
**Final Mitigated Negative Declaration
for the
March Plaza Project**

DPR 22-00031, PLN22-0031, PLN23-05028, PLN23-05029

MND No. 2401

State Clearinghouse Number 2024110983

Lead Agency:
City of Perris
101 N. D Street
Perris, California 92570



February 2025

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Appendices

Appendix A – Draft Initial Study/Mitigated Negative Declaration and Appendices

The circulated Initial Study/Mitigated Negative Declaration and associated appendices may be viewed and/or downloaded via the links here:

https://www.cityofperris.org/departments/development-services/planning/environmental-documents-for-public-review/-folder-477#docan1206_1313_479

and

<https://ceqanet.opr.ca.gov/2024110983>

1 Introduction

An Initial Study and Mitigated Negative Declaration (MND) for the proposed March Plaza Project [Planned Development Overlay/Specific Plan Amendment (PDO/SPA)23-05029, Development Plan Review (DPR) 22-00031, and Tentative Parcel Map 38739 (PLN23-05028), herein collectively referred to as the “proposed project” or “project”] has been prepared in accordance with the California Environmental Quality Act (CEQA), the Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines), and the City of Perris policies and practices for implementing CEQA.

On November 29, 2024, the City of Perris issued a Notice of Intent to Adopt a Mitigated Negative Declaration (SCH # 2024110983) for the proposed project. The Notice of Intent indicated that the City, acting as the lead agency for the project under CEQA, was notifying public agencies and interested parties that the City plans to adopt an MND for the project.

The Notice of Intent for the proposed project was sent to trustee and responsible agencies, members of the public, other interested parties, and the California Office of Planning and Research, State Clearinghouse for the 30-day public review period required under CEQA. The public review period ended on December 30, 2024.

Section 2.0 includes information related to the project’s background that provides context for the responses to the comments received on during the public review period.

Section 3.0 of this Final MND includes all comment letters and emails received by the City of Perris in response to the circulated Initial Study/MND during the public review period. The list of letters received is shown in Table 1 within that section. Although not required under CEQA or the State CEQA Guidelines for an MND, the City has chosen to provide formal responses to the comments received on the project during the public review period and include them in this Final MND document.

None of the comments received resulted in changes to the data, analysis, conclusions, or mitigation measures present in this Initial Study/MND. The comments and information provided by agencies and individuals do not constitute significant new information that would trigger a need to recirculate the Initial Study/MND for additional public review and comments.

CEQA was amended in 1989 to add Section 21081.6, which requires a public agency to adopt a mitigation monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to a proposed development. Section 3.0 contains the Mitigation Monitoring and Reporting Program for the project.

2 Project Background and Context for Responses

To provide context for the responses to comments, it should be noted that the proposed project is a less intensive modification of the final phase of a previously approved project that underwent previous CEQA review and approval, and is subject to the standards and guidelines of the Perris Valley Commerce Center Specific Plan (PVCCSP) and the mitigation measures of the PVCCSP

March Plaza Project

Environmental Impact Report. This background is described in detail in the Initial Study/MND, the relevant portions of which are summarized below.

In 2017, the City of Perris approved the March Plaza Project (Conditional Use Permit 16-05165, Tentative Parcel Map 16-05166, and Conditional Use Permit 16-05171), a multi-phase retail commercial development that included seven buildings and a total of 47,253 square feet of retail space as well as 254 parking spaces located at the northwestern corner of Harley Knox Boulevard and Perris Boulevard. That project was subject to CEQA review and in the resulting Negative Declaration found that the project would have less than significant impacts and no mitigation measures were required (Source: 22). This finding was based in part on several technical studies that were considered in the CEQA analysis, including those related to biological resources, cultural resources, a Phase 1 Environmental Site Assessment, geotechnical evaluation, traffic study, and air quality study. While no CEQA mitigation measures were required, the approved project was subject to a variety of conditions of approval outside of the CEQA process. These included the following public improvements that were required to be constructed prior to project development:

- Curbs, gutters and sidewalks;
- Realignment of the intersection of Harley Knox Boulevard and Perris Boulevard;
- A new traffic signal at that intersection;
- Required ingress and egress curb cuts;
- Fire hydrant;
- Utility approvals and stub outs; and
- Fencing as required by County Flood Control on the northern portion of the site.

These improvements were all subsequently completed and the entire site was mass graded in anticipation of development of CUP 16-05165. In the first phase of the approved project, Building "E" (a 7-Eleven store), was permitted and built on Parcel 1, but the remaining approved commercial component of the project was not constructed.

In 2023, the original project applicant submitted an application to construct a less intensive business park office development on a portion of the remaining unbuilt area within the previously approved March Plaza project site, essentially a modification of the final phase of the approved project to a less intensive use. However, the City determined that this new development concept would require the following: a Specific Plan Amendment, a Planned Development Overlay, a Development Plan Review, a new Tentative Parcel Map, an updated Title Report, and approval from the Riverside County Airport Land Use Commission (ALUC). The intent of the Plan Development Overlay is to allow flexibility with respect to architectural design standards and to allow development consistent with the City's Business Park Office (BPO) Specific Plan designation within the underlying Commercial (C) zone.

As the requested actions change the uses approved for the original project, the City determined that the new proposed development is subject to an updated analysis under CEQA, as well as a Storm Water Quality Management Plan (SWQMP). The current Initial Study/MND addressed these requirements.

Responses to comments received on the Initial Study/MND are framed in this context.

3 Comments and Responses

The City of Perris received seven comment letters on the Initial Study/MND. The commenters and the date which each commenter’s letter was received are listed in Table 1.

Table 1 Comment Letters and Public Comments Received

Letter or Public Comment No. and Commenter		Date Received
Public Comment Letters		
1	Tamara Purvis; California Department of Toxic Substances Control	December 6, 2024
2	Richard Drury; Lozeau Drury, LLP	December 19, 2024
3	Richard Drury; Lozeau Drury, LLP	December 30, 2024
4	Richard Drury; Lozeau Drury, LLP	December 30, 2024
5	Amy McNeill; Riverside County Flood Control and Water Conservation District	December 16, 2024
6	Mauricio Alvarez; Riverside Transit Agency	December 6, 2024
7	Anthony Budicin; Eastern Municipal Water District	December 23, 2024

The public comment letters and responses follow. The comment letters have been numbered sequentially, and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 3.2, for example, indicates that the response is for the second issue raised in comment Letter 3).



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Katherine M. Butler, MPH, Director
8800 Cal Center Drive
Sacramento, California 95826-3200
dtsc.ca.gov



Gavin Newsom
Governor

SENT VIA ELECTRONIC MAIL

December 6, 2024

Letter 1

Nathan Perez
Senior Planner
City of Perris
135 North D Street
Perris, CA 92570
nperez@cityofperris.org

RE: MITIGATED NEGATIVE DECLARATION FOR THE MARCH PLAZA PROJECT
DATED NOVEMBER 26, 2024, STATE CLEARINGHOUSE NUMBER [2024110983](#)

Dear Nathan Perez,

The Department of Toxic Substances Control (DTSC) reviewed the Mitigated Negative Declaration (MND) for the March Plaza Project (Project). The proposed Project would involve the construction and operation of three (3) multi-tenant concrete tilt-up buildings with spec suites. Projected uses would be non-industrial in nature, and more consistent with business park or office development. No use or transport of hazardous materials is anticipated. The total building area would be 66,686 square feet. A total of 143 parking spaces serving the development would be provided, including 8 accessible stalls. DTSC recommends and requests consideration of the following comments:

1. If buildings or other structures are to be demolished on any Project sites included in the proposed Project, surveys should be conducted for the presence of lead-based paints or products, mercury, asbestos containing materials, and polychlorinated biphenyl caulk. Removal, demolition, and disposal of any of the above-mentioned chemicals should be conducted in compliance with California environmental regulations and policies. In addition,

1.1

sampling near current and/or former buildings should be conducted in accordance with [DTSC's Preliminary Endangerment Assessment \(PEA\) Guidance Manual](#).

2. DTSC recommends that all imported soil and fill material should be tested to assess any contaminants of concern meet screening levels as outlined in [DTSC's Preliminary Endangerment Assessment \(PEA\) Guidance Manual](#). Additionally, DTSC advises referencing the [DTSC Information Advisory Clean Imported Fill Material Fact Sheet](#) if importing fill is necessary. To minimize the possibility of introducing contaminated soil and fill material there should be documentation of the origins of the soil or fill material and, if applicable, sampling be conducted to ensure that the imported soil and fill material are suitable for the intended land use. The soil sampling should include analysis based on the source of the fill and knowledge of prior land use. Additional information can be found by visiting [DTSC's Human and Ecological Risk Office \(HERO\) webpage](#).

DTSC appreciates the opportunity to comment on the MND for the March Plaza Project. Thank you for your assistance in protecting California's people and environment from the harmful effects of toxic substances. If you have any questions or would like clarification on DTSC's comments, please respond to this letter or via [email](#) for additional guidance.

Nathan Perez
December 6, 2024
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Sincerely,

Tamara Purvis

Tamara Purvis
Associate Environmental Planner
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Tamara.Purvis@dtsc.ca.gov

cc: (via email)

Governor's Office of Land Use and Climate Innovation
State Clearinghouse
State.Clearinghouse@opr.ca.gov

Dave Kereazis
Associate Environmental Planner
HWMP-Permitting Division – CEQA Unit
Department of Toxic Substances Control
Dave.Kereazis@dtsc.ca.gov

Scott Wiley
Associate Governmental Program Analyst
HWMP - Permitting Division – CEQA Unit
Department of Toxic Substances Control
Scott.Wiley@dtsc.ca.gov

March Plaza Project

Letter 1

COMMENTER: Tamara Purvis; California Department of Toxic Substances Control

DATE: December 6, 2024

Response 1.1

The commenter does not question the adequacy or contents of the Initial Study/MND, but makes recommendations which could be considered by the City for possible inclusion as conditions of approval for the project, including issues related to building demolition and soil importation. It should be noted that the project would not involve the demolition of any existing structures, so the issue of building demolition would not apply to the project. The Planning Commission and City Council will consider these comments as part of their deliberations for potential project approval.



T 510.836.4200
F 510.836.4205

1939 Harrison Street, Ste. 150
Oakland, CA 94612

www.lozeaudrury.com
richard@lozeaudrury.com

Letter 2

Via Email

December 19, 2024

Nathan Perez, Senior Planner
Planning Division
Development Services Department
City of Perris
135 North "D" Street
Perris, CA 92570
Nperez@cityofperris.org

Re: Comment on Mitigated Negative Declaration, March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029)

Dear Mr. Perez:

This comment is submitted on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029), which proposes the development of three (3) multi-tenant concrete tilt-up buildings totaling in 66,686 square feet, located at the northwest corner of Perris Boulevard and Harley Knox Boulevard (APNs: 302090-052, -053, -054, -056, -057, -058, -059, -060 and -061) in the City of Perris ("Project").

SAFER requests an extension of the comment period. The comment deadline of December 30, 2024 falls between Christmas and New Years' Day, at a time when it is very difficult for the public and expert consultants to review and comment adequately on the IS/MND. As one commentator has noted, "the 'privileged position' that members of the public hold in the CEQA process ... is based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision-making...." (Selmi, *The Judicial Development of the California Environmental Quality Act* (1984) 18 U.C.Davis L.Rev. 197, 215–216.) "CEQA compels an interactive process of assessment of environmental impacts and responsive project modification which must be genuine. It must be open to the public, premised upon a full and meaningful disclosure of the scope, purposes, and effect of a consistently described project, with flexibility to respond to unforeseen insights that emerge from the process." (*County of Inyo v. City of Los Angeles* (1984) 160 Cal.App.3d 1178, 1185, 207 Cal.Rptr. 425.) In short, a project must be open for public discussion and subject to agency modification during the CEQA process. (*Ibid.*) This process helps demonstrate to the public that the agency has in fact analyzed and considered the environmental implications of its action. (*No. Oil, Inc. v. City of Los Angeles* (1974) 13

2.1

December 19, 2024

Comment on Mitigated Negative Declaration, March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029)

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Cal.3d 68, 86, 118 Cal.Rptr. 34, 529 P.2d 66; *Concerned Citizens of Costa Mesa, Inc. v. 32nd Dist. Agric. Assn.* (1986) 42 Cal. 3d 929, 936, 727 P.2d 1029, 1033.) By placing the comment deadline on December 30, the City has impeded CEQA's primary purpose of facilitating public review and comment.

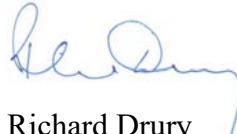
2.1
(cont'd)

SAFER is concerned that the IS/MND is improper under the California Environmental Quality Act due to the IS/MND's failure to adequately assess the Project's potentially significant environmental impacts. SAFER requests that an environmental impact report (EIR) be prepared for the Project rather than an MND because there is a fair argument that the Project may have adverse environmental impacts. The MND relies on improper deferred mitigation measures. An EIR will ensure that potentially significant impacts of this Project are fully disclosed, analyzed, and mitigated.

2.2

SAFER reserves the right to supplement this comment throughout the administrative process. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

Sincerely,



Richard Drury
Lozeau Drury LLP

Letter 2

COMMENTER: Richard Drury; Lozeau Drury, LLP

DATE: December 19, 2024

Response 2.1

The commenter requests an extension of the public comment period for the CEQA document beyond the 30 days provided. However, the 30-day review period is consistent with the requirements under CEQA for the public review of a proposed MND, specifically State CEQA Guidelines Section 15105.b. An extension of the public review period is not warranted.

Response 2.2

The commenter requests that an Environmental Impact Report (EIR) be prepared for the project, because of the project's potentially significant environmental impacts. However, the Initial Study/MND as written properly identifies the potential impacts of the project and identifies feasible mitigation measures to reduce the potential impacts of the project to less than significant levels based on substantial evidence. The commenter does not provide any specific evidence in this letter to support their contention that an EIR should be prepared.

Additional information is provided by the commenter in subsequent letters submitted later within the 30-day public review period that shed additional light on this topic. Please refer to the responses to Letters 3 and 4.



T 510.836.4200
F 510.836.4205

1939 Harrison Street, Ste. 150
Oakland, CA 94612

www.lozeaudrury.com
richard@lozeaudrury.com

Letter 3

Via Email

December 30, 2024

Nathan Perez, Senior Planner
Planning Division
Development Services Department
City of Perris
135 North "D" Street
Perris, CA 92570
Nperez@cityofperris.org

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As discussed below, there is a fair argument that the Project may result in significant air quality impacts. Therefore, SAFER respectfully requests that the City prepare an environmental impact report ("EIR") before approving the Project to analyze and mitigate these impacts in accordance with the California Environmental Quality Act ("CEQA").

SAFER's review of the MND was assisted by acoustical engineering expert Jack Meighan of Wilson Ihrig; and wildlife ecologist, Dr. Shawn Smallwood, Ph.D. Their comments are attached hereto as Exhibits A, and B, and are incorporated herein by reference in their entirety.

PROJECT DESCRIPTION

The proposed project is called the March Plaza Project (PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029), which would involve the construction and operation of three (3) multitenant concrete tilt-up buildings with spec suites. Projected uses would be non-industrial in nature, and more consistent with business park or office development. No

3.1

use or transport of hazardous materials is anticipated. The total building area would be 66,686 square feet. A total of 143 parking spaces serving the development would be provided, including 8 accessible stalls. Pursuant to Section 5.106.5.3.1 of the 2022 California Green Building Standards (CALGreen) Code, at least 25 electric vehicle (EV) capable parking spaces would be provided while at least six of these spaces would provide EV chargers at the time that the project begins operations; more chargers would be added in the future based on demand. In addition, 12 bicycle parking stalls will be provided. Project access would be via one driveway from Perris Boulevard and one driveway from Harley Knox Boulevard.

LEGAL STANDARD

As the California Supreme Court held, “[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR.” (*Communities for a Better Env’t v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319-20.) “Significant environmental effect” is defined very broadly as “a substantial or potentially substantial adverse change in the environment.” (Pub. Res. Code [“PRC”] § 21068; see also 14 California Code of Regulations [“CCR”] § 15382.) An effect on the environment need not be “momentous” to meet the CEQA test for significance; it is enough that the impacts are “not trivial.” (*No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.) “The ‘foremost principle’ in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.” (*Communities for a Better Env’t v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 109.)

The EIR is the very heart of CEQA. (*Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1214; *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927.) The EIR is an “environmental ‘alarm bell’ whose purpose is to alert the public and its responsible officials to environmental changes before they have reached the ecological points of no return.” (*Bakersfield Citizens, supra*, 124 Cal.App.4th at 1220.) The EIR also functions as a “document of accountability,” intended to “demonstrate to an apprehensive citizenry that the agency has, in fact, analyzed and considered the ecological implications of its action.” (*Laurel Heights Improvements Assn. v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 392.) The EIR process “protects not only the environment but also informed self-government.” (*Pocket Protectors*, 124 Cal.App.4th 903, 927.)

An EIR is required if “there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment.” (PRC § 21080(d); see also *Pocket Protectors, supra*, 124 Cal.App.4th at 927.) An MND instead of an EIR is proper only if project revisions would avoid or mitigate the potentially significant effects identified in the initial study “to a point where clearly no significant effect on the environment would occur, and . . . there is no substantial evidence in light of the

3.1
(cont'd)

whole record before the public agency that the project, as revised, may have a significant effect on the environment.” (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 331 [quoting PRC §§ 21064.5, 21080(c)(2)].) In that context, “may” means a reasonable possibility of a significant effect on the environment. (PRC §§ 21082.2(a), 21100, 21151(a); *Pocket Protectors, supra*, 124 Cal.App.4th at 927; *League for Protection of Oakland's etc. Historic Res. v. City of Oakland* (1997) 52 Cal.App.4th 896, 904-05.)

An EIR must be prepared rather than an MND “whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.” (*No Oil, Inc. v City of Los Angeles* (1974) 13 Cal.3d 68, 75.) Under this “fair argument” standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect—even if contrary evidence exists to support the agency’s decision. (14 CCR § 15064(f)(1); *Pocket Protectors, supra*, 124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-51; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The “fair argument” standard creates a “low threshold” favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors, supra*, 124 Cal.App.4th at 928.)

3.1
(cont'd)

The “fair argument” standard is virtually the opposite of the typical deferential standard accorded to agencies. As a leading CEQA treatise explains:

This ‘fair argument’ standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily, public agencies weigh the evidence in the record before them and reach a decision based on a preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environmental impact. The lead agency’s decision is thus largely legal rather than factual; it does not resolve conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

(Kostka & Zishcke, *Practice Under CEQA*, § 6.29, pp. 273-74.) The Courts have explained that “it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency’s determination. Review is de novo, with a preference for resolving doubts in favor of environmental review.” (*Pocket Protectors, supra*, 124 Cal.App.4th at 928.)

DISCUSSION

A. There is a Fair Argument that the Project May Have Significant Noise Impacts.

Jack Meighan of the acoustical engineering firm, Wilson Ihrig, has submitted comments concluding that the Project may have significant noise and vibration impacts. Mr.

3.2

December 30, 2024

Comment on Mitigated Negative Declaration, March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029)

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Meighan points out several deficiencies and errors with the noise analysis in the IS/MND.

1. IS/MND Fails to Accurately Describe the Environmental Setting.

The IS/MND fails to accurately describe the environmental setting of the Project. The IS/MND states that the nearest residences are 1600 feet west of the project site, and the nearest commercial building is 225 feet east. (IS/MND 70). Mr. Meighan points out that this description is erroneous. The nearest residence is 1200 feet away and the nearest commercial building is only 90 feet away. (Ex. A, p. 2). As a result of these errors, the IS/MND underestimates the noise and vibration impacts of the Project since noise and vibration decrease with distance.

Mr. Meighan also points out that the IS/MND fails to establish baseline noise levels. (Ex. A, p. 3). This is particularly important given the Project's location near four major arterial streets, as well as March Airforce Base.

CEQA requires the agency to describe the "environmental setting" of the Project. CEQA Guidelines §15063(d)(2); *Mejia v. City of Los Angeles*, 130 Cal. App. 4th 322 (2005). The "environmental setting" is defined as "the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." Guidelines, § 15360; see § 21060.5; *Lighthouse Field Beach Rescue v. City of Santa Cruz*, 131 Cal. App. 4th 1170, 1192 (2005). By underestimating the distance of the Project to residential and commercial receptors, the IS/MND also underestimates the noise and vibration impacts of the Project.

3.2
(cont'd)

2. Project May Exceed Construction Vibration Damage Thresholds.

Mr. Meighan concludes that the Project may exceed construction vibration damage thresholds. In particular, vibration impacts may exceed thresholds at the Seven-Eleven store located only 90-feet from the Project. (Ex. A, p. 3).

3. Operational Noise Impacts May be Significant.

Mr. Meighan concludes that the Project's operational noise impacts may be significant. (Ex. A, p. 3). Mr. Meighan concludes that noise from rooftop mechanical equipment and background noise must be analyzed. Since the City has failed to adequately analyze the environmental setting, the background noise levels and the Project's operational noise from rooftop mechanical equipment, there is a fair argument that the Project may have a significant environmental impact and an environmental impact report ("EIR") is required.

