentile breathing rates according to each age category (see excerpt below) (Table 3, Appendix C, pp. 287).

Table 3
Cancer Risk Parameters by Receptor Type

Receptor Type	Daily Breathing Rate (L/kg/day)	Inhalation Absorption Factor	Exposure Frequency (Days/Year)	Exposure Duration (Years)	Averaging Time Period (Days)
Resident	393	1	365	70	25,550
Worker	149	1	261	40	25,550
Teacher	149	1	190	40	25,550
Student	581	1	180	9	25,550

As a result, the Project's health risk impacts are underestimated. These age specific breathing rates should be applied in an updated HRA in an effort to accurately determine the potential cancer risk posed to infants and children residing near the Project site. As a result, the potential excess cancer risk posed to children and infants is not accurately represented, and the HRA within the EIR should not be relied upon to determine Project significance.

Updated Health Risk Assessment Indicates Significant Health Impact

In an effort to demonstrate the potential risk posed by construction and operation of the proposed Project to nearby sensitive receptors, we prepared a simple screening-level HRA. The results of our assessment, as described in the sections below, provide substantial evidence demonstrating that potential health risk impacts associated with construction and operation of the proposed Project may result in a potentially significant health risk impact. As such, an updated EIR should be prepared to adequately evaluate the proposed Project's health risk impacts, and additional mitigation measures should be identified and incorporated into the Project design, where necessary.

Modeling Parameters

As of 2011, the Environmental Protection Agency (EPA) recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions

based on simple input parameters.[45] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA[46] and the California Air Pollution Control Officers Associated (CAPCOA)[47] guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs"). A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary health risk screening assessment of the Project's health-related impact to sensitive receptors using the annual construction and operational PM_{10} exhaust estimates from our SWAPE CalEEMod model and the EIR's CalEEMod model, respectively. According to the EIR, the closest sensitive receptor is 1,800 feet, or approximately 550 meters away from the Project site (p. 3.3-23). According to the EIR, construction of the Project would occur over two phases (with Phase 1 split into Phase 1A and Phase 1B) over the course of 5 years (p. 2-27). Consistent with recommendations set forth by OEHHA, we used a residential exposure duration of 30 years, starting from the infantile stage of life. We also assumed that construction and operation of the Project would occur in quick succession, with no gaps between each Project phase.

The AERSCREEN model relies on a continuous average emissions rate to simulate maximum downwind concentrations from point, area, and volume emission sources. To account for the variability in construction equipment usage over the phases of Project construction and operation, we calculated an average DPM emission rate by the following equation for each of the phases of construction and operation.

$$Emission\ Rate\left(\frac{grams}{second}\right) = \frac{lbs\ of\ DPM}{Number\ of\ days} \times \frac{453.6\ grams}{lb} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds}$$

[45] "AERSCREEN Released as the EPA Recommended Screening Model," USEPA, April 11, 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf

[46] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[47] "Health Risk Assessments for Proposed Land Use Projects," CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf

Because the duration, start year, year of completion, and activity type vary between each phase of construction and operation, we calculated a specific emission rate for each of the phases (see table below).

Project Phase Emission Rates

Phase	DPM Emissions (tons/year)[1]	Number of Days	Emission Rate (g/s)[2]
Phase 1A Construction	0.2237	328	0.007161
Phase 1B Construction	0.1930	328	0.006178
Phase 1 Operation & Phase 2 Construction	0.5619	1091	0.005408
Phase 1 & Phase 2 Operation	1.0513	365	0.01223

[1] Construction values representative of Exhaust PM10 Emissions taken from the SWAPE CalEEMod output files. Operational values representative of Exhaust PM10 Emissions at full Project build out from the EIR located in Appendix C of the EIR. Source: Appendix C, pp. 97 and 149

[2] Emission rate was calculated by dividing the annual emissions by the duration for each phase. 2,000 pounds/ton; 453.6 grams/pound; 24 hours/day; 3,600 seconds/hour

Construction and operational activity was simulated as a 120-acre rectangular area source in AERSCREEN, with dimensions of 735 meters by 661 meters. A release height of three meters was selected to represent the height of exhaust stacks on operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution.

Modeling Outputs

The AERSCREEN model generated maximum reasonable estimates of single hour downwind DPM concentrations from the Project site. EPA guidance suggests that in screening procedures, the annualized average concentration of an air pollutant may be estimated by multiplying the single-hour concentration by 10%.[48] For example, for the Maximum Exposed Individual at an Existing Residential Receptor (MEIR) the single-hour concentration estimated by AERSCREEN for Project construction is approximately 0.6581 µg/m^3 DPM at approximately 550 meters downwind. Multiplying this single-hour concentration by 10%, we get an annual average concentration of 0.06581 µg/m^3 for Project construction at the MEIR. We estimated the

[48] http://www.epa.gov/ttn/scram/guidance/guide/EPA-454R-92-019_OCR.pdf

annualized average concentration for the remaining phases of construction and operation in this same fashion for the MEIR (see table below).

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)		
Phase	**Maximum Single Hour DPM Concentration (µg/m³)**	**Annualized Average DPM Concentration (µg/m³)**
Phase 1A Construction	0.6581	0.06581
Phase 1B Construction	0.5679	0.05679
Phase 1 Operation & Phase 2 Construction	0.4969	0.04969
Phase 1 & Phase 2 Operation	1.124	0.1124

Exposure Assumptions

We calculated the excess cancer risk for each sensitive receptor location, for adults, children, and infant receptors using applicable HRA methodologies prescribed by OEHHA. As mentioned the inspections above, OEHHA recommends the use of ASFs to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.[49] According to the revised guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). Furthermore, in accordance with guidance set forth by the SCAQMD and OEHHA, we used 95th percentile breathing rates for infants and 80th percentile breathing rates for children and adults.[50] We used a cancer potency factor of 1.1 (mg/kg-day)$^{-1}$ and an averaging time of 25,550 days.

[49] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf

[50] "Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics 'Hot Spots' Information and Assessment Act," SCAQMD, June 5, 2015, *available at:* http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab2588-risk-assessment-guidelines.pdf?sfvrsn=6, p. 19

Health Risk at the Maximally Exposed Individual Receptor (MEIR)

OEHHA recommends that a 30-year exposure duration be used as the basis for estimating cancer risk at the MEIR.[51] Consistent with OEHHA guidance, exposure to the MEIR was assumed to begin in the infantile stage of life to provide the most conservative estimate of air quality hazards. The results of our calculations are shown below.

The Maximum Exposed Individual at an Existing Residential Receptor (MEIR)					
Activity	**Duration (years)**	**Concentration (µg/m³)**	**Breathing Rate (L/kg-day)**	**ASF**	**Cancer Risk**
Phase 1A Construction	0.90	0.06581	1090	10	9.7E-06
Phase 1B Construction	0.90	0.05679	1090	10	8.4E-06
Phase 2 Construction, Phase 1 Operation	0.20	0.04969	1090	10	1.6E-06
Infant Exposure Duration	***2.00***			***Infant Exposure***	***2.0E-05***
Phase 2 Construction, Phase 1 Operation	2.80	0.04969	572	3	3.6E-06
Operation	11.20	0.1124	572	3	3.3E-05
Child Exposure Duration	***14.00***			***Child Exposure***	***3.6E-05***
Operation	14.00	0.1124	261	1	6.2E-06
Adult Exposure Duration	***14.00***			***Adult Exposure***	***6.2E-06***
Lifetime Exposure Duration	**30.00**			**Lifetime Exposure**	**6.2E-05**

[51] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf, p. 8-1.

The excess cancer risk to adults, children, and infants at the MEIR located approximately 550 meters away, over the course of Project construction and operation are approximately 6.2, 36, and 20 in one million, respectively. Furthermore, the excess cancer risk over the course of a residential lifetime (30 years) at the MEIR is approximately 62 in one million. Consistent with OEHHA guidance, exposure was assumed to begin in the infantile stage of life to provide the most conservative estimates of air quality hazards. The infant, child, and lifetime cancer risks all exceed the SCAQMD's threshold of 10 in one million.

It should be noted that our analysis represents a screening-level HRA, which is known to be more conservative, and is aimed at health protection.[52] The purpose of a screening-HRA, however, is to determine if a more refined HRA needs to be conducted. If the results of a screening-level HRA are above applicable thresholds, then the Project needs to conduct a more refined HRA that is more representative of site specific concentrations. Our screening-level HRA demonstrates that construction and operation of the Project could result in a potentially significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used. As a result, a refined HRA must be prepared to examine air quality impacts generated by Project construction and operation using site-specific meteorology and specific equipment usage schedules. An updated EIR must be prepared to adequately evaluate the Project's health risk impact and should include additional mitigation measures to reduce these impacts to a less-than-significant level.[53]

Mitigation Measures Available to Reduce Construction Emissions

Our analysis demonstrates that the Project's construction-related DPM emissions may present a potentially significant impact that will not be mitigated to less than significant levels with implementation of the EIR's proposed mitigation measures (p. ES Page 2). Therefore, additional mitigation measures must be identified and incorporated in a revised EIR to reduce these emissions to a less than significant level.

Additional mitigation measures can be found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures,* which attempt to reduce GHG levels, as well as reduce criteria air pollutants such as particulate matter.[54] DPM is a byproduct of diesel fuel combustion and are emitted by on-road vehicles and by off-road construction equipment. Mitigation for criteria

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[52] http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf p. 1-5

[53] See section titled "Feasible Mitigation Measures Available to Reduce Emissions" on pg. 20 of this letter. These measures would effectively reduce operational DPM emissions, as well as operational NOx and GHG emissions.

[54] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

pollutant emissions should include consideration of the following measures in an effort to reduce construction emissions.

Repower or Replace Older Construction Equipment Engines

The NEDC recognizes that availability of equipment that meets the EPA's newer standards is limited.[55] Due to this limitation, the NEDC proposes actions that can be taken to reduce emissions from existing equipment in the *Best Practices for Clean Diesel Construction* report.[56] These actions include but are not limited to:

- Repowering equipment (i.e. replacing older engines with newer, cleaner engines and leaving the body of the equipment intact).

Engine repower may be a cost-effective emissions reduction strategy when a vehicle or machine has a long useful life and the cost of the engine does not approach the cost of the entire vehicle or machine. Examples of good potential replacement candidates include marine vessels, locomotives, and large construction machines.[57] Older diesel vehicles or machines can be repowered with newer diesel engines or in some cases with engines that operate on alternative fuels (see section "Use Alternative Fuels for Construction Equipment" for details). The original engine is taken out of service and a new engine with reduced emission characteristics is installed. Significant emission reductions can be achieved, depending on the newer engine and the vehicle or machine's ability to accept a more modern engine and emission control system. It should be noted, however, that newer engines or higher tier engines are not necessarily cleaner engines, so it is important that the Project Applicant check the actual emission standard level of the current (existing) and new engines to ensure the repower product is reducing emissions for DPM.[58]

- Replacement of older equipment with equipment meeting the latest emission standards.

