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September 16, 2025

VIA EMAIL

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Re: Comment on Addendum to the City of Chino General Plan EIR for the Chino Gateway Terminal Project, September 16, 2025 City Council Agenda Item 17

Dear Mayor Ulloa and Honorable City Councilmembers:

This comment is submitted on behalf of Appellant Supporters Alliance for Environmental Responsibility ("SAFER") regarding the Chino Gateway Terminal Project, which proposes the development of a 158,548 square-foot warehouse building and a 3,520 square-foot multi-tenant restaurant building, located on an approximately 7.35-acre site bounded by Schaefer Avenue and Oaks Avenue intersection in the City of Chino ("Project"), to be heard on appeal as Agenda Item 17 at the City Council's September 16, 2025 meeting.

SAFER objects to the City's reliance on an Addendum to the City of Chino General Plan Environmental Impact Report, certified in 2010 ("General Plan EIR"), for the Project. Under the California Environmental Quality Act ("CEQA"), an addendum is not appropriate because there is new information available since certification of the General Plan EIR indicating new significant impacts and the availability of new mitigation measures.

SAFER submits the following comment and related exhibits to inform the City Council of the new, significant impacts that the Project will have on individuals living and working in the City of Chino, which were not addressed or mitigated in the 2010 General Plan EIR or Addendum. Specifically, the comment and related exhibits address the Project's potentially significant biological resources, air quality, health, and noise impacts. As evidenced by the expert comments submitted by expert wildlife ecologist Dr. Shawn

Smallwood, Ph.D., air quality expert Dr. James Clark, Ph.D., and noise expert Ani Toncheva of Wilson Ihrig, CEQA requires that an updated, new initial study and a subsequent EIR, or, at the very least, an MND be prepared for the Project prior to approval. Dr. Smallwood, Dr. Clark, and Ms. Toncheva's written comments and CVs are attached as Exhibits A, B, and C, respectively.

Therefore, SAFER requests that the City Council not approve this Project or the Addendum, and instead refer it back to staff to address these shortcomings in an initial study and subsequent mitigated negative declaration or environmental impact report.

PROJECT DESCRIPTION

The Project proposes demolition of three existing buildings and associated ancillary structures (totaling 17,716 square feet) and the development of a 158,548 square-foot warehouse building and a 3,520 square-foot multi-tenant restaurant building, located on an approximately 7.35-acre site bounded by Schaefer Avenue and Oaks Avenue intersection in the City of Chino. The Project site is partially undeveloped.

The Project is anticipated to generate up to 72 employees (18 restaurant employees and 54 warehouse employees). The hours of operation for the proposed facilities include 8:00 a.m. to 10:00 p.m., 7 days per week for the restaurant tenants and 24 hours per day, and 7 days per week for the industrial tenants.

LEGAL STANDARD

CEQA contains a strong presumption in favor of requiring a lead agency to prepare an EIR. This presumption is reflected in the fair argument standard. Under that standard, a lead agency must prepare an EIR whenever there is substantial evidence in the whole record before the agency that supports a fair argument that a project may have a significant effect on the environment. (Pub. Res. Code § 21082.2 ("PRC"); *Laurel Heights Improvement Ass'n v. Regents of the University of California* (1993) [*"Laurel Heights II"*] 6 Cal.4th 1112, 1123; *No Oil, Inc.*, 13 Cal.3d at 75, 82; *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.)

Preparation of an Addendum Under CEQA

The City prepared the Addendum to the previously certified 2010 General Plan EIR. Pursuant to the CEQA Guidelines, an addendum to a previous EIR is proper only where "some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." (14 CCR § 15164(a).) Looking to Guidelines Section 15162, **an addendum is not appropriate when**:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new

significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would, in fact, be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

(14 CCR § 15162.)

Tiering Under CEQA

CEQA permits agencies to "tier" CEQA documents, in which general matters and environmental effects are considered in a document "prepared for a policy, plan, program or ordinance followed by narrower or site-specific [environmental review] which incorporate by reference the discussion in any prior [environmental review] and which concentrate on the environmental effects which (a) are capable of being mitigated, or (b) were not analyzed as significant effects on the environment in the prior [EIR]." (Pub. Res. Code ["PRC"] § 21068.5.) "[T]iering is appropriate when it helps a public agency to focus upon the issues ripe for decision at each level of environmental review and in order to exclude duplicative analysis of environmental effects examined in previous [environmental reviews]." (*Id.* § 21093.) CEQA regulations strongly promote tiering of environmental review.

"Later activities in the program must be examined in light of the program [document] to determine whether an additional environmental document must be prepared." (14 CCR § 15168(c).) The first consideration is whether the activity proposed is covered by the program. (*Id.* § 15168(c)(2).) If a later project is outside the scope of the program, then it is treated as a separate project and the previous environmental review may not be relied upon in further review. (See, *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1320-21.) The

second consideration is whether the "later activity would have effects that were not examined in the program." (14 CCR § 15168(c)(1).) A program environmental review may only serve "to the extent that it contemplates and adequately analyzes the potential environmental impacts of the project . . . ." (*Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal.App.4th 1156, 1171 [quoting *Citizens for Responsible Equitable Envtl. Dev. v. City of San Diego Redevelopment Agency* (2005) 134 Cal.App.4th 598, 615].) If the program environmental review does not evaluate the environmental impacts of the project, a tiered CEQA document must be completed before the project is approved. (*Id.* at 1184.)

For these inquiries, the "fair argument test" applies. (*Sierra Club*, 6 Cal.App.4th at 1318; *see also Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1164 ["when a prior EIR has been prepared and certified for a program or plan, the question for a court reviewing an agency's decision not to use a tiered EIR for a later project 'is one of law, i.e., 'the sufficiency of the evidence to support a fair argument.'"] [quoting *Sierra Club*, 6 Cal.App.4th at 1318].) Under the fair argument test, a new EIR must be prepared "whenever it can be fairly argued on the basis of substantial evidence that the project may have significant environmental impact." (*Sierra Club*, 6 Cal.App.4th at 1316 [quotations and citations omitted].) When applying the fair argument test, "deference to the agency's determination is not appropriate and its decision not to require an EIR can be upheld only when there is no credible evidence to the contrary." (*Id.* at 1318.) "[I]f there is substantial evidence in the record that the later project may arguably have a significant adverse effect on the environment which was not examined in the prior program EIR, doubts must be resolved in favor of environmental review and the agency must prepare a new tiered EIR, notwithstanding the existence of contrary evidence." (*Id.* at 1319.)

DISCUSSION

I. UNDER CEQA'S TIERING PROVISIONS, AN EIR, NOT AN ADDENDUM, MUST BE PREPARED FOR THE PROPOSED PROJECT.

A. A Project-Level MND or EIR is Required Because the Project may Result in Significant Environmental Impacts not Previously Analyzed in the 2010 General Plan EIR.

A lead agency may tier EIRs where multiple individual projects or phased projects are to be undertaken, and the individual projects are linked geographically, temporally, or in an otherwise logical manner. (14 CCR §§ 15165, 15168.) Here, the 2010 General Plan EIR is a program EIR subject to CEQA Guidelines section 15168. Under section 15168, "***[i]f a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration***." (14 CCR § 15168(c)(1) [emphasis added].) Importantly, in reviewing an agency's decision whether to prepare a tiered EIR, the "fair argument" test applies. (*Sierra Club v. Cnty. of Sonoma* (1992) 6 Cal.App.4th 1307, 1318.) Under the fair argument test, a new EIR must be prepared "whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact." (*Id.* at 1316; see also, *Friends of Coll. of San*

Mateo Gardens v. San Mateo Cnty. Comm. College Dist. (2016) 1 Cal.5th 937, 960.) A program EIR may only serve for subsequent actions "to the extent that it ***contemplates and adequately analyzes*** the potential environmental impacts of the project . . . ." (*Center for Sierra Nevada Conservation v. County of El Dorado* (2012) 202 Cal.App.4th 1156, 1171 [emphasis added] [citations omitted].)

Here, there is substantial evidence of a fair argument that the Project will result in significant biological resources impacts to special-status species and their habitats, (Smallwood Comments, pp. 2-29, 30-34), and significant air quality, health risk, and noise impacts to construction workers and nearby residences of the Project, (Clark Comments, pp. 6-17; Wilson Ihrig Comments, pp. 3-8), which were not analyzed in the 2010 General Plan EIR.

1. There is substantial evidence supporting a fair argument that the Project will result in a significant impact to special-status species.

There is substantial evidence of a fair argument that the Project will have a significant impact on special-status species not analyzed in the General Plan EIR. Dr. Smallwood's associate, Noriko Smallwood, performed a 3-hour site visit during the day and a 2-hour nocturnal survey of the site on July 24, 2025. (Smallwood, p. 2.) During these surveys, Noriko detected 30 species of vertebrate wildlife at or adjacent to the project site, including eight species with special status. (Smallwood, p. 3.) These special-status species included the Monarch butterfly, Allen's hummingbird, Cooper's hawk, red-tailed hawk, Great horned owl, American kestrel, Western yellow bat, and Silver-haired bat, which are listed as a candidate for listing under the federal Endangered Species Act, protected Birds of Prey (California Fish and Game Code 3503.5), California Species of Special Concern, Taxa to Watch List, U.S. Fish and Wildlife Service Bird of Conservation Concern,[1] and Western Bat Working Group priority bats. (Smallwood, pp. 2-12.) As discussed below, Dr. Smallwood found that the Project's construction and operation could result in significant impacts to these special-status species due to habitat loss and fragmentation and the increase in road mortalities. (See, Smallwood, pp. 28-29, 32-33.) Dr. Smallwood found that the current mitigation measures intended to reduce impacts to special-status species in the General Plan EIR are deficient, and recommends several other mitigation measures. (See, Smallwood, pp. 34-37.)

The Addendum fails to disclose, analyze, or mitigate significant impacts to special-status species, which was not analyzed in the 2010 General Plan EIR. Because Dr. Smallwood's expert review is substantial evidence of a fair argument of significant biological resources impacts, an EIR should be prepared to disclose and mitigate those impacts.

2. There is substantial evidence supporting a fair argument that the Project will result in a significant impact to wildlife from habitat loss and road mortality.

[1] *See* https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern- 2021.pdf.

i. Habitat loss and fragmentation.

Neither the 2010 General Plan EIR nor the Addendum analyzed the significant habitat loss and fragmentation that will occur as a result of the Project. Neither General Plan EIR nor the Addendum estimate the numerical or productive capacities of the site for nesting birds as a result of habitat loss and habitat fragmentation. (Smallwood, p. 28.) The Project's destruction of 7.35 acres of habitat will have a corresponding impact on breeding capacity for species utilizing the site for nesting. Dr. Smallwood calculated that as a result of this habitat loss, the Project could result in "[t]he loss of 124 birds per year" which "would be a loss of significant habitat value that is currently provided by the project site," and "[m]ost if not all these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which are intended to most strongly protect breeding migratory birds." (Smallwood, p. 29.) The loss of that many birds would easily qualify as an unmitigated significant impact. (*Id.*, p. 29.) Dr. Smallwood found that the current mitigation measures intended to reduce impacts to biological resources in the General Plan EIR are deficient, and recommends several other mitigation measures to reduce the effects of habitat loss. (See, Smallwood, pp. 34-37.)

The Addendum fails to disclose, analyze, or mitigate significant impacts to birds from habitat loss and fragmentation, which was not analyzed in the 2010 General Plan EIR. Because Dr. Smallwood's expert review is substantial evidence of a fair argument of significant biological resources impacts, an EIR should be prepared to disclose and mitigate those impacts.

ii. Road mortality.

Neither the 2010 General Plan EIR nor the Addendum address impacts to wildlife from collisions with traffic generated by the Project. According to the Addendum, the Project would result in 1,013,614 vehicle miles traveled annually. (Smallwood, p. 32.) Dr. Smallwood estimates that collisions with vehicles as a result of the Project would kill 203 animals annually. (*Id.*, pp. 32-33.) Especially due to the special-status species likely to occur at or near the Project, these collisions represent a significant impact to wildlife that has not been addressed, discussed, or mitigated in the Addendum or General Plan EIR. Dr. Smallwood's calculations constitute substantial evidence of a fair argument that an EIR is necessary to address and mitigate this impact. Dr. Smallwood found that the current mitigation measures intended to reduce impacts to biological resources in the General Plan EIR are deficient, and recommends several other mitigation measures to reduce the effects of road mortality. (See, Smallwood, pp. 34-37.)

The Addendum fails to disclose, analyze, or mitigate this significant impact to wildlife from an increase in traffic collision-related mortalities, which was not analyzed in the 2010 General Plan EIR. Because Dr. Smallwood's expert review is substantial evidence of a fair argument of significant biological resources impacts, an EIR should be prepared to disclose and mitigate those impacts.

3. There is substantial evidence supporting a fair argument that the Project will result in a significant cumulative air quality and health risk impact as a result of nearby warehouse projects and existing degraded air quality conditions.

In the 2010 General Plan EIR, the City found that the impact of the General Plan on air quality would be cumulatively significant and unavoidable because "[t]he proposed General Plan would increase the region's VMT and air emissions beyond what was assumed in the 2007 SCAQMP. Consequently, the proposed General Plan would conflict with the adopted air plan, and would result in cumulative air quality impacts in the [South Coast Air Basin]." (Findings of Fact and Statement of Overriding Considerations for the Envision Chino - General Plan 2025 City of Chino (Apr. 19, 2010), p. 12.) Hence, the Project would likewise contribute to a significant cumulative air quality impact, which was not analyzed in the 2010 General Plan EIR. Therefore, an EIR should be prepared to disclose and mitigate those impacts.

Additionally, air quality expert Dr. James Clark, Ph.D., reviewed the Project and found that the Addendum's cumulative impact analysis failed to adequately analyze the significant impacts from nearby warehouse projects. (Clark, pp. 6-7.) Dr. Clark's expert comments and curriculum vitae are attached hereto as Exhibit B. Dr. Clark explains that the Project is located within the South Coast Air Quality Management District (SCAQMD), an area that is already in non-attainment for particles with a diameter of 10 micrometers or smaller ("PM10"), particles with a diameter of 2.5 micrometers or smaller ("PM2.5"), and ozone. (*Id.*, p. 6.)

The Addendum fails to acknowledge the existing poor air quality and pollution burden in analyzing the Project's cumulative impacts on air quality and human health. Instead, the Addendum concludes that the Project "would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard." (Addendum, p. 2-49.) As Dr. Clark explains, the Addendum ignores the sheer scale of nearby industrial development. (Clark, pp. 6-7.) For example, within 5 kilometers of the Project site, there are 167 existing warehouse projects totaling 25,011,300 square feet and 9 vacant warehouses covering 1,288,700 square feet. (*Id.*, p. 6.) According to Dr. Clark, these existing projects "generate 17,000 daily truck trips, producing 23.5 pounds (lbs) of diesel particulate matter (DPM) and 2,649 lbs of oxides of nitrogen (NOx) per day." (*Id.*, p. 7.) Dr. Clark concluded that this "cumulative analysis demonstrates that the Project will exacerbate regional issues with ozone and particulate matter, introducing additional toxic air contaminants (TACs) to an already impacted area." (*Id.*)

In addition, the Project site is located in an area with existing degraded air quality conditions due to warehouse-related pollution. (Clark, pp. 7-9.) The Project site is located in an area that ranks in the top 11% statewide for exposure to overall pollution, the top 7% for exposure to PM2.5, and the top 12% for exposure to DPM in the South Coast Air Basin. (*Id.*,

pp. 7-8.) According to Dr. Clark, the Project site "has a cumulative cancer risk of 607 in 1 million placing it in the top 12% of communities in the South Coast Air Basin (SCAB) impacted by TACs." (*Id.*, p. 9.) Therefore, Dr. Clark concludes that "[i]ncreasing the number of sources of ozone precursors within the community via the construction of the Project will exacerbate pollution levels, resulting in a substantially greater health burden on the community which the Addendum to the EIR fails to disclose." (*Id.*)

As a result, there is substantial evidence of a fair argument that the Project will have a significant cumulative air quality impact as well as a significant health risk impact on nearby residences as a result of the site's close proximity to other warehouse projects in the area that emit high levels of TAC emissions. An EIR should be prepared to disclose and mitigate those impacts.

4. There is substantial evidence supporting a fair argument that the Project will result in a significant health risk impact to construction workers and nearby residences from exposure to Valley Fever.

Dr. Clark's comments are substantial evidence of a fair argument that the project will have a significant health risk impact on construction workers and nearby residents from Valley Fever that was not analyzed in the 2010 General Plan EIR or Addendum. (Clark, pp. 9-16.) According to Dr. Clark:

> Valley Fever often manifests as a mild respiratory illness, but it can progress to serious chronic forms, especially in immunocompromised individuals, and may even become disseminated, impacting organs including the skin, bones, brain, and spinal cord. Disseminated Valley Fever is associated with severe symptoms like meningitis, painful lesions, and swollen joints. (Clark, pp. 13-14.)

The Project proposes approximately 35 acres of soil disturbance during its site preparation and grading phases, which will release large quantities of dust. (Clark, p. 10.) Dr. Clark explains that dust exposure is a primary risk factor for contracting Valley Fever (via *Coccidioides immitis (cocci)* exposure). (*Id.*) When soil containing the *cocci* spores are disturbed by construction activities, the fungal spores become airborne, exposing construction workers and nearby sensitive receptors. (*Id.*, pp. 10-11.) Exposure to Valley Fever from the Project's construction activities is a new significant health risk impact that the Addendum and General Plan EIR failed to disclose, analyze, or mitigate. (*Id.*, pp. 10-14.)

Additionally, the Addendum's reliance on Rule 403 standard dust control measures to reduce nuisance dust are not designed to prevent the release and transport of infectious spores. (Clark, p. 14.) Dr. Clark explains that "the risk that nearby residences would be exposed to Valley Fever disturbed during Project construction is substantial," and that "risk would not be mitigated by Rule 403 standard dust control measures...because the measures do not consider the drift of spores from a Project Site to the adjacent residential structures." (*Id.*) Dr. Clark's comments provide several available, effective, and feasible mitigation measures to safeguard both onsite workers and surrounding communities. (*Id.*, pp. 14-16.)

As a result, there is substantial evidence of a fair argument that the Project will have significant health risk impacts on construction workers and nearby residences from exposure to Valley Fever. An EIR should be prepared to disclose and mitigate those impacts.

5. There is substantial evidence supporting a fair argument that the Project will result in a significant noise impact.

Noise expert Ani Toncheva of Wilson Ihrig found that the Project could result in new significant construction and operational noise impacts that were not analyzed in General Plan EIR or Addendum. Wilson Ihrig's comments and CVs are attached as Exhibit C.

i. Construction noise.

There is substantial evidence of a fair argument that the Project will have a significant construction noise impact that was not analyzed in the 2010 General Plan EIR. Wilson Ihrig found that the City fails to disclose potentially significant construction noise impacts. (Wilson Ihrig, pp. 3-4.) The Addendum reports construction noise levels up to 70 dBA, even though the City of Chino General Plan and Municipal Code limit construction noise to 65 dBA. (Addendum, p. 2-83; General Plan, p. N-10; Wilson Ihrig, p. 3.) The analysis evaluates noise at a distance of 400 feet from the middle of the Project site, rather than from the nearest homes, which are only 90 feet away. (Wilson Ihrig, p. 3.) Using the construction equipment lists in the air quality analysis and applying the Federal Highway Administration's Roadway Construction Noise Model, Wilson Ihrig estimates that construction noise levels from demolition and grading at nearby residences are as high as 81 dBA, which is 11 dB higher than the Addendum's estimate, well above the General Plan's 65 dBA limit, and 8 to 13 dB above existing ambient noise levels. (*Id.*, pp. 3-4.) Wilson Ihrig recommends several mitigation measures to reduce construction noise impacts, including noise reduction, limiting high-noise activities during sensitive hours, and implementing real-time noise monitoring. (*Id.*, p. 4.)

Because Wilson Ihrig's comments are substantial evidence of a fair argument that the Project will exceed adopted construction noise limits in the General Plan and significantly increase ambient noise levels, an EIR should be prepared to disclose and mitigate those impacts. (Wilson Ihrig, pp. 3-4.)

ii. Truck noise.

There is substantial evidence of a fair argument that the Project will have a significant truck noise impact. Wilson Ihrig found that the City failed to analyze potentially significant truck noise impacts from the Schaefer Avenue driveway, which is located 90 feet from sensitive receptors. (Wilson Ihrig, pp. 5-6.) Even though the Project is expected to operate 24 hours a day, seven days a week, the Addendum provides no information about nighttime truck traffic or its potential effects. (*Id.*, p. 5.) Using the Addendum's reference level of 76 dBA at 20 feet, Wilson Ihrig found that "truck noise at the Schaefer Avenue driveway is estimated to be 63 dBA at the nearest residences (90 feet from the site)," which is far above

the City's daytime (50 dBA) and nighttime (45 dBA) noise standards, and 4 dB higher than measured nighttime ambient levels. (*Id.*)

Wilson Ihrig explains, "Single event truck noise at night can cause sleep disturbance. Reliance on the hourly Leq as the significance threshold is inadequate to assess the significance of truck noise on sleep disturbance." (Wilson Ihrig, p. 5.) At the Schaefer Avenue driveway, modeled interior Lmax levels of 46 dBA at the nearest residence "has an approximately 10% chance of disturbing sleep." (*Id.*) These are significant new truck noise impacts not analyzed in the General Plan EIR or Addendum.

Wilson Ihrig also recommends several mitigation measures to reduce noise from trucks coming in and out of Shaefer Avenue, including:

> Operational conditions such as prohibiting line-haul trucks during nighttime hours, or routing nighttime line-haul trucks away from residential areas, or off-site mitigation in the form of new windows and mechanical ventilation for bedrooms affected by the nighttime line-haul operations.

(Wilson Ihrig, p. 6.) Additionally, General Plan Objective N-1.2, Policy P1 requires the minimization of transportation noise through street and right-of-way design or route coordination. (General Plan, p. N-31; Wilson Ihrig, p. 6.) In order to avoid conflicting with General Plan's policies, the Project "should consider rerouting truck traffic away from the planned Schaeffer Avenue driveway and nearby residences." (*Id.*)

Because Wilson Ihrig's comments are substantial evidence of a fair argument that project truck noise at the Schaefer Avenue driveway will exceed noise standards and conflict with General Plan policies, an EIR should be prepared to disclose and mitigate those impacts. (Wilson Ihrig, pp. 5-6.)

6. Because the 2010 General Plan EIR Concluded that the Effects of the General Plan Would have Significant and Unavoidable Impacts, a Tiered MND or EIR is Required to Mitigate Those Impacts.

The 2010 General Plan EIR admitted that the program would have significant, unavoidable impacts in the areas of air quality, greenhouse gases, and agriculture. (See, e.g., Findings of Fact and Statement of Overriding Considerations for the Envision Chino - General Plan 2025 City of Chino (Apr. 19, 2010), pp. 12-14.) Since the General Plan will have significant unavoidable impacts, the City must conduct project-level supplemental MNDs or EIRs for specific projects proposed within the program area. The supplemental MNDs or EIRs are required to determine whether mitigation measures exist to reduce the significant unavoidable impacts identified in the General Plan EIR.

In the case of *Communities for a Better Environment v. Cal. Resources Agency* (2002) 103 Cal.App.4th 98, 122-125, the court of appeal held that when a "first tier" EIR admits a significant, unavoidable environmental impact, then the agency must prepare second

tier EIRs for later phases of the project to ensure that those unmitigated impacts are "mitigated or avoided." (*Id.* [citing CEQA Guidelines §15152(f)].) The court reasoned that the unmitigated impacts were not "adequately addressed" in the first tier EIR since they were not "mitigated or avoided." (*Id.*) Thus, significant effects disclosed in first tier EIRs will trigger second tier EIRs unless such effects have been "adequately addressed," in a way that ensures the effects will be "mitigated or avoided." (*Id.*) Such a second tier EIR is required, even if the impact still cannot be fully mitigated and a statement of overriding considerations will be required. The court explained that "[t]he requirement of a statement of overriding considerations is central to CEQA's role as a public accountability statute; it requires public officials, in approving environmental detrimental projects, to justify their decisions based on counterbalancing social, economic or other benefits, and to point to substantial evidence in support." (*Id.* at 124-125) The court specifically rejected a prior version of the CEQA guidelines regarding tiering that would have allowed a statement of overriding considerations for a program-level project to be used for a later specific project within that program. (*Id.* at 124.) Even though "a prior EIR's analysis of environmental effects may be subject to being incorporated in a later EIR for a later, more specific project, the responsible public officials must still go on the record and explain specifically why they are approving the later project despite its significant unavoidable impacts." (*Id.* at pp. 124-25.) As such, a tiered MND or EIR should be prepared to mitigate the significant and unavoidable impacts to air quality, greenhouse gases, and agriculture that were identified in the General Plan EIR.

B. Under CEQA's Subsequent Review Provisions, the Addendum is Improper Because of the Availability of new Information Since the Certification of the 2010 General Plan EIR.

Under CEQA, an addendum is not allowed when "[n]ew information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified" shows that (1) the project will have one or more significant effects not discussed in the previous EIR or (2) mitigation measures considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment. (14 CCR §§ 15162, 15164.) Under the standard, the Addendum is improper because the Project's potentially significant impact to special-status species that could not have been known when the 2010 General Plan EIR was certified.

As discussed above, the Project could result in a significant impact on special-status species that could not have been known at the time of the General Plan EIR's certification in 2010. As Dr. Smallwood states, "There is no doubt that eight special-status species of wildlife occur on the project site, including the Monarch which is a candidate for listing under the federal Endangered Species Act." (Smallwood, p. 20.) However, the Monarch butterfly did not become a candidate for listing under the federal Endangered Species Act until December 15, 2020—ten years after the General Plan EIR's certification in 2010. The Monarch's status as a candidate species has been reaffirmed by the U.S. Fish and Wildlife Service annually, and the agency proposed listing the monarch as threatened in December 2024. Because the General Plan EIR was certified in 2010, the Monarch's candidate listing

and heighted protections in 2020 is new information of a significant impact to special-status species that occurred after the certification of the General Plan EIR, requiring the preparation of a subsequent EIR. As such, the Addendum is improper under CEQA Guidelines sections 15162 and 15164 and a subsequent EIR is required. (See, 14 CCR §§ 15162(a)(3), 15164(a).)