"The agency [will] not be allowed to hide behind its own failure to gather relevant data.... CEQA places the burden of environmental investigation on government rather than the public. If the local agency has failed to study an area of possible environmental impact, a fair argument may be based on the limited facts in the record. Deficiencies in the record may

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actually enlarge the scope of fair argument by lending a logical plausibility to a wider range of inferences.” (*Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 311, 248 Cal.Rptr. 352; see also *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180, 197, 228 Cal.Rptr. 868 [fact that initial study checklist was incomplete and marked every impact “no” supported fair argument that project would have significant environmental effects]; *Gentry v. City of Murrieta*, 36 Cal. App. 4th 1359, 1378–79, 43 Cal. Rptr. 2d 170, 185 (1995), as modified on denial of reh'g (Aug. 17, 1995).)_

3.2
(cont'd)

B. There is a Fair Argument that the Project May have Significant Adverse Biological Impacts.

Wildlife ecologist, Dr. Shawn Smallwood, Ph.D. concludes that the Project will have adverse biological impacts. Dr. Smallwood’s associate, wildlife biologist Noriko Smallwood, MS, conducted a site visit on December 23, 2024 for 2.8 hours. Ms. Smallwood detected 37 species of vertebrate wildlife at or adjacent to the project site, including eight species with special status, including Double-Crested Cormorant; Turkey Vulture, Northern Harrier; Red-Tailed Hawk; American Kestrel; California Gull; Peregrine Falcon, California Horned Lark. In addition, Dr. Smallwood concludes that the Project site provides potential habitat for Burrowing Owl, which is a candidate species for listing under the Endangered Species Act. (Smallwood at 14).

3.3

1. The IS/MND fails to account for special-status species present on the Project site, and Lacks an Adequate Environmental Setting Description.

No wildlife survey was conducted for the Project. According to the IS/MND (p. 28), “A Biological Reconnaissance Survey was prepared for the original project approval. By preparing the Biological Reconnaissance Survey, the development of the project site has complied with PVCCSP [Perris Valley Commerce Center Specific Plan] EIR mitigation measure MM Bio 6.” However, this conclusion makes little sense because MM Bio 6 of the PVCCSP EIR requires focused plant surveys for narrow endemic plant species. A focused plant survey is required, but has not been completed. Regardless, this MM Bio 6 requirement has nothing to do with wildlife.

According to the Perris Valley Commerce Center Specific Plan (PVCCSP) DEIR, a roadside survey was performed by unnamed biologists on a single day more than 17 years ago – 10 August 2007. According to Dr. Smallwood, this 17-year old survey was, “minimal to meaningless. Moreover, the PVCCSP EIR did not report which species were detected during the survey, nor does it include a report of the survey or its findings.” (Smallwood at 14). The IS/MND also relies on a habitat assessment performed 8.5 years ago. Even if species were not found on the site 17 years ago or 8.5 years ago, that has no bearing on whether species are on the site today. (Smallwood at 14). The IS/MND concludes that the site has no habitat value due to the absence of trees and/or water. However, Dr. Smallwood

December 30, 2024

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points out that many of the species identified by Ms. Smallwood do not nest in trees, but nest on bare ground or burrows. (Smallwood at 15).

The IS/MND's environmental setting description is refuted conclusively by Noriko Smallwood's observation of 37 species at and adjacent to the project site. The evidence soundly refutes the IS/MND's claim. Dr. Smallwood's analysis demonstrates, the IS/MND has failed to account for the special-status species that occur or on the Project site.

CEQA requires the agency to describe the "environmental setting" of the Project. CEQA Guidelines §15063(d)(2); *Mejia v. City of Los Angeles*, 130 Cal. App. 4th 322 (2005). The "environmental setting" is defined as "the physical conditions which exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." Guidelines, § 15360; see § 21060.5; *Lighthouse Field Beach Rescue v. City of Santa Cruz*, 131 Cal. App. 4th 1170, 1192 (2005). By failing to disclose the fact that the Project site contains at least eight special status species, the Initial Study fails to adequately describe the "environmental setting," and thereby fails to adequately analyze the impacts of the Project.

3.3
(cont'd)

2. The IS/MND inadequately analyzes the Project's impact on wildlife.

Dr. Smallwood concludes that the Project will have significant adverse impacts to wildlife due to direct habitat loss. (Smallwood at 23). Dr. Smallwood calculates that the Project will result in the loss of 19.2 nest attempts per year, which "would qualify as significant impacts that have not been analyzed by the City." (Id. at 24.) He further calculates that the Project will result in the loss of 62 bird per year. (Id.)

Dr. Smallwood also concludes that the Project will have adverse biological impacts by interfering with wildlife movement. (Id. at 24). He also predicts that the Project will have significant biological impacts due to collisions between traffic generated by the Project and wildlife. (Id. at 25). Dr. Smallwood calculates that the Project will result in 379 vertebrate wildlife fatalities per year due to project-generated traffic collisions. (Id. at 27).

Dr. Smallwood's comments constitute substantial evidence establishing a fair argument that the Project may have adverse environmental impacts. Therefore, an EIR should be prepared to analyze the impacts identified by Dr. Smallwood and to implement the feasible mitigation measures proposed by Dr. Smallwood.

3. The Project Will Have Significant Cumulative Impacts.

Dr. Smallwood concludes that the Project will have significant cumulative biological impacts. (Smallwood at 27). The IS/MND concludes that the Project will not have cumulative biological impacts because it will not have individually significant biological impacts. (IS/MND at 90). However, as discussed by Dr. Smallwood, the Project will have significant biological impacts.

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Dr. Smallwood concludes that the loss of habitat caused by the Project together with other similar projects in the area will have a cumulatively significant impact on wildlife. (Smallwood at 27-28).

4. The Project is Inconsistent with the Perris Valley Commerce Center Specific Plan (PVCCSP) DEIR.

The IS/MND relies in part on the Perris Valley Commerce Center Specific Plan (PVCCSP) DEIR. However, the IS/MND fails to conduct project-level analysis required by the PVCCSP. According to the IS/MND (p. 29), “The site does not contain riparian/riverine, vernal pool, or any similar areas that might provide habitat for sensitive riparian birds or fairy shrimp species...” However, this statement is unsupported. No survey for vernal pools has been completed on the project site, as the 2007 reconnaissance survey was performed from roadsides. The PVCCSP EIR stated, “detailed information for most resources, including vernal pools and fairy shrimp was difficult to obtain.” And, “Site-specific habitat assessments would need to be conducted during the rainy season to determine the presence/absence of potential fairy shrimp habitat.” Thus, the reporting in the PVCCSP EIR fails to support the conclusion in the IS/MND. Moreover, MM Bio-5 of the PVCCSP EIR requires “project-specific mapping of vernal pools for implementing projects...” The IS/MND concludes that there are no vernal pools before the required surveys for vernal pools have been completed. (Smallwood at 16).

3.3
(cont'd)

In addition, MM Bio 6 of the PVCCSP EIR requires focused plant surveys for narrow endemic plant species. A focused plant survey is required, but has not been completed.

Since the IS/MND fails to implement mitigation measures required by the PVCCSP, the City may not rely on that document.

Where a local or regional policy of general applicability, is adopted in order to avoid or mitigate environmental effects, a conflict with that policy in itself indicates a potentially significant impact on the environment. (*Pocket Protectors v. Sacramento* (2005) 124 Cal.App.4th 903.) Indeed, any inconsistencies between a proposed project and applicable plans must be discussed in an EIR. (14 CCR § 15125(d); *City of Long Beach v. Los Angeles Unif. School Dist.* (2009) 176 Cal. App. 4th 889, 918; *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 Cal. App. 4th 859, 874 (EIR inadequate when Lead Agency failed to identify relationship of project to relevant local plans).) A Project’s inconsistencies with local plans and policies constitute significant impacts under CEQA. (*Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 783-4, 32 Cal.Rptr.3d 177; see also, *County of El Dorado v. Dept. of Transp.* (2005) 133 Cal.App.4th 1376 (fact that a project may be consistent with a plan, such as an air plan, does not necessarily mean that it does not have significant impacts); see also, *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358 (fair argument standard applies to a potential inconsistency with a plan adopted for environmental protection.)

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Since the Project and IS/MND fail to comply with mitigation measures required by the PVCCSP, there is a fair argument that the Project may have significant environmental impacts that must be analyzed in an EIR.

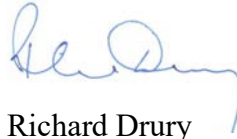
3.3
(cont'd)

CONCLUSION

As discussed above, there is a fair argument that the Project may have significant adverse impacts on air quality. An EIR is thus required to analyze and mitigate the Project's potentially significant effects. Therefore, SAFER respectfully requests that the City not rely on the MND and instead prepare and circulate an EIR before further consideration of the Project. SAFER reserves the right to supplement this comment throughout the administrative process. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

3.4

Sincerely,



Richard Drury
Lozeau Drury LLP

EXHIBIT A



27 December 2024

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

Subject: *March Plaza Perris MND - Comments on Noise Analysis*
Review of Noise and Vibration Impact Analysis

Dear Mr. Drury.

As requested, we have reviewed the information and noise impact analysis for the March Plaza Project Initial Study/Mitigated Negative Declaration (IS/MND) in Perris, CA. The project consists of the construction and operation/occupancy of three warehouses totaling 66,686 square feet on a currently vacant site at the northwest corner of Perris Blvd and Harley Knox Blvd. This letter is based on the November 2024 DEIR, prepared by the City of Perris, with emphasis on section XIII regarding the noise analysis.

Wilson Ihrig is an acoustical consulting firm that has practiced exclusively in the field of acoustics since 1966. During our almost 58 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 CadnaA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise¹

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

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://www.who.int/publications/i/item/a68672>)

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 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.

Distances Presented in the Analysis may Indicate an Error

The IS/MND establishes the sensitive uses of nearby buildings by stating that "The nearest residences located to the project site are approximately 1,600 feet east of the project site. Existing commercial is located approximately 225 feet east" (IS/MND, page 70).

However, it appears that both values are incorrect. The closest residence to the project site is 75 E Nance St, where the northeast corner of the façade is 1,200 feet away from the closest footprint of the project.

To the east of the project site is a Nursery & Rock Supply store, which is about 225 feet away from the proposed project. Presumably this is what the IS/MND is referring to as the closest commercial receiver. However, the 7/11 on the project site is much closer, with walls that are as close as 90 feet from the proposed warehouse. Commercial properties are typically not considered noise sensitive, but the structures are still susceptible to damage from high vibration-generating activities.

If there is a reason why the closest distance to the façade should not be used in the noise and vibration analysis, it should be stated in the IS/MND. As it stands, the IS/MND contains an incomplete picture of the potential impacts based on nearby land use.

Project has Potential to Exceed Construction Vibration Damage Thresholds

The errors in distances are especially important because certain construction activities may exceed damage thresholds for the closest buildings. Using the equations and procedures in the Federal

Transit Administration's 2018 *Transit Noise and Vibration Impact Assessment Manual*² (FTA Manual), the vibration from typical construction activities can be predicted at the most sensitive façade. Other similar guides exist. With the 7/11 being 90 feet away from the proposed façade, this can be taken as a worst-case scenario. For example, if the 7/11 was classified as a 'non-engineered timber and masonry building,' then the upper range of impact pile driving could potentially exceed damage criteria based on source values and equations in the FTA manual. Pile driving is sometimes used for low-rise warehouses like the ones proposed on this site, but it is typically not required. However, this is the reason why due diligence to study potential impacts is important. Without a proper analysis, pile driving could be used when the potential to cause damage to nearby structures is possible. Further study could indicate that all construction activities are okay, or the revised environmental document could include the banning of the most intrusive construction activities as a project design feature. Either way, this should require additional analysis in an updated Environmental Impact Report (EIR).

Baseline Noise not Established.

CEQA requires evaluation of whether a project would cause a substantial temporary or permanent increase in ambient noise levels. Without knowing how loud the environment is, it is impossible to determine if the new project will increase noise in the surrounding community. Baseline noise measurements are the preferred way to determine background noise sources. These measurements serve as a crucial reference point for evaluating the potential noise impacts of proposed projects or activities. Without establishing the baseline noise conditions before any new development occurs, decision-makers cannot effectively determine whether the project complies with noise regulations nor identify any potential adverse effects on the surrounding environment and communities.

In appendix E of the aforementioned FTA Manual, the document recommends a minimum of three one-hour Equivalent Sound Level (Leq) noise measurements (peak-hour roadway traffic, typical midday conditions, and typical nighttime conditions) to estimate the Day-Night Sound Level (Ldn) at site, which can be used to establish baseline noise conditions for the project, including the Community Noise Equivalent Level (CNEL).

Given the proximity to highly trafficked arterial streets in all four directions, along with noise from nearby industrial uses, as well as levels from nearby aircraft activity at the March Airforce Base, noise levels should be physically measured to be accurately determined. An EIR should be prepared with these baseline noise measurements to properly describe the noise environment.

Operational Noise Impacts are Potentially Significant.

Operational noise from the project may represent long-term changes in the surrounding noise environment for nearby receptors. Typically, operational noise sources can include rooftop mechanical units and noise from outdoor spaces such as loading docks and parking lots.

Reasonable estimates for rooftop mechanical equipment must be provided and the potential for noise increases to the existing ambient noise must be evaluated for rooftop equipment. This is also why baseline noise measurements are typically required. It is impossible to accurately predict the increase in ambient noise due to a new project, if the current ambient environment is not known. An

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

EIR must be prepared to document the long-term noise caused by the project and evaluate potential noise impacts to sensitive receivers.

Conclusions

There are several errors and omissions in the IS/MND noise analysis, including nonexistent measurements of the existing noise environment, an omission of impact analysis to nearby buildings, and an insufficient analysis of mechanical noise. Correcting these would potentially identify several significant impacts which would require mitigation. Please feel free to contact me with any questions on this information.

Very truly yours,

WILSON IHRIG



Jack Meighan
Associate

EXHIBIT B

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

Attn: Nathan Perez, Senior Planner
City of Perris
101 N. D Street
Perris, California 92570

28 December 2024

RE: March Plaza IS/MND

Dear Mr. Perez,

I write to comment on potential impacts to biological resources resulting from the proposed March Plaza project, which I understand would add three tilt-up concrete buildings totaling 66,686 sf and 143 parking spaces on a 4.37-acre site at the northwest corner of Perris Boulevard and Harley Knox Boulevard in Perris, California. The planned use would be professional office spaces. I comment on the analyses of impacts to biological resources that is presented in the Initial Study/Mitigated Negative Declaration (City of Perris 2024).

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.

SITE VISIT

On my behalf, Noriko Smallwood, a wildlife biologist with a Master's Degree from California State University Los Angeles, visited the site of the proposed project for 2.8 hours from 07:00 to 09:48 hours on 23 December 2024. She walked the site's perimeter where accessible, stopping to scan for wildlife with use of binoculars. 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 during Noriko's survey were partly cloudy with no wind and temperatures of 45-62° F. The site is covered by annual grassland and ornamental trees and shrubs (Photos 1-3).



Photos 1 – 3. Views of the project site, 23 December 2024, photographed by Noriko Smallwood.

Noriko saw red-tailed hawk (Photos 4 and 5), California gull (Photo 6), American kestrel (Photos 7 and 8), California horned lark and savannah sparrow (Photos 9 and 10), American pipit and house sparrow (Photos 11 and 12), yellow-rumped warbler and white-crowned sparrow (Photos 13 and 14), house finch (Photo 15), common raven (Photos 16, 17 and 18), coyote (Photos 19 and 20), among the other species listed in Table 1. Noriko detected 19 species of vertebrate wildlife at or adjacent to the project site, including four species with special status (Table 1). Including surveys she conducted at an adjacent project site, she detected an additional 18 species for a total of 37 species, including eight species with special status in the immediate area (Table 1).

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

Noriko Smallwood
Noriko Smallwood



Photo 4. Red-tailed hawk flying over the project site, 23 December 2024. Photo by Noriko Smallwood.



Photos 5 and 6. Red-tailed hawk (left) and California gull (right) on the project site, 23 December 2024. Photos by Noriko Smallwood.



Photos 7 and 8. American kestrel on the project site, 23 December 2024. Photos by Noriko Smallwood.



Photos 9 and 10. California horned lark just off of the project site (left) and savannah sparrow on the project site (right), 23 December 2024. Photos by Noriko Smallwood.



Photos 11 and 12. American pipit (left) and house sparrow (right) on the project site, 23 December 2024. Photos by Noriko Smallwood.



Photos 13 and 14. Yellow-rumped warbler on the project site (left), and white-crowned sparrow just off the project site (right), 23 December 2024. Photos by Noriko Smallwood.



Photo 15. House finch on the project site, 23 December 2024. Photo by Noriko Smallwood.



Photos 16, 17 and 18. Common ravens on the project site, 23 December 2024. Photos by Noriko Smallwood.



Photos 19 and 20. Coyote on the project site, 23 December 2024. Photo by Noriko Smallwood.

Table 1. Species of wildlife Noriko observed during 1.7 hours of survey adjacent to the project site on 21 November 2021, 1.6 hours of survey adjacent to the project site on 9 December 2022, 2.8 hours of survey adjacent to the project site on 5 March 2024, and 2.8 hours of survey on the project site on 23 December 2024.

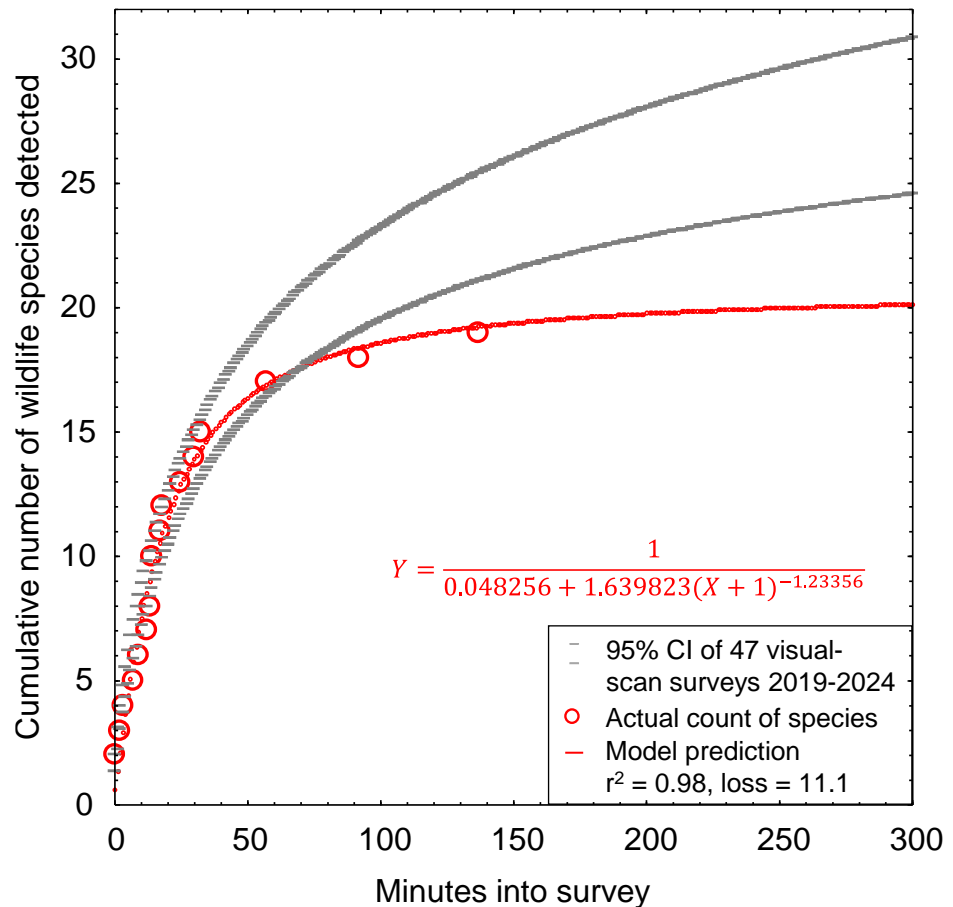
Common name	Species name	Status ¹	Adjacent to project site			On site, 23 Dec 2024	Notes from 12/23/24
			21 Nov 2021	9 Dec 2022	5 Mar 2024		
Harvester ant	<i>Pogonomyrmex sp.</i>		X	X	X		
Canada goose	<i>Branta canadensis</i>			X	X		
Mallard	<i>Anas platyrhynchos</i>				X		
Rock pigeon	<i>Columba livia</i>	Non-native	X	X	X	X	Just off site
Mourning dove	<i>Zenaida macroura</i>		X	X	X	X	Flew over
Anna's hummingbird	<i>Calypte anna</i>		X	X		X	
Killdeer	<i>Charadrius vociferus</i>				X		
California gull	<i>Larus californicus</i>	BCC, WL	X	X	X	X	Flew over
Double-crested cormorant	<i>Nannopterum auritum</i>	WL	X				
Great egret	<i>Ardea alba</i>				X		
Turkey vulture	<i>Cathartes aura</i>	BOP			X		
Northern harrier	<i>Circus cyaneus</i>	BCC, SSC ₃ , BOP		X			
Red-tailed hawk	<i>Buteo jamaicensis</i>	BOP	X	X	X	X	Multiple
American kestrel	<i>Falco sparverius</i>	BOP	X		X	X	Hunted
Peregrine falcon	<i>Falco peregrinus</i>	BOP	X				
Cassin's kingbird	<i>Tyrannus vociferans</i>				X		
Kingbird sp.	<i>Tyrannus sp.</i>		X				
Black phoebe	<i>Sayornis nigricans</i>				X	X	Just off site
Say's phoebe	<i>Sayornis saya</i>				X		
Common raven	<i>Corvus corax</i>		X	X	X	X	Foraged
California horned lark	<i>Eremophila alpestris actia</i>	WL		X		X	
Swallow sp.	<i>Hirundinidae</i>				X		
Bushtit	<i>Psaltriparus minimus</i>				X		
Northern mockingbird	<i>Mimus polyglottos</i>				X	X	
European starling	<i>Sturnus vulgaris</i>	Non-native	X	X	X		
House sparrow	<i>Passer domesticus</i>	Non-native		X		X	
American pipit	<i>Anthus rubescens</i>			X	X	X	Many, foraged

Common name	Species name	Status ¹	Adjacent to project site			On site, 23 Dec 2024	Notes from 12/23/24
			21 Nov 2021	9 Dec 2022	5 Mar 2024		
House finch	<i>Haemorphous mexicanus</i>		X	X	X	X	
Lesser goldfinch	<i>Spinus psaltria</i>		X	X	X		
Lark sparrow	<i>Chondestes grammacus</i>				X		
White-crowned sparrow	<i>Zonotrichia leucophrys</i>				X	X	Just off site
Savannah sparrow	<i>Passerculus sandwichensis</i>		X	X	X	X	Foraged
Western meadowlark	<i>Sturnella neglecta</i>			X	X		
Red-winged blackbird	<i>Agelaius phoeniceus</i>				X		
Yellow-rumped warbler	<i>Setophaga coronata</i>		X	X	X	X	Foraged
Raccoon	<i>Procyon lotor</i>			X			
Coyote	<i>Canis latrans</i>					X	Searched site
California ground squirrel	<i>Otospermophilus beecheyi</i>					X	Burrows just off site
Botta's pocket gopher	<i>Thomomys bottae</i>				X	X	Burrows

¹ Listed as BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, SSC3 = California Species of Special Concern priority level 3, WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (California Fish and Game Code 3503.5).