Engine replacement can include substituting a cleaner highway engine for a nonroad engine. Diesel equipment may also be replaced with other technologies or fuels. Examples include hybrid switcher locomotives, electric cranes, LNG, CNG, LPG or propane yard tractors, forklifts or loaders. Replacements using natural gas may require changes to fueling

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[55] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[56] http://northeastdiesel.org/pdf/BestPractices4CleanDieselConstructionAug2012.pdf

[57] Repair, Rebuild, and Repower, EPA, *available at:* https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#repair

[58] Diesel Emissions Reduction Program (DERA): Technologies, Fleets and Projects Information, *available at:* http://www2.epa.gov/sites/production/files/2015-09/documents/420p11001.pdf

infrastructure.[59] Replacements often require some re-engineering work due to differences in size and configuration. Typically, there are benefits in fuel efficiency, reliability, warranty, and maintenance costs.[60]

Install Retrofit Devices on Existing Construction Equipment

PM emissions from alternatively-fueled construction equipment can be further reduced by installing retrofit devices on existing and/or new equipment. The most common retrofit technologies are retrofit devices for engine exhaust after-treatment. These devices are installed in the exhaust system to reduce emissions and should not impact engine or vehicle operation. [61] It should be noted that actual emissions reductions and costs will depend on specific manufacturers, technologies and applications.

Implement a Construction Vehicle Inventory Tracking System

CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*[62] report recommends that the Project Applicant provide a detailed plan that discusses a construction vehicle inventory tracking system to ensure compliances with construction mitigation measures. The system should include strategies such as requiring engine run time meters on equipment, documenting the serial number, horsepower, manufacture age, fuel, etc. of all onsite equipment and daily logging of the operating hours of the equipment. Specifically, for each onroad construction vehicle, nonroad construction equipment, or generator, the contractor should submit to the developer's representative a report prior to bringing said equipment on site that includes:[63]

- Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number.
- The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level.

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[59] Alternative Fuel Conversion, EPA, *available at:* https://www3.epa.gov/otaq/consumer/fuels/altfuels/altfuels.htm#fact

[60] Cleaner Fuels, EPA, *available at:*https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#cleaner

[61] Retrofit Technologies, EPA, *available at:*https://www.epa.gov/verified-diesel-tech/learn-about-verified-technologies-clean-diesel#retrofit

[62]http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

[63] Diesel Emission Controls in Construction Projects, *available at:*http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

- The Certification Statement[64] signed and printed on the contractor's letterhead.

Furthermore, the contractor should submit to the developer's representative a monthly report that, for each onroad construction vehicle, nonroad construction equipment, or generator onsite, includes: [65]

- Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date.
- Any problems with the equipment or emission controls.
- Certified copies of fuel deliveries for the time period that identify:
    - Source of supply
    - Quantity of fuel
    - Quality of fuel, including sulfur content (percent by weight).

In addition to these measures, we also recommend that the Applicant implement the following mitigation measures, called "Enhanced Exhaust Control Practices,"[66] that are recommended by the Sacramento Metropolitan Air Quality Management District (SMAQMD):

1. The project representative shall submit to the lead agency a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project.

    - The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.

    - The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

    - This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment.

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[64] Diesel Emission Controls in Construction Projects, *available at:*http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf The NEDC Model Certification Statement can be found in Appendix A.

[65] Diesel Emission Controls in Construction Projects, *available at:*http://www2.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf

[66]http://www.airquality.org/ceqa/Ch3EnhancedExhaustControl_10-2013.pdf

- The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

2. The project representative shall provide a plan for approval by the lead agency demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average.

    - This plan shall be submitted in conjunction with the equipment inventory.

    - Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

    - The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.

3. The project representative shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour.

    - Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. Non-compliant equipment will be documented and a summary provided to the lead agency monthly.

    - A visual survey of all in-operation equipment shall be made at least weekly.

    - A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

Finally, our air quality analysis demonstrated that construction-related ROG (also referred to as VOC) emissions will exceed SCAQMD daily thresholds. In an effort to mitigate these measures, the following mitigation measures should be considered.

Use of Zero-VOC Emissions Paint

The Project Applicant should consider the use of low VOC coatings. The use of zero-VOC emission paint has been required for numerous projects that have undergone CEQA review. Zero-VOC emission paints are commercially available. Other low-VOC standards should be incorporated into mitigation including use of "super-compliant" paints, which have a VOC standard of less than 10 g/L. [67]

Use of Material that Do Not Require Paint

Using materials that do not require painting is a common mitigation measure where VOC emissions are a concern. Interior and exterior surfaces, such as concrete, can be left unpainted.

Use of Spray Equipment with Greater Transfer Efficiencies

Various coatings and adhesives are required to be applied by specified methods such as electrostatic spray, high-volume, low-pressure (HVLP) spray, roll coater, flow coater, dip coater, etc. in order to maximize the transfer efficiency. Transfer efficiency is typically defined as the ratio of the weight of coating solids adhering to an object to the total weight of coating solids used in the application process, expressed as a percentage. When it comes to spray applications, the rules typically require the use of either electrostatic spray equipment or HVLP spray equipment. The SCAQMD is now able to certify HVLP spray applicators and other application technologies at efficiency rates of 65 percent or greater.[68]

These measures offer a cost-effective, feasible way to incorporate lower-emitting equipment into the Project's construction fleet, which subsequently reduces DPM emissions released during Project construction. Furthermore, these measures also offer a feasible way to reduce the construction-related ROG emissions released from paints and architectural coatings. A revised EIR must be prepared to include additional mitigation measures, as well as include an updated air quality assessment to ensure that the necessary mitigation measures are implemented to reduce construction emissions. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval to ensure that the Project's construction-related emissions are reduced to the maximum extent possible.

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[67] http://www.aqmd.gov/home/programs/business/business-detail?title=super-compliant-coatings

[68] http://www.aqmd.gov/home/permits/spray-equipment-transfer-efficiency

Feasible Mitigation Measures Available to Reduce Operational Emissions

As previously stated, the EIR's air quality analysis concluded that the Project's operational NOx emissions would be "significant and unavoidable" (p. 3.3-21). Additionally, our HRA demonstrates that operational DPM emissions may presents a potentially significant impact. In an effort to reduce the Project's impacts, we identified several additional mitigation measures that are applicable to the Project. These measures would effectively reduce the Project's operational NO_x and DPM emissions. Measures recommended for the Waterman Logistic Center that are also applicable for the industrial portion of this Project include[69]:

- Limit the daily number of trucks allowed at the facility to levels analyzed in the Addendum. If higher daily truck volumes are anticipated to visit the site, the Lead Agency should commit to re-evaluating the project through CEQA prior to allowing this higher activity level.

- Design the site such that any check-in point for trucks is well inside the facility to ensure that there are no trucks queuing outside of the facility.

- Should the proposed Project generate significant emissions, the Lead Agency should require mitigation that requires accelerated phase-in for non-diesel powered trucks. For example, natural gas trucks, including Class 8 HHD trucks, are commercially available today. Natural gas trucks can provide a substantial reduction in emissions, and may be more financially feasible today due to reduced fuel costs compared to diesel. In the Final CEQA document, the Lead Agency should require a phase-in schedule for these cleaner operating trucks to reduce project impacts.

Furthermore, the additional, feasible mitigation measures can be also found in CAPCOA's *Quantifying Greenhouse Gas Mitigation Measures*.[70] These mitigation measures would effectively reduce the operational NOx and DPM emissions resulting from the Business Park portion of the project. Therefore, to reduce the Project's operational DPM emissions, consideration of the following measures should be made.

- Incorporate Bike Lane Street Design (On-Site)
    - Incorporating bicycle lanes, routes, and shared-use paths into street systems, new subdivisions, and large developments can reduce VMTs. These improvements

[69] SCAQMD Comment Letter in Response to MND for the Waterman Logistic Center, January 2018, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2015/january/mndwaterman.pdf

[70] http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf

can help reduce peak-hour vehicle trips by making commuting by bike easier and more convenient for more people. In addition, improved bicycle facilities can increase access to and from transit hubs, thereby expanding the "catchment area" of the transit stop or station and increasing ridership. Bicycle access can also reduce parking pressure on heavily-used and/or heavily-subsidized feeder bus lines and auto-oriented park-and-ride facilities.

- Limit Parking Supply
    - This mitigation measure will change parking requirements and types of supply within the Project site to encourage "smart growth" development and alternative transportation choices by project residents and employees. This can be accomplished in a multi-faceted strategy:
        - Elimination (or reduction) of minimum parking requirements
        - Creation of maximum parking requirements
        - Provision of shared parking
- Implement Commute Trip Reduction Program- Voluntary or Required
    - Implementation of a Commute Trip Reduction (CTR) program with employers will discourage single-occupancy vehicle trips and encourage alternative modes of transportation such as carpooling, taking transit, walking, and biking. The main difference between a voluntary and a required program is:
        - Monitoring and reporting is not required
        - No established performance standards (i.e. no trip reduction requirements)
    - The CTR program should provide employees with assistance in using alternative modes of travel, and provide both "carrots" and "sticks" to encourage employees. The CTR program should include all of the following to apply the effectiveness reported by the literature:
        - Carpooling encouragement
        - Ride-matching assistance
        - Preferential carpool parking
        - Flexible work schedules for carpools

        - Half time transportation coordinator
        - Vanpool assistance
        - Bicycle end-trip facilities (parking, showers and lockers)

- Provide Ride-Sharing Programs
    - Increasing the vehicle occupancy by ride sharing will result in fewer cars driving the same trip, and thus a decrease in VMT. The project should include a ride-sharing program as well as a permanent transportation management association membership and funding requirement. The project can promote ride-sharing programs through a multi-faceted approach such as:
        - Designating a certain percentage of parking spaces for ride sharing vehicles
        - Designating adequate passenger loading and unloading and waiting areas for ride-sharing vehicles
        - Providing a web site or message board for coordinating rides
- Implement Subsidized or Discounted Transit Program
    - This project can provide subsidized/discounted daily or monthly public transit passes to incentivize the use of public transport. The project may also provide free transfers between all shuttles and transit to participants. These passes can be partially or wholly subsidized by the employer, school, or development. Many entities use revenue from parking to offset the cost of such a project.
- Implement Commute Trip Reduction Marketing
    - The project can implement marketing strategies to reduce commute trips. Information sharing and marketing are important components to successful commute trip reduction strategies. Implementing commute trip reduction strategies without a complementary marketing strategy will result in lower VMT reductions. Marketing strategies may include:
        - New employee orientation of trip reduction and alternative mode options
        - Event promotions
        - Publications

- Implement Preferential Parking Permit Program
    - The project can provide preferential parking in convenient locations (such as near public transportation or building front doors) in terms of free or reduced parking fees, priority parking, or reserved parking for commuters who carpool, vanpool, ride-share or use alternatively fueled vehicles. The project should provide wide parking spaces to accommodate vanpool vehicles.
- Implement Car-Sharing Program
    - This project should implement a car-sharing project to allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. User costs are typically determined through mileage or hourly rates, with deposits and/or annual membership fees. The car-sharing program could be created through a local partnership or through one of many existing car-share companies. Car-sharing programs may be grouped into three general categories: residential- or citywide-based, employer-based, and transit station-based. Transit station-based programs focus on providing the "last-mile" solution and link transit with commuters' final destinations. Residential-based programs work to substitute entire household based trips. Employer-based programs provide a means for business/day trips for alternative mode commuters and provide a guaranteed ride home option.
- Provide Employer-Sponsored Vanpool/Shuttle
    - This project can implement an employer-sponsored vanpool or shuttle. A vanpool will usually service employees' commute to work while a shuttle will service nearby transit stations and surrounding commercial centers. Employer-sponsored vanpool programs entail an employer purchasing or leasing vans for employee use, and often subsidizing the cost of at least program administration, if not more. The driver usually receives personal use of the van, often for a mileage fee. Scheduling is within the employer's purview, and rider charges are normally set on the basis of vehicle and operating cost.
- Price Workplace Parking
    - The project should implement workplace parking pricing at its employment centers. This may include: explicitly charging for parking for its employees, implementing above market rate pricing, validating parking only for invited guests, not providing employee parking and transportation allowances, and educating employees about available alternatives.