II. THE ADDENDUM'S CONCLUSIONS ARE NOT SUPPORTED BY SUBSTANTIAL EVIDENCE.

A. There is no Evidence that the Project Will not Result in New Significant Impacts to Special-Status Species.

1. The Addendum underestimated the diversity of species using the Project site.

As discussed above, Dr. Smallwood's associate, Noriko Smallwood, performed a 3-hour site visit during the day and a 2-hour nocturnal survey of the site on July 24, 2025. (Smallwood, p. 2.) During these surveys, Noriko Smallwood detected 30 species of vertebrate wildlife at or adjacent to the project site, including eight species with special status. (Smallwood, p. 3.)

The Biological Resources Assessment prepared for the Addendum by LSA Associates, Inc. ("LSA Biological Report") states that "[a]nimal species observed on the site are typical of urban environments," but does not disclose which animal species were observed, except to report, "[n]o special-status wildlife species were observed." (Smallwood, p. 16.) Therefore, it can be assumed that LSA did not observe all 30 species of vertebrate wildlife detected by Noriko Smallwood, including the eight special-status species she observed: the Monarch butterfly, Allen's hummingbird, Cooper's hawk, red-tailed hawk, Great horned owl, American kestrel, Western yellow bat, and Silver-haired bat. (*Id.*, p. 16.)

The failure of the LSA's Report to detect these special-status species and an abundance of other wildlife at the Project site underscores the inadequacy of the Addendum's documentation of baseline conditions, skewing the subsequent impact analysis. (Smallwood, pp. 12-13.)

Although Noriko Smallwood's site visits lasted only 5 hours, Dr. Smallwood calculated that more thorough site visits would reveal an even greater diversity of wildlife. (Smallwood, pp. 13-15.) Given more time to survey the site, Dr. Smallwood predicts that Noriko would have observed an additional 17 special-status wildlife species. (Smallwood, pp. 14-15.) Based on his review of the Addendum and the site visit, Dr. Smallwood concluded, "the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort. . . . The site is far richer in special-status species than the Addendum would have the reader believe. . . . The evidence is overwhelming that the project site is important to multiple special-status species of wildlife." (*Id.*, pp. 15, 20, 27.)

An initial study and MND or EIR is needed to adequately address the impacts to special-status species from the proposed Project, and to mitigate those impacts accordingly.

2. The Addendum relied on an inadequate biological report.

In addition to the LSA Biological Report's failure to adequately disclose the diversity of species that would be impacted by the Project, Dr. Smallwood found numerous other deficiencies in the LSA Biological Report. (Smallwood, pp. 19-20.)

Dr. Smallwood found that LSA's review of available literature and databases was incomplete because it relied on only one database, the California Natural Diversity Data Base ("CNDDB") and failed to consult other available databases such as eBird and iNaturalist. (Smallwood, p. 19.) By including additional databases in the review, such as eBird and iNaturalist, Dr. Smallwood found that 139 special-status species (as opposed to the 34 species in the LSA Biological Report) were known to occur in the area. (Smallwood, pp. 19-20.) By relying on cursory review of CNDDB, the LSA Biological Report improperly "screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting." (Smallwood, p. 19.)

The LSA Biological Report also improperly relied on CNDDB to determine whether a species would *not* occur on the Project site. (Smallwood, pp. 19-20.) As Dr. Smallwood explains, "CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community." (Smallwood, p. 19.) In other words, although CNDDB can be useful in determining whether a species is likely to occur (because it has been detected and reported in CNDDB), it does not follow that the absence of a species from CNDDB means that a species is unlikely to occur. This error in the LSA Biological Report results in a further underestimation of the diversity of wildlife occurring or likely to occur at the Project site.

The Addendum and LSA Biological Report made additional flawed arguments in defending its determination that certain species were unlikely to occur on the Project site. For example, the Addendum states that "[d]ue to the absence of suitable habitat on-site and the develop[ed] nature of the project vicinity, all of the remaining special-status species identified in the literature search, including the white cuckoo bee (*Neolarra alba*), are considered absent from the project site and vicinity." (Smallwood, p. 20.) However, as Dr. Smallwood notes, "[t]here is no doubt that eight special-status species of wildlife occur on the project site, including the Monarch which is a candidate for listing under the federal Endangered Species Act." (*Id.*) As such, Dr. Smallwood concluded that "[t]he Addendum presents a profoundly inaccurate analysis of whether special-status species of wildlife occur on the project site." (*Id.*) Because "[a]n inaccurate baseline characterization of the wildlife community is ill-suited for accurate analysis of project impacts on wildlife, and therefore ill-suited for formulating appropriate mitigation," the Addendum's impact analysis and conclusions should not be relied upon. (*Id.*, p. 20.)

Due to the above shortcomings in the LSA Biological Report, the Addendum's conclusions about the Project's impacts to biological resources are not supported by substantial evidence. As such, an initial study and MND or EIR is needed to adequately address the impacts to wildlife of the proposed Project, and to mitigate those impacts accordingly.

B. There is no Evidence that the Project Will not Result in New Significant Impacts on Wildlife Movement and Cumulative Impacts.

1. Wildlife movement.

Dr. Smallwood found that the Addendum, its LSA Biological Report, and the 2010 General Plan EIR's analysis of the Project's impacts to wildlife movement were all deeply flawed. (Smallwood, pp. 29-30.) According to Dr. Smallwood, the General Plan EIR lacks any serious analysis of the potential for the Project to interfere with wildlife movement in the region. (*Id.*, p. 29.) The Addendum and LSA Biological Report adopt a false standard that the Project site must represent a regional wildlife movement corridor in order to serve wildlife movement in the region. (*Id.*, p. 30.) However, under CEQA, the standard is whether the Project will impact wildlife movement "regardless of whether the movement is channeled by a corridor." (*Id.*) As Dr. Smallwood explains,

> [T]he species detected on site by Noriko would not have been detected there had their members not moved to the site for its habitat. For many species of wildlife, the project site provides stopover opportunities, and for many others it is a migratory destination.... Again, the CEQA question goes to wildlife movement in the region, and not specifically to whether the site is part of, or inclusive of, a corridor. What was needed, but not provided, was a program of observation to characterize how wildlife use the site for movement in the region. Biologists should have recorded flight paths, especially of birds and bats moving to or from the project site....

(*Id.*, pp. 29-30.) Dr. Smallwood concludes that neither the Addendum nor the General Plan EIR provide substantial evidence that the Project's impact on wildlife movement would be less than significant. (*Id.*) An initial study and MND or EIR is needed to adequately address the impacts to wildlife movement of the proposed Project, and to mitigate those impacts accordingly.

2. Cumulative Impacts.

Dr. Smallwood found that the Addendum failed to discuss cumulative impacts to wildlife. (Smallwood, pp. 33-34.) According to Dr. Smallwood, "Given the extent of habitat fragmentation in the region, leaving the open space of the project site as one of the last sizable patches of wildlife habitat within miles, the project's contribution to cumulative habitat destruction would be consequential." (*Id.*, p. 33.) Thus, because the Project "would cause severe declines in wildlife abundance and species richness in the region," an initial

study and MND or EIR is needed to adequately address the impacts to wildlife movement of the proposed Project, and to mitigate those impacts accordingly. (*Id.*, p. 34.)

C. There is no Evidence that the Project Will not Result in a New Significant Construction or Operational-Related Air Quality Impact.

In determining that CEQA's subsequent review provisions apply to the proposed Project, the City relied on emissions calculated with CalEEMod. 2022.1. (Addendum, p. 2-46.) This model relies on recommended default values, or on site-specific information related to a number of factors. When more specific project information is known, the user may change the default values and input project-specific values, but CEQA requires that such changes be justified by substantial evidence. The model is used to generate a project's construction and operational emissions. Dr. Clark reviewed the Project's CalEEMod output files provided at Appendix A to the Addendum, and found that several model inputs used to generate a project's operation emissions were not consistent with information disclosed in the Addendum. (Clark, pp. 5-6.) As a result, Dr. Clark concludes that the Project's operational emissions are underestimated. (*Id.*) Because the Addendum uses incorrect estimates for emissions, its air quality analysis cannot be relied upon to determine the Project's emissions, and the City's conclusions are not supported by substantial evidence. The particular errors identified by Dr. Clark are discussed below. These errors should be corrected in a subsequent CEQA document prior to approval of the Project.

Specifically, Dr. Clark found that the Addendum's air quality analysis failed to include back-up generators and fire pumps in its operational air quality impact analysis. (Clark, pp. 5-6.) An initial study and MND or EIR is needed to adequately address the air quality impacts of the proposed Project, and to mitigate those impacts accordingly.

D. There is no Evidence that the Project Will not Result in New Significant Hazards from Battery Storage on Site.

Neither the Addendum nor the 2010 General Plan EIR include any information regarding the capacity of the battery storage system or the type of batteries to be deployed at the Project site. (See, Clark, pp. 16-17.) Instead, the Addendum merely states, "Solar photovoltaic panels would be installed in collective arrangements on the project site such that the total power generated would augment 80 percent of the project's power needs." (*Id.*, p. 16.) According to Dr. Clark, the Addendum's "failure to include any specifications of the battery systems results in the failure to analyze the particular hazards presented by the presence of such infrastructure." (*Id.*) Dr. Clark explains that the "hazards from battery storage systems include thermal runaway, off-gassing, and stranded energy, along with discharges of hazardous chemicals from the batteries themselves." (*Id.*, pp. 16-17.) The General Plan EIR did not analyze battery storage system and related hazard impacts at this site. The plan to include battery storage is new information and changed circumstances resulting in a potentially significant hazard impact. As such, an initial study and MND or EIR is needed to adequately address the hazards of the proposed battery storage on the Project site, and to mitigate those impacts accordingly.

E. There is no Evidence that the Project Will not Result in a New Significant Noise Impact.

The Addendum's noise analysis contains several deficiencies that underestimate the Project's construction and operational noise impacts on nearby sensitive receptors. (See, Wilson Ihrig, pp. 6-8.) As discussed below, errors in modeling mechanical systems, validating traffic noise, and establishing baseline conditions resulted in the Addendum's inadequate noise analysis and failure to disclose and mitigate the Project's potentially significant noise impacts. (*Id.*)

First, the Addendum's mechanical noise analysis contains errors and omissions. (Wilson Ihrig, pp. 6-7.) Wilson Ihrig found that the Addendum underestimates the Project's mechanical noise by modeling only four HVAC units, when a warehouse of that size would realistically require at least 25 units. (*Id.*) Moreover, even the four HVAC units assumed would exceed residential noise limits. (*Id.*, p. 6.) The analysis should be corrected to reflect actual ventilation needs of the planned building and include enforceable mitigation. (*Id.*, p. 7.)

Second, the Addendum's traffic analysis is missing validation. (Wilson Ihrig, p. 7.) Wilson Ihrig found that the "modeled levels for existing traffic along Shaeffer Avenue are lower than measured levels reported in the Addendum," with modeled CNEL levels 8 dB lower than measured levels." (*Id.*) As a result, the traffic noise modeling along Shaeffer Avenue is inconsistent and unreliable. (*Id.*) The Addendum fails to explain this discrepancy, apply a calibration factor, or reconcile the use of different metrics (CNEL vs. Ldn). (*Id.*) As such, Wilson Ihrig recommends that the Project "address this discrepancy and validate the traffic model using measured baseline data" in a subsequent EIR or MND. (*Id.*)

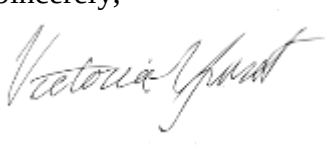
Lastly, the Addendum "does not properly characterize the existing noise environment." (Wilson Ihrig, p. 8.) Wilson Ihrig found that the Addendum failed to establish an adequate baseline because the second monitoring measurement location was conducted at the back of the Project site rather than at residences most affected by truck traffic on Shaeffer Avenue. (*Id.*) Wilson Ihrig explains that this omission obscures the existing noise environment for sensitive receptors. (*Id.*) Without an accurate baseline, the Project's noise impact analysis is inadequate.

An initial study and MND or EIR is needed to adequately address the noise impacts of the proposed Project, and to mitigate those impacts accordingly.

CONCLUSION

For the foregoing reasons, reliance on the Addendum for the Project is in violation of CEQA. Thus, an initial study and a subsequent EIR or MND must be prepared for the proposed Project and should be circulated for public review and comment in accordance with CEQA. Thank you for considering these comments.

Sincerely,



Victoria Yundt
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EXHIBIT A

Shawn Smallwood, PhD
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Davis, CA 95616

Kim Le, Senior Planner
City of Chino
Community Development Department, Planning Division
13220 Central Avenue
Chino, California 91710

27 July 2025

RE: Chino Gateway Terminal Project

Dear Mr. Perez,

I write to comment on the analysis of potential impacts to biological resources that is reported in the Addendum to a Draft Environmental Impact Report (DEIR Addendum) prepared for the proposed Chino Gateway Terminal Project. I understand the project would add 158,548 square-foot warehouse building and a 3,520 square-foot multi-tenant restaurant building on 7.35 acres at the southwest corner of Schaefer Ave and Oaks Ave in Chino, California. My comments that follow address my concerns that the Addendum mischaracterizes the existing environmental setting, and that its impacts analysis is flawed and its mitigation measures are inadequate.

My qualifications for preparing expert comments are the following. I hold a Ph.D. degree in Ecology from University of California at Davis, where I also worked as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, wildlife interactions with the anthrosphere, and conservation of rare and endangered species. I authored many papers on these and other topics. I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and Raptor Research Foundation, and I've lectured part-time at California State University, Sacramento. I was Associate Editor of wildlife biology's premier scientific journal, The Journal of Wildlife Management, as well as of Biological Conservation, and I was on the Editorial Board of Environmental Management. I have performed wildlife surveys in California for thirty-seven years. My CV is attached.

THE WILDLIFE COMMUNITY AS BIOLOGICAL RESOURCE

Most environmental reviews pursuant to the California Environmental Quality Act (CEQA) focus on special-status species because CEQA's Checklist Evaluation of Environmental Impacts specifies that such evaluation includes potential impacts to special-status species. However, an important policy of CEQA is "to prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history." Pub. Res. Code § 21001(c). This policy is not restricted to special-status species, but applies to wildlife populations and plant and

animal communities. In fact, the CEQA Guidelines Section 21155.1 defines wildlife habitat as "the ecological communities upon which wild animals, birds, plants, fish, amphibians, and invertebrates depend for their conservation and protection." This definition is consistent with the scientific definition of habitat, which is that portion of the environment that is used by members of a species for survival and reproduction (Hall et al. 1997). The CEQA Checklist Evaluation assigns priority to special-status species to balance information and cost, but it does not exclude the need to evaluate environmental impacts to other species, which, after all, are members of the very communities within which special-status species inter-depend for survival and reproduction.

All wildlife species should be of concern in a CEQA review, but the CEQA prioritizes special-status species. The species I consider to be special-status species are those listed in California's Special Animals List inclusive of threatened and endangered species under the California and federal Endangered Species Acts, candidates for listing under CESA and FESA, California's Fully Protected Species, California species of special concern, and California's Taxa to Watch List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406), continental and region-specific US Fish and Wildlife Service Birds of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf), and naturally rare species such as raptors protected by California's Birds of Prey laws, Fish and Game Code Sections 3503, 3503.5, 3505 and 3513 (see https://wildlife.ca.gov/Conservation/Birds/Raptors).

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master of Science Degree from California State University Los Angeles, visited the site of the proposed project for 3 hours of morning diurnal survey from 6:16 to 9:16 hours, for 1.67 hours of evening diurnal survey from 18:25 to 20:05 hours, and for 2 hours of nocturnal survey from 19:48 to 21:48 hours on 24 July 2025. During daylight, Noriko walked the site's perimeter where accessible, stopping to scan for wildlife with use of binoculars. During the night. Noriko mounted a Pettersson M500 bat detector on a 30-foot pole, and she identified bat species by sonograms of their foraging calls with use of Sonobat Live. Noriko recorded all species of vertebrate wildlife she detected, including those whose members flew over the site or were seen nearby, off the site. Animals of uncertain species identity were either omitted or, if possible, recorded to the Genus or higher taxonomic level.

Conditions were sunny with 2 MPH west wind and temperatures of 57-70° F in the morning, and sunny with 9 MPH west wind and temperatures of 81-76° F in the evening. The western portion of the site is annual grassland that's regularly mowed, and the eastern portion of the site is a church and houses. There are multiple mature trees on site such as oak, sycamore, palm, magnolia, Chinese elm, and crepe myrtle (Photos 1 and 2).

Noriko saw Cooper's hawk and American kestrel (Photos 3 and 4), monarch (Photo 5), Allen's hummingbird and Anna's hummingbird (Photos 6 and 7), mourning dove (Photo 8), northern mockingbird (Photos 9 and 10), bushtit and house finch (Photos 11 and 12), hooded oriole (Photo 13), barn swallow and Eurasian collared-dove (Photos 14 and 15), Cassin's kingbird and black phoebe (Photos 16 and 17), European starling (Photo 18), house sparrow and American crow (Photos 19 and 20), snowy egret and Great Basin fence lizard (Photos 21 and 22), western yellow bat and silver-haired bat (Photos 23 and 24), among the other species listed in Table 1. Noriko detected 30 species of vertebrate wildlife at or adjacent to the project site, including 8 species with special status (Table 1).

Noriko Smallwood certifies that the foregoing and following survey results are true and accurately reported.

Noriko Smallwood

Photos 1 and 2. *Views of the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photos 3 and 4. *Cooper's hawk (top), and American kestrel (bottom) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

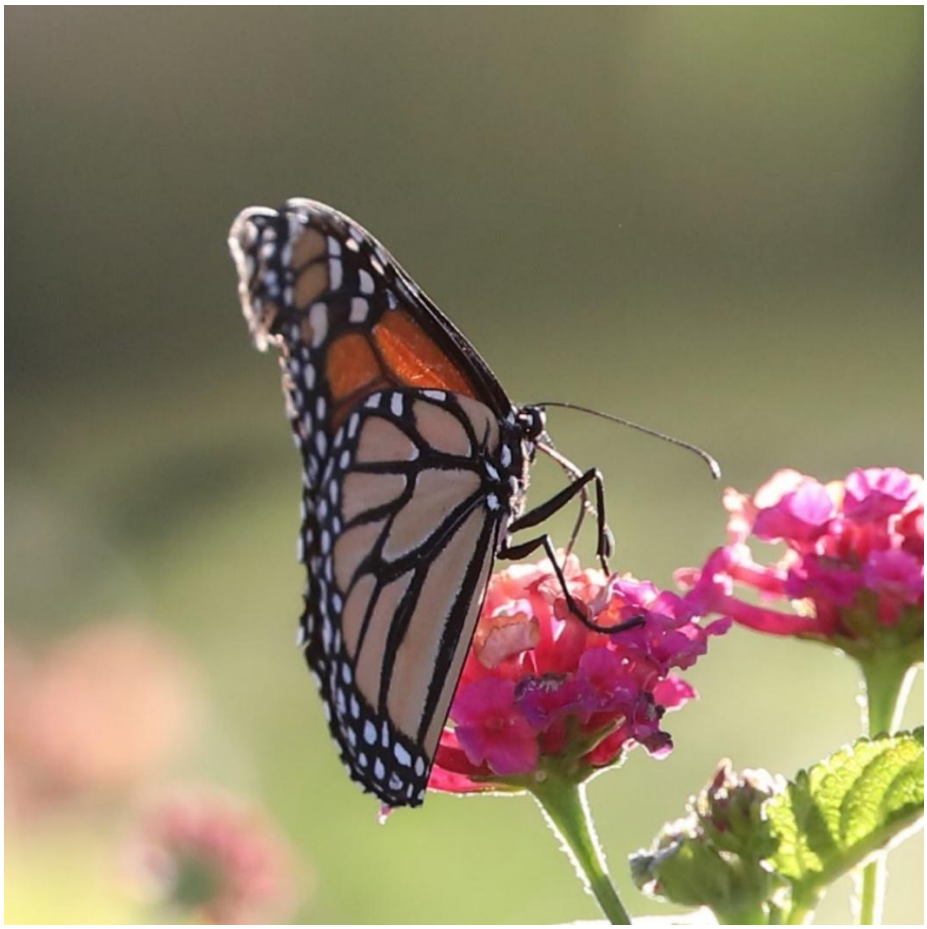


Photo 5. *Monarch just off of the project site, after flying from the project site, 24 July 2025. Photo by Noriko Smallwood.*

Photos 6 and 7. *Allen's hummingbird (left), and Anna's hummingbird (right) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photo 8. *Mourning dove on the project site, 24 July 2025. Photo by Noriko Smallwood.*

Photos 9 and 10. *Northern mockingbird with insects (left), and nest material (right) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photos 11 and 12. *Bushtit (left), and house finch (right) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photo 13. *Hooded oriole with an insects on the project site, 24 July 2025. Photo by Noriko Smallwood.*

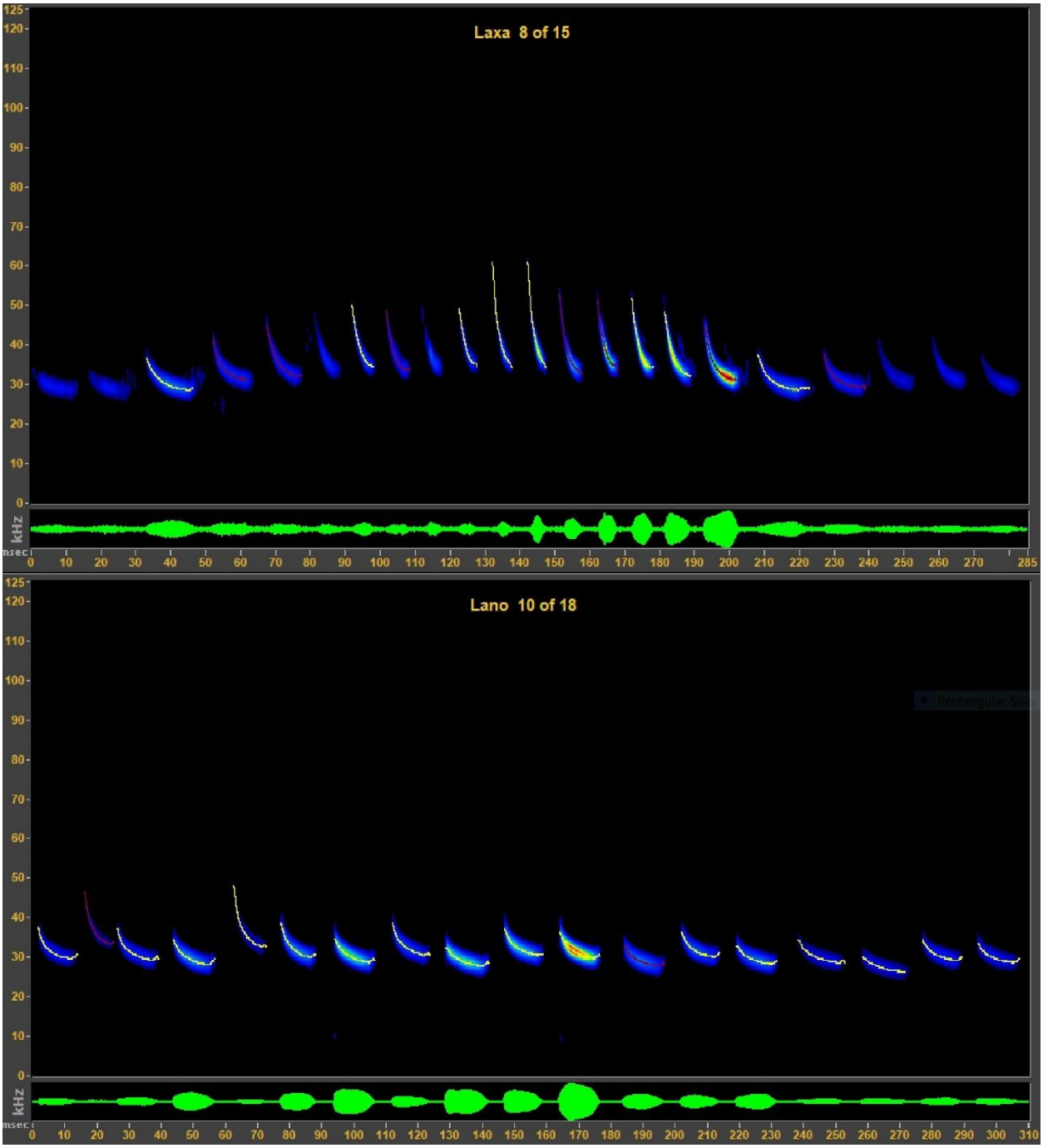
Photos 14 and 15. *Barn swallow (left) and Eurasian collared-dove (right) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photos 16 and 17. *Cassin's kingbird (left), and black phoebe (right) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photo 18. *Many juvenile European starlings on the project site, 24 July 2025. Photo by Noriko Smallwood.*

Photos 19 and 20. *House sparrow dust bathing (left), and American crow (right) on the project site, 24 July 2025. Photos by Noriko Smallwood.*

Photos 21 and 22. *Snowy egret (top) and Great Basin fence lizard (bottom) on the project site, 24 July 2025. Photos by Noriko Smallwood.*



Photos 23 and 24. *Sonogram of western yellow bat (top) and silver-haired bat (bottom) detected on site using Sonobat Live and a Pettersson M500, 24 July 2025.*