The species of wildlife Noriko detected at the project site comprised only a sampling of the species that were present during her survey. To demonstrate this, I fit a nonlinear regression model to Noriko’s cumulative number of vertebrate species detected with time into her survey to predict the number of species that she would have detected with a longer survey or perhaps with additional biologists available to assist her. The model is a logistic growth model which reaches an asymptote that corresponds with the maximum number of vertebrate wildlife species that could have been detected during the survey. In this case, the model fit to her survey predicts 21 species of vertebrate wildlife were available to be detected, or two species more than the number she actually detected (Figure 1). Noriko detected most of the species that were likely to be detected on the morning of her survey.

Figure 1. Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on Noriko’s visual-scan survey on 23 December 2024.



The pattern in Noriko’s species detections indicates that the project site supports an average species richness as compared to 47 other sites she and I have surveyed in the region. Species richness likely would have been higher had the site not been surrounded by warehouses, big box retail and a convenience store. Importantly, however, the species Noriko did and did not detect on 23 December 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.

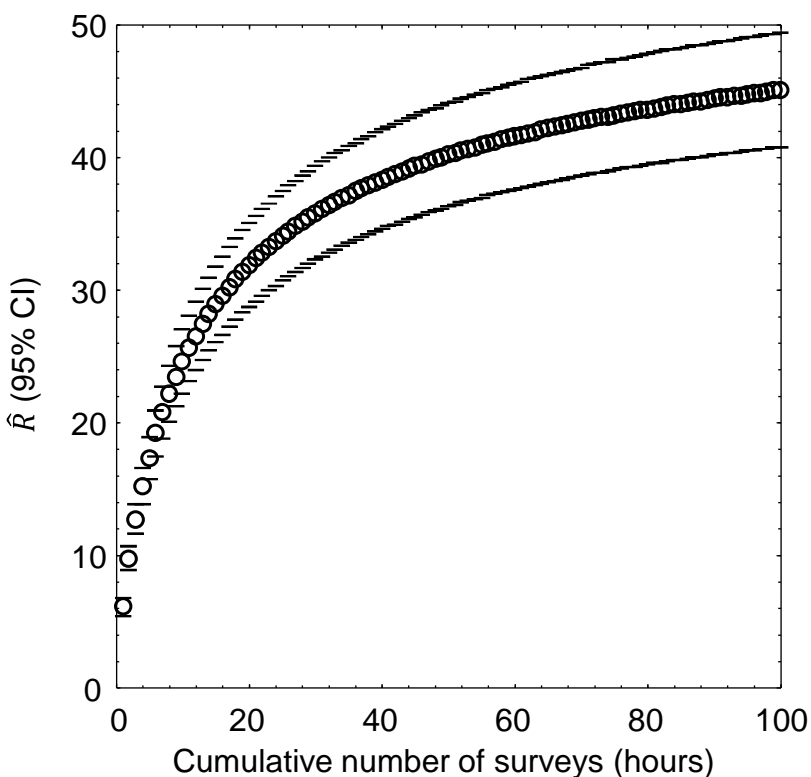
At least a year's worth of surveys would be needed to more accurately report the number of vertebrate species that occur at the project site, but I only have Noriko's one survey. However, by use of an analytical bridge, a modeling effort applied to a large, robust data set from a research site can predict the number of vertebrate wildlife species that likely make use of the site over the longer term. 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: $\hat{R} = \frac{1}{1/a+b \times (\text{Hours})^c}$, 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 12.1 species over my first 2.8 hours of surveys at my research site in the Altamont Pass (2.8 hours to match the 2.8 hours Noriko surveyed at the project site), which composed 21.2% 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 19 species Noriko detected after her 2.8 hours of survey at the project site likely represented 21.2% 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 $19/0.212 = 90$ species of 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 90 predicted species, then continued surveys would eventually detect 19 special-status species of vertebrate wildlife.

Because my prediction of 90 species of vertebrate wildlife, including 19 special-status species of vertebrate wildlife, 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 survey 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 one survey to inventory the species of wildlife that use the project site. 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.

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 support of the proposed project, no wildlife survey was completed. According to the IS/MND (p. 28), “A Biological Reconnaissance Survey was prepared for the original project approval. By preparing the Biological Reconnaissance Survey, the development of the project site has complied with PVCCSP [Perris Valley Commerce Center Specific Plan] EIR mitigation measure MM Bio 6.” However, this conclusion makes little sense because MM Bio 6 of the PVCCSP EIR requires focused plant surveys for narrow endemic plant species. A focused plant survey is required, but has not been completed. Regardless, this MM Bio 6 requirement has nothing to do with wildlife.

According to the Perris Valley Commerce Center Specific Plan (PVCCSP) DEIR, a roadside survey was performed by unnamed biologists on a single day more than 17 years ago – 10 August 2007. During this survey, some unknown number of unnamed biologists also identified and mapped vegetation cover types across the 3,347 acres of the Specific Plan area. Assuming the survey lasted eight hours, which would be a lengthy survey as reconnaissance surveys go, the biologists would have covered 7 acres per minute, which means they would have, on average, spent 37 seconds surveying the project site from a roadside. In other words, the survey effort was minimal to meaningless. Moreover, the PVCCSP EIR did not report which species were detected during the survey, nor does it include a report of the survey or its findings.

The IS/MND (p. 5) reports, “The site supports limited non-native vegetation cover.” However, there is no reporting of the species that compose the vegetation cover, so this vague statement lacks sufficient detail to be taken seriously. Nor it is clear what is meant by limited. Regardless, the vegetation cover of the site suffices to support wildlife, as Noriko detected 19 species during her 23 December survey, and she detected 37 species of wildlife including 8 special-status species at and adjacent to the project site during four surveys over the last several years.

The IS/MND (p. 29) reports that “A habitat assessment (burrowing owl, general biological reconnaissance) and Western Riverside Multiple Species Habitat Conservation Plan (MSHCP) consistency analysis was conducted on May 6, 2016.” However, a report of the habitat assessment and MSHCP consistency analysis is not provided with the IS/MND. I have not had the opportunity to review the findings for myself. Moreover, the assessment was performed longer than 8.5 years ago, and is therefore likely outdated. These deficiencies are all the more important considering that a listing petition has been submitted to the California Fish and Game Commission in response to an ongoing rapid decline of burrowing owls across California (Miller 2024), and considering that CDFW (2024) has endorsed the petition and the Commission voted unanimously to adopt it. Noriko found California ground squirrels next to the project site, which means that the most important mutualist species of burrowing owls is present, thereby increasing the likelihood that burrowing owls are present (Smallwood and Morrison 2018, 2024). It is therefore my opinion that the proposed project would result in potentially significant adverse impacts to burrowing owls unless breeding-season detection surveys are implemented to the standards of CDFW (2012).

The ISD/MND (p. 29) assures that “...in accordance with PVCCSP mitigation measure MM Bio 2 and the requirements of the MSHCP, a preconstruction survey would be required following project approval but prior to construction ...” And, “a 30-day pre-construction burrowing owl survey would be conducted immediately prior to the initiation of construction to confirm that the species is not present at the project site at that time.” However, a preconstruction survey does not carry the same detection probability as a focused survey. A preconstruction survey cannot confirm the absence of burrowing owls. Performing a preconstruction survey without having first performed a focused detection survey would be inconsistent with the available guidelines and would be much more likely to generate a false negative finding; it would be inappropriate.

The City needs to retain the services of professional wildlife ecologists. Indicative of this need is the IS/MND’s (p. 29) inaccurate characterization of burrowing owl as “a California Department of Fish and Wildlife (CDFW) Species of Special Concern.” In fact, the burrowing owl is a candidate species for listing under the California Endangered Species Act.

Also indicative of the need to retain a biologist is the IS/MND’s (p. 29) claim that “If burrowing owls are detected within or adjacent to the project site during the pre-construction survey, the burrowing owls shall be relocated/excluded from the site outside of the breeding season following accepted protocols, ...” However, as a candidate species for listing under CESA, no take of burrowing owl is allowed.

The IS/MND makes additional false assertions that are readily refutable by observations. For example, the IS/MND (p. 29) claims, “Due to the absence of trees and/or water, the project site does not provide suitable habitat for nesting migratory birds. As such, the project does not have the potential to impact nesting migratory birds and PVCCSP EIR mitigation measure MM Bio 1 is not applicable to the project.” In fact, many species of birds do not require trees or water for nesting. Many species of birds nest in grasslands, and some nest on bare ground, some in burrows, and some on disturbed soils or even on gravel. The IS/MND is factually inaccurate regarding nesting and whether the site provides birds with breeding opportunities.

In another example, the IS/MND (p. 29) claims, “The project site does not contain suitable foraging habitat for raptors and/or burrowing owls.” The IS/MND cites no evidence in support of this preposterous claim. In fact, Noriko observed five species of raptor, including raptors that were foraging.

In another example, the IS/MND (p. 29) claims, “The site ... was determined to be devoid of habitat value for plants and wildlife.” In support of this indefensible, false determination, the IS/MND fails to identify who allegedly determined the site is devoid of habitat value for plants and wildlife. Noriko detected 37 species at and adjacent to the project site. The pattern in her species detection data indicates at least 90 species of vertebrate wildlife use the site as habitat. The evidence soundly refutes the IS/MND’s claim.

According to the IS/MND (p. 29), “The site does not contain riparian/riverine, vernal pool, or any similar areas that might provide habitat for sensitive riparian birds or fairy shrimp species...” However, this statement is unsupportable. No survey for vernal pools has been completed on the project site, as the 2007 reconnaissance survey was performed from roadsides. The PVCCSP EIR stated, “detailed information for most resources, including vernal pools and fairy shrimp was difficult to obtain.” And, “Site-specific habitat assessments would need to be conducted during the rainy season to determine the presence/absence of potential fairy shrimp habitat.” Thus, the reporting in the PVCCSP EIR fails to support the conclusion in the IS/MND. Moreover, MM Bio-5 of the PVCCSP EIR requires “project-specific mapping of vernal pools for implementing projects...” The IS/MND concludes that there are no vernal pools before the required surveys for vernal pools have been completed.

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.

The documents I reviewed include no desktop review to assess avian species’ occurrence likelihoods in or near the airspace that would be displaced by the proposed project. The lack of a desktop review for avian flight paths and for special-status species likely to occur at the project site leaves the City of Los Angeles uninformed of and unprepared for potential project impacts to birds.

In my assessment based on database review, 146 special-status species of wildlife are known to occur near enough to the project site to warrant analysis of occurrence potential (Table 2). Of these 146 special-status species, 4 have been confirmed on the project site, 24 (16%) have been documented within 1.5 miles of the site (Very close), 51 (35%) within 1.5 and 4 miles (Nearby), and another 59 (40%) within 4 to 30 miles (In region). Most (54%) of the species in Table 2 have been reportedly seen within 4 miles of the project site. It is reasonable to conclude, therefore, that the site carries considerable potential for supporting special-status species of wildlife based on proximity of recorded occurrences.

A third of the species in Table 2 are covered by the MSHCP, including one confirmed on the project site, and 15 very close to the site, 16 nearby, and 16 in the region. Of these species, two-thirds have been documented within only four miles of the site. Insufficient mitigation of impacts to these species would interfere with the MSHCP.

On the other hand, two-thirds of the species listed in Table 2 have no coverage under the MSHCP, so the only viable mitigation of impacts to these species would be via traditional means of the CEQA. Of these species, three were confirmed on the project site, 9 have been documented very close to the site, and 35 have been documented nearby.

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 observed by Noriko at the project site.

Common name	Species name	Status¹	MSHCP	Data base records, Site visits
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FT	Yes	In region
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	FE		In region
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	FE	Yes	In region
Delhi sands flower-loving fly	<i>Rhaphiomidas terminatus abdominalis</i>	FE	Yes	In region
Monarch	<i>Danaus plexippus</i>	FC		Nearby
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	FE	Yes	In region
Crotch’s bumble bee	<i>Bombus crotchii</i>	CCE		Nearby
Western spadefoot	<i>Spea hammondi</i>	SSC	Yes	Nearby
Arroyo toad	<i>Anaxyrus californicus</i>	FE, SSC		In region
California red-legged frog	<i>Rana draytonii</i>	FT, SSC	Yes	In region
Western pond turtle	<i>Emys marmorata</i>	SSC	Yes	In region
Blainville’s horned lizard	<i>Phrynosoma blainvillii</i>	SSC	Yes	In region
Orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	WL	Yes	Very close
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	SSC	Yes	Nearby
San Diegan legless lizard	<i>Anniella stebbinsi</i>	SSC		In region
California glossy snake	<i>Arizona elegans occidentalis</i>	SSC		In region
Coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	SSC		In region
Two-striped gartersnake	<i>Thamnophis hammondi</i>	SSC		In region
South coast gartersnake	<i>Thamnophis sirtalis pop. 1</i>	SSC		In region
Red-diamond rattlesnake	<i>Crotalus ruber</i>	SSC	Yes	Nearby
Fulvous whistling-duck	<i>Dendrocygna bicolor</i>	SSC1		In region
Brant	<i>Branta bernicla</i>	SSC2		Nearby
Cackling goose (Aleutian)	<i>Branta hutchinsii leucopareia</i>	WL		In region
Redhead	<i>Aythya americana</i>	SSC2		Very close
Western grebe	<i>Aechmophorus occidentalis</i>	BCC		Nearby

Common name	Species name	Status¹	MSHCP	Data base records, Site visits
Clark's grebe	<i>Aechmophorus clarkii</i>	BCC		Nearby
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	FT, CE	Yes	In region
Black swift	<i>Cypseloides niger</i>	SSC3, BCC	Yes	Nearby
Vaux's swift	<i>Chaetura vauxi</i>	SSC2		Nearby
Calliope hummingbird	<i>Selasphorus calliope</i>	BCC		Nearby
Rufous hummingbird	<i>Selasphorus rufus</i>	BCC		Nearby
Allen's hummingbird	<i>Selasphorus sasin</i>	BCC		Nearby
Mountain plover	<i>Charadrius montanus</i>	SSC2, BCC	Yes	In region
Snowy plover	<i>Charadrius nivosus</i>	BCC		Nearby
Western snowy plover	<i>Charadrius nivosus nivosus</i>	FT, SSC		In region
Long-billed curlew	<i>Numenius americanus</i>	WL		Nearby
Marbled godwit	<i>Limosa fedoa</i>	BCC		Nearby
Red knot (Pacific)	<i>Calidris canutus</i>	BCC		Nearby
Pectoral sandpiper	<i>Calidris melanotos</i>	BCC		Nearby
Short-billed dowitcher	<i>Limnodromus griseus</i>	BCC		In region
Lesser yellowlegs	<i>Tringa flavipes</i>	BCC		Nearby
Willet	<i>Tringa semipalmata</i>	BCC		Very close
Laughing gull	<i>Leucophaeus atricilla</i>	WL		In region
Franklin's gull	<i>Leucophaeus pipixcan</i>	BCC		Nearby
Heermann's gull	<i>Larus heermanni</i>	BCC		Nearby
Western gull	<i>Larus occidentalis</i>	BCC		Nearby
California gull	<i>Larus californicus</i>	BCC, WL		On site
California least tern	<i>Sternula antillarum browni</i>	FE, CE, CFP		In region
Black tern	<i>Chlidonias niger</i>	SSC2, BCC		Nearby
Elegant tern	<i>Thalasseus elegans</i>	BCC, WL		In region
Black skimmer	<i>Rynchops niger</i>	BCC, SSC3		In region
Common loon	<i>Gavia immer</i>	SSC		Nearby
Double-crested cormorant	<i>Phalacrocorax auritus</i>	WL	Yes	Very close
American white pelican	<i>Pelicanus erythrorhynchos</i>	SSC1		Nearby
California brown pelican	<i>Pelecanus occidentalis californicus</i>	CFP		Nearby

Common name	Species name	Status¹	MSHCP	Data base records, Site visits
Least bittern	<i>Ixobrychus exilis</i>	SSC2		In region
Reddish egret	<i>Egretta rufescens</i>	BCC		In region
White-faced ibis	<i>Plegadis chihi</i>	WL	Yes	Very close
Turkey vulture	<i>Cathartes aura</i>	BOP	Yes	Very close
Osprey	<i>Pandion haliaetus</i>	WL, BOP	Yes	Very close
White-tailed kite	<i>Elanus leucurus</i>	CFP, BOP	Yes	Very close
Golden eagle	<i>Aquila chrysaetos</i>	BGEPA, CFP, BOP, WL	Yes	Nearby
Northern harrier	<i>Circus cyaneus</i>	BCC, SSC3, BOP	Yes	Very close
Sharp-shinned hawk	<i>Accipiter striatus</i>	WL, BOP	Yes	Nearby
Cooper's hawk	<i>Accipiter cooperii</i>	WL, BOP	Yes	Very close
Bald eagle	<i>Haliaeetus leucocephalus</i>	CE, BGEPA, BOP	Yes	Very close
Red-shouldered hawk	<i>Buteo lineatus</i>	BOP		Very close
Swainson's hawk	<i>Buteo swainsoni</i>	CT, BOP	Yes	Nearby
Red-tailed hawk	<i>Buteo jamaicensis</i>	BOP		On site
Ferruginous hawk	<i>Buteo regalis</i>	WL, BOP	Yes	Very close
Zone-tailed hawk	<i>Buteo albonotatus</i>	BOP		In region
Harris' hawk	<i>Parabuteo unicinctus</i>	WL, BOP		In region
Rough-legged hawk	<i>Buteo lagopus</i>	BOP		Nearby
American barn owl	<i>Tyto furcata</i>	BOP		Very close
Western screech-owl	<i>Megascops kennicotti</i>	BOP		Nearby
Great horned owl	<i>Bubo virginianus</i>	BOP		Very close
Burrowing owl	<i>Athene cunicularia</i>	BCC, SSC2, BOP, CCE	Yes	Nearby
Long-eared owl	<i>Asio otus</i>	BCC, SSC3, BOP		In region
Short-eared owl	<i>Asia flammeus</i>	BCC, SSC3, BOP		In region
Lewis's woodpecker	<i>Melanerpes lewis</i>	BCC		In region
Nuttall's woodpecker	<i>Picoides nuttallii</i>	BCC		Very close
American kestrel	<i>Falco sparverius</i>	BOP		On site
Merlin	<i>Falco columbarius</i>	WL, BOP	Yes	Nearby