    - Though similar to the Employee Parking "Cash-Out" strategy, this strategy focuses on implementing market rate and above market rate pricing to provide a price signal for employees to consider alternative modes for their work commute.

- Implement Employee Parking "Cash-Out"

    - The project can require employers to offer employee parking "cash-out." The term "cash-out" is used to describe the employer providing employees with a choice of forgoing their current subsidized/free parking for a cash payment equivalent to the cost of the parking space to the employer.

In addition to the mobile source mitigation measures above, the Lead Agency should incorporate the following on-site area source mitigation measures below, as suggested by the SCAQMD, to reduce the Project's regional air quality impacts from NO_x emissions during operation.[71]

- Maximize use of solar energy including solar panels; installing the maximum possible number of solar energy arrays on the building roofs and/or the Project side to generate solar energy for the facility.

- Limit the use of outdoor lighting to only that needed for safety and security purposes.

- Install solar lights or light-emitting diodes (LEDs) for outdoor lighting.

- Require use of electric or alternatively fueled sweepers with HEPA filters.

Finally, the Kimball Business Park Project Final Environmental Impact Report includes various feasible mitigation measures that would reduce on-site area emissions that are applicable to the proposed Project and include, but are not limited to: [72]

- Increase in insulation such that heat transfer and thermal bridging is minimized.

- Limit air leakage through the structure and/or within the heating and cooling distribution system.

- Use of energy-efficient space heating and cooling equipment.

- Installation of dual-paned or other energy efficient windows.

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[71] SCAQMD Comment Letter in Response to MND for the Waterman Logistic Center, January 2018, *available at:* http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2015/january/mndwaterman.pdf

[72] Mitigation Monitoring Plan for the Kimball Business Park Project Final Environmental Impact Report, July 2016, *available at*: http://www.cityofchino.org/home/showdocument?id=13244

- Use of interior and exterior energy efficient lighting that exceeds the California Title 24 Energy Efficiency performance standards.
- Installation of automatic devices to turn off lights where they are not needed.
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings.
- Installation of a photo-voltaic electrical generation system (PV system) capable of generating 565,000 kilowatt hours per year on the roofs of project buildings. The developer(s) may install the required PV system in phases on a pro rata square foot basis as each building is completed; or if the PV system is to be installed on a single building, all of the PV system necessary to supply the PV estimated electrical generation shall be installed within two years (24 months) of the first building that does not include a PV system receives a certificate of occupancy.

When combined, these measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduces emissions released during Project operation. An updated EIR must be prepared to include additional mitigation measures, as well as include an updated air quality analysis to ensure that the necessary mitigation measures are implemented to reduce operational emissions to below thresholds. Furthermore, the Project Applicant needs to demonstrate commitment to the implementation of these measures prior to Project approval, to ensure that the Project's operational emissions are reduced to the maximum extent possible.

3.7 Greenhouse Gas Emissions

Failure to Adequately Evaluate Greenhouse Gas Impact

The EIR concludes that the Project's GHG impacts would be less than significant, yet fails to provide proper justification to support this claim. As a result, the Project's GHG impacts are inadequately addressed.

The EIR relies upon the City of Ontario's Community Climate Action Plan (CCAP) to determine the significance of the Project's GHG impact (p. 3.7-10). Specifically, the Project uses the City's CCAP GHG Screening Table to identify which reduction measures the Project will implement to reduce emissions (p. 3.7-10). According to the EIR, "projects that garner a minimum of 100 points are consistent with the CAP, and result in less than significant impacts related to GHG emissions" (p. 3.7-11). Using this significance criteria, the EIR concludes that the Project would obtain a total of 123 points on the GHG Screening Threshold Table and states,

"Because the Project will reduce GHG emissions in compliance with the CCAP and provide employment in an area that could reduce VMT and VHT, the Project would result in a less than significant impact related to GHG emissions" (p. 3.7-13).

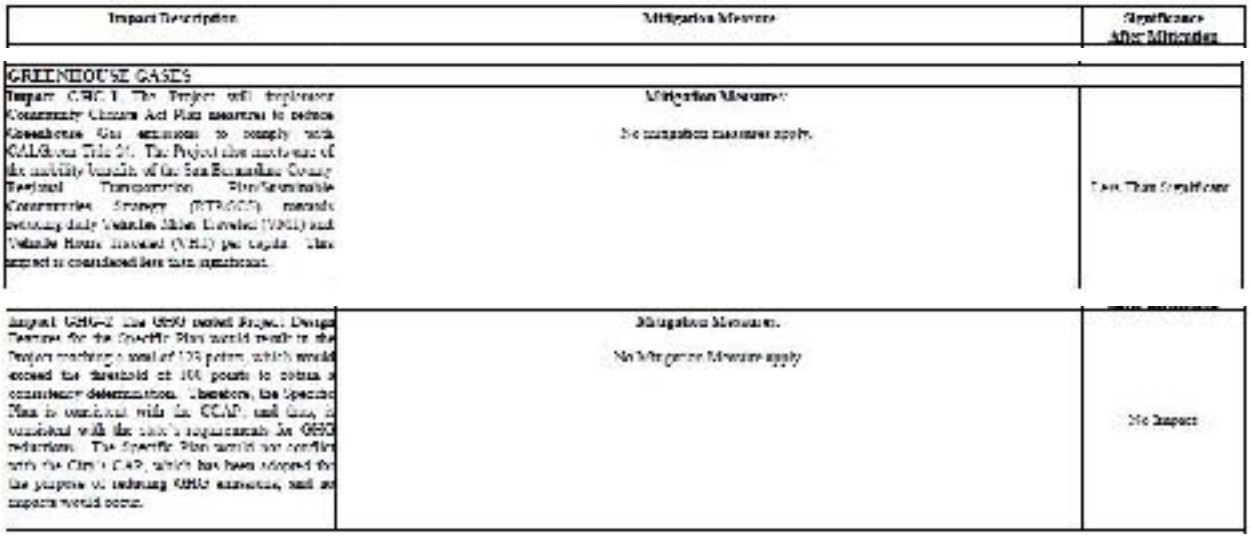
This conclusion, however, as well as the justification provided in the EIR to support this significance determination, are incorrect and inadequate.

While the EIR states that the Project would be consistent with the CCAP, the EIR fails to actually demonstrate compliance with all of the applicable criteria disclosed in the City's CCAP. Specifically, the EIR fails to comply with the following requirement, as required by Section 15183.5 *Tiering and Streamlining the Analysis of Greenhouse Gas Emissions* of the CEQA guidelines,

"An environmental document that relies on a greenhouse gas reduction plan for a cumulative impacts analysis must identify those requirements specified in the plan that apply to the project, and, if those requirements are not otherwise binding and enforceable, incorporate those requirements as mitigation measures applicable to the project."[73]

As stated above, CEQA requires the EIR to identify which requirements apply to the Project and requires the EIR make these requirements binding and enforceable to the Project by listing them as mitigation measures, if that are not already binding and enforceable in the City's CCAP. However, review of the EIR demonstrates that the Project fails to include any of the CCAP's measures that the EIR claims the Project would be consistent with as mitigation measures or as mandatory conditions of Project approval (see excerpt below) (p. ES Page 6 - ES Page 7).

[73] https://govt.westlaw.com/calregs/Document/I872A68805F7511DFBF66AC2936A1B85A?viewType=FullText&originationContext=documenttoc&transitionType=CategoryPageItem&contextData=%28sc.Default%29



Impact Description	Mitigation Measures	Significance After Mitigation
GREENHOUSE GASES		
Impact GHG-1 The Project will implement Community Climate Act Plan measures to reduce Greenhouse Gas emissions to comply with SB32/Executive Order S-3. The Project also conforms to the mobility benefits of the San Bernardino County Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) reducing daily Vehicle Miles Traveled (VMT) and Vehicle Hours Traveled (VHT) per capita. This impact is considered less than significant.	Mitigation Measures: No mitigation measures apply.	Less Than Significant
Impact GHG-2 The GHG model Project Design Features for the Specific Plan would result in the Project reaching a total of 170 points, which would exceed the threshold of 100 points to obtain a consistency determination. Therefore, the Specific Plan is considered with the CCAP, and thus, is considered with the city's requirements for GHG reductions. The Specific Plan would not conflict with the City's CAP, which has been adopted for the purpose of reducing GHG emissions, and no impacts would occur.	Mitigation Measures: No Mitigation Measures apply	No Impact

As you can see in the excerpt above, the EIR determines that "no mitigation measures apply" to the Project, and therefore does not include any of the CCAP's measures within its list of proposed mitigation measures. As a result, the EIR fails to show compliance with the City of Ontario's CCAP and should not be used to determine the Project's significance. A revised EIR should be prepared with an updated GHG analysis in order to adequately assess and address the Project's potential GHG impact.

Failure to Demonstrate Compliance with Executive Order B-30-15

According to the EIR, the Project would not interfere with the implementation of Executive Order B-30-15 and would comply with the GHG reduction goals for 2030, 2040, and 2050. Specifically, the EIR states,

"The CAP target is to reduce City emissions by the amount recommended in the ARB Scoping Plan for local government and includes a commitment to update the CAP beginning in 2018. The new plan would include a specific target for 2030, 2040, and 2050. The targets will be consistent with broader state and federal reduction targets with the scientific understanding of the needed reductions by 2050" (p. 3.7-13).