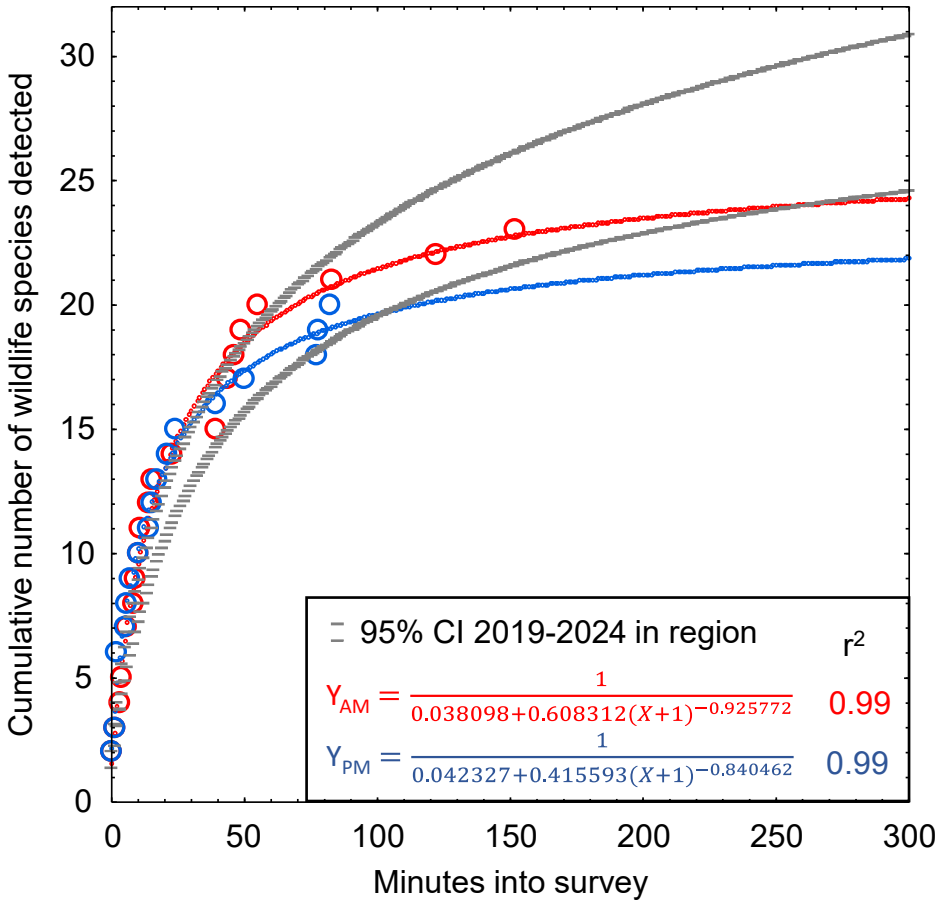
Table 1. *Species of wildlife Noriko observed during 3 hours of morning diurnal survey, 1.67 hours of evening diurnal survey, and 2 hours of nocturnal survey on 24 July 2025.*

Common name	***Species name***	**Status**[1]	**Notes**
Monarch	*Danaus plexippus*	FC	Landed on plants
Great Basin fence lizard	*Sceloporus occidentalis longipes*		
Canada goose	*Branta canadensis*		Flew over off site
Rock pigeon	*Columba livia*	Non-native	
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	
Mourning dove	*Zenaida macroura*		Foraged; likely nested
Anna's hummingbird	*Calypte anna*		Foraged
Allen's hummingbird	*Selasphorus sasin*	BCC	Territorial, foraged
Snowy egret	*Egretta thula*		Flew over
Cooper's hawk	*Accipiter cooperii*	WL, BOP	Perched on sycamore
Red-tailed hawk	*Buteo jamaicensis*	BOP	Just off site
Great horned owl	*Bubo virginianus*	BOP	Called during bat survey
American kestrel	*Falco sparverius*	BOP	Flew over
Cassin's kingbird	*Tyrannus vociferans*		
Black phoebe	*Sayornis nigricans*		
American crow	*Corvus brachyrhynchos*		
Common raven	*Corvus corax*		
Barn swallow	*Hirundo rustica*		Foraged over site
Cliff swallow	*Petrochelidon pyrrhonota*		Just off site
Bushtit	*Psaltriparus minimus*		Many foraged in oak and sycamore
Northern mockingbird	*Mimus polyglottos*		Nesting on site - gathered food & nest material
European starling	*Sturnus vulgaris*	Non-native	Many juveniles
Western bluebird	*Sialia mexicana*		Just off site
House sparrow	*Passer domesticus*	Non-native	Dust bathed in fresh soil from gopher mounds
House finch	*Haemorphous mexicanus*		Foraged; likely nested
Hooded oriole	*Icterus cucullatus*		Foraged
Brown-headed cowbird	*Molothrus ater*		Many
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H	
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M	
California ground squirrel	*Otospermophilus beecheyi*		Burrows
Botta's pocket gopher	*Thomomys bottae*		Burrows

[1] On CDFW's Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern (https://www.fws.gov/sites/ default/files/documents/birds-of-conservation-concern-2021.pdf); SSC = California Species of Special Concern, WL = Taxa to Watch List; BOP = protected by Birds of Prey (California Fish and Game Code 3503.5), WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H).

Noriko detected 30 species of vertebrate willdife, which was a relatively large number for the brevity of her survey effort. However, the species of wildlife Noriko detected at the project site were not the only species that were present during her surveys, as some species typically go undetected. To demonstrate this, I fit nonlinear regression models to Noriko's cumulative numbers of vertebrate species detected with time into her surveys to predict the numbers of species that she would have detected with longer surveys or perhaps with additional biologists available to assist her. The model is a logistic growth model which reaches an asymptote that corresponds with the theoretical maximum number of vertebrate wildlife species that could have been detected during the survey. The model fit to Noriko's morning survey data, for example, predicts 26 species of vertebrate wildlife were available to be detected, which equalled the number she detected (Figure 1). Her rate of species detections during both surveys mostly followed the upper bound of the 95% confidence interval I estimated from other . surveys in the region (Figure 1).

Figure 1. *Actual and predicted relationships between the numbers of vertebrate wildlife species detected and the elapsed survey time based on Noriko's visual-scan surveys on 24 July 2025.*



The species that Noriko did and did not detect on 24 July 2025 composed only a fraction of the species that would occur at the project site over the period of a year or longer. This is because many species are seasonal in their occurrence, some require more survey effort due to their are high crypticity, and the members of other species would visit the

site only periodically while patrolling large home ranges. A survey on only one day cannot possibly detect all of the species of the local wildlife community.

At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's two surveys. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. This analytical bridge draws inference from the pattern of species detections more than it does from the research site, and I note that the pattern, i.e., rate, of species detections is consistent from site to site.

As part of my research, I completed a much larger survey effort across 167 km² of annual grasslands of the Altamont Pass Wind Resource Area, where from 2015 through 2019 I performed 721 1-hour visual-scan surveys, or 721 hours of surveys, at 46 stations. I used binoculars and otherwise the methods were the same as the methods I and other consulting biologists use for surveys at proposed project sites. At each of the 46 survey stations, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a + b \times (Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The coefficients of determination, r^2, of the models ranged 0.88 to 1.00, with a mean of 0.97 (95% CI: 0.96, 0.98); or in other words, the models were excellent fits to the data.

I projected the predictions of each model to thousands of hours to find predicted asymptotes of wildlife species richness. The mean model-predicted asymptote of species richness was 57 after 11,857 hours of visual-scan surveys among the 46 stations of my research site. I also averaged model predictions of species richness at each incremental increase of number of surveys, i.e., number of hours (Figure 2). On average I would have detected 16.6 species over my first 4.67 hours of diurnal surveys at my research site in the Altamont Pass (4.67 hours to match the 4.67 hours Noriko surveyed during daylight hours at the project site), which composed 29.2% of the predicted total number of species I would detect with a much larger survey effort at the research site. Given the example illustrated in Figure 2, the 27 diurnally active species Noriko detected after her 4.67 hours of daylight survey at the project site likely represented 29.2% of the species to be detected after many more visual-scan surveys over another year or longer. With many more repeat surveys through the year, Noriko would likely detect $27/0.292 = 92$ species of diurnally active vertebrate wildlife at the site. Assuming Noriko's ratio of special-status to non-special-status species was to hold through the detections of all 92 predicted species, then continued surveys would eventually detect 17 special-status species of diurnally active vertebrate wildlife.

Because my prediction of 92 species of vertebrate wildlife, including 17 special-status species, is derived from daytime visual-scan surveys, and would detect few nocturnal

mammals such as bats, the true number of species composing the wildlife community of the site must be larger. Noriko's reconnaissance surveys should serve only as a starting point toward characterization of the site's wildlife community, but it certainly cannot alone inform of the inventory of species that use the site. More surveys are needed than her two surveys to inventory the project site's wildlife community. Nevertheless, the large number of species I predict at the project site is indicative of a relatively species-rich wildlife community that warrants a serious survey effort. The patterns in the data and what I know of nocturnal species, I predict at least 110 species of vertebrate wildlife rely on the project site as habitat.

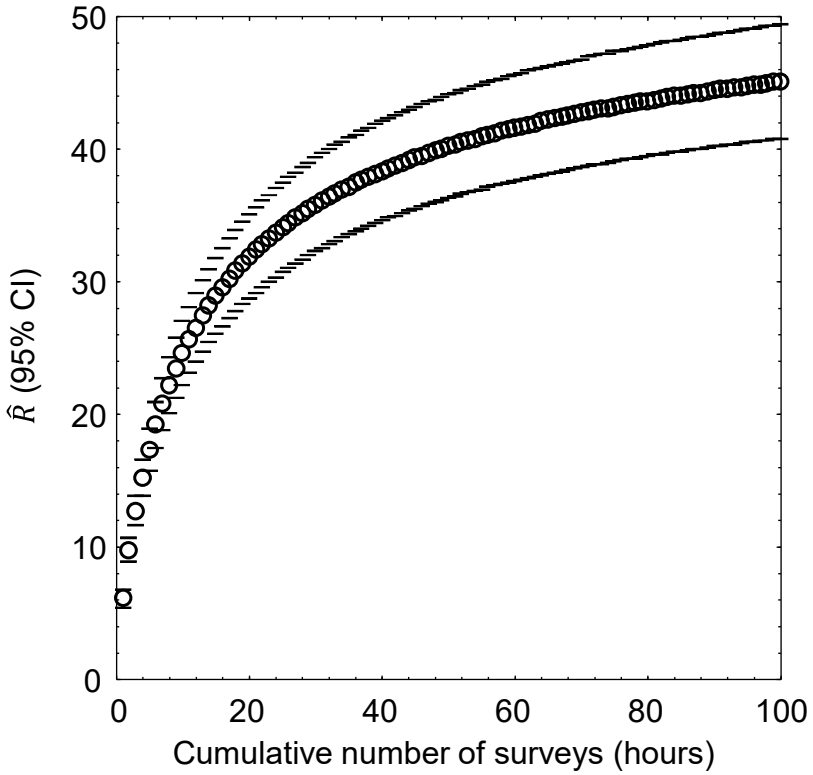


Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019. Note that the location of the study is largely irrelevant to the utility of the graph to the interpretation of survey outcomes at the project site. It is the pattern in the data that is relevant, because the pattern is typical of the pattern seen elsewhere.*

EXISTING ENVIRONMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the wildlife community and any key ecological relationships and known and ongoing threats to special-status species. A reasonably accurate characterization of the environmental setting can provide the baseline against which to analyze potential project impacts. For these reasons, characterization of the environmental setting, including the project site's regional setting, is one of the CEQA's essential analytical steps. Methods to achieve this first step typically include (1) surveys of the site for biological resources, and (2) reviews of literature, databases and local experts for documented occurrences of special-status species. In the case of the proposed project, these required steps remain incomplete and misleading.

Environmental Setting informed by Field Surveys

To the CEQA's primary objective to disclose potential environmental impacts of a proposed project, the analysis should be informed of which biological species are known to occur at the proposed project site, which special-status species are likely to occur, as well as the limitations of the survey effort directed to the site. Analysts need this information to characterize the environmental setting as a basis for opining on, or predicting, potential project impacts to biological resources. In the case of this project, however, the reconnaissance survey was inadequate for the needed analysis, and the analysis misinterpreted the survey's findings.

The survey's first shortfall was the attitude going into it. The Addendum (p. 10) characterizes the project site as "routinely disced for weed abatement and is covered in ruderal vegetation," implying there is no habitat to be found on this site. Except for possibly proving nesting opportunities for birds, LSA (2025:1) starts by asserting "No endangered, rare, or threatened species are expected to inhabit the project site. The site is not within the designated critical habitat of any species. No substantial project impacts to other special-status species are anticipated." All this decided already, then one must wonder why LSA bothered to survey for wildlife. But a survey was performed.

According to LSA (2025:2), two biologists "conducted a general biological resources assessment and arborist study on August 13, 2024," beginning at 09:15 hours and lasting 1.75 hours. The survey was conducted to record "notes on general site conditions, vegetation, wildlife, potential jurisdictional waters, and suitability of habitat for various special-status species." Specific to wildlife, LSA (2025:2) reports "Animal species observed on the site are typical of urban environments," thereby indicating that LSA's biologists observed wildlife. Although LSA (2025) discloses a complete list of plant species observed on the project site, it does not disclose which animal species were observed, except to report, "No special-status wildlife species were observed." Remarkably, perhaps, Noriko detected seven special-status species among the 30 species of vertebrate wildlife, and additionally she detected monarch which is a candidate for listing under the federal Endangered Species Act. How many of these were observed by LSA's biologists cannot be known without additional disclosures of what they observed. Considering that one in four species detected by Noriko were special-status species, it is likely that LSA's biologists observed at least one special-status species assuming they observed at least four species altogether. (Noriko detected her first four species within her first four minutes from the start of her morning survey, and she detected her first six species within the first three minutes from the start of her evening survey.)

LSA (2025:3) notes that "The project site has trees suitable for nesting." Yet LSA reports no observations of signs of breeding on the project site. In contrast, Noriko reports members of one bird species nesting on site (see Photo 10), and three more bird species that likely nested on site due to the presence of juveniles. More than being suitable, the trees on site serve as nest substrate, and it is likely that ground-nesting birds also nest on site.

LSA (2025:3) reports “The eastern portion of the project site has habitat potentially suitable for burrowing owl … A survey for burrows of this species was conducted during the initial site visit. No burrows suitable for burrowing owls were found. However, ground squirrels are active on the site, and there is a possibility that the squirrels could create suitable burrows, and that burrowing owl could move in and occupy the site prior to construction.” However, LSA cannot assert that no burrows suitable for burrowing owls were found while also reporting to have found California ground squirrels on the project site. California ground squirrels construct burrows, and burrowing owls utilize ground squirrel burrows. I have never found California ground squirrels in the absence of burrows, and I have never found ground squirrel burrows that are unsuitable for burrowing owls. Moreover, LSA’s biologists did not achieve the minimum standards of the CDFW (2012) survey guidelines for burrowing owls.

Further downplaying the potential occurrence of burrowing owls, LSA (2025:5) speculates, “Although the project site has low vegetation, it is surrounded by trees, which provide cover for avian predators of burrowing owls, is surrounded by urban development, and is frequently disked, all of which reduce the quality of the habitat and its potential for use by burrowing owl.” Yet, I have found burrowing owls nesting under and near trees (e.g., Photo 25). Rather than speculating about the likelihood of occurrence of a special-status species, the appropriate action is to implement the existing survey protocol (CDFW 2012).

Finally, LSA appeals to the existence of a larger mitigation strategy that would conserve burrowing owls even if the project would result in take. LSA (2025:5) assures that “The Draft Environmental Impact Report (EIR) [to the City of Chino General Plan] specifies mitigation for impacts of development projects to burrowing owl, including the establishment of a 300-acre conservation area to provide burrowing owl habitat, and relocation, in accordance with CDFW protocols, of any burrowing owls that are found on development project sites.” LSA is silent on whether this 300-acre conservation area has been established or whether burrowing owls reside on it. Regardless, a breeding-season detection survey is warranted, as explained below.

There are three types of surveys recommended and described in the CDFW’s (2012) survey and mitigation guidelines: (1) Habitat assessment, (2) Detection surveys, and (3) Preconstruction survey. The habitat assessment is intended to evaluate the likelihood that the site supports burrowing owls, and to decide whether detection surveys should be performed. The detection surveys, otherwise described as either or both breeding-season or non-breeding-season surveys, are intended to detect whether the site truly does presently support burrowing owls, and if so, where and how many. The preconstruction survey, otherwise known as a take-avoidance survey, is intended to determine whether burrowing owls immigrated to the site since completion of the detection survey, or whether they returned to the site since passive or active relocations were performed as mitigation. The three types of survey carry distinct but inter-related purposes, and they are to be completed in chronological order.

Photo 25. *Burrowing owl chick standing to the right of its mother and its natal burrow located under an oak tree in east Davis, California, 2020. This chick was one of three. This was the last nest attempt in Davis, as it appears the species has been extirpated from Davis.*

The first two types of survey support impacts analysis, whereas the third type of survey is a mitigation measure. Burrowing owls can be determined absent based on evidence derived from the habitat assessment or detection survey, but only if the surveys achieved the minimum standards of CDFW (2012). Whereas an absence determination naturally follows from the negative findings of properly performed detection surveys, the following three questions must be answered negatively to determine absence based on the habitat assessment, which would be the closest type of survey to what LSA (2025) completed:

A) Are there occurrence records nearby the project site?
B) Is the site's vegetation cover and height typical of where burrowing owls are found?
C) Are there fossorial mammals present which typically construct burrows useable by burrowing owls, or are there surrogate cavities that can serve as nest sites?

If the answers to these questions are compellingly negative, then detection surveys are not necessary, but the surveys could be implemented to make certain the site is absent of burrowing owls. If the answers to these questions are affirmative or not compellingly negative, then it should be assumed that burrowing owl habitat exists on the site until detection surveys prove otherwise.

To question A, there are burrowing owl occurrence records very close to the project site. To question B, the vegetation on site is typical of vegetation often used by burrowing owls. Noriko and I have detected burrowing owls at sites in the region with very similar vegetation cover. To question C, LSA (2025) reports that California ground squirrel occurs on the project site. The answers to all three questions are affirmative. Burrowing owl habitat is present on the project site. Breeding-season detection surveys are needed.

Environmental Setting informed by Desktop Review

The purpose of literature and database reviews and of consulting with local experts is to inform the field survey, and to augment interpretation of its outcome. Analysts need this information to identify which species are known to have occurred at or near the project site, and to identify which other special-status species could conceivably occur at the site due to geographic range overlap and migration flight paths. In the case of this project, the desktop review was incomplete, and the review that was completed was distorted to minimalize the likelihoods of occurrence of special-status species.

In its desktop review, LSA (2025) reportedly queried the California Natural Diversity Data Base (CNDDB) for species occurrence records within USGS Quadrangles abutting to and inclusive of the project site. LSA (2025) does not report having reviewed eBird (https://eBird.org) or iNaturalist (https://www.inaturalist.org), which are additional species occurrence databases. By querying the CNDDB to establish the pool of special-status species for analysis of occurrence likelihoods, LSA (2025) screened out many special-status species from further consideration in the characterization of the wildlife community as part of the existing environmental setting. The CNDDB is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present*." LSA (2025) and hence the Addendum misuse the CNDDB.

The CNDDB relies entirely on volunteer reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, the CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the inception of the CNDDB. Therefore, occurrence records in the CNDDB are most abundant for species assigned special status decades ago, but fewest for species only recently assigned special status. And because negative findings are not reported to the CNDDB, the CNDDB is also inappropriate as a basis for weighting occurrence likelihoods such as absent, not expected, unlikely, low, moderate or high. Whereas the CNDDB can be confirmatory of species presence, it cannot support absence determinations or assignments of low likelihood of occurrence. And again, the screening out of a species due to lack of occurrence records in the CNDDB is the same as an absence determination, and this step is being taken without adequate support of field surveys.

In my assessment based on a database review and a site visit, 139 special-status species of wildlife are known to occur near enough to the site to warrant analysis of occurrence

potential (Table 2). Of these 139 special-status species, 8 (6%) were recorded on or just off the project site, and another 28 (20%) special-status species have been documented within 1.5 miles of the site (Very close), another 27 (19%) within 1.5 and 4 miles (Nearby), and another 64 (46%) within 4 to 30 miles (In region). Almost half (45%) of the species in Table 2 have been reportedly seen within 4 miles of the project site. The site therefore supports multiple special-status species of wildlife and carries the potential for supporting many more special-status species of wildlife based on the proximities of recorded occurrences. The site is far richer in special-status species than the Addendum would have the reader believe.

Of the 139 special-status species listed in Table 2, the Addendum analyses the occurrence likelihoods of only 34 (24%) of them, all of which are given occurrence likelihoods of "Absent." Of the species determined to be "absent," four of them have been observed within 4 miles of the site, and seven of them have been observed within 1.5 miles of the site. Two of the species determined to be "absent," western yellow bat and monarch, were detected on site by Noriko. The occurrence likelihoods assigned to 34 special-status species fail to comport with the available occurrence records in public databases and with what Noriko saw on the project site. LSA's and the Addendum's absence determinations are not credible.

Of the 139 special-status species listed in Table 2, the DEIR fails to analyze the occurrence likelihoods of 75% of them. Of these species not analyzed for occurrence potential, Noriko detected six of them on the project site. LSA's and the Addendum's analyses of occurrence likelihoods are incomplete.

An inaccurate baseline characterization of the wildlife community is ill-suited for accurate analysis of project impacts on wildlife, and therefore ill-suited for formulating appropriate mitigation.

Special-status Species

The Addendum presents a profoundly inaccurate analysis of whether special-status species of wildlife occur on the project site. According to the Addendum (p. 2-61), "Due to the absence of suitable habitat on-site and the develop nature of the project vicinity, all of the remaining special-status species identified in the literature search, including the white cuckoo bee (*Neolarra alba*), are considered absent from the project site and vicinity." These absence determinations were not supported by protocol-level detection surveys, nor by appropriate interpretation of species occurrence records. And too often they were proven inaccurate.