Common name	Species name	Status¹	MSHCP	Data base records, Site visits
Peregrine falcon	<i>Falco peregrinus</i>	BOP	Yes	Very close
Prairie falcon	<i>Falco mexicanus</i>	WL, BOP	Yes	Nearby
Olive-sided flycatcher	<i>Contopus cooperi</i>	BCC, SSC2		Nearby
Willow flycatcher	<i>Empidonax traillii</i>	CE		Nearby
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	FE, CE	Yes	In region
Vermilion flycatcher	<i>Pyrocephalus rubinus</i>	SSC2		Very close
Least Bell's vireo	<i>Vireo bellii pusillus</i>	FE, CE	Yes	Nearby
Loggerhead shrike	<i>Lanius ludovicianus</i>	SSC2	Yes	Very close
Oak titmouse	<i>Baeolophus inornatus</i>	BCC		Nearby
Verdin	<i>Auriparus flaviceps</i>	BCC		Nearby
California horned lark	<i>Eremophila alpestris actia</i>	WL	Yes	On site
Bank swallow	<i>Riparia riparia</i>	CT		Nearby
Purple martin	<i>Progne subis</i>	SSC2	Yes	Nearby
Wrentit	<i>Chamaea fasciata</i>	BCC		Nearby
California gnatcatcher	<i>Polioptila c. californica</i>	FT, SSC2	Yes	Very close
California thrasher	<i>Toxostoma redivivum</i>	BCC		Nearby
Cassin's finch	<i>Haemorhous cassinii</i>	BCC		In region
Lawrence's goldfinch	<i>Spinus lawrencei</i>	BCC		Very close
Grasshopper sparrow	<i>Ammodramus savannarum</i>	SSC2	Yes	Nearby
Black-chinned sparrow	<i>Spizella atrogularis</i>	BCC		Nearby
Gray-headed junco	<i>Junco hyemalis caniceps</i>	WL		Nearby
Bell's sparrow	<i>Amphispiza b. belli</i>	WL	Yes	Very close
Oregon vesper sparrow	<i>Poocetes gramineus affinis</i>	SSC2		In range
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	WL	Yes	Nearby
Yellow-breasted chat	<i>Icteria virens</i>	SSC3	Yes	Nearby
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	SSC3		Nearby
Bullock's oriole	<i>Icterus bullockii</i>	BCC		Very close
Tricolored blackbird	<i>Agelaius tricolor</i>	CT, BCC, SSC1	Yes	Nearby
Lucy's warbler	<i>Leiothlypis luciae</i>	SSC3		In region

Common name	Species name	Status¹	MSHCP	Data base records, Site visits
Virginia's warbler	<i>Leiothlypis virginiae</i>	WL, BCC		In region
Prothonotary warbler	<i>Protonotaria citrea</i>	BCC		In region
Prairie warbler	<i>Setophaga discolor</i>	BCC		In region
Yellow warbler	<i>Setophaga petechia</i>	SSC ₂	Yes	Very close
Summer tanager	<i>Piranga rubra</i>	SSC ₁		Nearby
Little brown bat	<i>Myotis lucifugus</i>	WBWG: M		In region
Yuma myotis	<i>Myotis yumanensis</i>	WBWG: LM		In region
Long-eared myotis	<i>Myotis evotis</i>	WBWG: M		In region
Fringed myotis	<i>Myotis thysanodes</i>	WBWG: H		In region
Long-legged myotis	<i>Myotis volans</i>	WBWG: H		In region
California myotis	<i>Myotis californicus</i>	WBWG: L		In region
Small-footed myotis	<i>Myotis ciliolabrum</i>	WBWG: M		In range
Canyon bat	<i>Parastrellus hesperus</i>	WBWG: M		In region
Big brown bat	<i>Episticus fuscus</i>	WBWG: L		In region
Silver-haired bat	<i>Lasionycteris noctivagans</i>	WBWG: M		In range
Hoary bat	<i>Lasiurus cinereus</i>	WBWG: M		In region
Western red bat	<i>Lasiurus blossevillii</i>	SSC, WBWG: H		In region
Western yellow bat	<i>Lasiurus xanthinus</i>	SSC, WBWG: H		In region
Spotted bat	<i>Euderma maculatum</i>	SSC, WBWG: H		In range
Townsend's big-eared bat	<i>Corynorhinus townsendii</i>	SSC, WBWG: H		In region
Pallid bat	<i>Antrozous pallidus</i>	SSC, WBWG: H		In region
Mexican free-tailed bat	<i>Tadarida brasiliensis</i>	WBWG: L		In region
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	SSC, WBWG: M		In range
Big free-tailed bat	<i>Nyctinomops macrotis</i>	SSC, WBWG: MH		In region
Western mastiff bat	<i>Eumops perotis</i>	SSC, WBWG: H		In range
San Diego black-tailed jackrabbit	<i>Lepus californicus bennettii</i>	SSC	Yes	In region
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	SSC	Yes	In region
Pallid San Diego pocket mouse	<i>Chaetodipus fallax pallidus</i>	SSC		In range
San Bernardino kangaroo rat	<i>Dipodomys merriami parvus</i>	FE, CCE, SSC	Yes	In region

Common name	Species name	Status¹	MSHCP	Data base records, Site visits
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	FE, CT	Yes	In region
Los Angeles pocket mouse	<i>Perognathus longimembris brevinasus</i>	SSC	Yes	In region
San Diego Bryant's woodrat	<i>Neotoma bryanti</i>	SSC	Yes	In region
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	SSC		In range
American badger	<i>Taxidea taxus</i>	SSC		In region

¹ Listed as FT or FE = federal threatened or endangered, FC = federal candidate for listing, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, 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), SSC1, SSC2 and SSC3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively (Shuford and Gardali 2008), WL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (CFG Code 3503.5), and WBWG = Western Bat Working Group with priority rankings, of low (L), moderate (M), and high (H).

At least a fair argument can be made for the need to prepare an EIR to complete the surveys that are needed to accurately characterize the wildlife community as part of the project site's environmental setting.

BIOLOGICAL IMPACTS ASSESSMENT

Accurate characterization of the existing environmental setting is an essential foundation for analysis of potential project impacts, but the documents I reviewed provide no foundation for impacts analysis. An impacts analysis should consider whether and how the proposed project would affect members of each potentially occurring special-status species and of each species of bird likely to attempt to fly through the airspace of the project. In the following, I analyze two types of impacts likely to result from the project, and neither of which is addressed in the documents I reviewed.

HABITAT LOSS

Habitat loss not only results in the immediate numerical decline of wildlife, but it also results in permanent loss of productive capacity. Habitat fragmentation multiplies the negative effects of habitat loss on the productive capacities of biological species (Smallwood 2015). However, instead of analyzing this type of impact with any rigor, the IS/MND (p. 30) speculates, "Due to the disturbed condition of the project site, the complete lack of habitat, the nature of adjacent development, and the intervening presence of roadways and infrastructure, development of the proposed project would not result in habitat fragmentation...." Of course it would. The site was proven to serve as habitat to at least 19 species of wildlife which Noriko observed on the site. And many more species of wildlife rely on habitat provided by the site. Converting this habitat patch to three warehouses and a parking lot would further fragment the remaining habitat of the region.

Habitat loss results in a reduced productive capacity of affected wildlife species, but the IS/MND makes no attempt to estimate this lost capacity for any of the wildlife species potentially affected. In the case of birds, two methods exist for estimating the loss of productive capacity that would be caused by the project. One method would involve surveys to count the number of bird nests and chicks produced. The alternative method would be to infer productive capacity from estimates of total nest density elsewhere.

Because the project is located within an area that has undergone severe habitat fragmentation, the habitat that remains in fragmented patches probably no longer supports its original productive capacity of wildlife (Smallwood 2015). However, several studies have estimated total avian nest density at locations that had likewise been highly fragmented. Two study sites in grassland/wetland/woodland complexes within agricultural matrices had total bird nesting densities of 32.8 and 35.8 nests per acre (Young 1948, Yahner 1982) for an average 34.3 nests per acre. To acquire a total nest density closer to conditions in California, Noriko surveyed various patches of vegetation cover in southern California throughout the breeding seasons of 2023 and 2024. The most relevant study site to the vegetation cover on the project site consists of a 3.16-acre

site of grassland in Murrieta, where Noriko estimated an average of 3.8 nests/acre. Applying this nest density to the 4.37 acres of the project site would predict 13.8 nest sites on the project site. Assuming 1.39 broods per nest site, which is the average among 322 North American bird species I asked Noriko to review, then I predict the project would cost California 19.2 nest attempts/year.

The loss of 13 to 14 nest sites and 19.2 nest attempts per year would qualify as significant impacts that have not been analyzed in the IS/MND. But the impacts would not end with the immediate loss of nest sites. The reproductive capacity of the site would be lost. The average number of fledglings per nest in Young's (1948) study was 2.9. Assuming Young's (1948) study site typifies bird productivity, the project would prevent the production of 56 fledglings per year. Assuming an average bird generation time of 5 years, the lost capacity of both breeders and annual fledgling production can be estimated from an equation in Smallwood (2022): $\{(nests/year \times chicks/nest \times number\ of\ years) + (2\ adults/nest \times nests/year) \times (number\ of\ years \div years/generation)\} \div (number\ of\ years) = 62\ birds\ per\ year\ denied\ to\ California.$

The loss of 62 birds per year would be a loss of considerable habitat value that is currently provided by the project site. Most if not all of these birds are protected by the federal Migratory Bird Treaty Act and by California's Migratory Bird Protection Act, both of which most strongly protect breeding migratory birds. Therefore, at least a fair argument can be made for the need to prepare an EIR to appropriately analyze project impacts to birds in the form of lost productive capacity caused by habitat loss.

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 IS/MND provides a flawed analysis of whether the project would interfere with wildlife movement in the region. The IS/MND (p. 29) reasons that "No wildlife corridor, established native resident, or native wildlife nursery site exists on the subject site. ... The project site is not in proximity to any known wildlife corridors." However, whether the site functions as a wildlife movement corridor or is located within or near a corridor is not the only consideration when it comes to the standard CEQA Checklist question of whether the project would interfere with wildlife movement in the region. The primary phrase of the CEQA standard goes to wildlife movement regardless of whether the movement is channeled by a corridor. Birds are obviously using the site, as Noriko saw them doing so, so they are able to travel to and from the site. Most of the birds recorded at the site are migratory birds, and the site is one of the last remaining patches of open space available to any of these and other birds that need to move through the region. The project site is important to wildlife movement in the region.

At least a fair argument can be made for the need to prepare an EIR to appropriately analyze the project's potential impacts to volant wildlife and how those impacts to movement can be mitigated.

TRAFFIC IMPACTS TO WILDLIFE

The documents I reviewed neglect 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 21–24), including along roads far from the project footprint but which would nevertheless be 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.

Photo 21. *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 22. *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 23 and 24. *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 IS/MND predicts 890,041 annual VMT. 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 \times 2.5 miles \times 365 days/year \times 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 379 vertebrate wildlife fatalities per year due to project-generated traffic. This level of mortality would qualify as a significant impact, and based on my review of the IS/MND, it would be unmitigated.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The IS/MND 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. At least a fair argument can be made for the need to prepare an EIR to appropriately analyze the impact of wildlife-automobile collisions resulting from project-generated traffic.

CUMULATIVE IMPACTS

The IS/MND's cumulative effects analysis is flawed. At p. 90, the IS/MND explains, "The proposed project is being developed according to the PVCCSP and is an allowed use under the site's Commercial land use designation in the PVCCSP; however, implementation of the PVCCSP may result in several cumulatively considerable impacts [biological resources is not identified as one of these]. ... However, as Demonstrated by the analysis in this Initial Study, the proposed project would not result in any significant environmental impacts." This explanation, however, is flawed from its premise that there would be no significant environmental impacts. There would be significant impacts caused by habitat loss, interference with wildlife movement, and collision mortality with project-generated automobile traffic. That these impacts would be cumulatively significant is obvious in the face of nearly all of the habitat in the area having been already converted to warehouses and roads.

Noriko Smallwood and I measured the impacts of habitat loss to wildlife caused by mitigated development projects similar to and in many cases just like the proposed project. We revisited 80 sites of proposed projects that we had originally surveyed in support of comments on 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 in order 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 of the mitigation measures per existing policies and regulations. We also specifically tested for the effects of projects to wildlife in neighboring habitats, and we found significant decreases in species richness and overall abundance in those areas as well.

The IS/MND (p. 90) adds, “The project would be consistent with local and regional plans... the proposed project would not have impacts that are individually limited, but cumulatively considerable, and impacts would be less than significant with mitigation incorporated.” According to CEQA Guidelines §15064(h)(3), “When relying on a plan, regulation or program, the lead agency should explain how implementing the particular requirements in the plan, regulation or program ensure that the project’s incremental contribution to the cumulative effect is not cumulatively considerable.” The DEIR does not do this.

MITIGATION MEASURES

The IS/MND requires a single mitigation measure, which is misdirected and deficient.

MM BR-1: The project proponent shall retain a qualified biologist to conduct a preconstruction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities on the Project site. ... If burrowing owl are detected, the CDFW shall be sent written notification by the City, within three days of detection of burrowing owls. ... If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls may also be required in the Burrowing Owl Plan. The permittee shall implement the Burrowing Owl Plan following CDFW and USFWS review and concurrence.

As I commented earlier, a preconstruction survey does not carry anywhere close to the detection probability of a focal detection survey for burrowing owls. MM BR-1 requires only the one type of survey that is supposed to follow the completion of a detection survey effort. MM BR-1 is therefore incomplete and misleading. Furthermore, now that

the burrowing owls is a candidate for listing under CESA, no take is allowed. MM BR-1 is inappropriate.

RECOMMENDED MEASURES

Biological Surveys: Although not truly mitigation measures, the environmental review must be informed by the appropriate biological surveys. Qualified biologists are needed to survey for vernal pools and other wetlands, and for vernal pool brachiopods. Qualified biologists are also needed to survey the site for wildlife and to determine how wildlife rely on the site for movement in the region. Breeding-season detection surveys need to be completed for burrowing owls. A nesting bird survey is needed. All of these surveys are needed to accurately characterize the existing environmental setting, and to subsequently formulate appropriate mitigation measures.

Road Mortality: Compensatory mitigation is needed for the increased wildlife mortality that would be caused by bird-window collisions and 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 the building's windows and with automobiles traveling to and from the building.

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 threatened 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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Letter 3

COMMENTER: Richard Drury; Lozeau Drury, LLP

DATE: December 30, 2024

Response 3.1

The commentor provides several legal citations regard the “fair argument” standard for preparing an EIR under CEQA. With respect to the fair argument standard to prepare an EIR, it should be noted that a Negative Declaration had been previously prepared for a project on the site in 2016. That project was approved and has been partially constructed, with the exception of the portion of the site currently under consideration in the proposed Initial Study/MND. As noted throughout the Initial Study/MND, the revised project being considered for the undeveloped portion of the site that was previously studied in the Negative Declaration would be less intensive than what had previously been approved, so potential impacts would be generally less than described in the previously-adopted Negative Declaration. Nevertheless, as noted above, applicable mitigation measures from the PVCCSP EIR would be required.

This comment also states that “as discussed below, there is a fair argument that the project may result in significant air quality impacts.” The letter does not actually discuss air quality impacts. However, another December 30, 2024 letter submitted by the same commentor does discuss air quality impacts. That letter, as well as responses to comments related to air quality impacts, is included as Letter 4.

Response 3.2

The commenter asserts that an EIR is required because a fair argument can be made that there are significant noise impacts. Under CEQA, a project may result in a significant noise impact if it would generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The Initial Study/MND evaluated the potential increase in noise levels during both construction and operation of the project and concluded that potential noise impacts would be less than significant in this case based on technical studies prepared in conjunction with the previously adopted Negative Declaration for the approved project that was more intensive than the one currently proposed. Nevertheless, several mitigation measures are carried forward from the PVCCSP EIR that are applicable to the project, including mitigation related to the use of construction equipment, noise barriers when needed, and truck delivery restrictions during project construction. (See PVCCSP EIR mitigation measures MM Noise 1, MM Noise 2, MM Noise 3 and MM Noise 4 on pages 71-72 of the Initial Study/MND.) The mitigation measures would further reduce the less than significant impacts of the project.

The Initial Study/MND evaluated the potential groundborne vibration levels associated with project construction and determined that the proposed project would result in a less than significant impact.

The commenter provided an independent noise analysis for consideration by the City. That study draws conclusions that in some cases differ from the expert analysis included in the Initial Study/MND. The new study does not demonstrate the understanding that the project is the final phases of a previously approved project, and is less intensive than what had previously been

March Plaza Project

approved. In addition, it also includes some erroneous assumptions. For example, it describes the existing 7-11 store as “adjacent” to the proposed project, when in fact it is actually the first phase of the same project. A disagreement among experts is allowed under CEQA, and does not reflect on the adequacy of the CEQA document.

Response 3.3

The commenter asserts that an EIR is required because a fair argument can be made that there are significant impacts related to biological resources. The analysis of biological resources in the Initial Study/MND was prepared based on previous site surveys and a biological assessment prepared by Sage Institute, which is a qualified firm with expertise in such analysis.

The Initial Study/MND analysis concluded that potential impacts would be less than significant, generally because of the disturbed nature of the site and the lack of suitable habitat for nesting and foraging for birds or other sensitive animal species. Nevertheless, the Initial Study/MND acknowledges the potential for migratory birds to come onto the site, as well as the potential for burrowing owls to be present. For that reason, the Initial Study/MND includes mitigation measure MM BR-1, which requires pre-construction surveys for burrowing owls, as well as protocols related to that requirement in the event such species are found during the surveys. This is consistent with the mitigation requirements of the PVCCSP EIR, and direction provided by the California Department of Fish and Wildlife (CDFW). The required pre-construction survey measure would ensure that any potential impacts to sensitive biological resources would be less than significant. It should be noted that the CDFW did not submit comments on this project.

The commenter provided an independent assessment of biological resources for consideration by the Planning Commission and City Council. That study draws conclusions that in some cases differ from the expert analysis included in the Initial Study/MND. However, it does not establish that any special-status species are residents of the project site (i.e., using the site for nesting or a nursery site), and there are no federal Critical Habitat or state Sensitive Natural Communities on the site. It claims that the project would interfere with wildlife movement. However, the project would not significantly impact wildlife movement based on CEQA criteria because it is in an already disturbed site and not within any known migration corridor. CEQA does not protect all lands as “wildlife movement” areas but instead protects designated or “established native resident or migratory wildlife corridors.” It also includes additional recommendations related to potential mitigation measures, but does not provide the substantial evidence needed to support those recommendations. Previous surveys for the site, as well as mitigation requirements for the previously approved project on this site (which covered the same development footprint as what is currently proposed), provide a sufficient basis for a mitigation framework for this project based on identified impacts. Depending on the outcome of pre-construction surveys (which need to occur within 30 days prior to grading activities), additional post-survey protocols are already established in the mitigation requirements to address potential findings on the site. A disagreement among experts is allowed under CEQA, and does not reflect on the adequacy of the CEQA document.

Response 3.4

The commenter asserts that an EIR is required because a fair argument can be made that there are significant impacts related to impacts on air quality, but the letter does not actually discuss air quality impacts. However, another December 30, 2024 letter submitted by the same commentator

March Plaza Project

does discuss air quality impacts. That letter, as well as responses to comments related to air quality impacts, is included as Letter 4.



T 510.836.4200
F 510.836.4205

1939 Harrison Street, Ste. 150
Oakland, CA 94612

www.lozeaudrury.com
richard@lozeaudrury.com

Letter 4

Via Email

December 30, 2024

Nathan Perez, Senior Planner
Planning Division
Development Services Department
City of Perris
135 North "D" Street
Perris, CA 92570
Nperez@cityofperris.org

Re: Supplemental Comment on Mitigated Negative Declaration, March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029)

Dear Mr. Perez:

This comment supplements the comment submitted earlier today on behalf of Supporters Alliance For Environmental Responsibility ("SAFER") regarding the Initial Study and Mitigated Negative Declaration ("IS/MND") prepared for the March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029), which proposes the development of three (3) multi-tenant concrete tilt-up buildings totaling in 66,686 square feet, located at the northwest corner of Perris Boulevard and Harley Knox Boulevard (APNs: 302090-052, -053, -054, -056, -057, -058, -059, -060 and -061) ("Project") in the City of Perris ("City").

As discussed below, there is a fair argument that the Project may result in significant air quality impacts. Therefore, SAFER respectfully requests that the City prepare an environmental impact report ("EIR") before approving the Project to analyze and mitigate these impacts in accordance with the California Environmental Quality Act ("CEQA").

SAFER's review of the MND was assisted by Dr. Paul Rosenfeld and professional engineer Matthew Hagemann, PE, C.Hg. of the environmental consulting firm, Soil Water Air Protection Enterprise ("SWAPE"). Dr. Rosenfeld's comments are attached hereto as Exhibit C.

This letter incorporates the project description and legal standard discussion from the letter submitted earlier today.

4.1

DISCUSSION

A. There is a Fair Argument that the Project May Have Significant Air Quality Impacts.

1. IS/MND Fails to Accurately Describe the Environmental Setting.

The City inadequately characterized the existing environmental setting and the site's ability to provide habitat for special-status species. Every CEQA document must start from a "baseline" assumption. The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. *Communities for a Better Env't. v. So. Coast Air Qual. Mgmt. Dist.* (2010) 48 Cal. 4th 310, 321. Section 15125(a) of the CEQA Guidelines (14 C.C.R., § 15125(a)) states in pertinent part that a lead agency's environmental review under CEQA:

"...must include a description of the physical environmental conditions in the vicinity of the project, *as they exist at the time [environmental analysis] is commenced*, from both a local and regional perspective. This environmental setting will normally constitute the baseline physical conditions by which a Lead Agency determines whether an impact is significant." (Emphasis added.)

(See, *Save Our Peninsula Committee v. County of Monterey* (2001) 87 Cal.App.4th 99, 124-125.) As the court of appeal has explained, "the impacts of the project must be measured against the 'real conditions on the ground,'" and not against hypothetical permitted levels. (*Save Our Peninsula, supra*, 87 Cal.App.4th 99, 121-123.)

The IS/MND fails to accurately describe the environmental setting of the Project. Dr. Rosenfeld states, "We have determined that the development of the proposed Project may contribute to disproportionate health risk impacts that warehouses pose on community members living, working, and going to school within the immediate area of the Project site. According to the South Coast Air Quality Management District's ("SCAQMD"), communities within half a mile of warehouses often experience higher rates of asthma, heart attacks, and environmental burdens, with communities of color more commonly affected." (SWAPE at 1).