However, because the EIR was proposed after certification of the CCAP, the CCAP Screening Threshold Table only accounts for reductions required to meet the 2020 emissions reductions set forth by AB 32. Governor Brown recently issued an executive order to establish an even more ambitious GHG reduction target for 2030, which is not addressed in the City's CCAP. By failing to demonstrate consistency with the reduction targets set forth by Executive Order B-30-15 for 2030, the Project may conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. As a result, the Project may have a potentially significant

impact that was not previously addressed in the Project's GHG analysis, and as such, a revised EIR should be prepared.

Executive Order B-30-15 requires emissions reductions above those mandated by AB 32 to reduce GHG emissions 40 percent below their 1990 levels by 2030.[74] 1990 statewide GHG emissions are estimated to be approximately 431 million $MTCO_2e$ ($MMTCO_2e$).[75] Therefore, by 2030 California will be required to reduce statewide emissions by 172 $MMTCO_2e$ (431 x 40%), which results in a statewide limit on GHG emissions of 259 $MMTCO_2e$. 2020 "business-as-usual" levels are estimated to be approximately 509 $MMTCO_2e$.[76] In order to successfully reach the 2030 statewide goal of 259 $MMTCO_2e$, California would have to reduce its emissions by 49 percent below the "business-as-usual" levels. This reduction target is consistent with goals set forth by other recently passed legislature, such as SB 32,[77] indicating that compliance with these more aggressive reduction goals, beyond what is mandated by AB 32, will be necessary.

This 49 percent reduction target should be considered as a threshold of significance against which to measure Project impacts. Because the proposed Project is unlikely to be redeveloped again prior to 2030, the 2030 goals are applicable to any evaluation of the Project's impacts. A revised EIR should be prepared to demonstrate the Project's compliance with these more aggressive measures specified in Executive Order B-30-15. Specifically, the Project should demonstrate, at a minimum, a reduction of 49 percent below "business-as-usual" levels. It should be noted that this reduction percentage is applicable to statewide emissions, which is not directly applicable to a project-level analysis. As a result, an additional analysis would need to be conducted to translate the new statewide targets into a project-specific threshold against which Project GHG emissions can be compared. A revised EIR should be prepared to quantify any reductions expected to be achieved by mitigation measures, shown by substantial evidence that such measures will be effective, and should demonstrate how these measures will reduce the emissions below the new 2030 significance threshold.

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[74] http://gov.ca.gov/news.php?id=18938

[75] http://www.arb.ca.gov/cc/inventory/data/bau.htm

[76] http://energyinnovation.org/wp-content/uploads/2015/04/CA_CapReport_Mar2015.pdf

[77] http://www.latimes.com/politics/la-pol-ca-jerry-brown-signs-climate-laws-20160908-snap-story.html

3.8 Hazards and Hazardous Materials

The EIR identifies the Specific Plan area as "within Compatibility Zone D, which is identified as an area for primary traffic patterns and runway buffer area." However, the EIR does not provide a reference to substantiate this claim or state where the information was obtained from. The Chino Airport Land Use Compatibility Plan does not include a map for compatibility zones which indicates to the public that this is not the source of the information given[78]. CEQA § 15150 (f) states that incorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand. The document creating the compatibility zones utilized for analysis in the EIR contribute directly to the analysis of the problem at hand. Not including information, meaningful details, or the document creating the compatibility zones for public review is in violation of CEQA § 15150 (f).

The EIR continues by stating that the proposed development standards of the Specific Plan **"**allow for a maximum building height of 55 feet for main structures, and up to 65 feet for architectural projections and focal elements." Subsequently, "implementation of the proposed Specific Plan structures would not exceed the 70-foot high airspace review criteria, and the height of the proposed structures would not result in a hazard to flight or a safety hazard for people in the Project area." The EIR has not provided evidence to support the 70 ft high airspace review criteria utilized for analysis. The EIR is inadequate as an informational document and must be substantially amended and recirculated in order to provide the public and decision makers with accurate information.

Further, the proposed maximum height in the specific plan development standards are described in the Project Description as "allowed to exceed the maximum height up to 25 percent above the prescribed height limit", which in this case is 55 feet. A 25 percent addition to 55 feet is 68.75 feet, not 65 feet as described in the EIR. Also, the EIR does not indicate where the measurement of building and permitted projections height will be taken from. Where the datum is set can have a potentially significant impact on height measurement. For example, setting datum at site grade versus setting datum at the highest adjacent curb may result in different measurements of height.

3.10 Land Use

The EIR concludes that the project is consistent with the TOP due to the proposed GPA and Zone Change request. However, the EIR does not analyze the proposed project in conjunction with the

[78] Chino Airport Land Use Compatibility Plan http://www.sbcounty.gov/Uploads/lus/Airports/Chino.pdf

existing General Plan and Zoning Destination. The project as proposed requires a GPA and Zone Change to be implemented. This indicates that the project is not consistent with the current General Plan and Zoning Designations, and findings of significance must be made. This point is further illustrated by the EIR's Alternative Projects section. An Alternative Project analyzed is a project consistent with the existing General Plan and Zoning Designations. If the proposed project is consistent with the existing General Plan and Zoning Designations, a GPA and Zone Change would not be requested. Findings of significance regarding this impact to land use must be made as part of the EIR.

Further, the EIR does not provide any analysis regarding the proposed change to the land use designation of approximately 2.49-gross acres (1.41 net acres) within the Parkside Specific Plan north of the Site from Parkside Specific Plan (residential use) to Business Park to allow for the realignment of Eucalyptus Avenue. The EIR is inadequate as an informational document and must be revised to include analysis regarding this proposed change in order to comply with CEQA.

3.11 Noise

Existing Noise Measurements

The Noise Study (Appendix K) does not present a detailed analysis of existing noise and vibration conditions at the project site or in the project vicinity. The analysis was only conducted off-site and no existing noise measurements at the project site were provided. The noise measurements do not include a location at the nearest sensitive receptor, which is identified as a residence approximately 100 feet south of the site in the Air Quality analysis. Only modeling at the other receptors, located much further away from the site (0.2 miles west and 0.4 miles southeast), are presented for analysis. The Noise Analysis is misleading to the public and decision makers by excluding the closest sensitive receptor for analysis. The EIR is inadequate as an informational document and must be revised to include analysis regarding the closest sensitive receptor in order to comply with CEQA.

Further, the analysis was taken only in the morning and does not present existing conditions for PM peak times. The Noise Analysis must be revised to include this information for analysis in order for the EIR to be an adequate informational document.

Potential Impacts from On-Site Operation Activities

Table 10
Noise Levels for Warehousing Activities

Distance from Facility (ft.)	Noise Level (dBA Leq) No Barrier	With 12' Barrier
200 (Closest House)	44.9	38.4
1,300 (Second Closest Resy. Area)	28.6	23.5

West Ontario Commerce Center SPECIFIC PLAN EIR Chapter 3 Environmental Analysis

Table 3.11-6
Estimated Noise Levels for Warehousing Activities

Distance from Facility (feet)	Noise Level (dBA Leq) No Barrier	With 12-foot Barrier
250	42.9	36.9
500	36.9	31.5
1,300 (Nearest Residential)	28.6	23.5

The Noise Ordinance requires that noise levels remain below 45 dBA (Leq) during nighttime hours. As shown in Table 3.11-6, the projected noise level at the nearest residence is estimated to be 28.6 dBA (Leq), which is below the City 45 dBA noise level limit. Therefore, the noise impacts from on-site activities during the operation of the Project would be less than significant.

Noise levels were measured at similar facilities to determine representative noise levels that might be generated by the type of activity associated with the Project. Noise measurements were taken at two facilities: 1) Lowes Distribution Center (3984 Indian Avenue, Perris, California); and 2) Ross Distribution Center (3404 Indian Avenue, Perris, California). The Lowes facility is approximately 1.6 million square feet and was very busy during the time of the noise consultant's measurements, thus the Lowes measurements are utilized for analysis in the EIR. However, the Noise Analysis omits pertinent information regarding the Lowes measurements. Three measurements were taken, but only two locations are described as positions for analysis. Also, there is no specific time of day given for each of the measurements, only that they were during the afternoon hours, which does not reflect AM or PM peak times. The EIR must be revised to include this information for analysis.

The Lowes Analysis is utilized to predict nighttime noise levels for the proposed project at three different distances. The tables presented in the EIR and the Noise Analysis are vastly inconsistent.

The Noise Analysis (Appendix K) indicates that the nearest sensitive receptor is 200 feet from the site, while the EIR indicates that the nearest sensitive receptor is 1,300 feet from the site. To add to this error, the nearest sensitive receptor is identified as 100 feet from the site in the Air Quality Analysis. The Noise tables are not only inconsistent, they both are incorrect regarding the closest sensitive receptor, which is misleading to the public and decision makers. Further, the EIR presents information regarding noise levels 250 ft and 500 ft from the site, while the Noise Analysis modeled only 200 ft and 1,300 ft from the site. The EIR does not provide supporting evidence regarding where the information in the EIR is from. Further, these tables are utilized for nighttime maximum noise level analysis. The EIR states that the measurements were taken during the afternoon hours, which is not nighttime hours. The EIR presents skewed information in order for the noise impacts to appear less significant than they actually may be, requiring the EIR to be substantially revised and recirculated pursuant to CEQA.

Noise Impacts from Construction Activities

The Noise Analysis (Appendix K) states that in regard to sensitive receptors, "Construction could occur as close as 100 feet, but probably only very briefly." The Noise Analysis and EIR do not provide any information or analysis to support this statement. The EIR must be revised to include noise analysis modeling at 100 feet from the site, which is the worst case scenario as stated in Appendix K.

Appendix K also states that "the average noise levels (L50) are typically 15 dB lower than the peak (Lmax) noise levels. The 15 dB value is based on our general observations during construction noise measurements over the past 20 years." The Appendix does not provide a list of similar projects analyzed to support this assertion. The EIR must be revised to provide supporting evidence regarding the 15 dB value difference between Leq and Lmax noise levels utilized for analysis.

Additionally, the complete Lowes and Ross Noise Analysis conducted on March 13, 2012 must be included in the EIR. CEQA § 15150 (f) states that incorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand. The Lowes and Ross Noise Analysis conducted on March 13, 2012 utilized for analysis in the EIR contributes directly to the analysis of the problem at hand. Not including information, meaningful details, or

the Lowes and Ross Noise Analysis conducted on March 13, 2012 for public review is in violation of CEQA § 15150 (f).

Cumulative Impacts

The cumulative noise impact analysis of the EIR must be revised to reflect the inconsistencies stated above. Further, this section of the EIR again erroneously states that "the operational noise from onsite activities at Specific Plan buildout at the closest sensitive receptor would be 28.6 dBA Lmax, which is less than the noise standards and the existing ambient noise in the Project vicinity." This information is misleading to the public and decision makers, requiring the EIR to be substantially revised and recirculated in order to comply with CEQA's requirements for meaningful disclosure.