There is no doubt that eight special-status species of wildlife occur on the project site, including the Monarch which is a candidate for listing under the federal Endangered Species Act. Modeling the rate of species detections during Noriko's survey, and analytically bridging Noriko's survey results to a larger research effort, predicts 17 diurnally-active special-status species should be detectable on the project site after a larger survey effort conducted over the period of a year or longer. Indeed, species

Table 2. *Occurrence likelihoods of special-status bird species at or near the proposed project site, according to eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org) and on-site survey findings, where 'Very close' indicates within 1.5 miles of the site, "nearby" indicates within 1.5 and 4 miles, and "in region" indicates within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species detected by Noriko Smallwood.*

Common name	***Species name***	**Status[1]**	**Occurrence potential**	
			LSA 2025	**Databases, Site visits**
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT		In region
San Diego fairy shrimp	*Branchinecta sandiegonensis*	FE		In region
Riverside fairy shrimp	*Streptocephalus woottoni*	FE		In region
Delhi sands flower-loving fly	*Rhaphiomidas terminatus abdominalis*	FE	Absent	In region
Monarch	*Danaus plexippus*	FC	Absent	Very close/**On site**
Quino checkerspot butterfly	*Euphydryas editha quino*	FE		In region
Crotch's bumble bee	*Bombus crotchii*	CCE	Absent	Nearby
Western spadefoot	*Spea hammondii*	FC, SSC	Absent	In region
Western pond turtle	*Emys marmorata*	FC, SSC	Absent	In region
Blainville's horned lizard	*Phrynosoma blainvillii*	SSC	Absent	In region
Orange-throated whiptail	*Aspidoscelis hyperythra*	WL	Absent	In region
Coastal whiptail	*Aspidoscelis tigris stejnegeri*	SSC	Absent	In region
San Diegan legless lizard	*Anniella stebbinsi*	SSC	Absent	In region
California glossy snake	*Arizona elegans occidentalis*	SSC	Absent	In region
Coast patch-nosed snake	*Salvadora hexalepis virgultea*	SSC		In region
Two-striped gartersnake	*Thamnophis hammondii*	SSC	Absent	In region
South coast gartersnake	*Thamnophis sirtalis pop. 1*	SSC		In region
Red-diamond rattlesnake	*Crotalus ruber*	SSC	Absent	Nearby
Fulvous whistling-duck	*Dendrocygna bicolor*	SSC1		In region
Brant	*Branta bernicla*	SSC2		In region
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL		Nearby
Redhead	*Aythya americana*	SSC2		Nearby
Western grebe	*Aechmophorus occidentalis*	BCC		Nearby
Clark's grebe	*Aechmophorus clarkii*	BCC		Nearby
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE	Absent	In region

Common name	*Species name*	Status[1]	Occurrence potential	
			LSA 2025	Databases, Site visits
Black swift	*Cypseloides niger*	SSC3, BCC		In region
Vaux's swift	*Chaetura vauxi*	SSC2		Very close
Calliope hummingbird	*Selasphorus calliope*	BCC		In region
Rufous hummingbird	*Selasphorus rufus*	BCC		Very close
Allen's hummingbird	*Selasphorus sasin*	BCC		Very close/**On site**
Mountain plover	*Charadrius montanus*	SSC2, BCC		In region
Snowy plover	*Charadrius nivosus*	BCC		In region
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC		In region
Long-billed curlew	*Numenius americanus*	WL		Nearby
Marbled godwit	*Limosa fedoa*	BCC		Nearby
Red knot (Pacific)	*Calidris canutus*	BCC		In region
Pectoral sandpiper	*Calidris melanotos*	BCC		Nearby
Short-billed dowitcher	*Limnodromus griseus*	BCC		In region
Lesser yellowlegs	*Tringa flavipes*	BCC		Nearby
Willet	*Tringa semipalmata*	BCC		Nearby
Laughing gull	*Leucophaeus atricilla*	WL		In region
Franklin's gull	*Leucophaeus pipixcan*	BCC		In region
Heermann's gull	*Larus heermanni*	BCC		In region
Western gull	*Larus occidentalis*	BCC		In region
California gull	*Larus californicus*	BCC, WL		Very close
California least tern	*Sternula antillarum browni*	FE, CE, CFP		In region
Black tern	*Chlidonias niger*	SSC2, BCC		In region
Elegant tern	*Thalasseus elegans*	BCC, WL		In region
Black skimmer	*Rynchops niger*	BCC, SSC3		In region
Common loon	*Gavia immer*	SSC		In region
Double-crested cormorant	*Phalacrocorax auritus*	WL		Very close
American white pelican	*Pelacanus erythrorhynchos*	SSC1		Very close
Least bittern	*Ixobrychus exilis*	SSC2		In region
Reddish egret	*Egretta rufescens*	BCC		In region
White-faced ibis	*Plegadis chihi*	WL		Very close

Common name	*Species name*	Status[1]	Occurrence potential	
			LSA 2025	Databases, Site visits
Turkey vulture	*Cathartes aura*	BOP		Very close
Osprey	*Pandion haliaetus*	WL, BOP		Nearby
White-tailed kite	*Elanus luecurus*	CFP, BOP	Absent	Very close
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	Absent	Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP		Very close
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP		Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP		Very close/**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP		Nearby
Red-shouldered hawk	*Buteo lineatus*	BOP		Very close
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Absent	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP		Very close/**Very close**
Ferruginous hawk	*Buteo regalis*	WL, BOP		Nearby
Zone-tailed hawk	*Buteo albonotatus*	BOP		Nearby
Harris' hawk	*Parabuteo unicinctus*	WL, BOP		In region
Rough-legged hawk	*Buteo lagopus*	BOP		In region
American barn owl	*Tyto furcata*	BOP		Very close
Western screech-owl	*Megascops kennicotti*	BOP		Nearby
Great horned owl	*Bubo virginianus*	BOP		Very close/**On site**
Burrowing owl	*Athene cunicularia*	BCC, CCE, SSC2, BOP	Absent	Very close
Long-eared owl	*Asio otus*	BCC, SSC3, BOP	Absent	In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP		In region
Lewis's woodpecker	*Melanerpes lewis*	BCC		In region
Nuttall's woodpecker	*Picoides nuttallii*	BCC		Nearby
American kestrel	*Falco sparverius*	BOP		Very close/ **On site**
Merlin	*Falco columbarius*	WL, BOP		Nearby
Peregrine falcon	*Falco peregrinus*	BOP		Very close
Prairie falcon	*Falco mexicanus*	WL, BOP		Nearby
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2		In region
Willow flycatcher	*Empidonax trailii*	CE		Nearby
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE	Absent	In region

Common name	*Species name*	Status[1]	Occurrence potential	
			LSA 2025	Databases, Site visits
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2		Very close
Least Bell's vireo	*Vireo bellii pusillus*	FE, CE	Absent	Very close
Loggerhead shrike	*Lanius ludovicianus*	SSC2		Very close
Oak titmouse	*Baeolophus inornatus*	BCC		Very close
California horned lark	*Eremophila alpestris actia*	WL		Very close
Bank swallow	*Riparia riparia*	CT		Nearby
Purple martin	*Progne subis*	SSC2		Very close
Wrentit	*Chamaea fasciata*	BCC		Nearby
California gnatcatcher	*Polioptila c. californica*	FT, SSC2	Absent	In region
California thrasher	*Toxostoma redivivum*	BCC		Very close
Cassin's finch	*Haemorhous cassinii*	BCC		In region
Lawrence's goldfinch	*Spinus lawrencei*	BCC		Very close
Grasshopper sparrow	*Ammodramus savannarum*	SSC2	Absent	Nearby
Black-chinned sparrow	*Spizella atrogularis*	BCC		In region
Gray-headed junco	*Junco hyemalis caniceps*	WL		In region
Bell's sparrow	*Amphispiza b. belli*	WL		In region
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2		In range
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	WL		Nearby
Yellow-breasted chat	*Icteria virens*	SSC3	Absent	Nearby
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC3		Nearby
Bullock's oriole	*Icterus bullockii*	BCC		Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Absent	Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3		In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC		In region
Prothonotary warbler	*Protonotaria citrea*	BCC		In region
Prairie warbler	*Setophaga discolor*	BCC		In region
Yellow warbler	*Setophaga petechia*	SSC2	Absent	Very close
Summer tanager	*Piranga rubra*	SSC1		Nearby
Little brown bat	*Myotis lucifugus*	WBWG: M		In range

Common name	*Species name*	Status[1]	Occurrence potential	
			LSA 2025	Databases, Site visits
Yuma myotis	*Myotis yumanensis*	WBWG: LM		In region
Long-eared myotis	*Myotis evotis*	WBWG: M		In region
Fringed myotis	*Myotis thysanodes*	WBWG: H		In range
Long-legged myotis	*Myotis volans*	WBWG: H		In range
California myotis	*Myotis californicus*	WBWG:L		In region
Small-footed myotis	*Myotis ciliolabrum*	WBWG: M		In range
Canyon bat	*Parastrellus hesperus*	WBWG: M		In region
Big brown bat	*Episticus fuscus*	WBWG: L		In region
Silver-haired bat	*Lasionycteris noctivagans*	WBWG: M		In range/**On site**
Hoary bat	*Lasiurus cinereus*	WBWG: M		In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG: H	Absent	In region
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG: H	Absent	In region/**On site**
Spotted bat	*Euderma maculatum*	SSC, WBWG: H		In range
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG: H		In range
Pallid bat	*Antrozous pallidus*	SSC, WBWG: H	Absent	In range
Mexican free-tailed bat	*Tadarida brasiliensis*	WBWG: L		Very close
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG: M	Absent	In range
Western mastiff bat	*Eumops perotis*	SSC, WBWG: H	Absent	In range
San Diego black-tailed jackrabbit	*Lepus californicus bennettii*	SSC		In region
Northwestern San Diego pocket mouse	*Chaetodipus fallax fallax*	SSC	Absent	In region
Pallid San Diego pocket mouse	*Chaetodipus fallax pallidus*	SSC		In range
Stephens' kangaroo rat	*Dipodomys stephensi*	FE, CT	Absent	In region
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC	Absent	In region
San Diego Bryant's woodrat	*Neotoma bryanti*	SSC	Absent	In region
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC		In range

[1] Listed on Special Animals List (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406) as FT, FE or FC = federal threatened, endangered, or candidate for listing, BCC = US Fish and Wildlife Service Bird of Conservation Concern (https://www.fws.gov/sites/default/files/documents/birds-of-conservation-concern-2021.pdf), CT or CE = California threatened or

endangered, CCT or CCE = Candidate California threatened or endangered, CFP = California Fully Protected (California Fish and Game Code 3511), SSC = California Species of Special Concern (not threatened with extinction, but rare, very restricted in range, declining throughout range, peripheral portion of species' range, associated with habitat that is declining in extent, and SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively, WL = Taxa to Watch List, WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H); BOP = protected by Birds of Prey (California Fish and Game Code 3503.5, see https://wildlife.ca.gov/Conservation/Birds/Raptors); and BGEPA = Bald and Golden Eagle Protection Act.

occurrence records reveal that 36 special-status species of vertebrate wildlife have been detected within 1.5 miles of the site, and 63 have been detected within four miles of the site. The evidence is overwhelming that the project site is important to multiple special-status species of wildlife.

The occurrences of eight special-status species observed on the project site by Noriko, and the occurrence records of multiple other special-status species very close to the project site defines the project site as habitat, consistent with the accepted definition of habitat (Hall et al. 1997). These species are using the site for survival and reproduction. These species are members of the local wildlife community.

BIOLOGICAL IMPACTS ASSESSMENT

Whether the impacts analysis is made by the lead agency or by an expert, the analysis involves prediction. Predictions are necessary because measuring the impacts directly could not happen until after the impacts occur, and this type of measurement would prevent the formulations of avoidance and minimization mitigation strategies that are prioritized by the CEQA. Impact predictions are necessary as part of the environmental review. The accuracy of the predictions of impacts and their significance ultimately relies on the degree of accuracy in the characterization of the existing environmental setting (Figure 3).

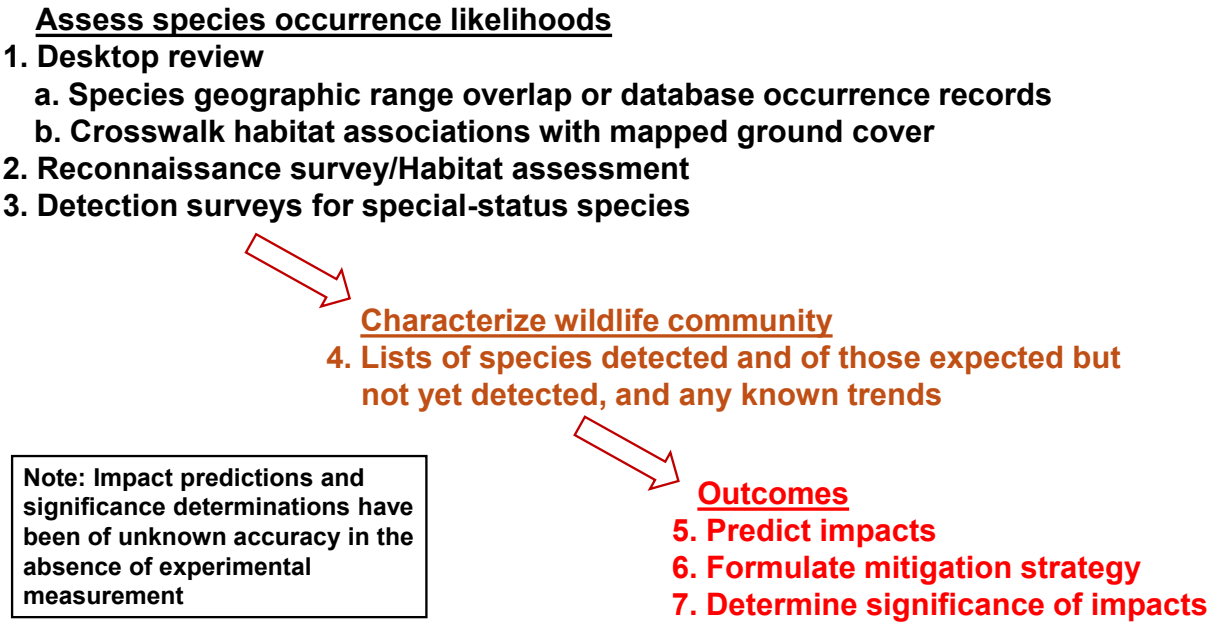


Figure 3. *General flow of information from the gathering stage through the characterization of the existing environment to predictions of impacts and their significance.*

Impact predictions can derive from speculation or from some level of experience (Figure 4). Speculation is repeatedly discouraged in the CEQA Guidelines, and for good reason because prediction accuracy improves with experience. But the experience that can be

brought to bear on impact predictions ranges from anecdotes to careful use of scientific inference. Any type of experience is usually better than relying on speculation, but careful scientific inference, especially inference drawn from experiments, have proven most effective. An analogy would be predicting the boiling temperature of water at a certain place with a known atmospheric pressure after having measured it hundreds of times at other places under various atmospheric pressures. The experience of measuring the boiling temperature at all these other places would certainly result in a more accurate prediction of the boiling point as compared to a speculative prediction. We know that use of inference in this example is certainly more predictive, and not potentially more predictive, because we have a long successful history with the application of this type of experimentation to draw predictive inference.

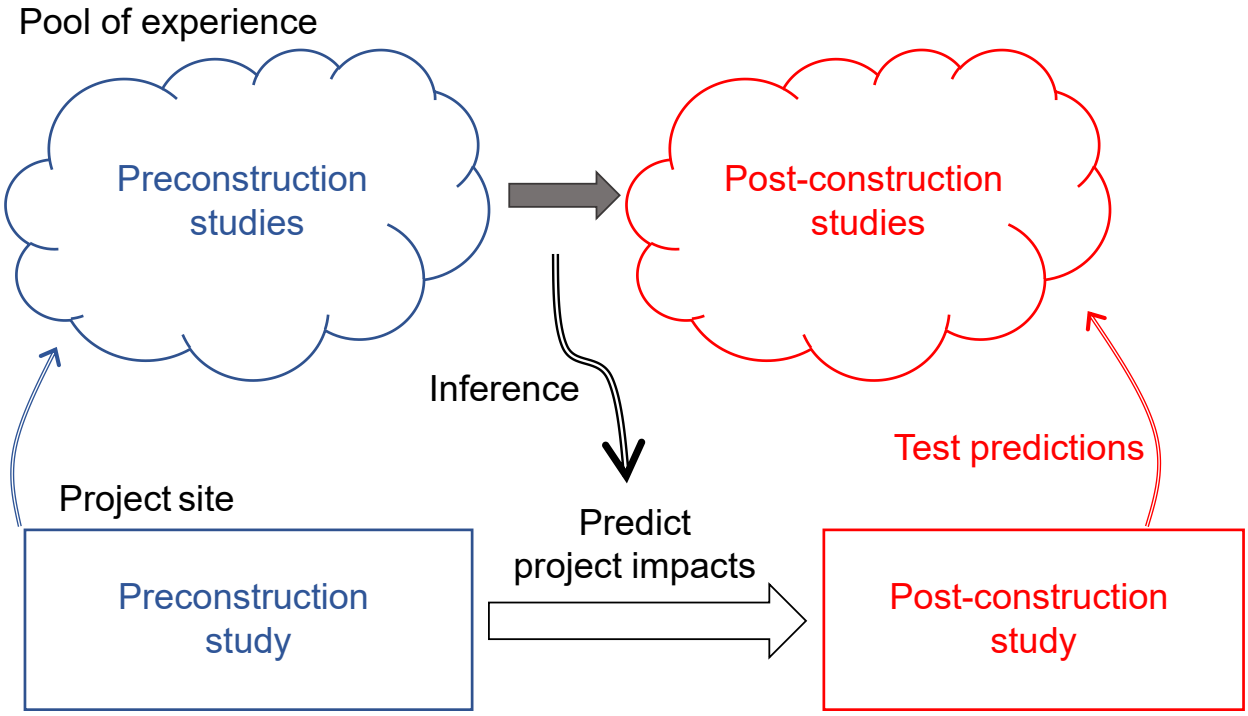


Figure 4. *A framework for arriving at predicted project impacts based on experience with other project sites. Ideally, there is a pool of similar projects in similar circumstances where predicted impacts were compared to realized impacts, and into which the proposed project can also contribute to experience.*

In the following, I analyze several types of impacts likely to result from the project, none of which is adequately analyzed in the Addendum.

REDUCED PRODUCTIVE CAPACITY FROM HABITAT LOSS

Habitat loss results in a reduced productive capacity of affected wildlife species, but the Addendum does not attempt to estimate the numerical or productive capacities of the site for nesting birds. Noriko's observations prove that the site provides habitat for at least 30 species of wildlife, but the number of avian nest sites remains unknown. Because Noriko's surveys were only reconnaissance surveys and therefore unsuitable for

detecting all bird nests on the site, estimating total nest density of birds was not possible. The alternative method would be to infer productive capacity from estimates of total nest density elsewhere. Noriko has completed several studies to estimate total avian nest density in similar environments in the local area.

Noriko estimated 5.56 nests/acre on a 3.6-acre site of ruderal grassland bordering a woodland strip in Murrieta, and 1.86 nests/acre on another 4.83-acre grassland site bordering a strip of woodland in Murietta. The average of the above two estimates is 3.71 nests/acre. This density applied to the 7.35 acres of the project site would predict 27 nest sites. Due to periodic weed control, the grassland portion of the site might support fewer nests sites per acre than found at Noriko's study sites, but the trees on the site likely more than make up for any difference. Assuming 1.39 broods per nest site based on a review of 322 North American bird species, which averaged 1.39 broods per year, then I estimate 38 nest attempts per year on the project site. Assuming Young's (1948) study site typifies bird productivity of 2.9 fledged birds per nest attempt, then I predict 110 fledglings/year at the project site.

The loss of 27 nest sites and 38 nest attempts per year would qualify as significant impacts that have not been analyzed in the Addendum. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The project would prevent the production of 110 fledglings per year. Assuming an average bird generation time of 4 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): {(nests/year × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 124 birds per year denied to California.

The loss of 124 birds per year would be a loss of significant habitat value that is currently provided by the project site. Most if not all these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which are intended to most strongly protect breeding migratory birds.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Unfortunately, the DEIR provides no serious analysis of the potential for the project to interfere with wildlife movement in the region. LSA (2025:6) claims, "The project site is not in a wildlife corridor, and, being surrounded by dense urban development, would not substantially limit wildlife movement. The Addendum (p. 2-61) claims, "Due to the developed nature of the surrounding properties and distance to open space, the project site does not act as a migratory corridor for wildlife." However, the species detected on site by Noriko would not have been detected there had their members not moved to the site for its habitat. For many species of wildlife, the project site provides stopover opportunities, and for many others it is a migratory destination.

The Addendum's focus on whether the site represents a regional wildlife movement corridor is misdirected. The principal phrase of the CEQA question at issue goes to wildlife movement in the region regardless of whether the movement is channeled by a corridor. The CEQA question uses the existence of a corridor as an example of a feature that pertains to wildlife movement in the region, but only a fraction of wildlife movement occurs along corridors,[1] most of which are human artefacts of habitat fragmentation (Smallwood 2015). Again, the CEQA question goes to wildlife movement in the region, and not specifically to whether the site is part of, or inclusive of, a corridor.

What was needed, but not provided, was a program of observation to characterize how wildlife use the site for movement in the region. Biologists should have recorded flight paths, especially of birds and bats moving to or from the project site. Biologists know how to detect patterns of wildlife movement; they were just not assigned the task in the case of this environmental review. A consequence is that LSA and the City of Chino can only speculate on whether and how the site is important to wildlife movement in the region. And in this case, the speculation lacks credibility due to Noriko's observations of wildlife that only got to the project site by moving to it.

TRAFFIC IMPACTS TO WILDLIFE

The Addendum neglects to address one of the project's most obvious, substantial impacts to wildlife, and that is wildlife mortality and injuries caused by project-generated traffic. Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic (Photos 26—29), including along roads far from the project footprint but which would nevertheless by traversed by automobiles head to or from the project's building. Vehicle collisions have accounted for the deaths of many thousands of amphibian, reptile, mammal, bird, and arthropod fauna, and the impacts have often been found to be significant at the population level (Forman et al. 2003). Across North America traffic impacts have taken devastating tolls on wildlife (Forman et al. 2003). In Canada, 3,562 birds were estimated killed per 100 km of road per year (Bishop and Brogan 2013), and the US estimate of avian mortality on roads is 2,200 to 8,405 deaths per 100 km per year, or 89 million to 340 million total per year (Loss et al. 2014). Local impacts can be more intense than nationally.

[1] Wildlife are often channeled in their movements by natural features such as streams and valleys, but if all wildlife moved along such features, then predators would always know where to capture prey, and prey would always know where to expect predators. For these reasons, wildlife often move outside of natural corridors. Constructed corridors are different by serving as the only pathways remaining to wildlife in the face of habitat fragmentation (see Smallwood 2015).

Photo 26. *A white-tailed antelope squirrel runs across the road just in the Coachella Valley, 26 May 2022. Such road crossings are usually successful, but too often prove fatal to the animal.*

Photo 27. *A coyote uses the crosswalk to cross a road on 2 February 2023. Not all drivers stop, nor do all animals use the crosswalk. Too often, animals are injured or killed when they attempt to cross roads.*

Photos 28 and 29. *Raccoon killed on Road 31 just east of Highway 505 in Solano County (left; photo taken on 10 November 2018), and mourning dove killed by vehicle on a California road (right; photo by Noriko Smallwood, 21 June 2020.)*

The nearest study of traffic-caused wildlife mortality was performed along a 2.5-mile stretch of Vasco Road in Contra Costa County, California. Fatality searches in this study

found 1,275 carcasses of 49 species of mammals, birds, amphibians and reptiles over 15 months of searches (Mendelsohn et al. 2009). This fatality number needs to be adjusted for the proportion of fatalities that were not found due to scavenger removal and searcher error. This adjustment is typically made by placing carcasses for searchers to find (or not find) during their routine periodic fatality searches. This step was not taken at Vasco Road (Mendelsohn et al. 2009), but it was taken as part of another study next to Vasco Road (Brown et al. 2016). Brown et al.'s (2016) adjustment factors for carcass persistence resembled those of Santos et al. (2011). Also applying searcher detection rates from Brown et al. (2016), the adjusted total number of fatalities was estimated at 9,462 animals killed by traffic on the road. This fatality number projected over 1.25 years and 2.5 miles of road translates to 3,028 wild animals per mile per year. In terms comparable to the national estimates, the estimates from the Mendelsohn et al. (2009) study would translate to 188,191 animals killed per 100 km of road per year, or 22 times that of Loss et al.'s (2014) upper bound estimate and 53 times the Canadian estimate. An analysis is needed of whether increased traffic generated by the project site would similarly result in local impacts on wildlife.

For wildlife vulnerable to front-end collisions and crushing under tires, road mortality can be predicted from the study of Mendelsohn et al. (2009) as a basis, although it would be helpful to have the availability of more studies like that of Mendelsohn et al. (2009) at additional locations. My analysis of the Mendelsohn et al. (2009) data resulted in an estimated 3,028 animals killed per mile along a county road in Contra Costa County. The estimated numbers of fatalities were 1.75% birds, 26.4% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 67.4% amphibians (large numbers of California tiger salamanders and California red-legged frogs, but also Sierran treefrogs, western toads, arboreal salamanders, slender salamanders and others), and 4.4% reptiles (many western fence lizards, but also skinks, alligator lizards, and snakes of various species). VMT is useful for predicting wildlife mortality because I was able to quantify miles traveled along the studied reach of Vasco Road during the time period of the Mendelsohn et al. (2009), hence enabling a rate of fatalities per VMT that can be projected to other sites, assuming similar collision fatality rates.

Predicting project-generated traffic impacts to wildlife

The Addendum's Air Quality analysis predicts 1,013,614 annual VMT for the warehouse and 897,716 annual VMT for the retail portion of the project, or a total 1,911,330 annual VMT generated by the project. During the Mendelsohn et al. (2009) study, 19,500 cars traveled Vasco Road daily, so the vehicle miles that contributed to my estimate of non-volant fatalities was 19,500 cars and trucks × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 9,462 wildlife fatalities, or 2,351 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 813 vertebrate wildlife fatalities per year due to project-generated traffic. Assuming wildlife abundance is lower in the vicinity of the project site as compared to Vasco Road in Contra Costa County, collision mortality could also be assumed lower. However, even if it is 75% lower, the predicted mortality would be 203 wildlife fatalities per year, which would still be many

fatalities, the impact of which the Addendum has not analyzed nor formulated mitigation.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The Addendum does not address this potential impact, let alone propose to mitigate it. Mitigation measures to improve wildlife safety along roads are available and are feasible, and they need exploration for their suitability with the proposed project. Given the predicted level of project-generated traffic-caused mortality, and the lack of any proposed mitigation, it is my opinion that the proposed project would result in potentially significant adverse biological impacts, and that, as the Addendum is currently written, these impacts would be unmitigated.

CUMULATIVE IMPACTS

The CEQA Guidelines state that "an EIR shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable, as defined in section 15065 (a)(3)." Incremental effects are those in combination with related effects of other projects. Additionally, the Guidelines state, "The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence…" The Guidelines describe two general approaches to analyzing cumulative impacts, one approach consisting of a listing of past, ongoing, planned and foreseeable future projects. Despite the CEQA's stated requirements and despite the suggested approaches to analysis, the Addendum provides no analysis of potential project contributions to cumulative impacts related to biological resources.

Given the extent of habitat fragmentation in the region, leaving the open space of the project site as one of the last sizable patches of wildlife habitat within miles, the project's contribution to cumulative habitat destruction would be consequential. Habitat fragmentation acts as a multiplier of the adverse effects of simple habitat loss (Smallwood 2015), but the loss of one of the final habitat patches vastly expands the magnitude of the multiplied effect. This added effect of the loss of the last patches of habitat in severely fragmented settings is evident in a study summarized below.

In collaboration with Noriko Smallwood, I measured the impacts – inclusive of cumulative impacts – of wildlife habitat loss that was caused by mitigated development projects. We revisited 80 sites of proposed projects that we had originally surveyed in support of comments on the CEQA review documents (Smallwood and Smallwood 2023). We revisited the sites to repeat the survey methods at the same time of year, the same start time in the day, and the same methods and survey duration to measure the effects of mitigated development on wildlife. We structured the experiment in a before-after, control-impact experimental design, as some of the sites had been developed since our initial survey and some had remained undeveloped. We found that mitigated development resulted in a 66% loss of species on site, and 48% loss of species in the project area. Counts of vertebrate animals declined 90%. "Development impacts measured by the mean number of species detected per survey were greatest for amphibians (-100%), followed by mammals (-86%), grassland birds (-75%), raptors (-53%), special-status species (-49%), all birds as a group (-48%), non-native birds

(-44%), and synanthropic birds (-28%). Our results indicated that urban development substantially reduced vertebrate species richness and numerical abundance, even after richness and abundance had likely already been depleted by the cumulative effects of loss, fragmentation, and degradation of habitat in the urbanizing environment," and despite all the mitigation measures per existing laws, policies and regulations. We also specifically tested for the cumulative effects of projects on wildlife in neighboring habitats, and found significant decreases in species richness and overall abundance in those areas as well. Regarding the effects of losing the last remaining patches of habitat in a region, as discussed above, Figure 12 of Smallwood and Smallwood (2023) shows the added effect, which was significant and very substantial. The proposed project would cause severe declines in wildlife abundance and species richness in the region, as has been measured elsewhere.