Dr. Rosenfeld states, "the County already exhibits a heightened residential carcinogenic risk from exposure to air toxics. Specifically, the location of the Project site is in the 76th percentile of highest cancer risks in the South Coast Air Basin, with a cancer risk of 426 in one million." (SWAPE at 2). Dr. Rosenfeld states that the Project will exacerbate the already high background cancer risks, creating a significant cumulative impact. Dr. Rosenfeld concludes that the Project will have a significant environmental justice impact since it will contribute to disproportionate impacts on communities of color living in the area. (SWAPE at 3). Dr. Rosenfeld notes that the City of Perris is already home to 100 existing warehouses, with an additional 20 approved and 16 under CEQA review. (Id.)

4.1
(cont'd)

By failing to describe the already high existing air pollution and cancer risk in the area, the IS/MND fails to adequately describe the impacts of the Project.

2. There is a Fair Argument that the Project May Create Significant Airborne Cancer Risks from Diesel Particulate Matter (“DPM”).

Dr. Rosenfeld calculates that the Project may create significant airborne cancer risks from Diesel Particulate Matter (“DPM”) emissions. (SWAPE at 7). DPM is a known human carcinogen, listed under California’s Proposition 65. Using the AERSCREEN model, Dr. Rosenfeld calculates that the Project will create a cancer risk of up to 161 in one million over a 30-year residential lifetime – far exceeding the South Coast Air Quality Management District (“SCAQMD”) CEQA significance threshold of 10 per million. (SWAPE at 10).

When a project exceeds a duly adopted CEQA significance threshold, as here, this alone establishes substantial evidence that the project will have a significant adverse environmental impact. Indeed, in many instances, such air quality thresholds are the only criteria reviewed and treated as dispositive in evaluating the significance of a project’s air quality impacts. (See, e.g. *Schenck v. County of Sonoma* (2011) 198 Cal.App.4th 949, 960 [County applies Air District’s “published CEQA quantitative criteria” and “threshold level of cumulative significance”]; see also *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-11 [“A ‘threshold of significance’ for a given environmental effect is simply that level at which the lead agency finds the effects of the project to be significant”].) The California Supreme Court has shown the importance an air district significance threshold has in providing substantial evidence of a significant adverse impact. (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 327 [estimated emissions in excess of air district’s significance thresholds “constitute substantial evidence supporting a fair argument for a significant adverse impact”].) Since expert evidence shows the Project will exceed the SCAQMD’s CEQA significance threshold, there is substantial evidence that an “unstudied, potentially significant environmental effect[]” exists. (See *Friends of Coll. of San Mateo Gardens v. San Mateo Cty. Cmty. Coll. Dist.* (2016) 1 Cal.5th 937, 958.) An EIR is required to analyze and mitigate this impact.

4.1
(cont’d)

3. The Project Will have Significant Greenhouse Gas Impacts.

Dr. Rosenfeld concludes that the Project will have significant greenhouse gas impacts. (SWAPE at 12). The IS/MND compares the Project’s GHG emissions to the interim threshold of 3000 metric tons per year of carbon dioxide. However, Dr. Rosenfeld states that the GHG emissions are significant when compared to the SCAQMD 2035 efficiency target of 3.0 metric tons per service population per year. The Project’s GHG emissions are more than double this threshold, at 8.3 MT/SP/yr. (SWAPE at 12).

Since the Project’s GHG emissions exceed a threshold adopted by the SCAQMD,

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Comment on Mitigated Negative Declaration, March Plaza Project (SCH 2024110983, PLN22-00031, DPR 22-00031, PLN23-05028, PLN23-05029)

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there is a fair argument that the Project has significant impacts that must be analyzed in an EIR. An EIR would analyze the feasibility of the many mitigation measures suggested by Dr. Rosenfeld. (SWAPE at 14-16).

When a Project exceeds one CEQA significance threshold, but not another, there is a fair argument that the Project may have a significant environmental impact, and the MND may not be upheld. (*Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 Cal.App.4th 714, 733.) “A threshold of significance is not conclusive, however, and does not relieve a public agency of the duty to consider the evidence under the fair argument standard.” (*Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 342; see also *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1108-1109; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 110-114; Guidelines, § 15064, subd. (b).) A public agency cannot, as the City does here, apply a threshold of significance or regulatory standard “in a way that forecloses the consideration of any other substantial evidence showing there may be a significant effect.” (*Communities for a Better Environment, supra*, at p. 114.)

4.1
(cont'd)

CONCLUSION

As discussed above and in our prior comment letter, there is a fair argument that the Project may have significant adverse impacts on air quality. An EIR is thus required to analyze and mitigate the Project’s potentially significant effects. Therefore, SAFER respectfully requests that the City not rely on the MND and instead prepare and circulate an EIR before further consideration of the Project. SAFER reserves the right to supplement this comment throughout the administrative process. *Galante Vineyards v. Monterey Peninsula Water Management Dist.*, 60 Cal. App. 4th 1109, 1121 (1997).

Sincerely,



Richard Drury
Lozeau Drury LLP

EXHIBIT C



Technical Consultation, Data Analysis and
Litigation Support for the Environment

2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.
(949) 887-9013
mhagemann@swape.com

Paul E. Rosenfeld, PhD
(310) 795-2335
prosenfeld@swape.com

December 30, 2024

Richard Drury
Lozeau | Drury LLP
1939 Harrison Street, Suite 150
Oakland, CA 94618

Subject: Comments on the March Plaza Project (SCH No. 2024110983)

Dear Mr. Drury,

We have reviewed the November 2024 Initial Study/Mitigation Negative Declaration (“IS/MND”) for the March Plaza Project (“Project”) located in the City of Perris. The Project proposes to construct 3 industrial buildings totaling 66,686-square-feet (“SF”) and 151 parking spaces on the 4.37-acre site.

Our review finds that the IS/MND does not fully evaluate the Project’s health risks or greenhouse gas (“GHG”) impacts. This may lead to an underestimation and inadequate addressal of emissions and health risk impacts from both construction and operation. An Environmental Impact Report (“EIR”) should be prepared to more adequately assess and mitigate these potential environmental impacts.

Air Quality

Disproportionate Health Risk Impacts of Warehouses on Surrounding Communities

We have determined that the development of the proposed Project may contribute to disproportionate health risk impacts that warehouses pose on community members living, working, and going to school within the immediate area of the Project site. According to the South Coast Air Quality Management District’s (“SCAQMD”), communities within half a mile of warehouses often experience higher rates of asthma, heart attacks, and environmental burdens, with communities of color more commonly affected.¹

¹ “South Coast AQMD Governing Board Adopts Warehouse Indirect Source Rule.” SCAQMD, May 2021, *available at*: <http://www.aqmd.gov/docs/default-source/news-archive/2021/board-adopts-waisr-may7-2021.pdf?sfvrsn=9>.

Specifically, the SCAQMD found that more than 2.4 million people live within a half mile radius of at least one warehouse, and that those areas not only experience increased rates of asthma and heart attacks, but are also disproportionately Black and Latino communities below the poverty line.² Another study indicates “neighborhoods with lower household income levels and higher percentages of minorities are expected to have higher probabilities of containing warehousing facilities.”³ Additionally, a report authored by the Inland Empire-based People’s Collective for Environmental Justice and University of Redlands exerts that the growing warehouse industry increasingly builds in low-income communities of color, bringing thousands of polluting diesel trucks. These trucks emit nitrogen oxide and particulate matter (“PM”), causing severe health issues like asthma, chronic obstructive pulmonary disease, cancer, and premature death, leading physicians to label these areas “diesel death zones.”⁴

The growing development of industrial warehouses within these communities poses a significant environmental justice challenge. The acceleration of warehouse development is nonetheless increasing despite the consequences for public health. The Inland Empire alone has already added approximately 14.2 million SF of new industrial space in the first half of 2024.⁵

The Project is located in Riverside County which has long endured a disproportionately high pollution burden.⁶ The Data Visualization Tool for Mates V, a monitoring and evaluation study conducted by SCAQMD, demonstrates that the County already exhibits a heightened residential carcinogenic risk from exposure to air toxics.⁷ Specifically, the location of the Project site is in the 76th percentile of highest cancer risks in the South Coast Air Basin, with a cancer risk of 426 in one million (see screenshot below).⁸

² “Southern California warehouse boom a huge source of pollution. Regulators are fighting back.” Los Angeles Times, May 2021, *available at*: <https://www.latimes.com/california/story/2021-05-05/air-quality-officials-target-warehouses-bid-to-curb-health-damaging-truck-pollution>.

³ “Location of warehouses and environmental justice: Evidence from four metros in California.” Metro Freight Center of Excellence, January 2018, *available at*: https://www.metrotrans.org/assets/research/MF%201.1g_Location%20of%20warehouses%20and%20environmental%20justice_Final%20Report_021618.pdf, p. 21.

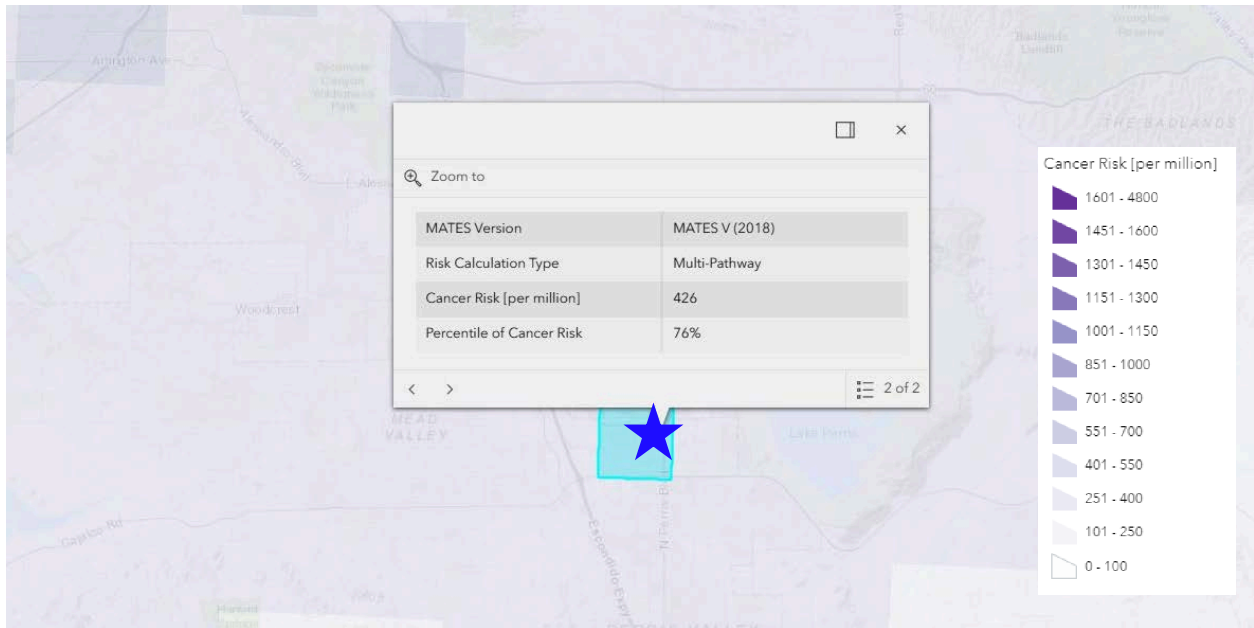
⁴ “Warehouses, Pollution, and Social Disparities: An analytical view of the logistics industry’s impacts on environmental justice communities across Southern California.” People’s Collective for Environmental Justice, April 2021, *available at*: https://earthjustice.org/sites/default/files/files/warehouse_research_report_4.15.2021.pdf, p. 4.

⁵ “2020 North America Industrial Big Box Review & Outlook.” CBRE, 2020, *available at*: https://www2.naicapital.com/wp-content/uploads/sites/2/IE-Industrial-Market-Outlook-Q2_2024.pdf, p. 1.

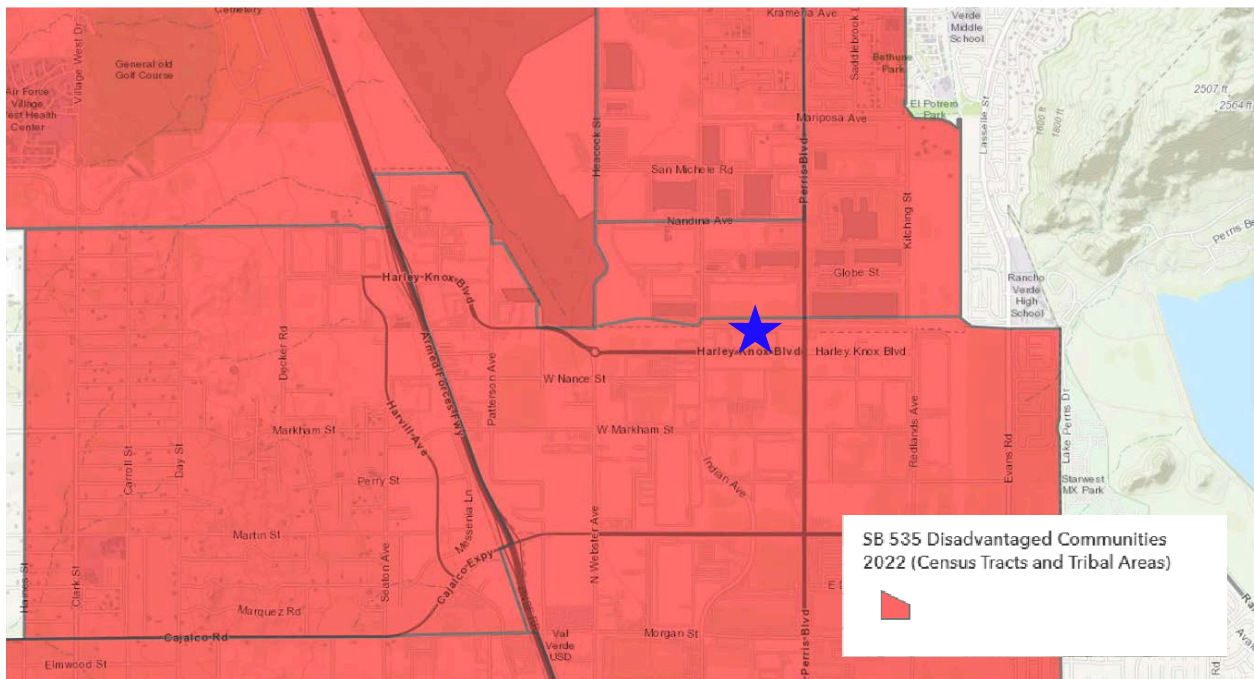
⁶ “Air Quality Element.” Riverside General Plan, *available at*: https://riversideca.gov/cedd/sites/riversideca.gov.icedd/files/pdf/planning/general-plan/13_Air_Quality_Element.pdf, p. AQ-11.

⁷ “Residential Air Toxics Cancer Risk Calculated from Model Data in Grid Cells.” MATES V, 2018, *available at*: <https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?views=Click-tabs-for-other-data%2CGridded-Cancer-Risk>; see also: “MATES V Multiple Air Toxics Exposure Study.” SCAQMD, *available at*: <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>.

⁸ “Gridded Cancer Risk.” SCAQMD, *available at*: https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/Main-Page/?data_id=dataSource_112-7c8f2a4db79b4a918d46b4e8985a112b%3A20315&views=Click-tabs-for-other-data%2CGridded-Cancer-Risk.



CalEnviroScreen’s Senate Bill (“SB”) 535 Disadvantaged Communities Map reveals that the Project site is identified as a designated disadvantaged community (see screenshot below).⁹



⁹ “SB 535 Disadvantaged Communities (2022 Update).” California Environmental Protection Agency, *available at:* <https://experience.arcgis.com/experience/1c21c53da8de48f1b946f3402fbae55c/page/SB-535-Disadvantaged-Communities/>.

SB 535 provides funding for development projects that benefit disadvantaged communities, with the California Environmental Protection Agency identifying these communities based on geographic, socioeconomic, public health, and environmental hazard criteria.¹⁰ Given that the Project site is within a disadvantaged community and a census tract that has a high existing cancer risk, the proposed Project is liable to exacerbate the health risk impacts imposed on the surrounding community.

The proposed Project may increase health risks for nearby community members, raising concerns under SB 1000. This legislation requires local governments to integrate environmental justice into their planning, prioritizing the reduction of health risks in disadvantaged communities.¹¹ The IS/MND identifies that the Project site is 0.25 miles from the nearest sensitive receptor (p. 28). The Project should align with SB 1000's objectives by incorporating policies to mitigate health risks faced by these communities.

In accordance with the California Department of Justice ("CA DOJ") guidelines, the effects of GHG emissions and air pollutants from warehouses should be evaluated cumulatively. The CA DOJ asserts that cumulative impacts should be analyzed by considering the project's incremental effects alongside past, present, and foreseeable future projects, even if the project's individual impacts do not exceed significance thresholds.¹²

To accurately assess the Project's impact on disadvantaged communities, both existing and anticipated warehouse developments should be considered during the environmental review process.

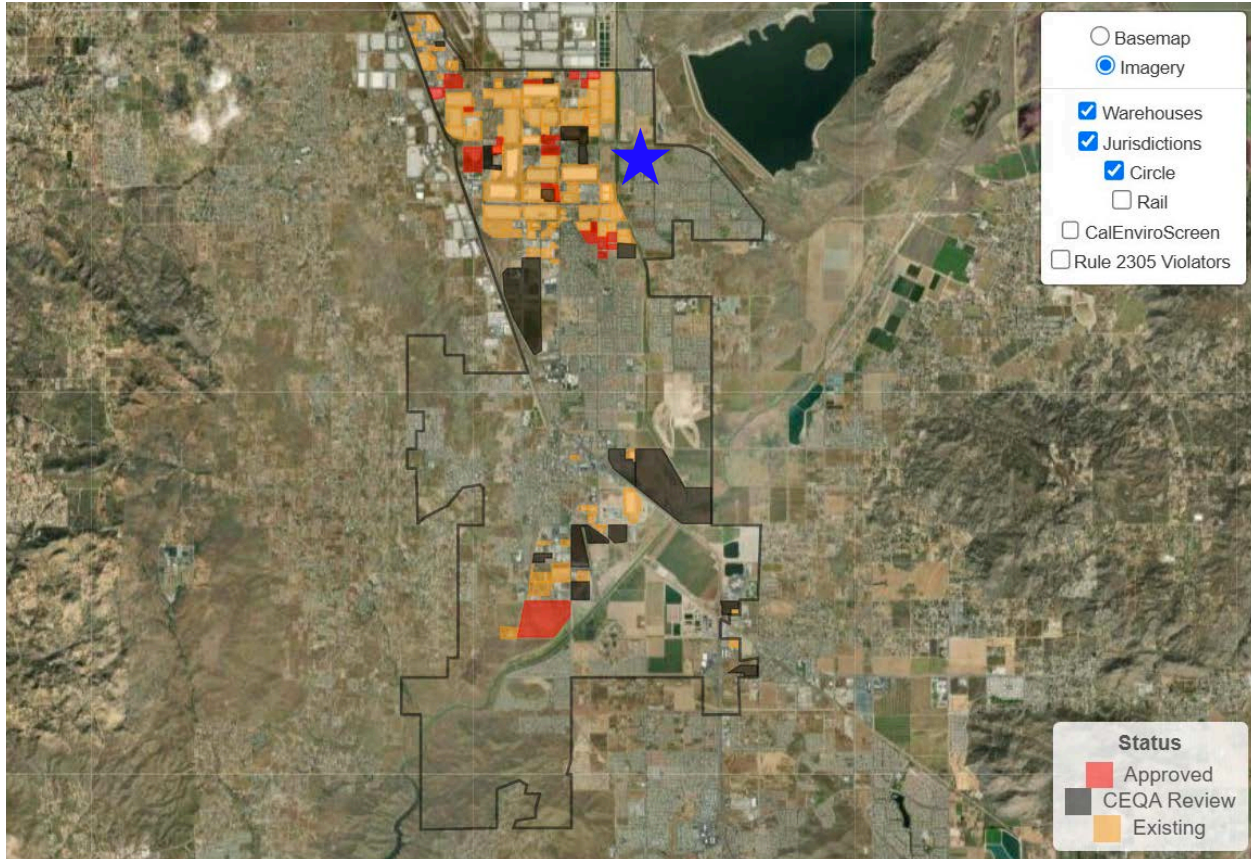
The Warehouse Cumulative Impact Tool for Community dashboard ("Warehouse CITY"), developed by the Redford Conservancy at Pitzer College and Radical Research LLC, is a tool that visualizes and quantifies existing, potential, and approved warehouse locations across Southern California. Review of Warehouse CITY reveals that there are 100 existing warehouses, 20 approved, and 16 that are currently under California Environmental Quality Act ("CEQA") review in the city of Perris (see screenshot below).¹³

¹⁰ "Final Designation of Disadvantaged Communities." California Environmental Protection Agency, *available at*: https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf?emrc=e05e10.

¹¹ "Environmental Justice in Local Land Use Planning." CA DOJ, *available at*: <https://oag.ca.gov/environment/sb1000>.

¹² "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." CA DOJ, *available at*: <https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf>, p. 6.

¹³ "Warehouse and Air Quality Mapping." Pitzer College & Radical Research LLC, *available at*: <https://radicalresearch.shinyapps.io/WarehouseCITY/>.