3.13 Transportation/Traffic

It must be noted that the Traffic Analysis does not provide any information or analysis regarding the potentially significant impacts associated with the proposed off-site re-alignment of Eucalyptus Avenue. The EIR must be revised to accurately analyze this improvement as part of the Traffic modeling and include it for review in the cumulative impacts analysis.

Conclusion

For the foregoing reasons, GSEJA believes the EIR is flawed and an amended EIR must be prepared for the proposed project and recirculated for public review. Golden State Environmental Justice Alliance requests to be added to the public interest list regarding any subsequent environmental documents, public notices, public hearings, and notices of determination for this project. Send all communications to Golden State Environmental Justice Alliance P.O. Box 79222 Corona, CA 92877.

Sincerely,

Board of Directors
Golden State Environmental Justice Alliance

wittwer / parkin

April 30, 2018

VIA EMAIL

Mr. Richard Ayala
Senior Planner
City of Ontario
303 East B Street
Ontario, CA 91764
RAyala@ontarioca.gov

Re: West Ontario Commerce Center Specific Plan Project DEIR (State Clearinghouse No. 2017041074)

Dear Mr. Ayala:

This law firm represents the Southwest Regional Council of Carpenters (Southwest Carpenters) and submits this letter on the above-referenced project on its behalf.

Southwest Carpenters represents 50,000 union carpenters in six states, including in Southern California, and has a strong interest in addressing the environmental impacts of development projects such as the West Ontario Commerce Center Specific Plan Project (Project). The City of Ontario (City) released a Draft Environmental Impact Report (DEIR) detailing the impacts of the Project in March 2018.

The proposed Project consists of two planning areas, totaling 120 acres. The Project would permit development of 2,905,510 square feet, including (1) 555,505 square feet of Business Park space, and (2) 2,350,005 square feet of Industrial space. In addition, the Project will involve the following approvals:

- Adoption of the West Ontario Center Specific Plan;
- General Plan Amendment;
- Zone Change;
- Development Agreement;
- Development Plans; and
- Tentative Parcel/Tract Map

Below, we present our comments to specific aspects of the DEIR.

Greenhouse Gases

The City determined, "[s]ince no significant greenhouse gas emission impacts have been identified, no mitigation measures are required." Yet, the Greenhouse Gas section of the DEIR states the Project would emit over 20,000 metric tons of CO_2-equivalent ($MTCO_2e$) of greenhouse gases annually, 17,000 $MTCO_2e$ over the City's threshold of significance for greenhouse gases. The City does not quantify the proposed mitigation, but it is highly unlikely to reduce Project-related impacts to less than significant by the City's own standards.

The City has determined that "projects with emissions that exceed 3,000 MT CO2EQ can demonstrate compliance with Title 24 by implementing measures from the Screening Tables presented in Appendix B of the CCAP. Per Appendix B of the CCAP, a proposed project would not result in a significant individual or cumulative impact if it implements 100 points worth of GHG reduction measures."

The City cannot ignore the quantitative significance thresholds it has set. CEQA Guidelines define a threshold of significance as "an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant." 14 Cal. Code Regs. § 15064.7. Unless the Project's impacts are reduced to a level below the City's significance threshold of 3,000 $MTCO_2e$, they will remain significant after mitigation. The City's conclusion that "points," which will result in negligible reductions in the Project's greenhouse gas emissions, could somehow reduce the Project's impacts to less than significant, while still greatly outstripping the City's own significance threshold of 3,000 $MTCO_2e$ runs counter to state standards set for CEQA impacts analysis, including those used by the City throughout the rest of the Project DEIR. It should be noted that, while the City states most of the greenhouse gas emissions will be caused by mobile sources, the City considers no mobile source mitigation measures to reduce these impacts. The City's significance conclusions cannot be supported by substantial evidence.

To provide a meaningful greenhouse gas impacts analysis, please quantify the greenhouse gas emissions reductions proposed for the Project, as reflected in Table 3.7-1. Further, please explain how the Project can be consistent with the City's Community Climate Action Plan, while at the same time running counter the central purpose of this plan. The Project greatly increases local greenhouse gas emissions, in direct conflict with the only real goal of the Climate Action Plan, to reduce "community" greenhouse gas emissions by nearly 1 million $MTCO_2e$ annually. Please discuss how the Project, combined with other nearby projects which will have comparable increases in greenhouse gas emissions, can be found consistent with the goals of the City's Climate Action Plan. In your response to these comments, please specify if the City has

determined whether it is on track to achieve its greenhouse gas reduction goals reflected in its Community Climate Action Plan, and provide information regarding the estimated greenhouse gas emissions from all projects identified in the Table 2.20 of the DEIR. If the City can claim all of these projects individually and cumulatively comply with its Climate Action Plan, while at the same time greatly increasing (as opposed to reducing) the City's total greenhouse gas emissions, then the City's efforts at reducing greenhouse gas emissions, and its Climate Action Plan, are a farce.

Air Quality

It is unclear whether the City has concluded the Project's air quality impacts will be significant and unavoidable. In its conclusion regarding air quality impacts, the City seems to provide conflicting analysis:

> While Mitigation Measure AQ-2 is recommended to reduce NOx emissions, no feasible mitigation measure has been identified that would mitigate NOx emissions associated with Impact AQ-2 and AQ-3 to below a level of significance due to the volume of vehicular trips that would result from the Project. Therefore, operational NOx emissions, even with Mitigation Measure AQ-2, would remain significant and unavoidable. AQ-1 would mitigate NOx emissions associated with AQ-1, AQ-2 and AQ-3 to below a level of significance.

Please clearly state whether the City has determined whether the Project will have a significant impact on air quality. It should be noted that the rest of the City's air quality analysis suggests the Project's air quality impacts would be significant and unavoidable, even after mitigation.

The City concludes that the Project's "emissions are largely related to vehicular emissions, and neither the applicant nor the City have the ability to reduce emissions from vehicles." Please explain the City's reasoning for arriving at this conclusion. The Project applicant and the City are in a perfect position to reduce emissions from vehicles. Although the City does not have authority to set vehicle emissions standards, it is in a position to regulate the specific conditions of use for the Project, which could include a myriad of measures designed to reduce Project emissions, including:

- Requiring the exclusive use of newer model-year vehicles transportation (the City seems to have required this);
- Reducing daily or yearly vehicle-miles traveled, including by (1) limiting the maximum number of permitted daily Project trips or vehicle-miles traveled, (2) ensuring transportation to and from the Project site is taking the shortest possible routes, and (3) requiring rideshare and mass transit incentives;

- installing several free EV charging stations (the City states the applicant has only committed to installing one);
- Conditioning approval on the installation of solar panels on the roofs of the two main structures, and installation of solar shade parking structures; and
- Requiring the Project applicant to purchase greenhouse gas offsets

The City must adopt all feasible mitigation measures. "CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible . . . A public agency shall not approve a project as proposed if there are feasible alternatives or mitigation measures available that would substantially lessen any significant effects that the project would have on the environment." 14 Cal. Code Regs. §§ 15021(a), 15065(c)(3). Please explain why additional mitigation measures, including those listed above, are not feasible, or would otherwise not lessen the significant air quality impacts of the Project.

The City's cumulative air quality impacts analysis is deeply flawed. The City states, "[a]ccording to SCAQMD's methodology, if an individual project results in criteria pollutant emissions (ROG, CO, NOx, SOx, PM10, and PM2.5) that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then it would also result in a cumulatively considerable net increase of these criteria pollutants for which the proposed project region is in non-attainment under an applicable federal or state ambient air quality standard." Please provide an exact reference to this supposed SCAQMD methodology to Southwest Carpenters so they can independently review it. Also, in the City's response to these comments, please disclose whether this "SCAQMD methodology" was adopted pursuant to noticed rulemaking, or whether it can in any way be considered an authoritative interpretation of SCAQMD's CEQA guidance.

The City has taken an illegal approach towards its cumulative impacts analysis for air quality impacts. The City has determined that, so long as the Project-level thresholds are not surpassed, the Project will not have significant cumulative impacts. This approach impermissibly writes the cumulative impacts analysis out of CEQA. CEQA Guidelines define "cumulative impacts" as "two or more individual effects, [which] when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines § 15355. Critically, "Cumulative impacts can result from ***individually minor but collectively significant projects*** taking place over a period of time." *Ibid.* (emphasis added).

The City turns the basic principle and directive of the cumulative impacts analysis on its head by equating the Project's direct impact thresholds to cumulative impact thresholds. As plainly stated in the definition of cumulative impacts, a project-related impact may be individually less than significant but cumulatively significant. CEQA Guidelines § 15355. The City's approach towards its cumulative impacts analysis defeats the purpose of this analysis and must be revised. According to the City's approach, cumulative impacts will never be significant

so long as Project-level impacts are less than significant. This runs directly counter to the definition of cumulative impacts. As stated above, we request that the City provide a legal and factual basis for the City's use of this flawed approach.

Agricultural Resources

Ontario and the region surrounding it is in the midst of a severe agricultural crisis, resulting in the loss of thousands of acres of arable land, primarily as a result of policies such as those adopted by the City. Facing the loss of essentially all of its agricultural lands, the City simply shrugs its shoulders and states that nothing can be done about it.

The City seems intent on eradicating the last vestiges of agricultural uses within the City and greater region. Figure 2.20 shows that, within 5 years, it intends to lose over half of its remaining farmland, including most of its prime farmland. The only mitigation the City proposes is to provide notice of nearby agricultural activities, which the city is actively eliminating. As the City is well aware, this mitigation does not even put a dent in the impacts arising from the City's policies designed to phase out these agricultural lands.

It is difficult to understate the significance of the loss of this and nearby farmland. In 2012, the County of San Bernardino reported the total gross value of its agricultural production to be roughly $387 million. By contrast,

> The total production value for the "west end south" County region, which includes the City of Chino Hills and portions of the cities of Ontario and Chino, was estimated at approximately $280 million in 2013, which represents nearly three quarters (72.3%) of the County's total gross value of agricultural production for 2013. The livestock and poultry commodity group, which includes milk, eggs, and chicken, accounted for 88.2% of the production value in the "west end south" County region, and over half (63.7%) of the production value for the County.