MITIGATION MEASURES

Before I comment specifically on the mitigation strategy, I will repeat that the formulation of an appropriate mitigation strategy can follow only from an adequate survey effort for wildlife on and around the project site. The characterizations of the plant and wildlife communities need to be sufficiently accurate to accurately characterize the existing environmental setting. This accuracy is needed to formulate the appropriate mitigation strategy.

The Addendum refers to measures in the Preserve Master Plan EIR to reduce impacts to migratory birds and raptors, and to measures in the Edgewater Communities EIR. The Addendum is ambiguous about whether these measures would be required, but these measures are the only mitigation measures presented in the Addendum. Because these measures were formulated to mitigate the impacts of other projects, it would be inappropriate to rely on them to mitigate impacts of the proposed project. The mitigation strategies in the referenced EIR were not designed or intended to mitigate the impacts of additional projects.

Below I summarize each of the Preserve Master Plan EIR and Edgewater Communities EIR measures in italics, followed by my comment(s) in regular font.

The Preserve Master Plan EIR:

♦ **Conservation Area.** *A 300-acre conservation area will be established to provide burrowing owl habitat. A weed removal program will be established for this area to create high-quality raptor foraging habitat. Twenty artificial burrowing owl nesting sites will be constructed on the site. Stands of trees will be planted to provide burrowing owl habitat.*

The Addendum does not identify the location or status of this 300-acre conservation area. It does not disclose whether burrowing owls already occur on the conservation area, nor how the owls there are faring. There is no explanation how the weed removal program would create high-quality raptor foraging habitat.

The construction of 20 artificial burrowing owl nest boxes would not help to conserve burrowing owls. I have monitored many such artificial nest sites and found that their benefits to burrowing owls last no longer than a few years, after which time the owls decline as the boxes are destroyed by neglect and predators (Smallwood and Morrison 2018, 2024).

Contrary to the statement in the measure, the planting of stands of trees would not provide burrowing owl habitat. While burrowing owls occasionally nest under or near trees, stands of trees are not burrowing owl habitat. As the stands of trees mature, the burrowing owls would disappear, just as I have witnessed before.

♦ **Relocation.** *If burrowing owls are found on any development site, the developer will be required to follow CDFG burrowing owl relocation protocols, including the creation of artificial burrows*.

The burrowing owl is a candidate for listing under California's Endangered Species Act. An incidental take permit would be needed. To obtain this permit, the City of Chino would need to consult with the CDFW before taking any other actions that could affect burrowing owls. Relocation would probably not be permitted.

♦ **Existing Windrows.** *Existing windrows that provide raptor habitat will be incorporated into the design of future development wherever practical. If incorporated windrows are not practical, the developer will provide replacement windrow trees as specified by an ornithologist specializing in raptor biology. … Although the mitigation measures listed above would potentially reduce the effects of development on raptors, including burrowing owls, The Preserve Master Plan EIR finds that this impact would remain significant after mitigation*.

The planting of windrow trees would not benefit burrowing owls, and would instead pose an added threat to burrowing owls. But the project, as planned, includes no plan to plant windrow trees, and doing so in the context of the project would add no habitat value to burrowing owls. This measure is irrelevant to burrowing owls that might occur on the project site.

<u>Edgewater Communities EIR:</u>

♦ *Establish 30 acres of restored native grassland habitat as a conservation easement and deed it to a land stewardship organization*.

The Addendum does not identify where these 30 acres would be located, whether they already support burrowing owls, and how the acreage would be managed for burrowing owls.

♦ *Provide a planting plan to establish and manage vegetation for three detention basins and perimeter slopes*.

This measure might be relevant to the Edgewater Communities project, but not to the Chino Gateway project.

♦ *Avoid burrowing owls by 75 meters during the nesting season and by 50 meters outside of the nesting season. Do not disturb occupied burrows during the nesting season.*

This measure is irrelevant. The burrowing owl is a candidate for listing under California's Endangered Species Act. An incidental take permit would be needed. To obtain this permit, the City of Chino would need to consult with the CDFW before taking any other actions that could affect burrowing owls.

♦ *Use passive relocation techniques if burrowing owls must be moved away from disturbance areas.*

The burrowing owl is a candidate for listing under California's Endangered Species Act. An incidental take permit would be needed. To obtain this permit, the City of Chino would need to consult with the CDFW before taking any other actions that could affect burrowing owls. Relocation would probably not be permitted.

♦ *Conduct a 30-day preconstruction survey for burrowing owls to map all occupied burrows and develop a strategy to avoid harm resulting from project construction.*

This measure would be out of sequence to the steps recommended in CDFW (2012). The survey guidelines specify that detection surveys need to be completed prior to preconstruction survey.

♦ *Submit a burrowing owl relocation and habitat management plan prior to passive relocation.*

The burrowing owl is a candidate for listing under California's Endangered Species Act. An incidental take permit would be needed. To obtain this permit, the City of Chino would need to consult with the CDFW before taking any other actions that could affect burrowing owls. Relocation would probably not be permitted.

RECOMMENDED MEASURES

Habitat loss: Should the project go forward, compensatory mitigation is needed for the loss of habitat. Habitat of equal or greater area should be protected as close to the project site as feasible.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by the project-generated road traffic in the region. I suggest that this mitigation can be directed toward funding research to identify fatality patterns and effective impact reduction measures such as reduced speed limits and wildlife under-crossings or overcrossings of particularly dangerous road segments.

Compensatory mitigation can also be provided in the form of donations to wildlife rehabilitation facilities (see below).

Fund Wildlife Rehabilitation Facilities: Compensatory mitigation ought also to include funding contributions to wildlife rehabilitation facilities to cover the costs of injured animals that will be delivered to these facilities for care. Many animals would likely be injured by collisions with automobiles traveling to and from the buildings.

Landscaping: If the project goes forward, California native plant landscaping (i.e., grassland and locally appropriate scrub plants) should be considered to be used as opposed to landscaping with lawn and exotic shrubs and trees. Native plants offer more structure, cover, food resources, and nesting substrate for wildlife than landscaping with lawn and ornamental trees. Native plant landscaping has been shown to increase the abundance of arthropods which act as importance sources of food for wildlife and are crucial for pollination and plant reproduction (Narango et al. 2017, Adams et al. 2020, Smallwood and Wood 2022.). Further, many endangered and threated insects require native host plants for reproduction and migration, e.g., monarch butterfly. Around the world, landscaping with native plants over exotic plants increases the abundance and diversity of birds, and is particularly valuable to native birds (Lerman and Warren 2011, Burghardt et al. 2008, Berthon et al. 2021, Smallwood and Wood 2022). Landscaping with native plants is a way to maintain or to bring back some of the natural habitat and lessen the footprint of urbanization by acting as interconnected patches of habitat for wildlife (Goddard et al. 2009, Tallamy 2020). Lastly, not only does native plant landscaping benefit wildlife, it requires less water and maintenance than traditional landscaping with lawn and hedges.

Thank you for your consideration,

_____

Shawn Smallwood, Ph.D.

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Curriculum Vitae

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Born May 3, 1963 in Sacramento, California. Married, father of two.

Ecologist

Expertise

- Finding solutions to controversial problems related to wildlife interactions with human industry, infrastructure, and activities;
- Wildlife monitoring and field study using GPS, thermal imaging, behavior surveys;
- Using systems analysis and experimental design principles to identify meaningful ecological patterns that inform management decisions.

Education

Ph.D. Ecology, University of California, Davis. September 1990.
M.S. Ecology, University of California, Davis. June 1987.
B.S. Anthropology, University of California, Davis. June 1985.
Corcoran High School, Corcoran, California. June 1981.

Experience

- 477 professional publications, including:
- 81 peer reviewed publications
- 24 in non-reviewed proceedings
- 370 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 87 public presentations of research results at meetings
- Reviewed many professional papers and reports
- Testified in 4 court cases.

Editing for scientific journals: Guest Editor, *Wildlife Society Bulletin*, 2012-2013, of invited papers representing international views on the impacts of wind energy on wildlife and how to mitigate the impacts. Associate Editor, *Journal of Wildlife Management*, March 2004 to 30 June 2007. Editorial Board Member, *Environmental Management*, 10/1999 to 8/2004. Associate Editor, *Biological Conservation*, 9/1994 to 9/1995.

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The

five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC reviewed the science underlying the Alameda County Avian Protection Program, and advised the County on how to reduce wildlife fatalities.

Consulting Ecologist, 2004-2007, California Energy Commission (CEC). Provided consulting services as needed to the CEC on renewable energy impacts, monitoring and research, and produced several reports. Also collaborated with Lawrence-Livermore National Lab on research to understand and reduce wind turbine impacts on wildlife.

Consulting Ecologist, 1999-2013, U.S. Navy. Performed endangered species surveys, hazardous waste site monitoring, and habitat restoration for the endangered San Joaquin kangaroo rat, California tiger salamander, California red-legged frog, California clapper rail, western burrowing owl, salt marsh harvest mouse, and other species at Naval Air Station Lemoore; Naval Weapons Station, Seal Beach, Detachment Concord; Naval Security Group Activity, Skaggs Island; National Radio Transmitter Facility, Dixon; and, Naval Outlying Landing Field Imperial Beach.

Fulbright Research Fellow, Indonesia, 1988. Tested use of new sampling methods for numerical monitoring of Sumatran tiger and six other species of endemic felids, and evaluated methods used by other researchers.

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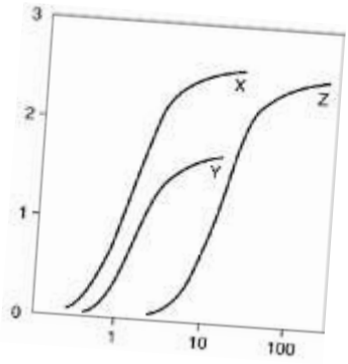
EXHIBIT B



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September 10, 2025

Lozeau Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

Attn: Ms. Victoria Yundt

Subject: Comment Letter on Addendum To The City Of Chino General Plan Environmental Impact Report, City of Chino, CA. SCH No. 2008091064

Dear Ms. Yundt:

At the request of Lozeau Drury LLP (Lozeau Drury), Clark and Associates (Clark) has reviewed materials related to the above referenced project.

Clark's review of the materials in no way constitutes a validation of the conclusions or materials contained within the Addendum to the GP-EIR. If we do not comment on a specific item, this does not constitute acceptance of the item.

Project Description:

In 2010, the City certified the City of Chino General Plan Environmental Impact Report (GPEIR), State Clearinghouse No. 2008091064, for the City of Chino General Plan (General Plan). The Chino Gateway Terminal Project (herein referred to as the "project," or "proposed project,") consists of a 158,548 square-foot warehouse and a 3,520 square-foot multi-tenant restaurant building on a 7.35-acre project site at 5885 Schaefer Avenue in Chino. The Project would include 128 passenger vehicle parking spaces, 10 truck parking spaces, 20 loading

docks, and 1 ground-level roll-up door. Development of the project site for industrial uses was evaluated programmatically in the GPEIR because specific details of a project-specific development on the site were not known at the time of certification of the GPEIR. According to the Addendum, the purpose for creating the Addendum was to analyze any potential differences between the impacts identified in the GPEIR for buildout of the General Plan and impacts that would be associated with the proposed project.

Project Location: The project site is southwest of the Schaefer Avenue and Oaks Avenue intersection in Chino, western San Bernardino County, California. The project site is in Section 13 of Township 2 South, Range 8 West of the San Bernardino Baseline and Meridian, as depicted on the United States Geological Survey 7.5-minute series Ontario, California quadrangle.5 Specifically, the center of the project site is at latitude 34°00'13.60" N and longitude 117°40’38.31" W at an elevation of 697 feet above mean sea level and consists of four parcels (Assessor’s Parcel Numbers 1021-052-04, 1021-052-06, 1021-052-09, and 1021-052-11).

Access to the project site is provided via three existing driveways along Oaks Avenue that facilitate access to the church and one of the former residential properties, and five existing driveways along Schaefer Avenue, one of which serves the church, two of which serve the former residential property west of the church, and two of which lead to the vacant lot on the western portion of the site. The Project Site is designated as light industrial (L1) in the general plan and (M1) light industrial in the zoning district.

The City Municipal Code does not include maximum building heights for the M1 zoning district; therefore, in accordance with Section 504.3 (Height in feet) of the California Building Code (CBC), the height of the proposed buildings would not exceed 75 feet. The warehouse building would reach a maximum height of approximately 47 feet. The multi-tenant restaurant building would reach a maximum height of approximately 25 feet.

The warehouse building would be a concrete tilt-up building with a contemporary architectural design, consisting of various exterior materials including spandrel glass and metal accents. Building design would use vertical and horizontal lines and color and material changes to provide visual relief and varied massing. Solar photovoltaic panels would be installed in collective arrangements on the project site such that the total power generated would augment 80 percent of the project’s power needs.

The proposed project is anticipated to generate up to 72 employees, with 18 employees generated by the restaurant uses and 54 employees generated by the warehouse use. The hours of

operation for 10 the proposed facilities include 8:00 a.m. to 10:00 p.m. 7 days per week for the restaurant tenants and 24 hours per day and 7 days per week for the industrial tenant.

Figure 1: Project Site Location

Construction of the project is anticipated to commence in October 2025 and finish in late 2026, resulting in a total construction duration of approximately 14 months. Construction activities would include the emolition of three existing buildings and associated ancillary structures (totaling 17,716 square feet), pavement, and fencing, and removal of all existing vegetation. Construction would also include grading, paving, and construction of the proposed buildings and parking areas. Construction would also include the installation of perimeter fencing and screen walls, landscaping, lighting, curb, gutter, sidewalk, and utility interconnections within the Oaks Avenue and Schaefer Avenue ROWs. During grading, on-site soils would be excavated and recompacted in accordance with the CBC to accommodate the proposed buildings, drive aisles, and parking areas. Construction equipment anticipated to be used includes bulldozers, loaders/backhoes, scrapers, cranes, forklifts, rollers, concrete pumps, and paving equipment equipped with Tier 2 or better engines and Level 3 diesel particulate filters.

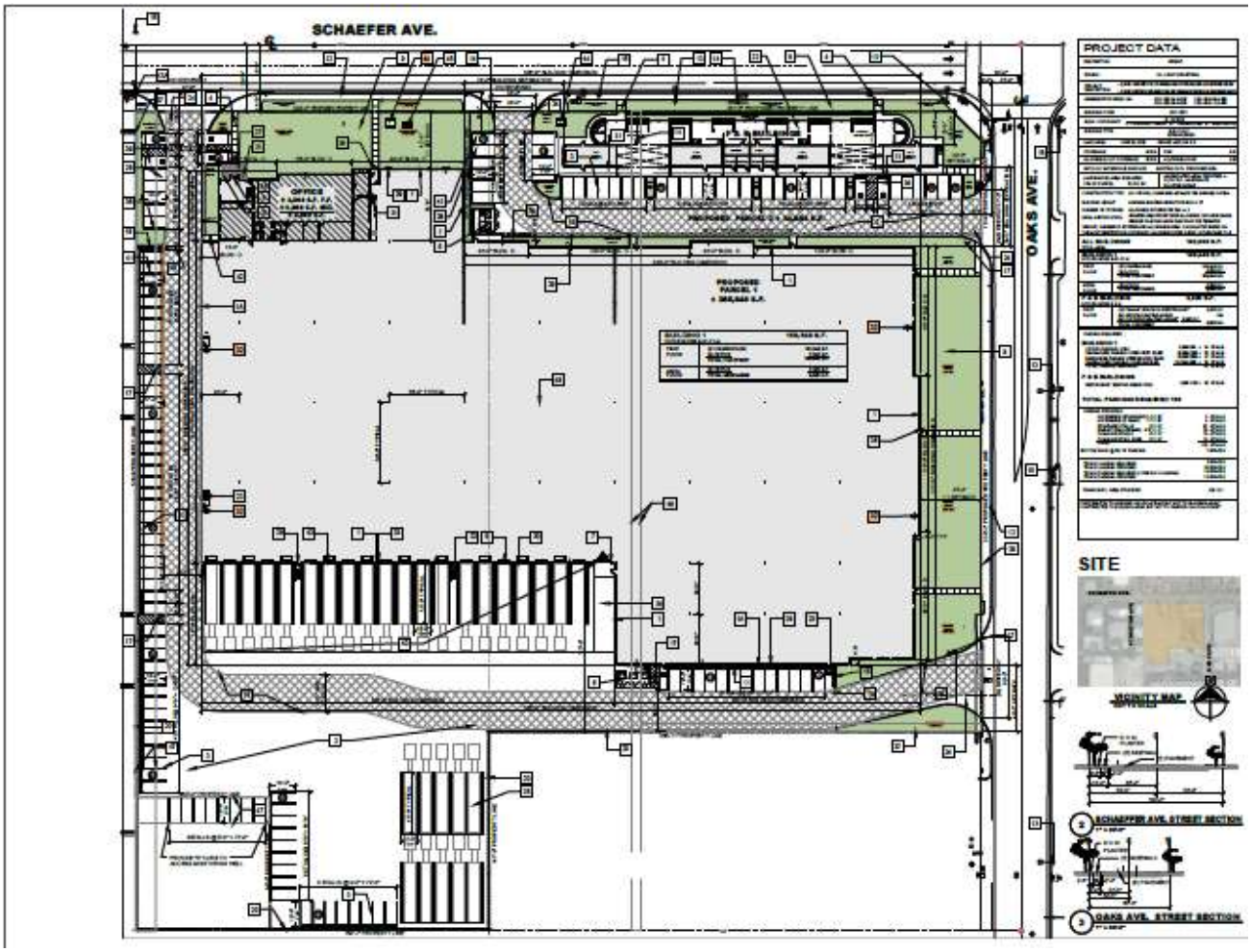


Figure 2: Conceptual Site Plan

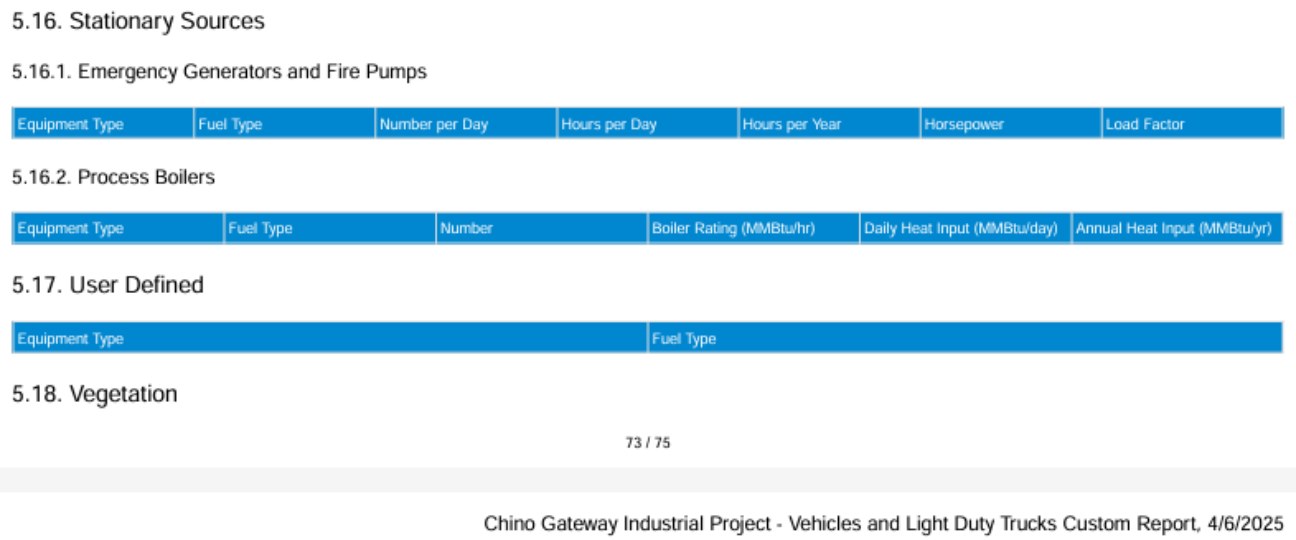
The air quality analysis for the Project assumes that construction of the proposed project is anticipated over a period of 14 months, beginning in October 2025 and ending in late 2026. Construction activities include demolition of three existing buildings and associated ancillary structures (totaling 17,716 square feet). Construction equipment anticipated to be used includes bulldozers, loaders/backhoes, scrapers, cranes, forklifts, rollers, concrete pumps, and paving equipment. The CalEEMod analysis assumed that construction equipment would use Tier 2 engines with Level 3 diesel particulate filters. In addition, the proposed project would result in a cut of approximately 112 cubic yards of soil for export. Default CalEEMod parameters were used for remaining construction details, such as construction equipment, construction worker and truck trips, and fleet activities.

This conclusion that no mitigation measures are required for air quality impacts is in conflict with the facts provided within the Addendum to the EIR.

Specific Comments:

1. **The Air Quality Analysis Of The Operational Phase Of The Project Fails To Include Back-Up Generators And Fire Pumps In The Analysis.**

To be compliant with the California Fire Code (CFC) and local fire authorities, the Project will be required to install fire pump systems and are likely to have a back-up generator (BUG) onsite. The fire pump and BUG will need to be tested and maintained annually. Under the California Air Resources Board (CARB) Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines Guidance, the District may allow a new stationary emergency standby diesel-fueled Cl engine (> 50 hp) to operate up to 100 hours per year for maintenance and testing purposes on a site-specific basis, provided the diesel PM emission rate is less than or equal to 0.01 g/bhp-hr. In addition to the testing emissions the air quality analysis in the IS must include the substantial increase in operational emissions from BUGs in the Air Basin due to unscheduled events, including but not limited to Public Safety Power Shutoff (PSPS) events and extreme heat events. Nowhere in the City's analysis of the operational emissions of stationary equipment (i.e., fire pumps and or BUGs) or emissions from those sources included in the CalEEMOD analysis.



5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

73 / 75

Chino Gateway Industrial Project - Vehicles and Light Duty Trucks Custom Report, 4/6/2025

Figure 3: CalEEMOD Analysis Of Operational Emissions

This failure to include the emissions from the fire pumps and BUGS are a significant unaddressed emission source for the Project. The City's analysis is therefore incomplete and must be corrected in a revised addendum to the EIR for the Project.

2. The City's Cumulative Impact Analysis Fails To Incorporate A Quantitative Analysis To The Substantial Impacts From Nearby Warehouse Projects.

The Project is located within the South Coast Air Quality Management District's (SCAQMD's) boundaries, an area currently in non-attainment for ozone (O_3), respirable particles (PM_{10}), and fine particulate matter ($PM_{2.5}$). The City[1] concludes that "the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard. Impacts are less than significant, and there is no new information requiring the preparation of an EIR or new or more severe impact beyond that previously identified in the GPEIR."

Within 5 kilometers of the project site, there are 167 existing warehouse projects totaling 25,011,300 square feet, with an additional nine (9) vacant warehouses covering 1,288,700 square feet.

[1] LSA 2025. Addendum to GP-EIR. Pg 2-49.

Figure 4: Existing And Approved Warehouse Projects Near Project

According to data from the Redford Conservancy at Pitzer College and Radical Research LLC (presented on the Warehouse CITY website)[2], the existing projects generate 17,000 daily truck trips, producing 23.5 pounds (lbs) of diesel particulate matter (DPM) and 2,649 lbs of oxides of nitrogen (NO_x) per day. The Project itself will further contribute to air pollution during both construction and operation.

The cumulative analysis demonstrates that the Project will exacerbate regional issues with ozone and particulate matter, introducing additional toxic air contaminants (TACs) to an already impacted area. The City has concluded that no mitigation measures are required for the air quality impacts, yet it is clear that the cumulative air quality and public health impacts from the Project have not been fully evaluated and appropriately mitigated, providing transparency and protection for the public.

3. The Project Site Is Located In The Top 11% Of Zipcodes In California For Exposure To Air Pollutants, The Top 7% For Exposure To $PM_{2.5}$, And Is In The Top 12% Of Zipcodes In The South Coast Air Basin For Exposure To Diesel Particulate Matter

[2] Warehouse City v. 1.21. Accessed September 10, 2025. https://radicalresearch.shinyapps.io/WarehouseCITY/

The Project Site is located in census tract 6071000504 (zip code 91710). Using the Office of Environmental Health and Hazard Assessment's (OEHHA's) California Communities Environmental Health Screening Tool Version·4.0 (CalEnviroScreen) it is possible to assess the existing concerns for the census tract in which the Project is located.