The Project is within an SB 535 disadvantaged community already burdened by numerous warehouses. The cumulative health risks should therefore be reassessed to better align with CA DOJ guidelines and SB 1000 environmental justice requirements. An EIR should be prepared to analyze the Project’s contribution to the health impacts warehouses impose on surrounding communities.

Diesel Particulate Matter Emissions Inadequately Evaluated

The Air Quality, Greenhouse Gas, and Energy Report (“AQ & GHG Report”) included as Appendix A to the IS/MND concludes that the Project will have a less-than-significant health risk impact without conducting a quantified construction or operational health risk analysis (“HRA”). The IS/MND claims that construction health risk impacts would be minimal due to the short duration of its diesel particulate matter (“DPM”) emitting activities, and that operational emissions are negligible due to the limited amount of estimated Project-generated truck trips (p. 24). However, the IS/MND’s conclusion and less than significant determination lacks adequate support.

The IS/MND does not comply with CEQA by failing to prepare a quantified construction or operational HRA.¹⁴ CEQA requires that a project’s emissions be correlated with their potential adverse impacts on human health. The Project is also inconsistent with the CA DOJ, which recommends that all warehouse projects prepare a quantitative HRA in accordance with the Office of Environmental Health Hazard

¹⁴ “Sierra Club v. County of Fresno.” Supreme Court of California, December 2018, available at: <https://cegaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf>.

Assessment (“OEHHA”), the organization responsible for providing guidance on conducting HRAs in California.¹⁵ By neglecting to analyze and quantify the health risks associated with construction-related or operational DPM emissions, the IS/MND does not make a reasonable effort to assess the potential risks posed to nearby receptors. This omission undermines CEQA’s mandate to evaluate how the Project’s emissions may adversely affect human health.

The IS/MND’s conclusion of a less-than-significant impact is unsupported because it does not include a quantified construction or operational HRA for nearby sensitive receptors. Without this analysis, the IS/MND fails to compare the Project’s excess cancer risk to the SCAQMD numeric threshold of 10 in one million.¹⁶ Relevant guidance indicates that an HRA is necessary to assess the potential health impacts of Project construction and operation on nearby existing receptors.

Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact

To analyze the Project’s potential health risk impacts we conducted a risk assessment using AERSCREEN, a screening level air quality dispersion model.¹⁷ AERSCREEN uses a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach should be conducted prior to the approval of the Project. According to the United States Environmental Protection Agency (“U.S. EPA”), AERSCREEN is the recommended screening model based on AERMOD.¹⁸

We prepared a preliminary HRA of the Project’s construction and operational health risk impact to residential sensitive receptors using the PM₁₀ total estimates from the IS/MND’s California Emissions Estimator Model (“CalEEMod”) model named “March Plaza Industrial” (Appendix A, pp. 31). Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life.¹⁹ The IS/MND’s CalEEMod model indicates that construction activities will generate approximately 184 pounds of DPM over the 394-day construction period.²⁰ The AERSCREEN model relies on a continuous average emission rate to simulate maximum downward concentrations from point, area, and volume emission sources. To account for the variability in equipment usage and truck trips over Project construction, we calculated an average DPM emission rate by the following equation:

¹⁵ “Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.” State of California Department of Justice, *available at*:

<https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf>, p. 6.

¹⁶ “South Coast AQMD Air Quality Significance Thresholds.” SCAQMD, March 2023, *available at*:

<https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25>.

¹⁷ “Air Quality Dispersion Modeling - Screening Models,” U.S. EPA, *available at*: <https://www.epa.gov/scram/air-quality-dispersion-modeling-screening-models>.

¹⁸ *Ibid.*

¹⁹ “Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, *available at*: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 8-18.

²⁰ See Attachment A for health risk calculations.

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}} \right) = \frac{184.3 \text{ lbs}}{394 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.00246 \text{ g/s}}$$

Using this equation, we estimated a construction emission rate of 0.00246 grams per second (“g/s”). Subtracting the 394-day construction period from the total residential duration of 30 years, we assumed that after Project construction, the sensitive receptor would be exposed to the Project’s operational DPM for an additional 28.92 years. The IS/MND’s operational CalEEMod emissions indicate that operational activities will generate approximately 660 pounds of DPM per year throughout operation. Applying the same equation used to estimate the construction DPM rate, we estimated the following emission rate for Project operation:

$$\text{Emission Rate } \left(\frac{\text{grams}}{\text{second}} \right) = \frac{660 \text{ lbs}}{365 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lbs}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} = \mathbf{0.00949 \text{ g/s}}$$

Using this equation, we estimated an operational emission rate of 0.00949 g/s. Construction and operation were simulated as a 4.37-acre rectangular area source in AERSCREEN, with approximate dimensions of 188- by 94-meters. A release height of three meters was selected to represent the height of stacks of operational equipment and other heavy-duty vehicles, and an initial vertical dimension of one and a half meters was used to simulate instantaneous plume dispersion upon release. An urban meteorological setting was selected with model-default inputs for wind speed and direction distribution. The population of the Perris was obtained from U.S. 2023 Census data.²¹

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. The U.S. EPA suggests that the annualized average concentration of an air pollutant be estimated by multiplying the single-hour concentration by 10% in screening procedures.²² Our AERSCREEN output files reveal that the maximally exposed individual receptor is located approximately 100 meters downwind of the Project site.²³ However, the AQ & GHG Report states that the nearest sensitive receptors are residences 0.25 miles away, or approximately 400 meters, from the Project site (p. 15). The single-hour concentration estimated by AERSCREEN for Project construction is therefore approximately 0.656 µg/m³ DPM at approximately 400 meters downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.0656 µg/m³ for Project construction at the nearest sensitive receptor. The single-hour concentration estimated by AERSCREEN is 2.54 µg/m³ DPM at approximately 400 meters downwind for Project operation. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.254 µg/m³ for Project operation at the nearest sensitive receptor.

²¹ “Perris.” U.S. Census Bureau, 2023, available at: <https://datacommons.org/place/geoid/0656700?q=perris>.

²² “Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised.” U.S. EPA, October 1992, available at: https://www.epa.gov/sites/default/files/2020-09/documents/epa-454r-92-019_ocr.pdf.

²³ See Attachment B for AERSCREEN output files.

We calculated the excess cancer risk to the nearest sensitive receptor using applicable HRA methodologies prescribed by OEHHA, as recommended by SCAQMD.²⁴ Guidance from OEHHA and the California Air Resources Board (“CARB”) recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95th percentile) breathing rates and age sensitivity factors to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children. The residential exposure parameters used for the various age groups in our screening-level HRA are as follows:

Exposure Assumptions for Residential Individual Cancer Risk						
Age Group	Breathing Rate (L/kg-day) ²⁵	Age Sensitivity Factor ²⁶	Exposure Duration (years)	Fraction of Time at Home ²⁷	Exposure Frequency (days/year) ²⁸	Exposure Time (hours/day)
3 rd Trimester	361	10	0.25	1	350	24
Infant (0 – 2)	1090	10	2	1	350	24
Child (2 – 16)	572	3	14	1	350	24
Adult (16 – 30)	261	1	14	0.73	350	24

For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day⁻¹) to derive the cancer risk estimate. We used the following dose algorithm to assess exposures:

$$Dose_{AIR,per\ age\ group} = C_{air} \times EF \times \left[\frac{BR}{BW} \right] \times A \times CF$$

where:

Dose_{AIR} = dose by inhalation (mg/kg/day), per age group

C_{air} = concentration of contaminant in air (µg/m³)

EF = exposure frequency (number of days/365 days)

²⁴ “AB 2588 and Rule 1402 Supplemental Guidelines.” SCAQMD, October 2020, available at: <http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines.pdf?sfvrsn=19>, p. 2.

²⁵ “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>.

²⁶ “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 8-5 Table 8.3.

²⁷ “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 8-5, Table 8.4.

²⁸ “Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments.” OEHHA, February 2015, available at: <https://oehha.ca.gov/media/downloads/cnr/2015guidancemanual.pdf>, p. 5-24.

BR/BW = daily breathing rate normalized to body weight (L/kg/day)
A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10⁻⁶, µg to mg, L to m³)

We used the following equation for each appropriate age group to calculate the overall cancer risk:

$$Cancer\ Risk_{AIR} = Dose_{AIR} \times CPF \times ASF \times FAH \times \frac{ED}{AT}$$

where:

Dose_{AIR} = dose by inhalation (mg/kg/day), per age group
CPF = cancer potency factor, chemical-specific (mg/kg/day)⁻¹
ASF = age sensitivity factor, per age group
FAH = fraction of time at home, per age group (for residential receptors only)
ED = exposure duration (years)
AT = averaging time period over which exposure duration is averaged (always 70 years)

The annualized average concentration for construction was used for the entire third trimester of pregnancy (0.25 years), and the first 1.17 years of the infantile (0 – 2) stage of life, consistent with the 394-day construction schedule. The annualized average concentration for operation was used for the remainder of the 30-year exposure period, which makes up the latter 0.83 years of the infantile stage of life, the entire child stage of life (2 – 16), as well the entire adult (16 – 30 years) stage of life. The results of our calculations are shown in the table below.

The Maximally Exposed Individual at an Existing Residential Receptor				
Age Group	Emissions Source	Duration (years)	Concentration (ug/m ³)	Cancer Risk
3rd Trimester	Construction	0.25	0.0656	8.92E-07
	<i>Construction</i>	<i>0.83</i>	<i>0.0656</i>	<i>8.94E-06</i>
	<i>Operation</i>	<i>1.17</i>	<i>0.2535</i>	<i>4.87E-05</i>
Infant (0 - 2)	Total	2		5.77E-05
Child (2 - 16)	Operation	14	0.2535	9.18E-05
Adult (16 - 30)	Operation	14	0.2535	1.02E-05
Lifetime		30		1.61E-04

The excess cancer risks for the 3rd trimester of pregnancy, infants, children, and adults at the nearest sensitive receptor located approximately 400 meters away, over the course of Project construction and

operation, are approximately 0.892, 57.7, 91.8, and 10.2 in one million, respectively. The excess cancer risk over the course of a residential lifetime (30 years) is approximately 161 in one million. The infant, child, adult, and lifetime cancer risks exceed the SCAQMD threshold of 10 in one million, resulting in a potentially significant impact not previously addressed or identified by the IS/MND and associated documents.

Our screening-level HRA uses conservative assumptions to prioritize health protection and evaluate the potential link between Project emissions and adverse health risks. The U.S. EPA’s Exposure Assessment Guidelines recommend starting with screening-level evaluations using basic tools, with refinements made as needed using detailed data or advanced models.²⁹

Our screening-level HRA indicates that Project construction and operation could result in significant health risks. An EIR should include a refined HRA to accurately assess these risks. If significant impacts are confirmed, mitigation measures outlined in the “Feasible Mitigation Measures Available to Reduce Emissions” section should be implemented.

Greenhouse Gas

Failure to Adequately Evaluate Greenhouse Gas Impacts

The IS/MND concludes that the Project would generate net annual GHG emissions of 793.3 metric tons of carbon dioxide equivalents per year (“MT CO₂e/year”) (see excerpt below) (p. 48, Table 6).

Table 6. Annual Greenhouse Gas Emissions

Generation Source	MT CO ₂ e/year
Project Emissions	
Area Sources	1.4
Energy Utilization	295.0
Mobile Source ^b	420.5
Offroad	0.0
Solid Waste Generation	25.8
Water Consumption	38.1
Construction (Amortized)	12.5
Total Project Operational Emissions	793.3
Source: CalEEMod Report, January 2024 (Appendix A)	
Note: Totals may differ due to rounding.	

The IS/MND states that the Project “would not generate GHG emissions, directly or indirectly, that have a significant effect on the environment” (p. 49). The IS/MND’s less-than-significant impact conclusion, however, is unsupported for the following reasons:

- (1) The IS/MND’s quantitative GHG analysis relies upon an outdated threshold; and
- (2) The IS/MND’s unsubstantiated air model indicates a potentially significant impact.

²⁹ “Exposure Assessment Tools by Tiers and Types - Screening-Level and Refined.” U.S. EPA, May 2024, available at: <https://www.epa.gov/expobox/exposure-assessment-tools-tiers-and-types-screening-level-and-refined>

1) *Reliance on an Outdated Quantitative GHG Threshold*

The IS/MND evaluates the Project's net annual GHG emissions against the SCAQMD bright-line threshold of 3,000 MT CO₂e/year (p. 48, Table 6). This threshold originates from SCAQMD's 2008 Interim CEQA GHG Significance Threshold for Stationary Sources, Rules, and Plans Report, which was developed under the Global Warming Solutions Act of 2006 ("AB 32"). AB 32 mandated California to reduce GHG emissions to 1990 levels by 2020.³⁰ The Association of Environmental Professionals' guidance states that the threshold must be updated through a new gap analysis aligned with the next GHG reduction milestone for projects after 2020.³¹

As it is currently December 2024, thresholds should be revised to reflect the current GHG reduction target. The SCAQMD bright-line threshold of 3,000 MT CO₂e/year is therefore outdated and inapplicable to the proposed Project, and the IS/MND's less-than-significant GHG impact conclusion should not be relied upon. We recommend that the Project apply the SCAQMD 2035 service population efficiency target of 3.0 metric tons of carbon dioxide equivalents per service population ("SP") per year ("MT CO₂e/SP/year"), which was calculated by applying a 40% reduction to the 2020 targets.³²

2) *Failure to Identify a Potentially Significant GHG Impact*

To quantitatively evaluate the Project's GHG emissions, we compared the Project's GHG emissions, as estimated by the IS/MND, to the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year. When applying the updated threshold, the Project's unsubstantiated air model indicates a potentially significant GHG impact.

According to California Air Pollution Control Officers Association ("CAPCOA")'s *CEQA & Climate Change* report, an SP is defined as "the sum of the number of residents and the number of jobs supported by the project."³³ The IS/MND estimates that the Project would employ 96 people (p. 21). As the Project would not support any residential land uses, the Project's SP is also 96. When dividing the Project's net annual GHG emissions of 793.3, as estimated by the IS/MND, by an SP of 96, we find that the Project would emit approximately 8.3 MT CO₂e/SP/year (p. 65, Table 17) (see table below).³⁴

³⁰ "Health & Safety Code 38550." California State Legislature, January 2007, *available at*:

https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum=38550.

³¹ "Beyond Newhall and 2020: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California." Association of Environmental Professionals, October 2016, *available at*:
https://califaep.org/docs/AEP-2016_Final_White_Paper.pdf, p. 39.

³² "Minutes for the GHG CEQA Significance Threshold Stakeholder Working Group #15." SCAQMD, September 2010, *available at*: [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf), p. 2.

³³ "CEQA & Climate Change." CAPCOA, January 2008, *available at*: <https://www.ourair.org/wp-content/uploads/CAPCOA-CEQA-and-Climate-Change.pdf>, p. 71-72.

³⁴ *Calculated*: (793.3 MT CO₂e/year) / (96 service population) = (8.26 MT CO₂e/SP/year).

Project Greenhouse Gas Emissions	
Annual Emissions (MT CO ₂ e/year)	793.3
Service Population	96
Service Population Efficiency (MT CO ₂ e/SP/year)	8.3
SCAQMD 2035 Target	3.0
Exceeds?	Yes

The Project’s service population efficiency value exceeds the SCAQMD 2035 efficiency target of 3.0 MT CO₂e/SP/year, indicating a potentially significant impact not previously identified or addressed by the IS/MND. As the IS/MND’s less-than-significant GHG impact conclusion is unreliable, an EIR should be prepared, including an updated GHG analysis and incorporating additional mitigation measures to reduce the Project’s GHG emissions to the greatest extent feasible.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

The sections above demonstrate that the proposed Project has potentially significant health risk and GHG impacts. The IS/MND is required under CEQA to implement all feasible mitigation to reduce the Project’s potential impacts.³⁵ To reduce the DPM emissions associated with Project construction and operation, we recommend the IS/MND consider several mitigation measures (see list below).

The CARB recommends:³⁶

- Ensure the cleanest possible construction practices and equipment are used. This includes eliminating the idling of diesel-powered equipment and providing the necessary infrastructure (e.g., electrical hookups) to support zero and near-zero equipment and tools.
- Implement, and plan accordingly for, the necessary infrastructure to support the zero and near-zero emission technology vehicles and equipment that will be operating on site. Necessary infrastructure may include the physical (e.g., needed footprint), energy, and fueling infrastructure for construction equipment, on-site vehicles and equipment, and medium-heavy and heavy-heavy duty trucks.
- Require all off-road diesel-powered equipment used during construction to be equipped with Tier 4 or cleaner engines, except for specialized construction equipment in which Tier 4 engines are not available. In place of Tier 4 engines, off-road equipment can incorporate retrofits, such that, emission reductions achieved are equal to or exceed that of a Tier 4 engine.

³⁵ “Other CEQA Considerations.” CEQA, available at: <https://files.ceqanet.opr.ca.gov/146819-2/attachment/K8KrMVu7dnKVahGdRBg6gktmTfITL2iHbJ500sLJgzlprOyPRP432aayglUjR6FZ93E570wN8FCRSo0>.

³⁶ “Recommended Air Pollution Emission Reduction Measures for Warehouses and Distribution Centers.” CARB, August 2023, available at: <https://ww2.arb.ca.gov/sites/default/files/2023-08/CARB%20Comments%20-%20NOP%20for%20the%20Oak%20Valley%20North%20Project%20EIR.pdf>; Attachment A, p. 5 – 8.

- Requires all off-road equipment with a power rating below 19 kilowatts (e.g., plate compactors, pressure washers) used during project construction be battery powered.
- Require all heavy-duty trucks entering the construction site during the grading and building construction phases be model year 2014 or later. All heavy-duty haul trucks should also meet CARB's lowest optional low-oxides of nitrogen (NO_x) standard starting in the year 2022.
- Require all construction equipment and fleets to be in compliance with all current air quality regulations.
- Require all heavy-duty trucks entering or on the project site to be zero-emission vehicles and be fully zero-emission. A list of commercially available zero-emission trucks can be obtained from the Hybrid and Zero-emission Truck and Bus Voucher Incentive Project (HVIP). Additional incentive funds can be obtained from the Carl Moyer Program and Voucher Incentive Program.
- Restrict trucks and support equipment from idling longer than two minutes while on site.
- Require the installation of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

In addition to recommending similar mitigation as the above-mentioned measures from CARB, the CA DOJ suggests:³⁷

- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.

³⁷ "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." State of California Department of Justice, September 2022, *available at*: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>, p. 8 – 10.

Lastly, SCAQMD staff recommends:³⁸

- Design the Proposed Project such that truck entrances and exits are not facing sensitive receptors and trucks will not travel past sensitive land uses to enter or leave the Proposed Project site.
- Restrict overnight truck parking in sensitive land uses by providing overnight truck parking inside the Proposed Project site.

The CalEEMod User’s Guide confirms that the methods for mitigating DPM emissions include the use of “alternative fuel, electric equipment, diesel particulate filters (DPF), oxidation catalysts, newer tier engines, and dust suppression.”³⁹

Additionally, to reduce the GHG emissions associated with the Project, we recommend several mitigation measures (see list below).

The CA DOJ recommends:⁴⁰

- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building’s projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Designing to LEED green building certification standards.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces.
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.

³⁸ “Draft Environmental Impact Report (EIR) for the Proposed CADO Menifee Industrial Warehouse Project (Proposed Project).” SCAQMD, April 2024, *available at*: <https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2024/april-2024/RVC240313-05.pdf?sfvrsn=8>, p. 3 - 4.

³⁹ “Calculation Details for CalEEMod.” CAPCOA, May 2021, *available at*: <http://www.aqmd.gov/docs/default-source/caleemod/user-guide-2021/appendix-a2020-4-0.pdf?sfvrsn=6>, Appendix A, p. 60.

⁴⁰ “Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.” State of California Department of Justice, September 2022, *available at*: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>, p. 8 – 10.

- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.

SCAQMD staff recommends:⁴¹

- Maximizing the use of solar energy by installing solar energy arrays.
- Using light-colored paving and roofing materials.
- Utilizing only Energy Star heating, cooling, and lighting devices and appliances.

CEQA Guidelines 15126.4 (c)(3) include “[o]ffsite measures, including offsets that are not otherwise required, to mitigate a project’s emissions” as an option for GHG mitigation.⁴² An example of this was in the case of the Oakland Sports and Mixed-Use Project, where off-site reduction measures in the neighboring communities were recommended.⁴³ We recommend consideration of local carbon offset programs to reduce the Project’s GHG impacts as a measure of last result.

An EIR should be prepared with updated health risk and GHG analyses that include all feasible mitigation measures to ensure that the necessary steps are taken to reduce emissions to the maximum extent feasible. The above-mentioned measures represent a portion of the established methods for achieving these reductions. The EIR should also demonstrate a clear commitment to the implementation of these measures prior to Project approval.

Disclaimer

SWAPE has received limited documentation regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or

⁴¹ “Draft Environmental Impact Report (EIR) for the Proposed CADO Meniffee Industrial Warehouse Project (Proposed Project).” SCAQMD, April 2024, *available at*: <https://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2024/april-2024/RVC240313-05.pdf?sfvrsn=8>, p. 3.

⁴² “Cal. Code Regs. tit. 14 § 15126.4.” CEQA Guidelines, May 2024, *available at*: <https://casetext.com/regulation/california-code-of-regulations/title-14-natural-resources/division-6-resources-agency/chapter-3-guidelines-for-implementation-of-the-california-environmental-quality-act/article-9-contents-of-environmental-impact-reports/section-151264-consideration-and-discussion-of-mitigation-measures-proposed-to-minimize-significant-effects>.