Ontario is the home of the majority of these agricultural lands. The Project site and surrounding lands is the last remaining agricultural pocket in Ontario, and represents a disproportionately high share of the value and productivity of all of the agricultural output of the county. Rather than staunch the bleeding from this loss of farmland, the City is doing its level best to facilitate it. To add insult to injury, the City has proposed the weakest of all possible measures to "mitigate" this irreplaceable, irreversible loss of farmland, including the loss of prime farmland and the cancellation of Williamson Act contracts:

> AG-1 Deed Disclosure - In order to reduce conflicting issues between sensitive receptors and agricultural uses, all property owners in the West Ontario Commerce

> Center Specific Plan shall be provided with a deed disclosure or similar notice approved by the City Attorney regarding the proximity and nature of neighboring agricultural uses. . . . . The content and text of the disclosure shall be approved by the City Attorney and shall include language to inform new residents that existing agricultural uses may create nuisances such as flies, odors, dust, night-light, and chemical spraying.

The City, conveniently, has determined all other mitigation to be infeasible because "avoidance (retention of the agricultural uses on the site) is inconsistent with the City's General Plan designations for the area that have been assigned to the properties because agricultural production in the region continues to decline due to economic viability." The City's analysis is a fait accompli: because the City is actively encouraging the conversion of its remaining farmland into more urbanized uses, it states in essence that no other nearby farmland is safe from its chopping block. No farmland can be saved, primarily because the City has made development within its final agricultural corridor so attractive.

It should be noted, however, that countless other urban jurisdictions have successfully saved tens of thousands of acres of farmland by requiring mitigation from developers who wish to develop this land in turn. The primary difference between the City and these other jurisdictions is not the feasibility of mitigation—jurisdictions with some of the highest real estate values, such as Santa Clara County, are actively working to ensure the preservation of their remaining farmland. Rather, the main difference appears to be that the City prioritizes conversion of this land, whereas other jurisdictions encourage its preservation. This is a political preference, not an issue of feasibility, as the City suggests.

Notwithstanding the economic viability of nearby agricultural practices, the City seems to ignore the open space benefits of these farmlands. Even absent active use, these lands can, and should, be preserved as wildlife habitat. Once preserved, the land can be leased for subsidized cultivation. Please explain why the City has not considered preserving nearby farmland as open space and wildlife habitat.

Biological Resources

The City does not provide an adequate baseline for biological resources. The baseline for the Project consists of "a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published." 14 Cal. Code Regs. § 15125(a).

The City states it conducted "incidental" nesting bird surveys during its surveys for burrowing owls. Please describe what was involved in these incidental surveys. It does not appear that the City truly attempted to catalogue or survey on-site nesting activities. The City

further requires the Project applicant to supply the results of bat surveys sometime after Project approval. However, the City is required to disclose whether bat species are present on site as part of its baseline discussion. Excluding this information does not permit interested members of the public to fully understand what species will be impacted by the Project, and in what manner.

Information available from the United States Fish and Wildlife Service suggests the Project site is likely to host a variety of migratory birds and one threatened plant the DEIR does not consider. These species include:

- Thread-leaved brodiaea
- Clark's grebe
- Costa's hummingbird
- Long-billed curlew
- Marbled godwit
- Rufous hummingbird
- Song sparrow
- Whimbrel

The DEIR does not suggest the City ever considered or conducted surveys for these species. Please confirm whether the City has conducted site surveys and other studies to discover the presence of these protected species.

The City's discussion of cumulative impacts to wildlife is deficient. As mentioned previously, CEQA Guidelines define "cumulative impacts" as "two or more individual effects, [which] when considered together, are considerable or which compound or increase other environmental impacts." CEQA Guidelines § 15355. "Cumulative impacts can result from ***individually minor but collectively significant projects*** taking place over a period of time." *Ibid.* (emphasis added).

The City states, "[t]he potential build out of the cumulative projects is approximately 3,795 acres." However, the City reasons that, because the Project will not have any significant *individual* direct impacts after mitigation "the Project will not have any significant cumulative biological impacts after implementation of mitigation." The City, again, equates direct and cumulative Project impacts, despite their fundamental differences. This analytical approach violates CEQA. Further, it defies credibility to conclude the loss of thousands of acres, including over half of the remaining contiguous open space in the region, can have a less than significant impact on wildlife populations. The City's own admitted loss of the majority of this remaining habitat runs directly counter to its claim that impacts are cumulatively less than significant. This conclusion cannot be supported by substantial evidence, as the only evidence the City provides

suggests catastrophic cumulative impacts. Please provide further explanation and justification to support the City's contention that species impacts are less than significant.

Hazards and Hazardous Materials

While the City seems to believe soils at the Project site have a high probability of being contaminated, it does not appear to have conducted testing to confirm this theory. Instead of requiring this analysis up front and disclosing it as part of its baseline discussion, it permits the applicant to defer discovery of these site conditions until after the Project is approved, or to not discover these site conditions at all.

As mentioned, above, "[a]n EIR must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published." 14 Cal. Code Regs. § 15125(a). In contrast, the City would permit delayed soils testing:

> Prior to approval of grading permits, the project applicant shall hire a qualified environmental consultant to conduct a limited soils investigation to identify the hazards related to the soils near the pumping equipment for the holding ponds on the GH Dairy site . . . . The Soil Management Plan shall include methodology and procedures to perform additional testing during soil disturbance activities if unknown potentially hazardous materials are identified.

There are multiple concerns with this approach. First, the City seems to ignore the potential contaminants in the soils of row crops. These crops often contain decades' worth of hazardous contaminants. Although more modern pesticides tend not to persist as long in soils, or to contain as many toxic or carcinogenic substances, the same cannot be said of older pesticides. Potentially toxic and carcinogenic remnants of these pesticides likely persist within these agricultural soils. These chemicals may be released into the air or handled during construction and, thus, pose a danger to workers.

Next, the City's approach toward discovering potential site hazards would require the ability to identify potentially hazardous materials on site. When these materials are found in the environment, they are hardly ever labeled, and most tend to provide no warning or indication of their presence. Thus, the City's approach avoids studying whether soils are contaminated at the outset, as required by CEQA, and essentially guarantees no one will do so at a later time.

Further, the City's approach appears to constitute deferred mitigation. "Formulation of mitigation measures should not be deferred until some future time." 14 Cal. Code Regs. § 15126.4(a)(1)(B). The City must formulate binding mitigation measures prior to Project

approval, which should be further informed by any baseline studies the City conducts on the Project site. Absent conducing these studies, the City should proceed under the assumption that all Project soils contain harmful contaminants and require mitigation accordingly.

SW Carpenters takes the health and safety of workers and future users of the Project site seriously. The City should take all possible precautions to ensure a safe work site.

Hydrology and Water Quality

The City concludes "[t]he project will maintain the overall existing drainage pattern of the Site." This conclusion seems odd, in light of the Project's creation of hundreds of thousands of square feet of impervious surfaces, where no impervious surfaces currently exist. Please explain how the Project will maintain the overall drainage pattern, while, at the same time, entirely changing the physical properties of the Project site.

In its discussion of hydrological impacts, as reflected in HYD-1 and HYD-2, the City concludes that no mitigation is necessary. However, at the same time City states that the Project will be adopting a bevvy of measures, which, by all appearances, are aimed at mitigating the impacts of the Project on hydrology and water quality:

> Landscaped areas would also be designed to receive and infiltrate runoff water from impervious surfaces. Use of the underground stormwater retention chambers and landscaping areas would regulate the rate and velocity of stormwater flows and would control the amount of discharge through the proposed drainage system into the County Line Channel. In addition, the drainage facilities proposed, have been sized to adequately accommodate the stormwater flows from the Specific Plan area, and are consistent with the City's Storm Drainage Master Plan.
>
> In addition, the City requires a hydrology study and drainage analysis be prepared by a state registered civil engineer in accordance with the San Bernardino County Hydrology Manual and the City of Ontario's Standards and Guidelines, prior to permitting, to ensure the drainage design would accommodate the Specific Plan development. As a result, implementation of the Specific Plan would not result in alteration of any stream or river, or the potential for on- or off-site flooding and impacts would be less than significant.

The City seems to be short circuiting the impacts analysis. The City states Project hydrology and water quality impacts will be less than significant prior to mitigation, but only *after* the Project implements several measures aimed to reduce these impacts. Please discuss whether the Project will have significant impacts on the environment *prior* to the above mitigation, so the public can better understand the true impacts of the Project.

Conclusion

Southwest Carpenters thanks the City for the opportunity to comment on the DEIR and looks forward to commenting on the City's subsequent environmental review documents when these documents are released for public review. Moving forward, please send all future notices relating to the Project to Nicholas Whipps at nwhipps@wittwerparkin.com. Thank you for your consideration of these comments.

Very truly yours,
WITTWER PARKIN LLP

Nicholas Whipps

Attachment A: USFWS, Information for Planning and Conservation Report
Attachment B: Cornell Waste Management Institute, Sources and Impacts of Contaminants in the Soils

Attachment A

IPaC **U.S. Fish & Wildlife Service**

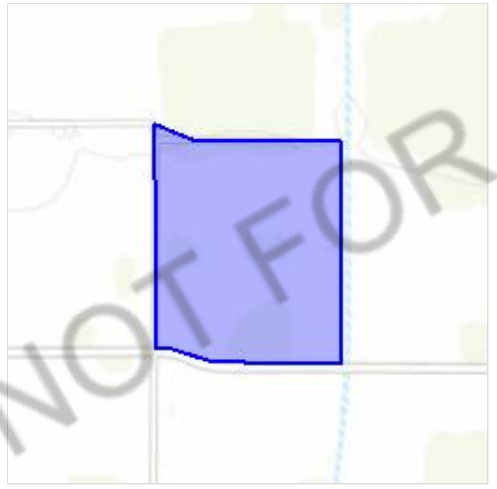
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Bernardino County, California



Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS

Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/3495

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly Rhaphiomidas terminatus abdominalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
San Diego Ambrosia Ambrosia pumila There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/8287	Endangered

Santa Ana River Woolly-star Eriastrum densifolium ssp. sanctorum — Endangered

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6575

Thread-leaved Brodiaea Brodiaea filifolia — Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6087

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip:

enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
Burrowing Owl Athene cunicularia This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9737	Breeds Mar 15 to Aug 31
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Dec 31
Costa's Hummingbird Calypte costae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Long-billed Curlew Numenius americanus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5511