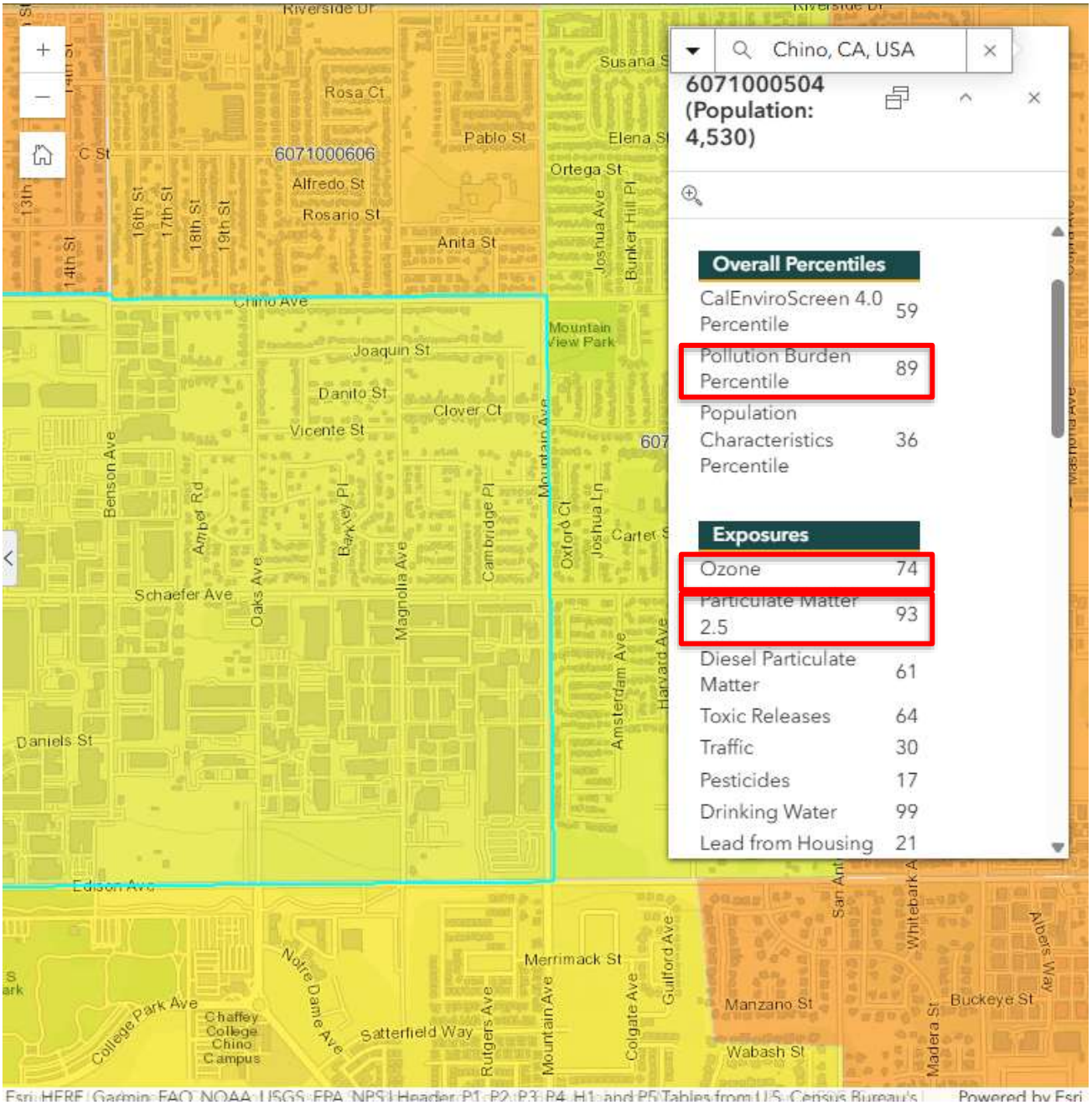


Figure 5: Enviroscreen 4.0 Map Of Project Site

Based on the CalEnviroScreen summary of zipcode 91070, it is clear that the area is in the top 11% of all communities in the State of California impacted by pollution.

According to the SCAQMD's Multiple Air Toxics Exposure Study (MATES) study, zip code 91070 (the location of the Project Site) has a cumulative cancer risk of 607 in 1 million placing it in the top 12% of communities in the South Coast Air Basin (SCAB) impacted by TACs.

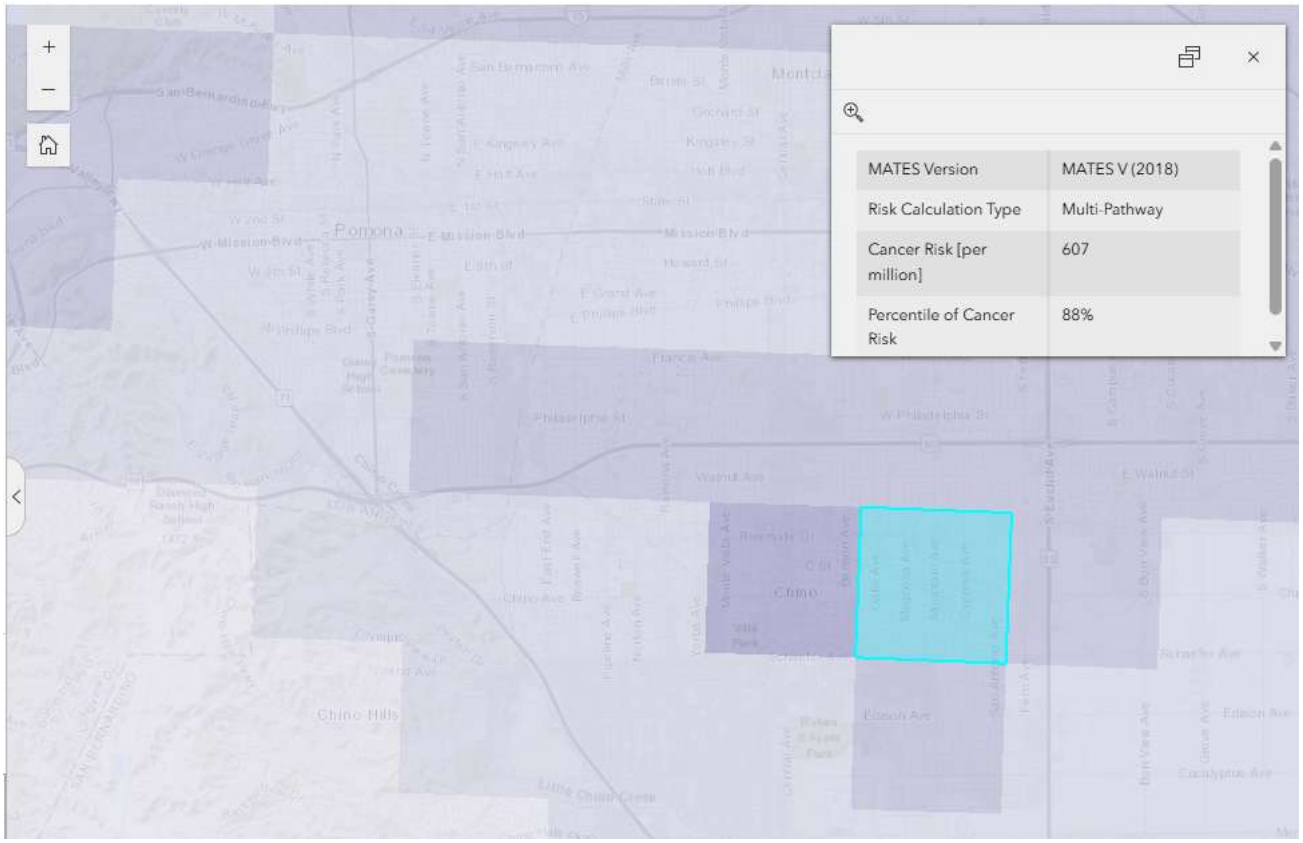


Figure 5: MATES Cancer Risk Analysis Of Project Location

Increasing the number of sources of ozone precursors within the community via the construction of the Project will exacerbate pollution levels, resulting in a substantially greater health burden on the community which the Addendum to the EIR fails to disclose.

4. The Project May Result in Significant Health Risk to Construction Workers and Nearby Residences from Exposure to Valley Fever.

Given the proximity of the Project Site to nearby residential receptors to the west of the Site, it is clear that sensitive receptors as well as workers at the project site could be exposed to Valley Fever (*Coccidiodes imimitis)* from fugitive dust generated during construction.

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/6/2025	11/3/2025	5.00	20.0	—
Site Preparation	Site Preparation	11/4/2025	11/18/2025	5.00	10.0	—
Grading	Grading	11/19/2025	12/17/2025	5.00	20.0	—
Building Construction	Building Construction	12/18/2025	11/5/2026	5.00	230	—
Paving	Paving	11/6/2026	11/19/2026	5.00	10.0	—
Architectural Coating	Architectural Coating	7/6/2026	12/4/2026	5.00	110	—

Figure 6: Construction Schedule

According to the CalEEMod model provided in the Air Quality Analysis, the Project will involve 30 days of site preparation and grading. During that time approximately 35.0 acres will be disturbed during the site preparation and grading phases. These activities will release large quantities of dust.

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	17,716	—
Site Preparation	0.00	0.00	15.0	0.00	—
Grading	0.00	112	20.0	0.00	—
Paving	0.00	0.00	0.00	0.00	3.63

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

Figure 7: Earthmoving Activities

Dust exposure is a primary risk factor for contracting Valley Fever (via *Coccidiodes imimitis (cocci)* exposure). When soil containing the *cocci* spores are disturbed by construction activities,

the fungal spores become airborne, exposing construction workers and other nearby sensitive receptors.

The fungus lives in the top 2 to 12 inches of soil. When soil containing this fungus is disturbed by activities such as digging, vehicles, construction activities, dust storms, or during earthquakes, the fungal spores become airborne. The most at-risk populations are construction and agricultural workers.[3] Here, construction workers are the population that would be most directly exposed by the Project. A refereed journal article on occupational exposures notes that "[l]abor groups where occupation involves close contact with the soil are at greater risk, especially if the work involves dusty digging operations."[4]

The potentially exposed population in surrounding areas is much larger than construction workers because the nonselective raising of dust during Project construction will carry the very small spores, 0.002–0.005 millimeters ("mm"), into nonendemic areas, potentially exposing large non-Project-related populations.[5],[6] These very small particles are not controlled by conventional construction dust control mitigation measures.

Recent data from the California Department of Public Health underscore the severity of this public health issue. Since 2016, the number of cases of Valley Fever in San Bernardino County has increased from 1.8 per 100,000 in 2016 to 10.5 in 2022 (an increase of 583%).[7] In 2021, the number

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[3] Lawrence L. Schmelzer and R. Tabershaw, Exposure Factors in Occupational Coccidioidomycosis, *American Journal of Public Health and the Nation's Health*, v. 58, no. 1, 1968, pp. 107–113, Table 3; available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1228046/?page=1.

[4] *Ibid.*, p. 110.

[5] Schmelzer and Tabershaw, 1968, p. 110; Pappagianis and Einstein, 1978

[6] Pappagianis and Einstein, 1978, p. 527 ("The northern areas were not directly affected by the ground level windstorm that had struck Kern County but the dust was lifted to several thousand feet elevation and, borne on high currents, the soil and arthrospores along with some moisture were gently deposited on sidewalks and automobiles as 'a mud storm' that vexed the residents of much of California." The storm originating in Kern County, for example, had major impacts in the San Francisco Bay Area and Sacramento).

[7] CDPH. 2022. Epidemiologic Summary of Valley Fever (Coccidiodomycosis) In California, 2022. Surveillance and Statistics Section, Infection Diseases Branch, Division of Communicable Disease Control, Center For Infectious Diseases,

of cases of Valley Fever in San Bernardino County reached a high of 250 cases. In the first 8 months of 2024, San Bernardino County reported 210 cases, representing a nearly 552% increase over the baseline year of 2016 in only three quarters of the year. Since Valley Fever cases are directly related to the disturbance of soils in the area, the City must directly address the impacts that the project's construction phase will have on the community.

A study in Antelope Valley identified a clear link between soil disturbance - due to large-scale renewable energy construction projects, agricultural management practices and PM_{10} fugitive dust emissions - and increased incidence of coccidioidomycosis.[8]

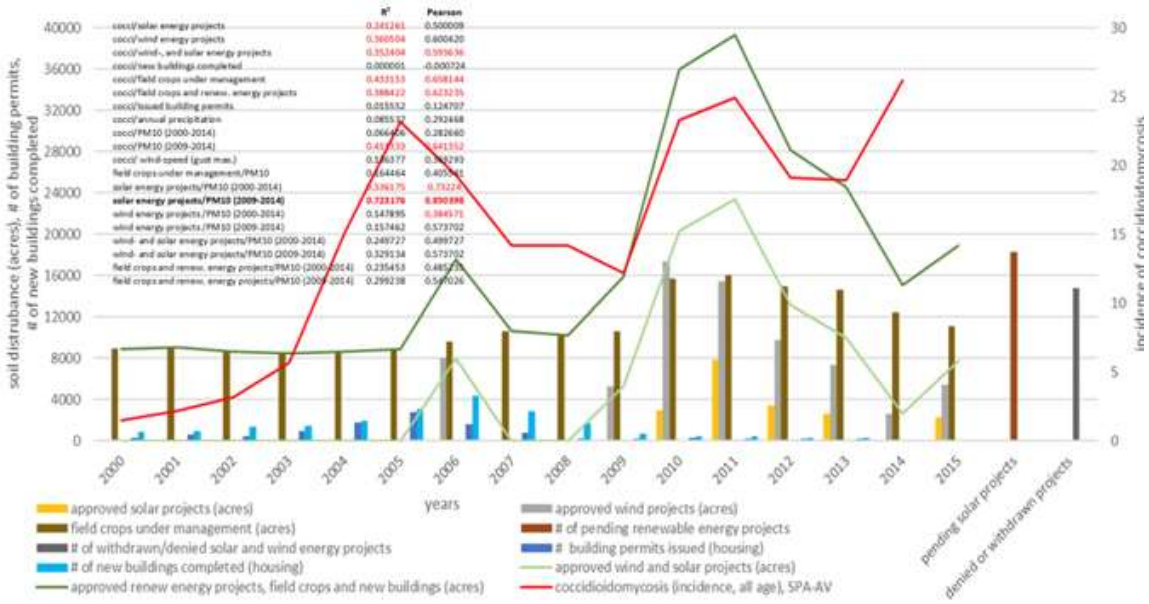

Figure 8: Valley Fever Incidence And Soil Disturbance

It is evident from the figure above that, as the number of acres of soil in the Antelope Valley were disturbed, the incidence rate of Valley Fever also increased. The mass disturbance of soils

California Department of Public Health. https://www.cdph.ca.gov/Programs/CID/DCDC/CDPH%20Document%20Library/CocciEpiSummary2022.pdf

[8] Colson. 2017. Large-Scale Land Development, Fugitive Dust, and Increased Coccidioidomycosis Incidence in the Antelope Valley of California, 1999-2014. https://knowthecause.com/wp-content/uploads/2017/03/Colson2017FugitiveDustCoccidiodes.pdf

anticipated by the proposed Project will create the same conditions that were detailed in the study by Colson. [9]

According to research on Valley Fever, outbreaks in populations with intense exposure to aerosolized arthroconidia are at greater risk for infection.[10] These groups include agricultural or construction workers, or persons who participate in outdoor activities such as hunting or digging in the soil. Outbreaks of coccidioidomycosis have been linked to a variety of activities involving disturbance of impacted soils.[11,12,13,14] Since Valley Fever cases are directly related to the disturbance of soils in the area, the City must directly address the impacts that the project's construction phase will have on the community.

Valley Fever often manifests as a mild respiratory illness, but it can progress to serious chronic forms, especially in immunocompromised individuals, and may even become disseminated,

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[9] *ibid*

[10] Frederick S. Fisher, Mark W. Bultman, and Demosthenes Pappagianis, Operational Guidelines (version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), U.S. Geological Survey Open-File Report 00-348, 2000, pp. 5, 7; https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf.

[11] Brown. Et al. 2013. Coccidioidomycosis: epidemiology. *Clinical Epidemiology*. 5:185-197.

[12] Rafael Laniado-Laborin, Expanding Understanding of Epidemiology of Coccidioidomycosis in the Western Hemisphere, Annals of the New York Academy of Sciences, v. 111, 2007, pp. 20–22, available at https://nyaspubs.onlinelibrary.wiley.com/doi/abs/10.1196/annals.1406.004; Frederick S. Fisher, Mark

W. Bultman, Suzanne M. Johnson, Demosthenes Pappagianis, and Erik Zaborsky, Coccidioides Niches and Habitat Parameters in the Southwestern United States, a Matter of Scale, Annals of the New York Academy of Sciences, v. 111, 2007, pp. 47–72 ("All of the examined soil locations are noteworthy as generally 50% of the individuals who were exposed to the dust or were excavating dirt at the sites were infected."), available at https://nyaspubs.onlinelibrary.wiley.com/doi/abs/10.1196/annals.1406.031.

[13] Lawrence L. Schmelzer and R. Tabershaw, Exposure Factors in Occupational Coccidioidomycosis, American Journal of Public Health and the Nation's Health, v. 58, no. 1, 1968, pp. 107–113, Table 3; available at http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1228046/?page=1.

[14] Frederick S. Fisher, Mark W. Bultman, and Demosthenes Pappagianis, Operational Guidelines (version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), U.S. Geological Survey Open-File Report 00-348, 2000, pp. 5, 7; https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf.

impacting organs including the skin, bones, brain, and spinal cord. Disseminated Valley Fever is associated with severe symptoms like meningitis, painful lesions, and swollen joints.

As shown above, the risk that nearby residences would be exposed to Valley Fever disturbed during Project construction is substantial. This risk would not be mitigated by Rule 403 standard dust control measures, as discussed in the Addendum to the EIR, because the measures do not consider the drift of spores from a Project Site to the adjacent residential structures.

The City should require that the Applicant implement mitigation measures to actively suppress the spread of Valley Fever by implementing the following methods:

1. Include specific requirements in the Project's Injury and Illness Prevention Program (as required by Title 8, Section 3203) regarding safeguards to prevent Valley Fever.
2. Control dust exposure:
    - Rule 403 requires application of nontoxic chemical soil stabilizers according to manufacturers' specifications to inactive construction areas. Additionally, chemical stabilizers should be applied at least 24-hours prior to high wind event.
    - In addition to Rule 403's requirement to apply water to all disturbed areas a minimum of three times per day, watering frequency should be increased to a minimum of *four times per day* if there is any evidence of visible wind-driven fugitive dust.
    - Provide National Institute for Occupational Safety and Health (NIOSH)-approved respirators for workers with a prior history of Valley Fever.
    - Half-face respirators equipped with a minimum N-95 protection factor for use during worker collocation with surface disturbance activities. Half-face respirators equipped with N-100 or P-100 filters should be used during digging activities. Employees should wear respirators when working near earth-moving machinery.
    - Prohibit eating and smoking at the worksite, and provide separate, clean eating areas with hand-washing facilities.
    - Avoid outdoor construction operations during unusually windy conditions or in dust storms.
    - Consider limiting outdoor construction during the fall to essential jobs only, as the

risk of cocci infection is higher during this season.

3. Prevent transport of cocci outside endemic areas:
    - Thoroughly clean equipment, vehicles, and other items before they are moved off-site to other work locations.
    - Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment's floor, sides, and/or tailgate.
    - Load all haul trucks such that the freeboard is not less than six inches when material is transported on any paved public access road and apply water to the top of the load sufficient to limit VDE to 20 percent opacity; or cover haul trucks with a tarp or other suitable cover.
    - Provide workers with coveralls daily, lockers (or other systems for keeping work and street clothing and shoes separate), daily changing and showering facilities.
    - Clothing should be changed after work every day, preferably at the work site.
    - Train workers to recognize that cocci may be transported offsite on contaminated equipment, clothing, and shoes; alternatively, consider installing boot-washing.
    - Post warnings onsite and consider limiting access to visitors, especially those without adequate training and respiratory protection.
4. Improve medical surveillance for employees:
    - Employees should have prompt access to medical care, including suspected work-related illnesses and injuries.
    - Work with a medical professional to develop a protocol to medically evaluate employees who have symptoms of Valley Fever.
    - Consider preferentially contracting with 1-2 clinics in the area and communicate with the health care providers in those clinics to ensure that providers are aware that Valley Fever has been reported in the area. This will increase the likelihood that ill workers will receive prompt, proper and consistent medical care.
    - Respirator clearance should include medical evaluation for all new employees, annual re-evaluation for changes in medical status, and annual training, and fit-testing.

- Skin testing is not recommended for evaluation of Valley Fever.[15]
- If an employee is diagnosed with Valley Fever, a physician must determine if the employee should be taken off work, when they may return to work, and what type of work activities they may perform.

The City must disclose the risk of Valley Fever exposure as a significant impact and should adopt these evidence-based mitigation measures – proven effective in similar construction projects in endemic areas – in a revised addendum to the EIR to ensure comprehensive protection of public health. Standard dust control measures are insufficient for preventing Valley Fever exposure, and only concrete, enforceable steps like those listed above will safeguard both onsite workers and surrounding communities.

The City should also add a requirement to offer filtration for the residences near the Project Site. The use of minimum efficiency reporting value (MERV) 16 filters on the residences nearby would reduce exposure to the spores by as much as 95 percent (95%). Given that the Project will be directly responsible for the generation of the spores into the local environment it is reasonable that they provide the necessary mitigation measures for the surrounding community. This measure should be included in an EIR for the Project.

5. The City Fails To Account For The Potential Hazards From Battery Storage On Site.

According to the Addendum to the EIR, "Solar photovoltaic panels would be installed in collective arrangements on the project site such that the total power generated would augment 80 percent of the project's power needs." The Addendum to the EIR fails to include any information regarding the capacity of the battery storage system or the type of batteries to be deployed at the site. The City's failure to include any specifications of the battery systems results in the failure to analyze the particular hazards presented by the presence of such infrastructure. Frequently identified hazards from battery storage systems include thermal runaway, off-gassing, and stranded energy, along with

[15] Short-term skin tests that produce results within 48 hours are now available. See Kerry Klein, NPR for Central California, New Valley Fever Skin Test Shows Promise, But Obstacles Remain, November 21, 2016; available at http://kvpr.org/post/new-valley-fever-skin-test-shows-promise-obstacles-remain.

discharges of hazardous chemicals from the batteries themselves.

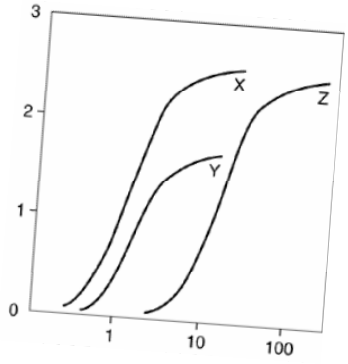
- Thermal runaway - Thermal runaway is the uncontrollable self-heating of a battery cell. It begins when the heat generated within a battery exceeds the amount of heat that can be dissipated to its surroundings. The initial overheated cell then generates flammable and toxic gasses and can reach a heat high enough to ignite those gasses. This phenomenon can cascade to adjacent cells and progress through the battery energy storage system (BESS), thus the term "runaway".
- Off Gassing – The gasses that ae released from battery energy storage systems are highly flammable and toxic. The type of gas released depends on the battery chemistry involved but typically includes gases such as: carbon monoxide, carbon dioxide, hydrogen, methane, ethane, and other hydrocarbons. If the gas is able to reach it's lower explosive limit before finding an ignition source then there is the potential for an explosion
- Stranded Energy – Standard energy is the term used for when a battery has no safe way of discharging its stored energy. This commonly occurs after an BESS fire has been extinguished and the battery terminals have been damaged. This is a shock hazard to those working with the damaged BESS since it still contains an unknown amount of electrical energy. Stranded energy can also lead to reignition of a fire within minute, hours, or even days after the initial event.

Additionally, the environmental impacts from the placement of batteries in the environment needs to be assessed. Specifically, environmental impacts can lead to battery failure. This can be the result of ambient temperature extremes, seismic activity, floods, ingress of debris or corrosive mists such as dust (deserts) or salt fog (marine locations), or rodent damage to wiring. Rapid temperature variations that exist in the foothills of the Sacramento Valley can result in dewing leading to damage within the battery storage systems located outdoors if not well-controlled. The Addendum to the EIR fails to include any meaningful information regarding the proposed battery storage systems. The City must prepare a revised addendum to the EIR to analyze and mitigate the foreseeable environmental impacts from the use of battery storage at the Project site.

Conclusion

The facts identified and referenced in this comment letter lead me to reasonably conclude that the Project could result in significant impacts if allowed to proceed. A revised addendum to the EIR should be prepared to address these substantial concerns.

Sincerely,



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James J. J. Clark, Ph.D.

Principal Toxicologist

Toxicology/Exposure Assessment Modeling

Risk Assessment/Analysis/Dispersion Modeling

Education:

Ph.D., Environmental Health Science, University of California, 1995

M.S., Environmental Health Science, University of California, 1993

B.S., Biophysical and Biochemical Sciences, University of Houston, 1987

Professional Experience:

Dr. Clark is a well recognized toxicologist, air modeler, and health scientist. He has 20 years of experience in researching the effects of environmental contaminants on human health including environmental fate and transport modeling (SCREEN3, AEROMOD, ISCST3, Johnson-Ettinger Vapor Intrusion Modeling); exposure assessment modeling (partitioning of contaminants in the environment as well as PBPK modeling); conducting and managing human health risk assessments for regulatory compliance and risk-based clean-up levels; and toxicological and medical literature research.

Significant projects performed by Dr. Clark include the following:

LITIGATION SUPPORT

Case: James Harold Caygle, et al, v. Drummond Company, Inc. Circuit Court for the Tenth Judicial Circuit, Jefferson County, Alabama. Civil Action. CV-2009

Client: Environmental Litgation Group, Birmingham, Alabama

Dr. Clark performed an air quality assessment of emissions from a coke factory located in Tarrant, Alabama. The assessment reviewed include a comprehensive review of air quality standards, measured concentrations of pollutants from factory, an inspection of the facility and detailed assessment of the impacts on the community. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Rose Roper V. Nissan North America, et al. Superior Court of the State Of California for the County Of Los Angeles – Central Civil West. Civil Action. NC041739

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to multiple chemicals, including benzene, who later developed a respiratory distress. A review of the individual's medical and occupational history was performed to prepare an exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to respiratory irritants. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: O'Neil V. Sherwin Williams, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to petroleum distillates who later developed a bladder cancer. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Summary judgment for defendants.

Case: Moore V., Shell Oil Company, et al. Superior Court of the State Of California for the County Of Los Angeles

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to chemicals while benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Raymond Saltonstall V. Fuller O'Brien, KILZ, and Zinsser, et al. United States District Court Central District of California

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to benzene who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a quantitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Richard Boyer and Elizabeth Boyer, husband and wife, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-7G.

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: JoAnne R. Cook, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-9R

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of an individual exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Patrick Allen And Susan Allen, husband and wife, and Andrew Allen, a minor, V. DESCO Corporation, et al. Circuit Court of Brooke County, West Virginia. Civil Action Number 04-C-W

Client: Frankovitch, Anetakis, Colantonio & Simon, Morgantown, West Virginia.