⁴³ “Cal. Pub. Resources Code § 21168.6.7.” 2023, *available at*: <https://casetext.com/statute/california-codes/california-public-resources-code/division-13-environmental-quality/chapter-6-limitations/section-2116867-oakland-sports-and-mixed-use-project-conditions-for-approval-certification-of-project-for-streamlining>.

otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink that reads "Matt Hagemann". The signature is fluid and cursive.

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink that reads "Paul Rosenfeld". The signature is fluid and cursive.

Paul E. Rosenfeld, Ph.D.

Attachment A: Health Risk Calculations
Attachment B: AERSCREEN Output Files
Attachment C: Matt Hagemann CV
Attachment D: Paul Rosenfeld CV

Construction		
2024		Total
Annual Emissions (tons/year)	0.07	Total DPM (lbs) 184.3287671
Daily Emissions (lbs/day)	0.383561644	Total DPM (g) 83611.52877
Construction Duration (days)	91	Emission Rate (g/s) 0.002456157
Total DPM (lbs)	34.90410959	Release Height (meters) 3
Total DPM (g)	15832.50411	Total Acreage 4.37
Start Date	10/2/2024	Max Horizontal (meters) 188.07
End Date	1/1/2025	Min Horizontal (meters) 94.03
Construction Days	91	Initial Vertical Dimension (meters) 1.5
		Setting Perris
		Population 80,603
		Start Date 10/2/2024
		End Date 10/31/2025
		Total Construction Days 394
		Total Years of Construction 1.08
		Total Years of Operation 28.92
2025		
Annual Emissions (tons/year)	0.09	
Daily Emissions (lbs/day)	0.493150685	
Construction Duration (days)	303	
Total DPM (lbs)	149.4246575	
Total DPM (g)	67779.02466	
Start Date	1/1/2025	
End Date	10/31/2025	
Construction Days	303	

Operation	
	Emission Rate
Annual Emissions (tons/year)	0.33
Daily Emissions (lbs/day)	1.808219178
Total DPM (lbs)	660
Emission Rate (g/s)	0.009493151
Release Height (meters)	3
Total Acreage	4.37
Max Horizontal (meters)	188.07
Min Horizontal (meters)	94.03
Initial Vertical Dimension (meters)	1.5
Setting	Perris
Population	80,603

The Maximally Exposed Individual at an Existing Residential Receptor				
Age Group	Emissions Source	Duration (years)	Concentration (ug/m3)	Cancer Risk
3rd Trimester	Construction	0.25	0.0656	8.92E-07
	<i>Construction</i>	<i>0.83</i>	<i>0.0656</i>	<i>8.94E-06</i>
	<i>Operation</i>	<i>1.17</i>	<i>0.2535</i>	<i>4.87E-05</i>
Infant (0 - 2)	Total	2		5.77E-05
Child (2 - 16)	Operation	14	0.2535	9.18E-05
Adult (16 - 30)	Operation	14	0.2535	1.02E-05
Lifetime		30		1.61E-04

AERSCREEN 21112 / AERMOD 21112

12/27/24

07:27:30

TITLE: MarchPlaza, Construction

 ***** AREA PARAMETERS *****

SOURCE EMISSION RATE:	0.246E-02 g/s	0.195E-01 lb/hr
AREA EMISSION RATE:	0.139E-06 g/(s-m2)	0.110E-05 lb/(hr-m2)
AREA HEIGHT:	3.00 meters	9.84 feet
AREA SOURCE LONG SIDE:	188.07 meters	617.03 feet
AREA SOURCE SHORT SIDE:	94.03 meters	308.50 feet
INITIAL VERTICAL DIMENSION:	1.50 meters	4.92 feet
RURAL OR URBAN:	URBAN	
POPULATION:	80603	
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

 ***** BUILDING DOWNWASH PARAMETERS *****

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

 ***** FLOW SECTOR ANALYSIS *****

25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	4.584	20	100.0	WIN

* = worst case diagonal

***** MAKEMET METEOROLOGY PARAMETERS *****

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
 DOMINANT CLIMATE TYPE: Average Moisture
 DOMINANT SEASON: Winter

ALBEDO: 0.35
 BOWEN RATIO: 1.50
 ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR

 10 01 10 10 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	

HT	REF TA	HT
10.0	310.0	2.0

***** AERSCREEN AUTOMATED DISTANCES *****
 OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	3.491	2525.00	0.5456E-01

25.00	3.860	2550.00	0.5383E-01
50.00	4.167	2575.00	0.5311E-01
75.00	4.425	2600.00	0.5242E-01
100.00	4.584	2625.00	0.5173E-01
125.00	3.135	2650.00	0.5107E-01
150.00	2.368	2675.00	0.5042E-01
175.00	1.945	2700.00	0.4978E-01
200.00	1.637	2725.00	0.4915E-01
225.00	1.404	2750.00	0.4854E-01
250.00	1.224	2775.00	0.4794E-01
275.00	1.079	2800.00	0.4736E-01
300.00	0.9615	2825.00	0.4679E-01
325.00	0.8649	2850.00	0.4623E-01
350.00	0.7837	2875.00	0.4568E-01
375.00	0.7149	2900.00	0.4514E-01
400.00	0.6561	2925.00	0.4461E-01
425.00	0.6053	2950.00	0.4409E-01
450.00	0.5604	2975.00	0.4359E-01
475.00	0.5212	3000.00	0.4309E-01
500.00	0.4868	3025.00	0.4261E-01
525.00	0.4561	3050.00	0.4213E-01
550.00	0.4284	3075.00	0.4166E-01
575.00	0.4034	3100.00	0.4120E-01
600.00	0.3810	3125.00	0.4075E-01
625.00	0.3607	3150.00	0.4031E-01
650.00	0.3422	3175.00	0.3987E-01
675.00	0.3252	3200.00	0.3945E-01
700.00	0.3096	3225.00	0.3903E-01
725.00	0.2953	3250.00	0.3862E-01
750.00	0.2822	3275.00	0.3822E-01
775.00	0.2700	3300.00	0.3782E-01
800.00	0.2586	3325.00	0.3743E-01
825.00	0.2481	3350.00	0.3705E-01
850.00	0.2383	3375.00	0.3668E-01
875.00	0.2292	3400.00	0.3631E-01
900.00	0.2205	3425.00	0.3595E-01
925.00	0.2125	3450.00	0.3559E-01
950.00	0.2049	3475.00	0.3524E-01
975.00	0.1978	3500.00	0.3490E-01
1000.00	0.1911	3525.00	0.3456E-01
1025.00	0.1848	3550.00	0.3423E-01
1050.00	0.1789	3575.00	0.3390E-01
1075.00	0.1733	3600.00	0.3358E-01
1100.00	0.1680	3625.00	0.3326E-01
1125.00	0.1629	3650.00	0.3295E-01
1150.00	0.1582	3675.00	0.3264E-01
1175.00	0.1536	3700.00	0.3234E-01
1200.00	0.1493	3725.00	0.3204E-01
1225.00	0.1452	3750.00	0.3175E-01
1250.00	0.1413	3775.00	0.3147E-01

1275.00	0.1375	3800.00	0.3118E-01
1300.00	0.1340	3825.00	0.3090E-01
1325.00	0.1305	3850.00	0.3063E-01
1350.00	0.1272	3875.00	0.3036E-01
1375.00	0.1241	3900.00	0.3009E-01
1400.00	0.1211	3925.00	0.2983E-01
1425.00	0.1182	3950.00	0.2957E-01
1450.00	0.1154	3975.00	0.2932E-01
1475.00	0.1128	4000.00	0.2907E-01
1500.00	0.1102	4025.00	0.2882E-01
1525.00	0.1078	4050.00	0.2858E-01
1550.00	0.1054	4075.00	0.2834E-01
1575.00	0.1031	4100.00	0.2810E-01
1600.00	0.1010	4125.00	0.2787E-01
1625.00	0.9885E-01	4149.99	0.2764E-01
1650.00	0.9682E-01	4175.00	0.2742E-01
1675.00	0.9487E-01	4200.00	0.2719E-01
1700.00	0.9298E-01	4225.00	0.2697E-01
1725.00	0.9115E-01	4250.00	0.2676E-01
1750.00	0.9015E-01	4275.00	0.2654E-01
1775.00	0.8842E-01	4300.00	0.2633E-01
1800.00	0.8674E-01	4325.00	0.2612E-01
1825.00	0.8511E-01	4350.00	0.2592E-01
1850.00	0.8354E-01	4375.00	0.2572E-01
1875.00	0.8202E-01	4400.00	0.2552E-01
1900.00	0.8054E-01	4425.00	0.2532E-01
1925.00	0.7911E-01	4450.00	0.2512E-01
1950.00	0.7773E-01	4475.00	0.2493E-01
1975.00	0.7638E-01	4500.00	0.2474E-01
2000.00	0.7508E-01	4525.00	0.2456E-01
2025.00	0.7381E-01	4550.00	0.2437E-01
2050.00	0.7258E-01	4575.00	0.2419E-01
2075.00	0.7139E-01	4600.00	0.2401E-01
2100.00	0.7022E-01	4625.00	0.2383E-01
2125.00	0.6910E-01	4650.00	0.2366E-01
2150.00	0.6800E-01	4675.00	0.2349E-01
2175.00	0.6693E-01	4700.00	0.2331E-01
2200.00	0.6589E-01	4725.00	0.2315E-01
2225.00	0.6488E-01	4750.00	0.2298E-01
2250.00	0.6389E-01	4775.00	0.2282E-01
2275.00	0.6293E-01	4800.00	0.2265E-01
2300.00	0.6200E-01	4825.00	0.2249E-01
2325.00	0.6109E-01	4850.00	0.2233E-01
2350.00	0.6020E-01	4875.00	0.2218E-01
2375.00	0.5933E-01	4900.00	0.2202E-01
2400.00	0.5849E-01	4924.99	0.2187E-01
2425.00	0.5766E-01	4950.00	0.2172E-01
2450.00	0.5686E-01	4975.00	0.2157E-01
2475.00	0.5607E-01	5000.00	0.2142E-01
2500.00	0.5531E-01		

 ***** AERSCREEN MAXIMUM IMPACT SUMMARY *****

3-hour, 8-hour, and 24-hour scaled concentrations are equal to the 1-hour concentration as referenced in SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
 Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
 under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	4.584	4.584	4.584	4.584	N/A
DISTANCE FROM SOURCE	100.00 meters				
IMPACT AT THE AMBIENT BOUNDARY	3.491	3.491	3.491	3.491	N/A
DISTANCE FROM SOURCE	1.00 meters				

TITLE: MarchPlaza, Operational

***** AREA PARAMETERS *****

SOURCE EMISSION RATE:	0.949E-02 g/s	0.753E-01 lb/hr
AREA EMISSION RATE:	0.537E-06 g/(s-m2)	0.426E-05 lb/(hr-m2)
AREA HEIGHT:	3.00 meters	9.84 feet
AREA SOURCE LONG SIDE:	188.07 meters	617.03 feet
AREA SOURCE SHORT SIDE:	94.03 meters	308.50 feet
INITIAL VERTICAL DIMENSION:	1.50 meters	4.92 feet
RURAL OR URBAN:	URBAN	
POPULATION:	80603	
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

***** BUILDING DOWNWASH PARAMETERS *****

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

***** FLOW SECTOR ANALYSIS *****

25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo	SURFACE	1-HR CONC	RADIAL	DIST	TEMPORAL
SECTOR	ROUGHNESS	(ug/m3)	(deg)	(m)	PERIOD
1*	1.000	17.71	20	100.0	WIN

* = worst case diagonal

***** MAKEMET METEOROLOGY PARAMETERS *****

MIN/MAX TEMPERATURE: 250.0 / 310.0 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban
 DOMINANT CLIMATE TYPE: Average Moisture
 DOMINANT SEASON: Winter

ALBEDO: 0.35
 BOWEN RATIO: 1.50
 ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U*) NOT ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR

 10 01 10 10 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS
-1.30	0.043	-9.000	0.020	-999.	21.	6.0	1.000	1.50	0.35	0.50	

HT	REF TA	HT
10.0	310.0	2.0

***** AERSCREEN AUTOMATED DISTANCES *****
 OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	13.49	2525.00	0.2109

25.00	14.92	2550.00	0.2080
50.00	16.11	2575.00	0.2053
75.00	17.10	2600.00	0.2026
100.00	17.71	2625.00	0.1999
125.00	12.11	2650.00	0.1974
150.00	9.150	2675.00	0.1948
175.00	7.516	2700.00	0.1924
200.00	6.326	2725.00	0.1900
225.00	5.427	2750.00	0.1876
250.00	4.729	2775.00	0.1853
275.00	4.170	2800.00	0.1830
300.00	3.716	2825.00	0.1808
325.00	3.342	2850.00	0.1786
350.00	3.029	2875.00	0.1765
375.00	2.763	2900.00	0.1744
400.00	2.535	2925.00	0.1724
425.00	2.339	2950.00	0.1704
450.00	2.166	2975.00	0.1685
475.00	2.014	3000.00	0.1665
500.00	1.881	3025.00	0.1647
525.00	1.763	3050.00	0.1628
550.00	1.656	3075.00	0.1610
575.00	1.559	3100.00	0.1592
600.00	1.472	3125.00	0.1575
625.00	1.394	3150.00	0.1558
650.00	1.323	3174.99	0.1541
675.00	1.257	3200.00	0.1525
700.00	1.197	3225.00	0.1508
725.00	1.141	3250.00	0.1493
750.00	1.090	3275.00	0.1477
775.00	1.043	3300.00	0.1462
800.00	0.9995	3325.00	0.1447
825.00	0.9588	3350.00	0.1432
850.00	0.9209	3375.00	0.1417
875.00	0.8857	3400.00	0.1403
900.00	0.8523	3425.00	0.1389
925.00	0.8211	3450.00	0.1375
950.00	0.7919	3475.00	0.1362
975.00	0.7644	3500.00	0.1349
1000.00	0.7387	3525.00	0.1336
1025.00	0.7143	3550.00	0.1323
1050.00	0.6913	3575.00	0.1310
1075.00	0.6696	3600.00	0.1298
1100.00	0.6491	3625.00	0.1285
1125.00	0.6297	3650.00	0.1273
1150.00	0.6113	3675.00	0.1262
1175.00	0.5938	3700.00	0.1250
1200.00	0.5771	3725.00	0.1238
1225.00	0.5611	3750.00	0.1227
1250.00	0.5460	3775.00	0.1216

1275.00	0.5315	3800.00	0.1205
1300.00	0.5177	3825.00	0.1194
1325.00	0.5044	3850.00	0.1184
1350.00	0.4917	3875.00	0.1173
1375.00	0.4796	3900.00	0.1163
1400.00	0.4679	3925.00	0.1153
1425.00	0.4568	3950.00	0.1143
1450.00	0.4461	3975.00	0.1133
1475.00	0.4358	4000.00	0.1123
1500.00	0.4260	4025.00	0.1114
1525.00	0.4165	4050.00	0.1104
1550.00	0.4074	4075.00	0.1095
1575.00	0.3986	4100.00	0.1086
1600.00	0.3902	4125.00	0.1077
1625.00	0.3820	4149.99	0.1068
1650.00	0.3742	4175.00	0.1059
1675.00	0.3666	4200.00	0.1051
1700.00	0.3593	4225.00	0.1042
1725.00	0.3523	4250.00	0.1034
1750.00	0.3484	4275.00	0.1026
1775.00	0.3417	4300.00	0.1018
1800.00	0.3352	4325.00	0.1010
1825.00	0.3289	4350.00	0.1002
1850.00	0.3229	4375.00	0.9938E-01
1875.00	0.3170	4400.00	0.9861E-01
1900.00	0.3113	4425.00	0.9785E-01
1925.00	0.3058	4450.00	0.9710E-01
1950.00	0.3004	4475.00	0.9636E-01
1975.00	0.2952	4500.00	0.9562E-01
2000.00	0.2902	4525.00	0.9490E-01
2025.00	0.2853	4550.00	0.9419E-01
2050.00	0.2805	4575.00	0.9349E-01
2075.00	0.2759	4600.00	0.9279E-01
2100.00	0.2714	4625.00	0.9211E-01
2125.00	0.2670	4650.00	0.9143E-01
2150.00	0.2628	4675.00	0.9076E-01
2175.00	0.2587	4700.00	0.9010E-01
2200.00	0.2546	4725.00	0.8945E-01
2225.00	0.2507	4750.00	0.8881E-01
2250.00	0.2469	4775.00	0.8817E-01
2275.00	0.2432	4800.00	0.8754E-01
2300.00	0.2396	4825.00	0.8693E-01
2325.00	0.2361	4850.00	0.8631E-01
2350.00	0.2326	4875.00	0.8571E-01
2375.00	0.2293	4900.00	0.8511E-01
2400.00	0.2260	4924.99	0.8452E-01
2425.00	0.2228	4950.00	0.8394E-01
2450.00	0.2197	4975.00	0.8336E-01
2475.00	0.2167	5000.00	0.8279E-01
2500.00	0.2137		

 ***** AERSCREEN MAXIMUM IMPACT SUMMARY *****

3-hour, 8-hour, and 24-hour scaled concentrations are equal to the 1-hour concentration as referenced in SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
 Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
 under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	17.71	17.71	17.71	17.71	N/A

DISTANCE FROM SOURCE 100.00 meters

IMPACT AT THE AMBIENT BOUNDARY	13.49	13.49	13.49	13.49	N/A
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DISTANCE FROM SOURCE 1.00 meters



2656 29th Street, Suite 201
Santa Monica, CA 90405

Matt Hagemann, P.G., C.Hg.
(949) 887-9013
mhagemann@swape.com

Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
Industrial Stormwater Compliance
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 30 years of experience in environmental policy, contaminant assessment and remediation, stormwater compliance, and CEQA review. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) and directed efforts to improve hydrogeologic characterization and water quality monitoring. For the past 15 years, as a founding partner with SWAPE, Matt has developed extensive client relationships and has managed complex projects that include consultation as an expert witness and a regulatory specialist, and a manager of projects ranging from industrial stormwater compliance to CEQA review of impacts from hazardous waste, air quality and greenhouse gas emissions.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014, 2017;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 300 environmental impact reports and negative declarations since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at more than 100 industrial facilities.
- Expert witness on numerous cases including, for example, perfluorooctanoic acid (PFOA) contamination of groundwater, MTBE litigation, air toxins at hazards at a school, CERCLA compliance in assessment and remediation, and industrial stormwater contamination.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.
- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted

public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nationwide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9.

Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific

principles into the policy-making process.

- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt is currently a part time geology instructor at Golden West College in Huntington Beach, California where he taught from 2010 to 2014 and in 2017.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

Hagemann, M.F., 1999, Is Dilution the Solution to Pollution in National Parks? The George Wright Society Biannual Meeting, Asheville, North Carolina.

Hagemann, M.F., 1997, The Potential for MTBE to Contaminate Groundwater. U.S. EPA Superfund Groundwater Technical Forum Annual Meeting, Las Vegas, Nevada.

Hagemann, M.F., and Gill, M., 1996, Impediments to Intrinsic Remediation, Moffett Field Naval Air Station, Conference on Intrinsic Remediation of Chlorinated Hydrocarbons, Salt Lake City.

Hagemann, M.F., Fukunaga, G.L., 1996, The Vulnerability of Groundwater to Anthropogenic Contaminants on the Island of Maui, Hawaii. Hawaii Water Works Association Annual Meeting, Maui, October 1996.

Hagemann, M. F., Fukunaga, G. L., 1996, Ranking Groundwater Vulnerability in Central Oahu, Hawaii. Proceedings, Geographic Information Systems in Environmental Resources Management, Air and Waste Management Association Publication VIP-61.

Hagemann, M.F., 1994. Groundwater Characterization and Clean up at Closing Military Bases in California. Proceedings, California Groundwater Resources Association Meeting.

Hagemann, M.F. and Sabol, M.A., 1993. Role of the U.S. EPA in the High Plains States Groundwater Recharge Demonstration Program. Proceedings, Sixth Biennial Symposium on the Artificial Recharge of Groundwater.

Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examinations, 2009-2011.



Technical Consultation, Data Analysis and
Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE

2656 29th Street, Suite 201
Santa Monica, California 90405
Attn: Paul Rosenfeld, Ph.D.
Mobil: (310) 795-2335
Office: (310) 452-5555
Fax: (310) 452-5550

Email: prosenfeld@swape.com

Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Focus on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years of experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, industrial, military and agricultural sources, unconventional oil drilling operations, and locomotive and construction engines. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities. Dr. Rosenfeld has also successfully modeled exposure to contaminants distributed by water systems and via vapor intrusion.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, creosote, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at sites and has testified as an expert witness on numerous cases involving exposure to soil, water and air contaminants from industrial, railroad, agricultural, and military sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

Rosenfeld P. E., Spaeth K., Hallman R., Bressler R., Smith, G., (2022) Cancer Risk and Diesel Exhaust Exposure Among Railroad Workers. *Water Air Soil Pollution*. **233**, 171.