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Rufous Hummingbird selasphorus rufus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Song Sparrow Melospiza melodia — Breeds Feb 20 to Sep 5
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that

week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

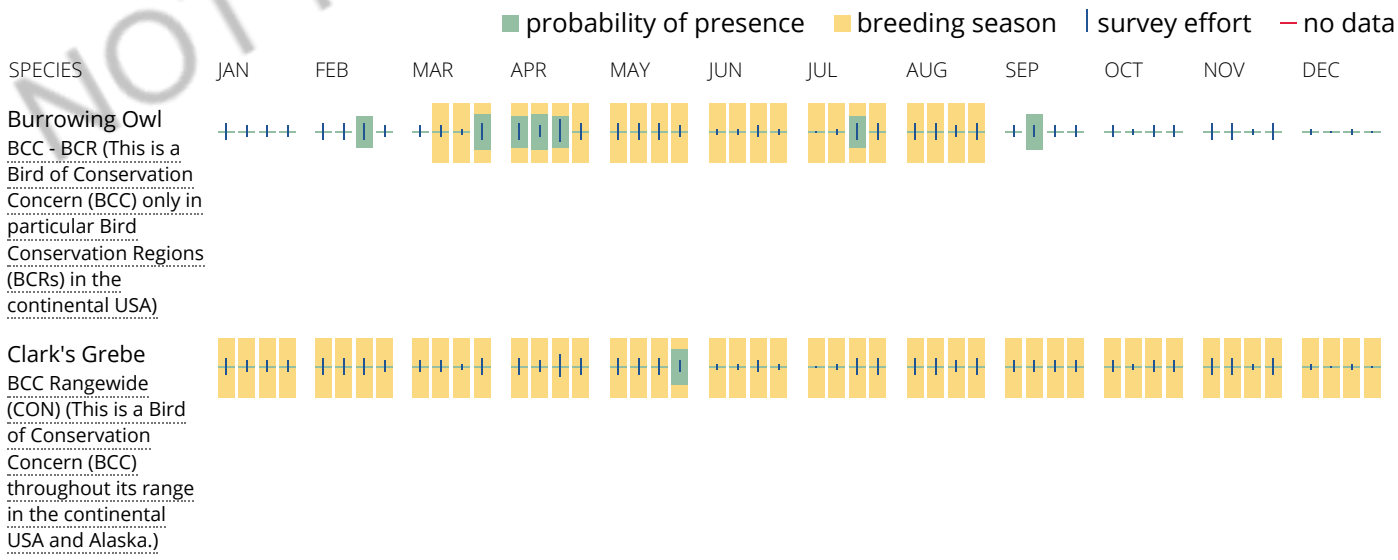
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

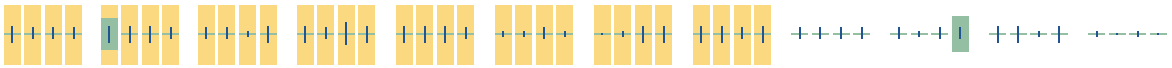
No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



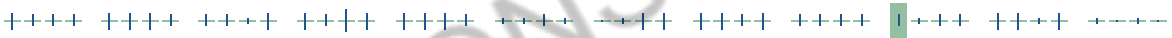
Costa's Hummingbird
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Golden Eagle
Non-BCC Vulnerable (This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.)



Long-billed Curlew
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

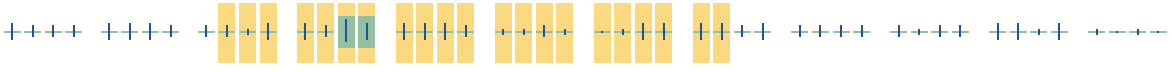
Marbled Godwit
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Rufous Hummingbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Song Sparrow
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)

Tricolored Blackbird
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

- PUBFx
- PUSAx
- PUSCx

A full description for each wetland code can be found at the National Wetlands Inventory website

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Attachment B

Cornell Waste Management Institute

Department of Crop & Soil Sciences
http://cwmi.css.cornell.edu

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Sources and Impacts of Contaminants in Soils

Soils Overview

Soils are formed by the decomposition of rock and organic matter over many years. Soil properties vary from place to place with differences in bedrock composition, climate, and other factors. At times, the amounts of some soil elements and other substances may exceed levels recommended for the health of humans, animals, or plants. Certain chemical elements occur naturally in soils as components of minerals, yet may be toxic at some concentrations. Other potentially harmful substances may end up in soils through human activities.

In some regions of the United States, naturally occurring concentrations of certain chemicals may be higher than those in other areas. For example, typical levels of arsenic in the soils of some regions of New York State can exceed recommended values. At times this results in groundwater arsenic concentrations above US Environmental Protection Agency (USEPA) limits for drinking water, requiring treatment to ensure a safe water supply. In New York State, the naturally occurring concentrations of potentially toxic elements in soils are otherwise generally not a problem.

Soil properties are affected by past land use, current activities on the site, and nearness to pollution sources. Human activities have intentionally added substances such as pesticides, fertilizers and other amendments to soils. Accidental spills and leaks of chemicals used for commercial or industrial purposes have also been sources of contamination. Some contaminants are moved through the air and deposited as dust or by precipitation.

CWMI Resources for Healthy Soils

http://cwmi.css.cornell.edu/soilquality.htm

- **Sources and Impacts of Contaminants in Soils**
- **Guide to Soil Testing and Interpreting Results**
- **Best Practices for Healthy Gardens**
- **More Information about Arsenic and Lead**

This document provides background information about soil contaminants and their impacts on human health and the environment. It is part of a series of CWMI resources intended to help people who are interested in soil testing, interpreting test results, and best practices for healthy soils.

What Happens to Contaminants in Soils?

Once contaminants are in soils, where they go and how quickly they travel depends on many factors. Some organic (carbon-based) contaminants can undergo chemical changes or degrade into products that may be more or less toxic than the original compound. Note that chemical elements (such as metals) cannot break down, but their characteristics may change so that they can be more or less easily taken up by plants or animals. Different contaminants vary in their tendency to:

- End up in water held in the soil or in the underlying groundwater (by leaching through the soil);
- Volatilize (evaporate) into the air; or
- Bind tightly to the soil.

The characteristics of the soil also affect the fate of contaminants and whether they can be readily taken up by plants or animals. Site management and land use (such as gardening practices) can affect some soil characteristics. Important soil characteristics that may affect the behavior of contaminants include:

- Soil mineralogy and clay content (soil texture);
- pH (acidity) of the soil;
- Amount of organic matter in the soil;
- Moisture levels;
- Temperature; and
- Presence of other chemicals.

Are Contaminants Biologically Available?

The bioavailable portion is the amount of a substance that can cause direct effects on plants, animals or humans because it can be taken up by their bodies. Usually, not all of a contaminant found in soil is biologically available. The bioavailability of a contaminant depends on many characteristics of the soil and of the site. Site conditions affect how tightly the contaminant is held by soil particles and its solubility (how much of it will dissolve in water). Greater solubility usually means that more of the contaminant is bioavailable, but this also means that the contaminant is more likely to leach out of the soil. Certain chemicals show an "aging effect" and can become less bioavailable the longer they remain in soils.

Most commonly available soil tests measure a large part of the total amount of a particular contaminant in the sample, not just the bioavailable portion. The bioavailable portion may be only a small fraction of the total amount. Changes in site conditions, such as soil acidity or organic matter content, can change the bioavailability of a contaminant. There is no easy way to know what portion may be bioavailable. Using bioassay tests to measure uptake of contaminants by plants or soil organisms is the most direct way to estimate bioavailability. Unfortunately, bioassay tests are slow and expensive and are not generally available. For this reason, only the total levels or chemically extractable amounts (commonly used to approximate the total amount) of a particular contaminant are usually measured.

How are Contaminants Distributed in Soils?

The distribution of contaminants released to soils by human activities is related to how and where they are added. For instance, the amount of contaminants in the soils of an industrially-contaminated site may vary depending on the activities conducted on the site. The movement of air and water will also affect how soil contaminants move throughout a site. Chemicals may be carried by winds and deposited on the surface of soils; tilling can then mix these surface deposits into the soil. The movement of groundwater or surface water may also affect how contaminants spread from the source.

Many pesticides and soil amendments used for agricultural, industrial, or commercial activities may be found in residential soils. This could happen if former industrial or agricultural lands are later used for residential properties, and contaminants remain in the soil. Spills, runoff , or aerial deposition of chemicals used for agriculture or industry can also result in contamination of the soils of residential sites.

For example, arsenic and lead were once used as pesticides on a number of crops, including orchards, throughout the United States. Sodium arsenate was also commonly used on potato crops in eastern Long Island. Therefore, old orchards, farms, and adjacent areas are places where testing for arsenic and lead might be advisable. Within an orchard, the distribution of these contaminants may be very spotty since individual trees may have been treated, resulting in higher residues under each tree. Collecting multiple soil samples from such an area would help to determine the pattern of contamination.

What are Some Common Sources of Soil Contaminants?

Due to the wide array of contaminants, soils and site conditions, the levels of possible contaminants will depend on the specific conditions of a particular property. If the answer to any of the following questions is "yes," soil testing can help provide more information about the levels of a particular contaminant (or contaminants).

♦ **Lead Paint:** *Has lead paint been used on the outside of homes or other buildings on or near the property?*

Some paints manufactured before 1978 are likely to contain lead. As lead paint ages and peels off or is intentionally removed through activities such as stripping, scraping or sandblasting, lead can make its way into the soil surrounding homes or other buildings. The concentrations of lead in soil are usually highest right near a building, and tend to decrease with distance away from the contamination source. See more information from the Cornell Waste Management Institute (CWMI) at: *http://cwmi.css.cornell.edu/soilquality.htm.*

♦ **Pesticides:** *Are pesticide chemicals currently used on the property? Were pesticides used in the past, such as for old orchards or farms?*

Pesticides include chemicals used as insecticides, herbicides, fungicides, rodent poisons and some other kinds of poisons. When testing for pesticides in soil, there is no single test to see if there are pesticide residues. It is necessary to test for specific chemicals, and unfortunately, there are hundreds of pesticides from which to choose. The best way to proceed is to consider if and how pesticides might have been used on your property, and to try to get information on what might have been used and where. For example, chlordane, a persistent chemical, was often used for termite control around foundations in the past. Pesticide mixing areas are often "hot spots" of contamination. Fact sheets providing more information about specific pesticide chemicals and their uses are available from the National Pesticide Information Center at: *http://npic.orst.edu/npicfact.htm*.

♦ **Industrial / Commercial Site Use:** *Is the property near an industrial or commercial site that may be using chemicals or might have used chemicals in the past? Was the property formerly the site of industrial or commercial activity?*

The particular chemicals that may be present due to industrial or commercial activities will depend on the type of industry and the specific procedures used on site. If commercial or industrial activities are currently occurring on or near the property, or may have occurred in the past, it may be helpful to research what chemicals might have been used for a specific activity. The level of contamination will depend on many factors, such as how close to the property a particular activity occurred, and how long it has been since chemicals were used. The USEPA (*http://www.epa.gov/*) and the Agency for Toxic Substances and Disease Registry (ATSDR, *http://www.atsdr.cdc.gov/*) may have more information about specific chemicals and contaminated sites.

♦ **High Traffic Areas:** *Is the property located near a roadway with frequent traffic?*

A property's distance from roadways and traffic can affect the amounts of certain chemicals in the soil, especially lead. Lead compounds were used in gasoline until the late 1970s; after this time their use was phased out. Even though the use of leaded gasoline has now been discontinued, the highest concentrations of lead in soils are still generally found adjacent to busy roadways. Polyaromatic hydrocarbons (PAHs) are chemicals associated with the incomplete combustion of fossil fuels and with coal tars and asphalt. The levels of PAHs and some other chemicals may also be higher in high traffic areas as compared to other areas. The lowest levels of contamination would be expected in the areas of the property farthest away from traffic.