Dr. Clark performed a toxicological assessment of a family exposed to chlorinated solvents released from the defendant's facility into local drinking water supplies. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to chlorinated solvents. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Michael Fahey, Susan Fahey V. Atlantic Richfield Company, et al. United States District Court Central District of California Civil Action Number CV-06 7109 JCL.

Client: Rose, Klein, Marias, LLP, Long Beach, California

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Settlement in favor of plaintiff.

Case: Constance Acevedo, et al., V. California Spray-Chemical Company, et al., Superior Court of the State Of California, County Of Santa Cruz. Case No. CV 146344

Dr. Clark performed a comprehensive exposure assessment of community members exposed to toxic metals from a former lead arsenate manufacturing facility. The former manufacturing site had undergone a DTSC mandated removal action/remediation for the presence of the toxic metals at the site. Opinions were presented regarding the elevated levels of arsenic and lead (in attic dust and soils) found throughout the community and the potential for harm to the plaintiffs in question.

Case Result: Settlement in favor of defendant.

Case: Michael Nawrocki V. The Coastal Corporation, Kurk Fuel Company, Pautler Oil Service, State of New York Supreme Court, County of Erie, Index Number I2001-11247

Client: Richard G. Berger Attorney At Law, Buffalo, New York

Dr. Clark performed a toxicological assessment of an individual occupationally exposed to refined petroleum hydrocarbons who later developed a leukogenic disease. A review of the individual's medical and occupational history was performed to prepare a qualitative exposure assessment. The exposure assessment was evaluated against the

known outcomes in published literature to exposure to refined petroleum hydrocarbons. The results of the assessment and literature have been provided in a declaration to the court.

Case Result: Judgement in favor of defendant.

SELECTED AIR MODELING RESEARCH/PROJECTS

Client – Confidential

Dr. Clark performed a comprehensive evaluation of criteria pollutants, air toxins, and particulate matter emissions from a carbon black production facility to determine the impacts on the surrounding communities. The results of the dispersion model will be used to estimate acute and chronic exposure concentrations to multiple contaminants and will be incorporated into a comprehensive risk evaluation.

Client – Confidential

Dr. Clark performed a comprehensive evaluation of air toxins and particulate matter emissions from a railroad tie manufacturing facility to determine the impacts on the surrounding communities. The results of the dispersion model have been used to estimate acute and chronic exposure concentrations to multiple contaminants and have been incorporated into a comprehensive risk evaluation.

Client – Los Angeles Alliance for a New Economy (LAANE), Los Angeles, California

Dr. Clark is advising the LAANE on air quality issues related to current flight operations at the Los Angeles International Airport (LAX) operated by the Los Angeles World Airport (LAWA) Authority. He is working with the LAANE and LAX staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client – City of Santa Monica, Santa Monica, California

Dr. Clark is advising the City of Santa Monica on air quality issues related to current flight operations at the facility. He is working with the City staff to develop a comprehensive strategy for meeting local community concerns over emissions from flight operations and to engage federal agencies on the issue of local impacts of community airports.

Client: Omnitrans, San Bernardino, California

Dr. Clark managed a public health survey of three communities near transit fueling facilities in San Bernardino and Montclair California in compliance with California Senate Bill 1927. The survey included an epidemiological survey of the effected communities, emission surveys of local businesses, dispersion modeling to determine potential emission concentrations within the communities, and a comprehensive risk assessment of each community. The results of the study were presented to the Governor as mandated by Senate Bill 1927.

Client: Confidential, San Francisco, California

Summarized cancer types associated with exposure to metals and smoking. Researched the specific types of cancers associated with exposure to metals and smoking. Provided causation analysis of the association between cancer types and exposure for use by non-public health professionals.

Client: Confidential, Minneapolis, Minnesota

Prepared human health risk assessment of workers exposed to VOCs from neighboring petroleum storage/transport facility. Reviewed the systems in place for distribution of petroleum hydrocarbons to identify chemicals of concern (COCs), prepared comprehensive toxicological summaries of COCs, and quantified potential risks from carcinogens and non-carcinogens to receptors at or adjacent to site. This evaluation was used in the support of litigation.

Client – United Kingdom Environmental Agency

Dr. Clark is part of team that performed comprehensive evaluation of soil vapor intrusion of VOCs from former landfill adjacent residences for the United Kingdom's Environment

Agency. The evaluation included collection of liquid and soil vapor samples at site, modeling of vapor migration using the Johnson Ettinger Vapor Intrusion model, and calculation of site-specific health based vapor thresholds for chlorinated solvents, aromatic hydrocarbons, and semi-volatile organic compounds. The evaluation also included a detailed evaluation of the use, chemical characteristics, fate and transport, and toxicology of chemicals of concern (COC). The results of the evaluation have been used as a briefing tool for public health professionals.

EMERGING/PERSISTENT CONTAMINANT RESEARCH/PROJECTS

Client: Ameren Services, St. Louis, Missouri

Managed the preparation of a comprehensive human health risk assessment of workers and residents at or near an NPL site in Missouri. The former operations at the Property included the servicing and repair of electrical transformers, which resulted in soils and groundwater beneath the Property and adjacent land becoming impacted with PCB and chlorinated solvent compounds. The results were submitted to U.S. EPA for evaluation and will be used in the final ROD.

Client: City of Santa Clarita, Santa Clarita, California

Dr. Clark is managing the oversight of the characterization, remediation and development activities of a former 1,000 acre munitions manufacturing facility for the City of Santa Clarita. The site is impacted with a number of contaminants including perchlorate, unexploded ordinance, and volatile organic compounds (VOCs). The site is currently under a number of regulatory consent orders, including an Immanent and Substantial Endangerment Order. Dr. Clark is assisting the impacted municipality with the development of remediation strategies, interaction with the responsible parties and stakeholders, as well as interfacing with the regulatory agency responsible for oversight of the site cleanup.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of perchlorate in environment. Dr. Clark evaluated the production, use, chemical characteristics, fate and transport, toxicology, and remediation of perchlorate. Perchlorates form the basis of solid rocket fuels and have recently been detected in water supplies in the United States. The results of this research

were presented to the USEPA, National GroundWater, and ultimately published in a recent book entitled *Perchlorate in the Environment.*

Client – Confidential, Los Angeles, California

Dr. Clark is performing a comprehensive review of the potential for pharmaceuticals and their by-products to impact groundwater and surface water supplies. This evaluation will include a review if available data on the history of pharmaceutical production in the United States; the chemical characteristics of various pharmaceuticals; environmental fate and transport; uptake by xenobiotics; the potential effects of pharmaceuticals on water treatment systems; and the potential threat to public health. The results of the evaluation may be used as a briefing tool for non-public health professionals.

PUBLIC HEALTH/TOXICOLOGY

Client: Brayton Purcell, Novato, California

Dr. Clark performed a toxicological assessment of residents exposed to methyl-tertiary butyl ether (MTBE) from leaking underground storage tanks (LUSTs) adjacent to the subject property. The symptomology of residents and guests of the subject property were evaluated against the known outcomes in published literature to exposure to MTBE. The study found that residents had been exposed to MTBE in their drinking water; that concentrations of MTBE detected at the site were above regulatory guidelines; and, that the symptoms and outcomes expressed by residents and guests were consistent with symptoms and outcomes documented in published literature.

Client: Confidential, San Francisco, California

Identified and analyzed fifty years of epidemiological literature on workplace exposures to heavy metals. This research resulted in a summary of the types of cancer and non-cancer diseases associated with occupational exposure to chromium as well as the mortality and morbidity rates.

Client: Confidential, San Francisco, California

Summarized major public health research in United States. Identified major public health research efforts within United States over last twenty years. Results were used as a briefing tool for non-public health professionals.

Client: Confidential, San Francisco, California

Quantified the potential multi-pathway dose received by humans from a pesticide applied indoors. Part of team that developed exposure model and evaluated exposure concentrations in a comprehensive report on the plausible range of doses received by a specific person. This evaluation was used in the support of litigation.

Client: Covanta Energy, Westwood, California

Evaluated health risk from metals in biosolids applied as soil amendment on agricultural lands. The biosolids were created at a forest waste cogeneration facility using 96% whole tree wood chips and 4 percent green waste. Mass loading calculations were used to estimate Cr(VI) concentrations in agricultural soils based on a maximum loading rate of 40 tons of biomass per acre of agricultural soil. The results of the study were used by the Regulatory agency to determine that the application of biosolids did not constitute a health risk to workers applying the biosolids or to residences near the agricultural lands.

Client – United Kingdom Environmental Agency

Oversaw a comprehensive toxicological evaluation of methyl-*tertiary* butyl ether (M*t*BE) for the United Kingdom's Environment Agency. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of M*t*BE. The results of the evaluation have been used as a briefing tool for public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of *tertiary* butyl alcohol (TBA) in municipal drinking water system. TBA is the primary breakdown product of M*t*BE, and is suspected to be the primary cause of M*t*BE toxicity. This evaluation will include available information on the production, use, chemical characteristics, fate and transport in the environment, absorption, distribution, routes of detoxification, metabolites, carcinogenic potential, and remediation of TBA. The results of the evaluation were used as a briefing tool for non-public health professionals.

Client – Confidential, Los Angeles, California

Prepared comprehensive evaluation of methyl *tertiary* butyl ether (MTBE) in municipal drinking water system. MTBE is a chemical added to gasoline to increase the octane

rating and to meet Federally mandated emission criteria. The evaluation included available data on the production, use, chemical characteristics, fate and transport, toxicology, and remediation of MTBE. The results of the evaluation have been were used as a briefing tool for non-public health professionals.

Client – Ministry of Environment, Lands & Parks, British Columbia

Dr. Clark assisted in the development of water quality guidelines for methyl tertiary-butyl ether (MTBE) to protect water uses in British Columbia (BC). The water uses to be considered includes freshwater and marine life, wildlife, industrial, and agricultural (e.g., irrigation and livestock watering) water uses. Guidelines from other jurisdictions for the protection of drinking water, recreation and aesthetics were to be identified.

Client: Confidential, Los Angeles, California

Prepared physiologically based pharmacokinetic (PBPK) assessment of lead risk of receptors at middle school built over former industrial facility. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client: Kaiser Venture Incorporated, Fontana, California

Prepared PBPK assessment of lead risk of receptors at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

RISK ASSESSMENTS/REMEDIAL INVESTIGATIONS

Client: Confidential, Atlanta, Georgia

Researched potential exposure and health risks to community members potentially exposed to creosote, polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxin compounds used at a former wood treatment facility. Prepared a comprehensive toxicological summary of the chemicals of concern, including the chemical characteristics, absorption, distribution, and carcinogenic potential. Prepared risk characterization of the carcinogenic and non-carcinogenic chemicals based on the exposure assessment to quantify the potential risk to members of the surrounding community. This evaluation was used to help settle class-action tort.

Client: Confidential, Escondido, California

Prepared comprehensive Preliminary Endangerment Assessment (PEA) of dense non-aqueous liquid phase hydrocarbon (chlorinated solvents) contamination at a former printed circuit board manufacturing facility. This evaluation was used for litigation support and may be used as the basis for reaching closure of the site with the lead regulatory agency.

Client: Confidential, San Francisco, California

Summarized epidemiological evidence for connective tissue and autoimmune diseases for product liability litigation. Identified epidemiological research efforts on the health effects of medical prostheses. This research was used in a meta-analysis of the health effects and as a briefing tool for non-public health professionals.

Client: Confidential, Bogotá, Columbia

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of a 13.7 hectares plastic manufacturing facility in Bogotá, Colombia The risk assessment was used as the basis for the remedial goals and closure of the site.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally cadmium) and VOCs from soil and soil vapor at 12-acre former crude oilfield and municipal landfill. The site is currently used as a middle school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and was used as the basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Managed remedial investigation (RI) of heavy metals and volatile organic chemicals (VOCs) for a 15-acre former manufacturing facility. The RI investigation of the site included over 800 different sampling locations and the collection of soil, soil gas, and groundwater samples. The site is currently used as a year round school housing approximately 3,000 children. The Remedial Investigation was performed in a manner

that did not interrupt school activities and met the time restrictions placed on the project by the overseeing regulatory agency. The RI Report identified the off-site source of metals that impacted groundwater beneath the site and the sources of VOCs in soil gas and groundwater. The RI included a numerical model of vapor intrusion into the buildings at the site from the vadose zone to determine exposure concentrations and an air dispersion model of VOCs from the proposed soil vapor treatment system. The Feasibility Study for the Site is currently being drafted and may be used as the basis for granting closure of the site by DTSC.

Client: Confidential, Los Angeles, California

Prepared comprehensive human health risk assessment of students, staff, and residents potentially exposed to heavy metals (principally lead), VOCs, SVOCs, and PCBs from soil, soil vapor, and groundwater at 15-acre former manufacturing facility. The site is currently used as a year round school housing approximately 3,000 children. The evaluation determined that the site was safe for the current and future uses and will be basis for regulatory closure of site.

Client: Confidential, Los Angeles, California

Prepared comprehensive evaluation of VOC vapor intrusion into classrooms of middle school that was former 15-acre industrial facility. Using the Johnson-Ettinger Vapor Intrusion model, the evaluation determined acceptable soil gas concentrations at the site that did not pose health threat to students, staff, and residents. This evaluation is being used to determine cleanup goals and will be basis for regulatory closure of site.

Client –Dominguez Energy, Carson, California

Prepared comprehensive evaluation of the potential health risks associated with the redevelopment of 6-acre portion of a 500-acre oil and natural gas production facility in Carson, California. The risk assessment was used as the basis for closure of the site.

Kaiser Ventures Incorporated, Fontana, California

Prepared health risk assessment of semi-volatile organic chemicals and metals for a fifty-year old wastewater treatment facility used at a 1,100-acre former steel mill. This evaluation was used as the basis for granting closure of the site by lead regulatory agency.

ANR Freight - Los Angeles, California

Prepared a comprehensive Preliminary Endangerment Assessment (PEA) of petroleum hydrocarbon and metal contamination of a former freight depot. This evaluation was as the basis for reaching closure of the site with lead regulatory agency.

Kaiser Ventures Incorporated, Fontana, California

Prepared comprehensive health risk assessment of semi-volatile organic chemicals and metals for 23-acre parcel of a 1,100-acre former steel mill. The health risk assessment was used to determine clean up goals and as the basis for granting closure of the site by lead regulatory agency. Air dispersion modeling using ISCST3 was performed to determine downwind exposure point concentrations at sensitive receptors within a 1 kilometer radius of the site. The results of the health risk assessment were presented at a public meeting sponsored by the Department of Toxic Substances Control (DTSC) in the community potentially affected by the site.

Unocal Corporation - Los Angeles, California

Prepared comprehensive assessment of petroleum hydrocarbons and metals for a former petroleum service station located next to sensitive population center (elementary school). The assessment used a probabilistic approach to estimate risks to the community and was used as the basis for granting closure of the site by lead regulatory agency.

Client: Confidential, Los Angeles, California

Managed oversight of remedial investigation most contaminated heavy metal site in California. Lead concentrations in soil excess of 68,000,000 parts per billion (ppb) have been measured at the site. This State Superfund Site was a former hard chrome plating operation that operated for approximately 40-years.

Client: Confidential, San Francisco, California

Coordinator of regional monitoring program to determine background concentrations of metals in air. Acted as liaison with SCAQMD and CARB to perform co-location sampling and comparison of accepted regulatory method with ASTM methodology.

Client: Confidential, San Francisco, California

Analyzed historical air monitoring data for South Coast Air Basin in Southern California and potential health risks related to ambient concentrations of carcinogenic metals and volatile organic compounds. Identified and reviewed the available literature and calculated risks from toxins in South Coast Air Basin.

IT Corporation, North Carolina

Prepared comprehensive evaluation of potential exposure of workers to air-borne VOCs at hazardous waste storage facility under SUPERFUND cleanup decree. Assessment used in developing health based clean-up levels.

Professional Associations

American Public Health Association (APHA)
Association for Environmental Health and Sciences (AEHS)
American Chemical Society (ACS)
California Redevelopment Association (CRA)
International Society of Environmental Forensics (ISEF)
Society of Environmental Toxicology and Chemistry (SETAC)

Publications and Presentations:

Books and Book Chapters

Sullivan, P., **J.J. J. Clark,** F.J. Agardy, and P.E. Rosenfeld. (2007). *Synthetic Toxins In The Food, Water and Air of American Cities*. Elsevier, Inc. Burlington, MA.

Sullivan, P. and **J.J. J. Clark**. 2006. *Choosing Safer Foods, A Guide To Minimizing Synthetic Chemicals In Your Diet*. Elsevier, Inc. Burlington, MA.

Sullivan, P., Agardy, F.J., and **J.J.J. Clark**. 2005. *The Environmental Science of Drinking Water*. Elsevier, Inc. Burlington, MA.

Sullivan, P.J., Agardy, F.J., **Clark, J.J.J.** 2002. *America's Threatened Drinking Water: Hazards and Solutions*. Trafford Publishing, Victoria B.C.

Clark, J.J.J. 2001. "TBA: Chemical Properties, Production & Use, Fate and Transport, Toxicology, Detection in Groundwater, and Regulatory Standards" in *Oxygenates in the Environment.* Art Diaz, Ed.. Oxford University Press: New York.

Clark, J.J.J. 2000. "Toxicology of Perchlorate" in *Perchlorate in the Environment.* Edward Urbansky, Ed. Kluwer/Plenum: New York.

Clark, J.J.J. 1995. Probabilistic Forecasting of Volatile Organic Compound Concentrations At The Soil Surface From Contaminated Groundwater. UMI.

Baker, J.; **Clark, J.J.J.**; Stanford, J.T. 1994. Ex Situ Remediation of Diesel Contaminated Railroad Sand by Soil Washing. Principles and Practices for Diesel Contaminated Soils, Volume III. P.T. Kostecki, E.J. Calabrese, and C.P.L. Barkan, eds. Amherst Scientific Publishers, Amherst, MA. pp 89-96.

Journal and Proceeding Articles

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) A Statistical Analysis Of Attic Dust And Blood Lipid Concentrations Of Tetrachloro-p-Dibenzodioxin (TCDD) Toxicity Equialency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. Organohalogen Compounds, Volume 70 (2008) page 002254.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008) Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. Organohalogen Compounds, Volume 70 (2008) page 000527

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** (2007). "Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." *Environmental Research.* 105:194-199.

Rosenfeld, P.E., **Clark, J. J.,** Hensley, A.R., and Suffet, I.H. 2007. "The Use Of An Odor Wheel Classification For The Evaluation of Human Health Risk Criteria For Compost Facilities" Water Science & Technology. 55(5): 345-357.

Hensley A.R., Scott, A., Rosenfeld P.E., **Clark, J.J.J.** 2006. "Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility." The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006, August 21 – 25, 2006. Radisson SAS Scandinavia Hotel in Oslo Norway.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2005. "The Value Of An Odor Quality Classification Scheme For Compost Facility Evaluations" The U.S. Composting Council's 13th Annual Conference January 23 - 26, 2005, Crowne Plaza Riverwalk, San Antonio, TX.

Rosenfeld, P.E., **Clark, J. J.** and Suffet, I.H. 2004. "The Value Of An Odor Quality Classification Scheme For Urban Odor" WEFTEC 2004. 77th Annual Technical Exhibition & Conference October 2 - 6, 2004, Ernest N. Morial Convention Center, New Orleans, Louisiana.

Clark, J.J.J. 2003. "Manufacturing, Use, Regulation, and Occurrence of a Known Endocrine Disrupting Chemical (EDC), 2,4-Dichlorophnoxyacetic Acid (2,4-D) in California Drinking Water Supplies." National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Minneapolis, MN. March 20, 2003.

Rosenfeld, P. and **J.J.J. Clark**. 2003. "Understanding Historical Use, Chemical Properties, Toxicity, and Regulatory Guidance" National Groundwater Association Southwest Focus Conference: Water Supply and Emerging Contaminants. Phoenix, AZ. February 21, 2003.

Clark, J.J.J., Brown A. 1999. Perchlorate Contamination: Fate in the Environment and Treatment Options. In Situ and On-Site Bioremediation, Fifth International Symposium. San Diego, CA, April, 1999.

Clark, J.J.J. 1998. Health Effects of Perchlorate and the New Reference Dose (RfD). Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Browne, T., **Clark, J.J.J.** 1998. Treatment Options For Perchlorate In Drinking Water. Proceedings From the Groundwater Resource Association Seventh Annual Meeting, Walnut Creek, CA, October 23, 1998.

Clark, J.J.J., Brown, A., Rodriguez, R. 1998. The Public Health Implications of MtBE and Perchlorate in Water: Risk Management Decisions for Water Purveyors. Proceedings of the National Ground Water Association, Anaheim, CA, June 3-4, 1998.

Clark J.J.J., Brown, A., Ulrey, A. 1997. Impacts of Perchlorate On Drinking Water In The Western United States. U.S. EPA Symposium on Biological and Chemical Reduction of Chlorate and Perchlorate, Cincinnati, OH, December 5, 1997.

Clark, J.J.J.; Corbett, G.E.; Kerger, B.D.; Finley, B.L.; Paustenbach, D.J. 1996. Dermal Uptake of Hexavalent Chromium In Human Volunteers: Measures of Systemic Uptake From Immersion in Water At 22 PPM. Toxicologist. 30(1):14.

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Paulo, M.T.; Gong, H., Jr.; **Clark, J.J.J.** (1992). Effects of Pretreatment with Ipratroprium Bromide in COPD Patients Exposed to Ozone. American Review of Respiratory Disease. 145(4):A96.

Harber, P.H.; Gong, H., Jr.; Lachenbruch, A.; **Clark, J.**; Hsu, P. (1992). Respiratory Pattern Effect of Acute Sulfur Dioxide Exposure in Asthmatics. American Review of Respiratory Disease. 145(4):A88.

McManus, M.S.; Gong, H., Jr.; Clements, P.; **Clark, J.J.J.** (1991). Respiratory Response of Patients With Interstitial Lung Disease To Inhaled Ozone. American Review of Respiratory Disease. 143(4):A91.

Gong, H., Jr.; Simmons, M.S.; McManus, M.S.; Tashkin, D.P.; Clark, V.A.; Detels, R.; **Clark, J.J.** (1990). Relationship Between Responses to Chronic Oxidant and Acute

Ozone Exposures in Residents of Los Angeles County. American Review of Respiratory Disease. 141(4):A70.

Tierney, D.F. and **J.J.J. Clark.** (1990). Lung Polyamine Content Can Be Increased By Spermidine Infusions Into Hyperoxic Rats. American Review of Respiratory Disease. 139(4):A41.

EXHIBIT C

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #25-002.12

August 6, 2025

Victoria Yundt
Lozeau | Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94612

SUBJECT: Chino Gateway Terminal Project
City of Chino, CA
Review and Comment on Noise Study

Dear Ms. Yundt,

Per your request, Wilson Ihrig has reviewed the information and noise impact analysis in the following documents:

Envision Chino, City of Chino General Plan 2025, July 2010 (General Plan)
Chino Gateway Terminal Project
Addendum to the City of Chino General Plan EIR, June 2025 (Addendum)
Appendix A Vehicles and Light Dury Truck Custom Report (App. A)
Appendix I.1 Noise Survey Sheets (App. I.1)
Appendix 1.2 SoundPLAN Day and Night Noise Levels (App. I.2)
Appendix J Traffic Impact Analysis (App. J)

The Proposed Chino Gateway Terminal Project (Project) would result in the demolition of existing structures and construction of a 158,548 square-foot warehouse building and a 3,520 square-foot multi-tenant restaurant building. The project site is surrounded by industrial uses to the east, west and south and single family house across Schaefer Avenue to the north.

Wilson Ihrig, Acoustical Consultants, has practiced exclusively in the field of acoustics since 1966. During our 57 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CADNA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise[1]

Although the health effects of noise are not taken as seriously in the United States as they are in other countries, they are real and, in many parts of the country, pervasive.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result.

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as cognitive decline, increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and it makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

[1] More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (https://iris.who.int/handle/10665/66217)

Potentially Significant Construction Noise Impacts

The Addendum underestimates construction noise and does not disclose potentially significant impacts. The anticipated construction noise levels reported in the Addendum are up to 70 dBA [p. 2-83]. The City of Chino General Plan limits noise from construction activities below 65 dBA, in accordance with Municipal Code Section 9.40.040(B) [General Plan, p. N-10]. The Addendum does not mention this limit or discuss how this impact will be addressed.

Further, the construction noise analysis is unsupported. The Addendum discusses noise levels predicted from the middle of the site (400 feet), even though the Addendum acknowledges that the nearest single-family residences are located 90 feet north of the edge of the site [p. 2-83]. The source of the range of construction levels shown in the Addendum is not cited and the report does not provide an equipment list for construction phases or equipment reference levels.

The air emissions report provided in Appendix A does contain construction equipment lists. The Federal Highway Administration's Roadway Noise Construction Model (RCNM) provides reference Lmax levels for construction equipment and usage factors, which account for power variation and the fraction of time each piece is typically used on site. The Addendum could have used this information to calculate noise levels based on the actual anticipated construction activities on site. As shown in Table 1 below, noise levels from construction activities at residences closest to the Project site are expected to be up to 81 dBA, 11 dB higher than the reported construction levels.

Table 1 Estimated Construction Noise Levels at Nearest Residences

Activity	Equipment	Usage (%)	Ref. Lmax at 50 ft. (dBA)	Dist. to Nearest Residence (ft.)	Lmax at Residence (dBA)	Leq at Residence (dBA)
Demo	concrete saw	20	90	90	85	78
	excavator	40	85	90	80	76
	dozer	40	85	90	80	76
	Total:					**81**
Site Prep	dozer	40	85	90	80	76
	loader/backhoe	40	80	90	75	71
	Total:					**77**
Grading	excavator	40	85	90	80	76
	grader	40	85	90	80	76
	dozer	40	85	90	80	76
	loader/backhoe	40	80	90	75	71
	Total:					**81**

California Environmental Quality Act Guidelines cited in the Addendum state that impacts to noise would be significant if the proposed project would result in "generation of a substantial temporary or permanent increase in ambient noise levels" [p. 2-33]. The Addendum lacks a significance threshold for "substantial increase" for Project construction noise. Daytime ambient levels measured at nearby homes (LT-2) are reported to be 68 to 73 dBA in the Addendum [p. 2-85]. The estimated

construction noise levels from demolition and grading of 81 dBA are not only above the General Plan limit, but 8 to 13 dB above the measured ambient.