♦ **Treated Lumber:** *Were decks, swing sets, playscapes, or other structures on the property built from pressure treated wood?*

Arsenic, in the form of chromated copper arsenate or CCA, has been used in wood preservatives to make pressure-treated lumber. CCA-treated lumber is no longer available in the US for residential uses, but it can still be used for industrial purposes. Some of the arsenic in CCA-treated wood can move from the wood to nearby soil, although it does not travel far from the wood structure. The ATSDR provides more information to answer common questions about CCA and arsenic (*http://www.atsdr.cdc.gov/cabs/arsenic/*), while Pennsylvania State University offers additional information about garden use of treated lumber (*http://pubs.cas.psu.edu/freepubs/pdfs/uc173.pdf*). Also see more information from CWMI at: *http://cwmi.css.cornell.edu/soilquality.htm*.

♦ **Petroleum Spills:** *Is there a history of spills or leaks of fuel oil, gasoline or other petroleum products on or near the property?*

Petroleum leaks or spills from gas stations, fuel tanks, or other activities can result in elevated levels of contaminants such as benzene, toluene, and xylene in the soil. Some of these chemicals (especially volatiles) are unlikely to remain in the surface soil where they would be taken up by plants or be in direct contact with humans, unless the spill was very recent or large. However, this is not true for all contaminants or all spills, especially for some underground spills that may result in vapors that make their way to the surface soil. If the source is a leaking underground heating oil tank, it is unlikely that the surface soil would be contaminated with these chemicals. However, these spills should be reported to the NYS Department of Environmental Conservation (NYS Spill Hotline: 1-800-457-7362)

It is particularly important to find out if contaminants are a problem in areas where children play or in gardens where fruits or vegetables are grown for food.

♦ **Automobile or Machine Repair / Junk Vehicle Storage:** *Has automobile or other machine repair work been done that may have resulted in chemical spills or dumping on or near the property? Are junk vehicles stored on or near the property?*

Automobile or machine repair activities may result in accidental spills or intentional dumping of chemicals into residential or community soils. Many possible contaminants could be associated with these activities, including petroleum products, PAHs (particularly from motor oil), solvents like trichloroethylene (TCE), used tires and rubber products, metals (used engine oil may contain chromium, lead, molybdenum, or nickel from engine wear), or used batteries (which may release lead or mercury). Junk vehicles may also be a source of these chemicals or other contaminants, depending on their condition and how and where they are stored.

♦ **Furniture Refinishing:** *Has furniture been refinished on or near the property?*

Some chemical strippers used in furniture refinishing contain methylene chloride and other solvents, including toluene and methanol. These substances can contaminate the soil and groundwater if handled improperly during commercial operations or projects by a home hobbyist. Note that a variety of chemical strippers are available commercially, some of which do not contain these toxic substances.

♦ **Landfills / Garbage Dumps:** *Is the property near a landfill or garbage dump? Was it formerly the site of a landfill or garbage dump?*

Many different soil contaminants can leach from landfills or other garbage disposal sites, including petroleum products, solvents, pesticides, lead and other heavy metals. The chemicals that may be present in soils near locations used for waste disposal (currently or in the past) will depend on the specific conditions of a particular site, and on what types of materials were disposed of at that site.

♦ **Fires:** *Have materials been burned on or near the property? Has there been an accidental fire?*

The intentional or accidental burning of materials can produce and release PAHs, dioxins or other chemicals into soils, depending on what was burned and how long ago. Burning yard wastes, such as tree branches, is much less likely to release harmful contaminants than intentional or accidental fires that burn garbage, buildings or their contents, or other synthetic substances.

♦ **Fertilizers:** *Are fertilizers used for lawns or gardens on the property? Is the property near farmland or was it formerly used for agriculture?*

The use of some fertilizers based on waste materials, particularly sewage biosolids or fly ash, may result in the addition of heavy metals (such as copper, zinc, cadmium and lead) and PBTs (persistent, bioaccumulative, toxic chemicals) to soils. Products made from cement kiln dust may also contain heavy metals and dioxins. The use of animal manure or chemical fertilizers may result in higher levels of some soil contaminants. Phosphate fertilizers are known to contain some cadmium (from the rock phosphate), and manures are sometimes relatively high in copper or zinc.

How are People Exposed to Soil Contaminants?

Generally, people can be exposed to contaminants in soil through ingestion (eating or drinking), dermal exposure (skin contact) or inhalation (breathing). The route of human exposure to a soil contaminant will vary with the contaminant and with the conditions and activities at a particular site.

Many people, especially children, accidentally ingest small amounts of soil as part of their normal activities, such as performing yard work, gardening or playing. Young children usually ingest more soil than older children and adults because of their frequent hand-to-mouth behavior. Children and adults may also ingest soil while indoors if soil is transported into homes or other buildings, such as on shoes, clothing, or pets. Some contaminants, such as many pesticides, can pass through the skin and enter the body. People may also inhale contaminants bound to soil particles that become airborne (such as in windblown dust), or contaminants that vaporize from soil.

People can be exposed to contaminants in soil particles that stick to edible parts of garden produce or get taken up into garden plants from the soil. Animals raised for food may also take in contaminants from soil, and people may be exposed to these contaminants by eating animal products such as meat, eggs and milk. Drinking water may contain contaminants that were directly discharged into the water source or entered the surface water through runoff, or had leached from the soil into groundwater. In some situations, a contaminant may vaporize from the underlying groundwater and become part of the air that people breathe.

What are the Possible Health Effects of Exposure?

For any exposure to a contaminant, the likelihood that health effects will occur depends on the toxicity of the contaminant (how harmful it is to humans), how much of the contaminant is in contact with humans, and how long and how often the exposure occurs. Other potentially important factors include how healthy the person is, and his or her age, diet, gender, family traits and lifestyle. Differences in these factors may affect how people will respond to a given level of exposure to a particular contaminant. Children are generally more vulnerable because they ingest more soil, absorb more of the ingested contaminants, and eat, drink and breathe more in relation to their body size than adults. The bodies of unborn babies, infants, and children are also still developing and are more vulnerable to contaminants.

Information about the health effects of a particular contaminant may be available through the ATSDR (*http://www.atsdr.cdc.gov*), the USEPA (*http://www.epa.gov*), or other sources.

What are the Possible Effects on Ecosystem Health?

In addition to possible effects on human health, elevated levels of soil contaminants can negatively affect plant vigor, animal health, microbial processes, and overall soil health. Some contaminants may change plants' metabolic processes and reduce yields or cause visible damage to crops. Even relatively low concentrations of certain contaminants can alter soil chemistry and impact organisms that depend on the soil or plants for their nutrition and habitat. The effects on plants, animals, microbes, and soils within a given system will depend on the properties of the soil, the levels of contamination, the specific contaminants present, and the sensitivity of a particular organism to existing contamination.

For example, legume plants are able to fix nitrogen in the soil through a symbiotic relationship with *Rhizobium* bacteria in their root nodules. Such crops (including beans, lentils, peas, and peanuts) are often used to replenish nitrogen levels in depleted soils. However, these bacteria are sensitive to zinc contamination, which can disrupt the nitrogen fixation process. Nitrogen, a key nutrient for plant growth, may then no longer be available to the plant or to the rest of the system.

What Resources are Available to Help Locate Site History Information?

Finding site history information may be easier for some properties than others. Any information will help to address questions about the past and present uses of a site, and how the site history may have affected the current soil quality or the levels of contamination. Local libraries, historical societies, or map archives are good places to begin to track down site history information. Searchable Internet resources, such as *http://www.propertyshark.com*, may provide additional information.

Gathering information about soil conditions and past and present uses of a property can clarify whether soil testing is needed.

To assess whether contamination problems are likely at a particular site, try to find out:

- *What activities took place on this site?*
- *What chemicals were used?*
- *Where, and how much, were chemicals applied?*

What if a Property is Bought or Sold?

New York State Property Law requires a seller to disclose the results of any environmental testing (including soil and water tests) when a property is sold in the Property Condition Disclosure Statement. Property laws may differ in different states.

If a property is being bought or sold and there are questions or concerns about soil contaminants, soil testing may provide information to help identify if and where problems occur, and to what degree contamination may be present.

Where Can I Get More Information?

Cornell Waste Management Institute Resources for Healthy Soils: ***http://cwmi.css.cornell.edu/soilquality.htm***

♦ Sources and Impacts of Contaminants in Soils ♦ Guide to Soil Testing and Interpreting Results

♦ Soil Contaminants and Best Practices for Healthy Gardens ♦ More Information about Arsenic and Lead

Other Resources

Agency for Toxic Substances and Disease Registry, Department of Health and Human Services, Atlanta. Provides information to prevent harmful exposures and diseases related to toxic substances. Accessible at: *http://www.atsdr.cdc.gov/*

California Office of Environmental Health Hazard Assessment. A database with toxicity information on many chemicals. Accessible at: *http://www.oehha.ca.gov/risk/ChemicalDB/index.asp*

Cleanup Levels for hazardous waste sites. Links to many federal, state and international websites that address soil clean up levels. Accessible at: *http://cleanuplevels.com/*

National Pesticide Information Center. Provides information about pesticides and related topics. Accessible at: *http://npic.orst.edu/*

New York State Department of Environmental Conservation. Brownfield and Superfund Regulation, 6 NYCRR Part 375 - Environmental Remediation Programs. Accessible at: *http://www.dec.ny.gov/chemical/34189.html*

Penn State University. Agronomy Fact Sheets: Environmental Soil Issues. Information about lead in residential soils, garden use of treated lumber, and other issues. Accessible at: *http://cropsoil.psu.edu/extension/esi.cfm*

US Environmental Protection Agency. Office of Solid Waste and Emergency Response. Soil Screening Guidance: Quick Reference Fact Sheet, EPA/540/F-95/041. Accessible at: *http://www.epa.gov/superfund/health/conmedia/soil/pdfs/fact_sht.pdf*

US Environmental Protection Agency. US Office of Solid Waste and Emergency Response. Superfund Soil Screening Guidance: Technical Background Document, EPA/540/R95/128. Accessible at: *http://www.epa.gov/oerrpage/superfund/health/conmedia/soil/introtbd.htm*

US Environmental Protection Agency. Integrated Risk Information System (IRIS). Searchable database with information on the toxicity of numerous chemicals. Accessible at: *http://cfpub.epa.gov/ncea/iris/index.cfm*

Washington State University Cooperative Extension. Gardening on Lead- and Arsenic-Contaminated Soils. Additional information about arsenic and lead in garden soils. Accessible at: *http://cru.cahe.wsu.edu/CEPublications/eb1884/eb1884.pdf*

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