As shown in Figure 3-6 of the Federal Transit Authority Noise and Vibration Impact Assessment Manual Noise (FTA Manual)[2], which is based on actual case studies, community reaction to newly introduced noise gets stronger as noise above existing levels increases. Reactions to increases between 5 to 10 dB varied from "widespread complaints" to "threats of legal action."

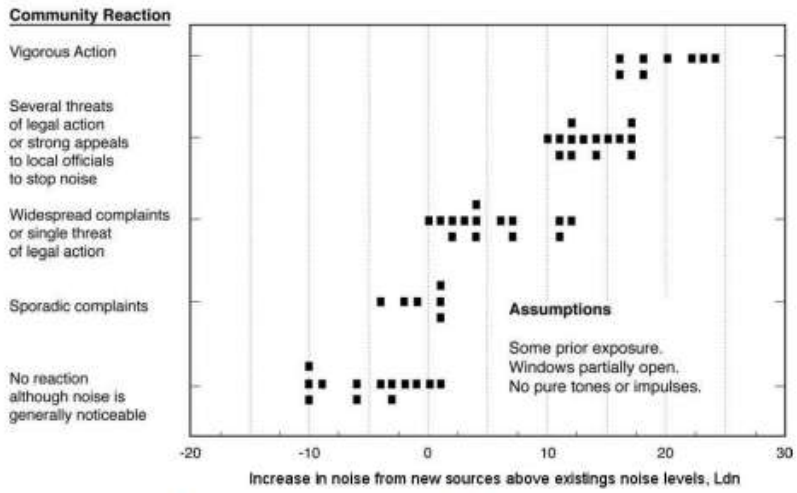

Figure 3-6 Community Reaction to New Noise, Relative to Existing Noise in a Residential Urban Environment

Figure 1 FTA Noise and Vibration Impact Assessment, Section on Construction Noise and Vibration (FTA page 18)

The Addendum indicates that the Project will prepare a construction management plan to ensure construction does not take place outside of allowable hours, but again omits any mention of the General Plan limit for construction noise [p. 2-85]. The report states that temporary noise barriers would be used. However, it does not indicate where the barriers would be placed (which impacts their effectiveness) or how much reduction they are expected to provide. The noise barriers are not explicitly called out as a mitigation measure.

The errors and omissions in the underlying data render the construction noise analysis unreliable. Noise impacts must be re-evaluated utilizing anticipated construction activities and properly established criteria. Mitigation measures such as enclosures, relocating staging areas and stationary equipment, temporary noise barriers, and noise monitoring should be considered to reduce potentially significant construction noise impacts.

[2] https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Potentially Significant Truck Noise Impacts

The Addendum does not address potentially significant impacts from trucks coming in and out of the Schaefer Avenue driveway. The Project Description indicates that trucks will use the western driveway along Schaefer Avenue and the southern driveway along Oaks Avenue [p. 12]. As shown in Figure 4 of the Addendum, the Schaefer Avenue driveway is planned to be directly across from sensitive residences, located 90 feet from the Project site. As further discussed in the Project Description, the industrial facility is anticipated to have 24 hour per day and 7 days a week hours of operation [p. 12]. The traffic analysis in Appendix J shows that the warehouse building will generate 28 total truck trips during the P.M. peak hour [App. J, Table A]. There is no information on anticipated nighttime truck traffic activity.

The Addendum discusses truck noise at the loading docks, which are shielded from homes, but does not give a quantitative analysis of truck noise in the driveway, which is not shielded from homes. The operational noise SoundPLAN model shown in Appendix J.2 does not include either driveway as a noise source. The Addendum cites a level of 76 dBA at 20 feet for "short term noise levels that occur during the docking process" based on previous measurements for another warehouse project and acknowledges that trucks would arrive on site and maneuver their trailers to the loading docks [p. 2-88].

Using the reference level provided by the Addendum, truck noise at the Schaefer Avenue driveway is estimated to be 63 dBA at the nearest residences (90 feet from the site), which exceeds both the daytime (50 dBA) and nighttime (45 dBA) noise standards cited in the Addendum. The estimated truck noise is 4 dB above the nighttime ambient measured by the Project. The Addendum lacks a significance threshold for "substantial increase" for operational noise. However, it acknowledges that a 3 dB difference would be perceptible to residents [p. 2-85].

The Leq represents noise from multiple truck events over a period of time (in this case, one hour). Single event truck noise at night can cause sleep disturbance. Reliance on the hourly Leq as the significance threshold is inadequate to assess the significance of truck noise on sleep disturbance. A 2018 review article by Basner and McGuire, titled *WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Effects on Sleep* and published in the International Journal of Environmental Research and Public Health (shown in Figure 2) uses data from two fairly large studies of sleep disturbance due to road traffic to estimate the effect of single traffic noise events on sleep.[3]

Lmax levels used in Figure 2 describe the highest "instantaneous" noise level during a specified time period, caused by short duration noises such as a truck passby, pneumatic brake air release, backup alarm, etc. As explained by FHWA-HEP-17-053, the maximum sound level is important in judging the interference caused by a noise event with common activities.[4] FHWA RCNM uses a reference Lmax of 84 dBA for truck noise at 50 feet. As show below, this would result in an interior Lmax level of 46 dBA at the nearest residence. This assumes 15-dB reduction from a partially open window, which is standard practice for acoustical analyses in California. As shown in Figure 2, this level has an approximately 10% chance of disturbing sleep.

[3] International Journal of Environmental Research and Public Health 2018, 15, 519; doi:10.3390/ijerph15030519
[4] https://www.fhwa.dot.gov/Environment/noise/resources/sound_descr.cfm

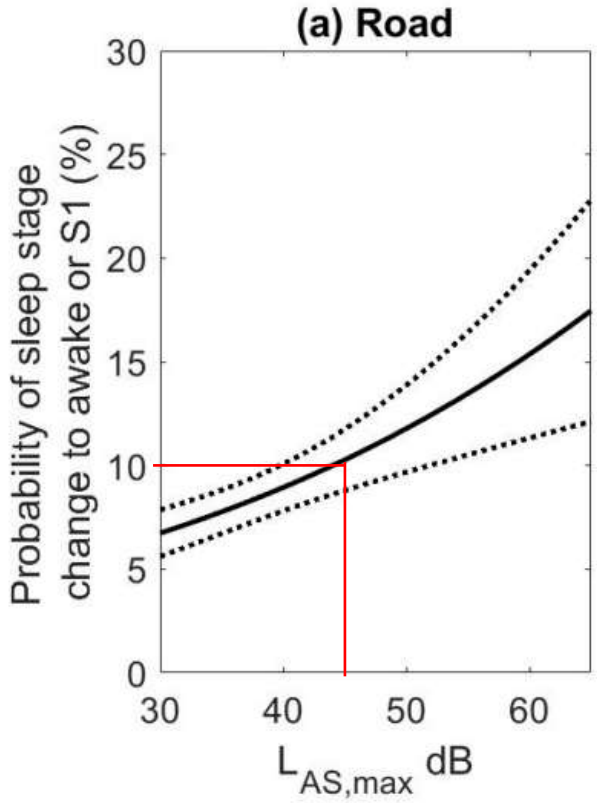

Figure 2 From Basner (2018), Figure 4 Probability of Sleep Disturbance

Mitigation measures could include operational conditions such as prohibiting line-haul trucks during nighttime hours, or routing nighttime line-haul trucks away from residential areas, or off-site mitigation in the form of new windows and mechanical ventilation for bedrooms affected by the nighttime line-haul operations. General Plan Objective N-1.2, Policy P1 requires the minimization of transportation noise through street and right-of-way design or route coordination [General Plan, p. N-31]. The Project should consider rerouting truck traffic away from the planned Schaeffer Avenue driveway and nearby residences.

Mechanical Noise Analysis Contains Errors and Omissions

The Addendum acknowledges that the results of the SoundPLAN model presented in Appendix I.2 exceed nighttime limits but does not discuss mitigation measures [p. 2-88]. Further, it appears that the SoundPLAN contours in Appendix I.2 do not include the contribution from all of the noise sources in the model and underestimates mechanical noise. The Addendum states the analysis used a reference sound power level of 87 dBA for HVAC units [p. 2-88]. The SoundPLAN model shows four HVAC units for the warehouse facility, about 180 feet from sensitive receptors, but does not show a contour from these sources. Four HVAC units at the referenced sound power level would result in a sound pressure level of 50 dBA at 180 feet, which is over the daytime and nighttime residential limits.

Further, four HVAC units are not sufficient for the ventilation needs of the planned building. For warehouses, The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) minimum ventilation rate is 0.06 CFM per square foot, per person, which must be adjusted

for occupancy rates, indoor air quality, and other factors.[5] The most common large unit size is 25 tons. A simple calculation using a rule of thumb for industrial buildings (see Figure 1 below) shows that a warehouse of this size would need at least 25 units (spread out across the roof) to properly ventilate the space. Ten of these units along the edge of the building would result in noise levels of 54 dBA at 180 feet.

$$158{,}148 \text{ sq. ft} \div 250 \text{ sq. ft. per ton} = 634 \text{ ton load}$$
$$634 \text{ ton load} \div 25 \text{ tons per unit} = 25 \text{ units}$$

The SoundPlan model for operational noise should have at the very least included the units along the roof parameter closest to sensitive receptors. **The HVAC noise predictions should be updated to reflect realistic equipment assumptions.**

Figure 3 Industrial Building Cooling Load, Rule of Thumb[6]

Traffic Analysis Missing Validation

The modeled levels for existing traffic along Shaeffer Avenue are lower than measured levels reported in the Addendum. Table K shows a CNEL of 67.4 dBA between Benson Avenue and Oaks Avenue [p. 2-86]. Table J shows a measured Ldn of 75.3 dBA at LT-2, 8 dB higher [p. 2-85]. The DEIR does not discuss this discrepancy or apply a calibration factor to the traffic noise model. Further, there is no explanation for why two different metrics were used to show measured and modeled existing levels. The CNEL level includes an additional 5 dB penalty for evening hours.

The Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol (TeNS) provides procedures for traffic studies, including a discussion of model accuracy tolerances.[7] The TeNS recommends that "differences of 5 dBA or more should be approached with caution" when validating traffic noise models [TeNS p. 4-13]. **The Project should address this discrepancy and validate the traffic model using measured baseline data.**

[5] https://www.ashrae.org/file%20library/technical%20resources/standards%20and%20guidelines/standards%20addenda/62_1_2013_p_20150707.pdf
[6] https://www.engproguides.com/hvac-rule-of-thumb-calculator.html
[7] https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf

Baseline Noise is Not Properly Established

The Addendum does not properly characterize the existing noise environment. The second measurement location is at the back of the site, which does not represent any sensitive receivers. A second measurement would have been better suited at residences further down Schaeffer Avenue to show noise levels from the existing warehouse driveways on Shaeffer and compare those levels to the tomes across the Project site.

Conclusion

The Addendum operational and construction noise analysis contains errors and fails to identify potentially significant impacts. The Addendum fails to establish a proper baseline for traffic noise.

Please feel free to contact me with any questions on this information.

Very truly yours,
Ani Toncheva, Senior Consultant, WILSON IHRIG

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

ANI TONCHEVA

Senior Consultant

Since joining the firm in 2011, Ani has conducted analyses for transit systems, vibration-sensitive research facilities, public infrastructure, construction, and other environmental noise. She has contributed to literature reviews, including research on current practices of historical preservation. She has extensive experience working on construction projects in New York City and is well-versed in local noise codes.

Education

- B.A., Physics; Bard College, New York

Professional Associations

- *Member*, National Council of Acoustical Consultants (NCAC)
- *Member*, Acoustical Society of America (ASA)
- *Board Member,* Transportation Research Forum (TRF), NY Chapter and International Board

Research Paper

- NCHRP 25-25, *Current Practices to Address Construction Vibration and Potential Effects to Historic Buildings Adjacent to Transportation Projects*

Project Experience

ARCHITECTURAL

180 Jones Street Mixed-Use Development, San Francisco, CA
Prepared a CCR Title 24 Noise Study Report for a new mixed-use building. The project included 70 residential units and on-site community facilities.

1801 Haight Street Mixed-Use Development, San Francisco, CA
Prepared a CCR Title 24 Noise Study Report for a new low-rise mixed-use building.

Analog (ArtX) Hotel, Palo Alto, CA
Prepared preliminary basis of design guidelines for a new five-story boutique hotel in a residential area. Work included evaluation of exterior noise from a project that may affect guest areas and interior noise and vibration isolation measures.

First Congregational Church of Berkeley Pilgrim Hall Replacement, Berkeley, CA
Responsible for developing 3D computer model of a new hall to prepare a basis of design guidelines for room acoustics and noise control and assist in the development of acoustic specifications for various disciplines.

Gansevoort Cooperative, New York, NY
Conducted measurements inside several units in a mixed-use building to characterize commercial noise levels and recommend mitigation measures.

Hollis Life Science, Emeryville, CA
Conducted a drawing review regarding the new air handler units, exhaust fans, and related noise, and vibration-generating equipment, to recommend base isolation requirements to control vibration within the building, and to assess noise control requirements.

Sunnydale Block 3A & 3B Mixed-Use Residential Development, San Francisco, CA
Prepared a CCR Title 24 Noise Study Report for two, mixed-use, 5-story buildings. The project was part of the complete rebuild of the existing Sunnydale-Velasco Housing Authority site through the HOPE SF Program.

CONSTRUCTION
Columbia University Medical Center Medical and Graduate Education Building, New York, NY
Conducted baseline noise survey and performed attended noise measurements during preliminary construction work. Installed long-term noise monitors and assisted with the implementation of a sophisticated remote noise monitoring system for a six-month construction phase including building demolition.

East Side Coastal Resiliency Noise Monitoring Plan, New York, NY
Prepared noise monitoring plan for residences located near planned construction activities involving the use of pile driving methods for the installation of a flood protection system.

Fulton Municipal Manufactured Gas Plant Environment Remediation, New York, NY
Conducted a baseline noise and vibration study in the vicinity of planned Gowanus Canal remediation for the former MGP site, including long-term unattended and short-term noise and vibration measurements.

Former Citizens Gas Works MGP Site Pilot Test Program, New York, NY
Collected long-term baseline noise and vibration data. Conducted short-term attended noise and vibration measurements at during pile operations. Vibration measurements were conducted at nearby residence and at the MTA NYCT structure near the project site.

Gowanus Canal Remediation, New York, NY
Conducted baseline noise measurements and ongoing long-term noise and vibration monitoring in vicinity of Gowanus Canal Superfund Site 4th street turning basin dredging and capping pilot study.

Hudson Yards Tower C Foundations and Utilities, New York, NY
Conducted a baseline noise survey prior to construction work including a combination of long-term unattended and short-term attended noise measurements.

PANYNJ Lincoln Tunnel Helix Rehabilitation, NJ
Assisted in developing construction noise control and mitigation plan and implementing a remote long-term noise monitoring program at three locations. Performed noise measurements of nighttime construction activities in vicinity of sensitive receptors.

MSK 74th Street, New York, NY
Conducted baseline noise survey, assisted in developing construction noise control and mitigation plan, and implemented a long-term noise monitoring program at two locations. Provided weekly reports of monitoring data with on-going assessments of Contractor compliance with project noise limits and coordinated interior short-term measurements in nearby residential buildings.

NYMTA No. 7 Line Subway Extension, New York, NY
Performed long-term noise monitoring for the ventilation shaft construction site.

NYMTA No. 7 Line Subway Extension Site L Ventilation Facility Construction, New York, NY
The project involved the mining and lining of two shafts and the construction of a 2-story ventilation building at Site L near Dyer Avenue on West 41st Street. Assisted with long-term noise compliance monitoring and preparation of monthly noise monitoring reports.

NYMTA ESA/LIRR Grand Central Terminal Fit-Out, New York, NY
Prepared the Contractor's noise and vibration control plan updates for fit-out work conducted underground at the Grand Central Terminal Suburban Level. Performed field measurements of construction equipment noise and prepared noise emission certificates.

San Francisco Planning Department, Alameda Street Wet Weather Tunnel and Folsom Area Sewer Improvement, San Francisco, CA
Project Manager in charge of noise and vibration analysis for Folsom Area stormwater infrastructure improvements, as part of the San Francisco Public Utilities Commission's (SFPUC) flood resilience efforts under the Sewer System Improvement Program. Work included baseline noise survey, noise and vibration predictions, evaluation of applicable criteria and recommendations for noise and vibration control measures.

SLAC National Accelerator Laboratory, San Mateo, CA
Generated a site-specific vibration propagation model and analyzed the potential for vibration impacts to ongoing scientific experiments during the construction of a new building on the SLAC campus. Testing included measuring transfer mobilities, determining the vibration response of particle beamline equipment, and vibration generated by construction equipment.

World Trade Center Vehicle Security Center, New York, NY
Conducted baseline noise surveys, assisted in developing construction noise control plans, and implementing a remote long-term noise monitoring program at six locations around the perimeter of the site at noise sensitive receptors. Provided weekly reports of monitoring data with on-going assessments of Contractor compliance with project noise limits.

ENVIRONMENTAL
CEQA Peer Reviews, CA
Peer review of noise and vibration analyses prepared per CEQA. These projects have primarily focused on the construction and operation of new facilities including residential in-fill, office and mixed-use projects, and educational buildings.

Millennium Bulk Terminal, Longview, WA
Prepared noise analysis for the project's NEPA and SEPA environmental impact statements. Tasks included future rail traffic modeling using CadnaA and preparation of noise contours using GIS.

Peninsula Humane Society & SPCA Haskin Hill Sanctuary, Loma Mar, CA
Prepared an environmental study for a planned animal sanctuary in Loma Mar. Work included baseline noise measurements, predictions of expected noise from the completed project and a review of compliance with local regulations and CEQA.

HIGHWAY AND OTHER TRAFFIC STUDIES

Alameda CTC, I-880 Interchange Improvements Project (Whipple Road-Industrial Southwest and Industrial Parkway West), Hayward, CA

Project Manager for a traffic noise study. The work included noise modelling and impact assessments consistent with FHWA and Caltrans procedures and methodology for multiple project alternatives.

Alameda CTC, I-80/Ashby Avenue Interchange Improvements, Berkeley, CA

Project Manager for a traffic noise study. The work included noise modelling and impact assessments consistent with FHWA and Caltrans procedures and methodology for multiple project alternatives.

Riverstone Apartments, Seattle, WA

This street will serve the future Star Lake Station currently under construction for Sound Transit's Federal Way Link Extension. As part of the Federal Way project, improvements to the street include the addition of a turning lane and traffic light (currently in place) at the end of a roadway. The study provided an independent assessment of the potential for traffic noise impacts on the residents of Riverstone based on FTA project noise criterion.

Junipero Serra Roadway Noise, South San Francisco, CA

Noise analysis of existing traffic noise and potential benefits of noise abatement measures such as sound walls and quieter pavement.

LEGAL

50 Pine Street Condominiums, New York, NY

The project involved evaluating noise at residential dwelling units for NYC noise code compliance. Measured noise levels from mechanical equipment in an enclosed courtyard.

Uptown Newport, Newport Beach, CA

Evaluation of noise levels due to mechanical equipment at adjacent property. Assisted heavily with data analysis from long-term monitoring and data presentation for the legal team.

RAIL TRANSIT

BART Berryessa Station Transit Noise Impact and Mitigation, San Jose, CA

Assisted with noise predictions and barrier design recommendations. Project is a 10.2-mile extension of a heavy rail transit system in the San Francisco Bay Area, and this is one of the stations along the new route.

BART to Silicon Valley Phase II

Acoustics, noise, and vibration discipline lead for a large single-bore tunnel project through downtown San Jose. The largest single public infrastructure project ever constructed in Santa Clara County, this phase of VTA's BART to Silicon Valley project will extend BART service six miles from the Berryessa Transit Center into San Jose and ending in the City of Santa Clara. Responsibilities include station acoustics and speech intelligibility design and evaluation of operational train noise and vibration.

California High-Speed Rail Fresno-Merced Corridor, Fresno-Merced, CA
Lead noise analyst for the project's environmental impact assessment. Tasks included characterizing the existing noise conditions and assessing noise impacts from transit operations and construction-related activities.

Caltrain Peninsula Corridor Electrification, San Francisco Peninsula, CA
Analysed previous noise study. Assisted in developing current noise prediction model and GIS model for vibration. Helped prepare FEIR. This project included extensive ambient noise and vibration measurement surveys; the development of noise and vibration prediction models for HST operations; prediction of wayside noise and vibration levels for HST operations; evaluation of environmental noise and vibration impacts using FRA procedures and criteria and determining the need for and type of noise mitigation.

LA Metro Purple Line Section 3 Design-Build, Los Angeles, CA
Responsible for developing detailed 3D computer models for two transit stations using EASE software.

Maryland Purple Line Station Acoustics, Baltimore, MD
Responsible for developing detailed 3D computer models for three transit stations using EASE software.

Massachusetts Bay Transportation Authority (MBTA) Green Line Extension (GLX), Boston, MA
Lead analyst on noise predictions and barrier design. Work included planning field measurements, conducting data analysis, predicting noise impacts from project operations, and making barrier design recommendations.

RTD Eagle P3 Northwest Corridor Noise and Impacts, Denver, CO
Assisted with data analysis and helped prepare the final technical report. The project consists of 33 miles of EMU Commuter Rail connecting downtown Denver Union Station to the Denver International Airport. This project also includes a Commuter Rail Maintenance Facility with a capacity to store and service 100 EMU.

Santa Clara VTA, Vasona LRT Corridor Tire-Derived Aggregate (TDA) Underlayment Performance Testing, San Jose, CA
Project Manager in charge of planning a series of tests to document the performance of TDA ballast underlayment over time, as required by FTA. Previous tests were done in 2006, 2006, and 2009. Work will include documenting vibration isolation performance, rail strain, and rail deflection.

Sound Transit Northgate Link Vibration Attenuation Estimates, Seattle, WA
Provided general field support for all elements of testing. Tasks included moving equipment into/out of the tunnel, deploying sensors on campus, and attending to wireless antennas during testing. To derive the relationship between vibration measured in the Northgate link tunnel and building vibration at research facilities on the University of Washington campus, field tests were conducted using a shaker in the tunnel while simultaneously measuring the vibration response in UW buildings using a wireless data collection system.

Toronto Transit Commission (TTC) Eglinton Crosstown LRT, Toronto, ON, Canada
Reviewed historic reports for relevant data, assisted with GIS model and preparation for noise and vibration measurements. The TTC is planning to construct the Eglinton Tunnel subway line and needed to address what mitigation could be necessary to reduce ground-borne noise and vibration impacts. The proposed study would determine the most likely range of ground-borne noise and vibration levels in residences and other sensitive buildings along the planned alignment.

Toronto Transit Commission (TTC) Scarborough Subway Extension, Toronto, ON, Canada
Conducted force density level (FDL) measurements and analysis for the Toronto Rocket vehicles on TTC standard double ties on the Toronto-York Spadina Subway Extension. Predicted ground-borne noise and vibration levels at sensitive receptors along the Scarborough extension and prepared project memos.

Transbay Program Downtown Rail Extension (DTX), San Francisco, CA
Project Manager in charge of preliminary engineering noise and vibration analysis. The project consists of a 2.4-mile at-grade and tunnel alignment starting at the existing Caltrain terminal station and railyard and ending at the Salesforce Transit Center. Provided updated noise and vibration predictions for the project based on current design and abasement measure design recommendations based on new field testing and updated analysis.

Washington Metropolitan Area Transit Authority (WMATA) On-Call Services, Washington, DC
Conducted extensive field measurements inside homes and along tunnels to document ground-borne noise and vibration due to WMATA Green Line trains. Performed rail roughness measurements along sections of track within the study area. Analyzed recordings to determine train passby levels and plotted data to compare results for the different vehicle fleets and compare to applicable criteria.

Washington Metropolitan Area Transit Authority (WMATA) Vehicles Out-of-Round Wheel Study, DC
Assisted with modal analysis on nine wheelsets of WMATA vehicles.

STRUCTURES
101 Mass Avenue (aka Parcel 12), Boston, MA
Responsible for developing a Finite Element model of mixed-use development, built over MBTA commuter railway tracks, and spanning I-90 to analyse predicted building response to ground-borne vibration.

206th Street Theater Vibration Study, New York, NY
Analyzed ground vibration measurements at the site of the planned theater located near NYCT rail lines.

Centene Corporation Theater, Clayton, MO
Conducted vibration measurements on the site to define and identify frequency and levels of vibration. The purpose of the study was to assess possible intrusion from trains and other sources into the proposed auditorium.

David Geffen Hall Renovation, Lincoln Center Development, New York, NY
Conducted vibration measurements on multiple levels of the existing David Geffen Hall structure to measure ground-borne vibration from subway trains. Performed background noise measurements inside the hall to determine ground-borne noise from subway trains.

Pace University Performing Arts, New York, NY
Conducted a vibration feasibility study for the proposed fit-out in an existing mixed-use commercial/residential building to accommodate the university's dance program. The analysis included vibration measurements of the existing space to characterize the floor response and determine vibration transmission between the dance spaces and residences on the upper floors. Estimated dance-induced vibration and provided recommendations on possible structural modifications to reduce vibration.

The Perelman Performing Arts Center at World Trade Center, New York, NY
Conducted structure-borne vibration measurements as part of building vibration isolation design for future flexible space performing arts center. Conducted quality control field visits during isolation pad installation.