Remy, L.L., Clay T., Byers, V., **Rosenfeld P. E.** (2019) Hospital, Health, and Community Burden After Oil Refinery Fires, Richmond, California 2007 and 2012. *Environmental Health*. 18:48

Simons, R.A., Seo, Y. **Rosenfeld, P.**, (2015) Modeling the Effect of Refinery Emission On Residential Property Value. *Journal of Real Estate Research*. 27(3):321-342

Chen, J. A, Zapata A. R., Sutherland A. J., Molmen, D.R., Chow, B. S., Wu, L. E., **Rosenfeld, P. E.**, Hesse, R. C., (2012) Sulfur Dioxide and Volatile Organic Compound Exposure To A Community In Texas City Texas Evaluated Using Aermol and Empirical Data. *American Journal of Environmental Science*, 8(6), 622-632.

Rosenfeld, P.E. & Feng, L. (2011). *The Risks of Hazardous Waste*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2011). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Agrochemical Industry*, Amsterdam: Elsevier Publishing.

Gonzalez, J., Feng, L., Sutherland, A., Waller, C., Sok, H., Hesse, R., **Rosenfeld, P.** (2010). PCBs and Dioxins/Furans in Attic Dust Collected Near Former PCB Production and Secondary Copper Facilities in Sauget, IL. *Procedia Environmental Sciences*. 113–125.

Feng, L., Wu, C., Tam, L., Sutherland, A.J., Clark, J.J., **Rosenfeld, P.E.** (2010). Dioxin and Furan Blood Lipid and Attic Dust Concentrations in Populations Living Near Four Wood Treatment Facilities in the United States. *Journal of Environmental Health*. 73(6), 34-46.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2010). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Wood and Paper Industries*. Amsterdam: Elsevier Publishing.

Cheremisinoff, N.P., & **Rosenfeld, P.E.** (2009). *Handbook of Pollution Prevention and Cleaner Production: Best Practices in the Petroleum Industry*. Amsterdam: Elsevier Publishing.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. *WIT Transactions on Ecology and the Environment, Air Pollution*, 123 (17), 319-327.

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 Equivalency Quotients (TEQ) In Two Populations Near Wood Treatment Facilities. *Organohalogen Compounds*, 70, 002252-002255.

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Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

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Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., "The science for Perfluorinated Chemicals (PFAS): What makes remediation so hard?" Law Seminars International, (May 9-10, 2018) 800 Fifth Avenue, Suite 101 Seattle, WA.

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States" Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. *The 23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florida, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 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*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference Orlando, FL*.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

In the Superior Court of the State of California, County of San Bernardino
Billy Wildrick, Plaintiff vs. BNSF Railway Company
Case No. CIVDS1711810
Rosenfeld Deposition 10-17-2022

In the State Court of Bibb County, State of Georgia
Richard Hutcherson, Plaintiff vs Norfolk Southern Railway Company
Case No. 10-SCCV-092007
Rosenfeld Deposition 10-6-2022

In the Civil District Court of the Parish of Orleans, State of Louisiana
Millard Clark, Plaintiff vs. Dixie Carriers, Inc. et al.
Case No. 2020-03891
Rosenfeld Deposition 9-15-2022

In The Circuit Court of Livingston County, State of Missouri, Circuit Civil Division
Shirley Ralls, Plaintiff vs. Canadian Pacific Railway and Soo Line Railroad
Case No. 18-LV-CC0020
Rosenfeld Deposition 9-7-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jonny C. Daniels, Plaintiff vs. CSX Transportation Inc.
Case No. 20-CA-5502
Rosenfeld Deposition 9-1-2022

In The Circuit Court of St. Louis County, State of Missouri
Kieth Luke et. al. Plaintiff vs. Monsanto Company et. al.
Case No. 19SL-CC03191
Rosenfeld Deposition 8-25-2022

In The Circuit Court of the 13th Judicial Circuit Court, Hillsborough County, Florida Civil Division
Jeffery S. Lamotte, Plaintiff vs. CSX Transportation Inc.
Case No. NO. 20-CA-0049
Rosenfeld Deposition 8-22-2022

In State of Minnesota District Court, County of St. Louis Sixth Judicial District
Greg Bean, Plaintiff vs. Soo Line Railroad Company
Case No. 69-DU-CV-21-760
Rosenfeld Deposition 8-17-2022

In United States District Court Western District of Washington at Tacoma, Washington
John D. Fitzgerald Plaintiff vs. BNSF
Case No. 3:21-cv-05288-RJB
Rosenfeld Deposition 8-11-2022

In Circuit Court of the Sixth Judicial Circuit, Macon Illinois
Rocky Bennyhoff Plaintiff vs. Norfolk Southern
Case No. 20-L-56
Rosenfeld Deposition 8-3-2022

In Court of Common Pleas, Hamilton County Ohio
Joe Briggins Plaintiff vs. CSX
Case No. A2004464
Rosenfeld Deposition 6-17-2022

In the Superior Court of the State of California, County of Kern
George LaFazia vs. BNSF Railway Company.
Case No. BCV-19-103087
Rosenfeld Deposition 5-17-2022

In the Circuit Court of Cook County Illinois
Bobby Earles vs. Penn Central et. al.
Case No. 2020-L-000550
Rosenfeld Deposition 4-16-2022

In United States District Court Easter District of Florida
Albert Hartman Plaintiff vs. Illinois Central
Case No. 2:20-cv-1633
Rosenfeld Deposition 4-4-2022

In the Circuit Court of the 4th Judicial Circuit, in and For Duval County, Florida
Barbara Steele vs. CSX Transportation
Case No.16-219-Ca-008796
Rosenfeld Deposition 3-15-2022

In United States District Court Easter District of New York
Romano et al. vs. Northrup Grumman Corporation
Case No. 16-cv-5760
Rosenfeld Deposition 3-10-2022

In the Circuit Court of Cook County Illinois
Linda Benjamin vs. Illinois Central
Case No. No. 2019 L 007599
Rosenfeld Deposition 1-26-2022

In the Circuit Court of Cook County Illinois
Donald Smith vs. Illinois Central
Case No. No. 2019 L 003426
Rosenfeld Deposition 1-24-2022

In the Circuit Court of Cook County Illinois
Jan Holeman vs. BNSF
Case No. 2019 L 000675
Rosenfeld Deposition 1-18-2022

In the State Court of Bibb County State of Georgia
Dwayne B. Garrett vs. Norfolk Southern
Case No. 20-SCCV-091232
Rosenfeld Deposition 11-10-2021

In the Circuit Court of Cook County Illinois
Joseph Ruepke vs. BNSF
Case No. 2019 L 007730
Rosenfeld Deposition 11-5-2021

In the United States District Court For the District of Nebraska
Steven Gillett vs. BNSF
Case No. 4:20-cv-03120
Rosenfeld Deposition 10-28-2021

In the Montana Thirteenth District Court of Yellowstone County
James Eadus vs. Soo Line Railroad and BNSF
Case No. DV 19-1056
Rosenfeld Deposition 10-21-2021

In the Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al.cvs. Cerro Flow Products, Inc.
Case No. 0i9-L-2295
Rosenfeld Deposition 5-14-2021
Trial October 8-4-2021

In the Circuit Court of Cook County Illinois
Joseph Rafferty vs. Consolidated Rail Corporation and National Railroad Passenger Corporation d/b/a
AMTRAK,
Case No. 18-L-6845
Rosenfeld Deposition 6-28-2021

In the United States District Court For the Northern District of Illinois
Theresa Romcoe vs. Northeast Illinois Regional Commuter Railroad Corporation d/b/a METRA Rail
Case No. 17-cv-8517
Rosenfeld Deposition 5-25-2021

In the Superior Court of the State of Arizona In and For the Cunty of Maricopa
Mary Tryon et al. vs. The City of Pheonix v. Cox Cactus Farm, L.L.C., Utah Shelter Systems, Inc.
Case No. CV20127-094749
Rosenfeld Deposition 5-7-2021

In the United States District Court for the Eastern District of Texas Beaumont Division
Robinson, Jeremy et al vs. CNA Insurance Company et al.
Case No. 1:17-cv-000508
Rosenfeld Deposition 3-25-2021

In the Superior Court of the State of California, County of San Bernardino
Gary Garner, Personal Representative for the Estate of Melvin Garner vs. BNSF Railway Company.
Case No. 1720288
Rosenfeld Deposition 2-23-2021

In the Superior Court of the State of California, County of Los Angeles, Spring Street Courthouse
Benny M Rodriguez vs. Union Pacific Railroad, A Corporation, et al.
Case No. 18STCV01162
Rosenfeld Deposition 12-23-2020

In the Circuit Court of Jackson County, Missouri
Karen Cornwell, Plaintiff, vs. Marathon Petroleum, LP, Defendant.
Case No. 1716-CV10006
Rosenfeld Deposition 8-30-2019

In the United States District Court For The District of New Jersey
Duarte et al, Plaintiffs, vs. United States Metals Refining Company et. al. Defendant.
Case No. 2:17-cv-01624-ES-SCM
Rosenfeld Deposition 6-7-2019

In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido” Defendant.
Case No. 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition 5-9-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No. BC615636
Rosenfeld Deposition 1-26-2019

In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No. BC646857
Rosenfeld Deposition 10-6-2018; Trial 3-7-19

In United States District Court For The District of Colorado
Bells et al. Plaintiffs vs. The 3M Company et al., Defendants
Case No. 1:16-cv-02531-RBJ
Rosenfeld Deposition 3-15-2018 and 4-3-2018

In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants
Cause No. 1923
Rosenfeld Deposition 11-17-2017

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No. C12-01481
Rosenfeld Deposition 11-20-2017

In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition 8-23-2017

In United States District Court For The Southern District of Mississippi
Guy Manuel vs. The BP Exploration et al., Defendants
Case No. 1:19-cv-00315-RHW
Rosenfeld Deposition 4-22-2020

In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilbert, Plaintiff vs. BMW of North America LLC
Case No. LC102019 (c/w BC582154)
Rosenfeld Deposition 8-16-2017, Trail 8-28-2018

In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., Plaintiffs, vs. Meritor Inc., et al., Defendants
Case No. 4:16-cv-52-DMB-JVM
Rosenfeld Deposition July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No. RG14711115
Rosenfeld Deposition September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No. LALA002187
Rosenfeld Deposition August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action No. 14-C-30000
Rosenfeld Deposition June 2015

In The Iowa District Court for Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No. 4980
Rosenfeld Deposition May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case No. CACE07030358 (26)
Rosenfeld Deposition December 2014

In the County Court of Dallas County Texas
Lisa Parr et al, Plaintiff, vs. Aruba et al, Defendant.
Case No. cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., Plaintiffs, vs. Republic Services, Inc., et al., Defendants
Case No. 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition October 2012

In the United States District Court for the Middle District of Alabama, Northern Division
James K. Benefield, et al., Plaintiffs, vs. International Paper Company, Defendant.
Civil Action No. 2:09-cv-232-WHA-TFM
Rosenfeld Deposition July 2010, June 2011

In the Circuit Court of Jefferson County Alabama
Jaeante Moss Anthony, et al., Plaintiffs, vs. Drummond Company Inc., et al., Defendants
Civil Action No. CV 2008-2076
Rosenfeld Deposition September 2010

In the United States District Court, Western District Lafayette Division
Ackle et al., Plaintiffs, vs. Citgo Petroleum Corporation, et al., Defendants.
Case No. 2:07CV1052
Rosenfeld Deposition July 2009

Letter 4

COMMENTER: Richard Drury; Lozeau Drury, LLP

DATE: December 30, 2024

Response 4.1

The commenter asserts that an EIR is required because a fair argument can be made that there are significant air quality and greenhouse gas (GHG) emission-related impacts. The air quality and GHG analysis in the Initial Study/MND was prepared in January 2024 by Envicom Corporation, which is a qualified firm with expertise in air quality and GHG analysis. The Initial Study/MND concluded that potential air quality impacts would be less than significant, based on the fact that the project would not include land uses that would exceed the assumptions on which the Air Quality Management Plan is based, and that both construction and operation emissions would not exceed South Coast Air Quality Management District (AQMD) thresholds of significance. Nevertheless, several mitigation measures are carried forward from the PVCCSP EIR that are applicable to the project, including mitigation related to traffic control, fugitive dust, grading, energy use, construction equipment maintenance, low VOC paints, and the inclusion of high occupancy vehicle parking spaces to encourage carpooling. (See PVCCSP EIR mitigation measures MM Air 2, MM Air 3, MM Air 4, MM Air 5, MM Air 6, MM Air 7, MM Air 8, MM Air 9, MM Air 13, MM Air 14, MM Air 19, MM Air 20 and MM Air 21 on pages 25-28 of the Initial Study/MND.) The mitigation measures would further reduce the less than significant impacts of the project. It should also be noted that the South Coast AQMD did not submit comments on this project.

PVCCSP EIR mitigation measure MM Air 15 requires that facility-specific Health Risk Assessments be performed to assess the diesel particulate matter impacts from mobile-source traffic generated by development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with transport refrigeration units (TRUs) per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses. The proposed project would not meet any of these standards and, as such, PVCCSP EIR mitigation measure MM Air 15 is not applicable to the project. The project would not generate substantial truck trips (an estimated 98 per day, based on the Focused Traffic Impact Analysis for the project), fewer than the threshold set forth in PVCCSP EIR mitigation measure MM Air 15, so it would not pose a significant health risk impact.

Similarly, the GHG analysis in the Initial Study/MND concluded that potential impacts would be less than significant, based on thresholds of significance used by the City of Perris based on direction from the South Coast AQMD.

The commenter provided an independent air quality and GHG analysis for consideration by the City. That study draws conclusions that in some cases differ from the expert analysis included in the Initial Study/MND. However, that new study does not directly analyze the project, but instead provides background information that relates to air quality and GHG issues in the region, and how the project might generically contribute to existing regional issues. As noted above, the methodology and thresholds used in the Initial Study are based on direction from the South Coast AQMD and the PVCCSP EIR. A disagreement among experts is allowed under CEQA, and does not reflect on the adequacy of the CEQA document.



RIVERSIDE COUNTY FLOOD CONTROL
AND WATER CONSERVATION DISTRICT

260003

December 16, 2024

City of Perris
Planning Department
135 North D Street
Perris, CA 92570

Letter 5

Attention: Nathan Perez

Re: PM 38739 (PLN23-05028), DPR 22-00031,
PDO/SPA 23-05029, APNs 302-090-052
through 302-090-054 and APNs
302-090-056 through 302-090-061

The Riverside County Flood Control and Water Conservation District (District) does not normally recommend conditions for land divisions or other land use cases in incorporated cities. The District also does not plan check City land use cases or provide State Division of Real Estate letters or other flood hazard reports for such cases. District comments/recommendations for such cases are normally limited to items of specific interest to the District including District Master Drainage Plan facilities, other regional flood control and drainage facilities which could be considered a logical component or extension of a master plan system, and District Area Drainage Plan fees (development mitigation fees). In addition, information of a general nature is provided.

The District's review is based on the above-referenced project transmittal, received November 22, 2024. The District **has not** reviewed the proposed project in detail, and the following comments do not in any way constitute or imply District approval or endorsement of the proposed project with respect to flood hazard, public health and safety, or any other such issue:

- This project would not be impacted by District Master Drainage Plan facilities, nor are other facilities of regional interest proposed.
- This project involves District proposed Master Drainage Plan facilities, namely, _____. The District will accept ownership of such facilities on written request by the City. The Project Applicant shall enter into a cooperative agreement establishing the terms and conditions of inspection, operation, and maintenance with the District and any other maintenance partners. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection, and administrative fees will be required. All regulatory permits (and all documents pertaining thereto, e.g., Habitat Mitigation and Monitoring Plans, Conservation Plans/Easements) that are to be secured by the Applicant for both facility construction and maintenance shall be submitted to the District for review. The regulatory permits' terms and conditions shall be approved by the District prior to improvement plan approval, map recordation, or finalization of the regulatory permits. There shall be no unreasonable constraint upon the District's ability to operate and maintain the flood control facility(ies) to protect public health and safety.
- This project proposes channels, storm drains larger than 36 inches in diameter, or other facilities that could be considered regional in nature and/or a logical extension a District's facility, the District would consider accepting ownership of such facilities on written request by the City. The Project Applicant shall enter into a cooperative agreement establishing the terms and conditions of inspection, operation, and maintenance with the District and any other maintenance partners. Facilities must be constructed to District standards, and District plan check and inspection will be required for District acceptance. Plan check, inspection, and administrative fees will be required. The regulatory permits' terms and conditions shall be approved by the District prior to improvement plan approval, map recordation, or finalization of the regulatory permits. There shall be no unreasonable constraint upon the District's ability to operate and maintain the flood control facility(ies) to protect public health and safety.

5.1

Re: PM 38739 (PLN23-05028), DPR 22-00031,
PDO/SPA 23-05029, APNs 302-090-052
through 302-090-054 and APNs
302-090-056 through 302-090-061

260003

- This project is located within the limits of the District's Perris Valley San Jacinto River Homeland/Romoland Line A Homeland/Romoland Line B Area Drainage Plan for which drainage fees have been adopted. If the project is proposing to create additional impervious surface area, applicable fees should be paid (in accordance with the Rules and Regulations for Administration of Area Drainage Plans) to the Flood Control District or City prior to issuance of grading or building permits. Fees to be paid should be at the rate in effect at the time of issuance of the actual permit.
- An encroachment permit shall be obtained for any construction related activities occurring within District right of way or facilities, namely, Perris Valley Channel Lateral B if an upgrade to the existing 30-inch reinforced concrete pipe (RCP) is required. If a proposed storm drain connection exceeds the hydraulic performance of the existing drainage facilities, mitigation will be required. For further information, contact the District's Encroachment Permit Section at 951.955.1266.
- The District's previous comments are still valid.

GENERAL INFORMATION

The project proponent shall bear the responsibility for complying with all applicable mitigation measures defined in the California Environmental Quality Act (CEQA) document, and/or Mitigation Monitoring and Reporting Program, and with all other federal, state, and local environmental rules and regulations that may apply, such as, but not limited to, the Multiple Species Habitat Conservation Plan (MSHCP), Sections 404 and 401 of the Clean Water Act, California Fish and Game Code Section 1602, and the Porter Cologne Water Quality Control Act. The District's action associated with the subject project triggers evaluation by the District with respect to the applicant's compliance with federal, state, and local environmental laws. For this project, the Lead Agency is the agency in the address above, and the District is a Responsible Agency under CEQA. The District, as a Co-permittee under the MSHCP, needs to demonstrate that all District related activities, including the actions identified above, are consistent with the MSHCP. This is typically achieved through determinations from the CEQA Lead Agency (if they are also a Co-permittee) for the project. For the MSHCP, the District's focus will be particular to Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.3.7, 7.5.3, and Appendix C of the MSHCP. Please include consistency determination statements from the Lead Agency/Co-permittee for the project for each of these sections in the CEQA document. The District may also require that an applicant provide supporting technical documentation for environmental clearance.

This project may require a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Clearance for grading, recordation, or other final approval should not be given until the City has determined that the project has been granted a permit or is shown to be exempt.

If this project involves a Federal Emergency Management Agency (FEMA) mapped floodplain, then the City should require the applicant to provide all studies, calculations, plans, and other information required to meet FEMA requirements, and should further require that the applicant obtain a Conditional Letter of Map Revision (CLOMR) prior to grading, recordation, or other final approval of the project and a Letter of Map Revision (LOMR) prior to occupancy.

Very truly yours,



AMY MCNEILL
Engineering Project Manager

EM:blj

5.1
(cont'd)



Development Services Department
Planning Division

135 North "D" Street, Perris
CA 92570

NOTICE OF INTENT TO ADOPT
MITIGATED NEGATIVE DECLARATION (MND No. 2401)
FOR THE CITY OF PERRIS, CALIFORNIA

PROJECT DESCRIPTION: Planned Development Overlay/Specific Plan Amendment [REDACTED]
[REDACTED] (Building A: 23,881 SF, Building B: 20,340 SF, and Building C: 22,465 SF) totaling 66,686 SF on 4.37 acres.

NOTES: *The Project site is located within Airport Overlay Zone D of the March Air Reserve Base/Inland Port (MARB/IP) Airport Land Use Compatibility Plan. The proposed Project does not conflict with the MARB/IP Land Use Compatibility Plan and is required to comply with the standard Conditions of Approval for this Airport Zone. In addition, Tribal Consultation has been concluded.*

PROJECT LOCATION: The Project site is located at the northwest corner of Perris Boulevard and Harley Knox Boulevard, in the Commercial Zone of the Perris Valley Commerce Center Specific Plan [REDACTED].

HAZARDOUS WASTE SITES: Pursuant to Section 15087c6 of the Guidelines for California Environmental Quality Act, the City acknowledges the non-existence of hazardous waste sites within the project area reviewed by this Mitigated Negative Declaration (MND 2401).

PUBLIC HEARINGS: The City of Perris will hold a formal public hearing with the City Planning Commission on the above-noted project and the Mitigated Negative Declaration (MND 2401). The specific public hearing date will be noticed 10 days prior to the hearing, in accordance with the Perris Municipal Code.

PUBLIC REVIEW AND WRITTEN COMMENTS: The review period for submitting written comments on the Mitigated Negative Declaration (MND 2401) pursuant to State CEQA Guidelines Section 15105, commences on November 29, 2024, and will close on December 30, 2024, at 5:00 p.m. Please submit comments regarding the project or Mitigated Negative Declaration (MND 2401), via regular mail or e-mail to the following:

PROJECT CONTACT: [REDACTED] Senior Planner
PHONE: (951) 943-5003 Extension # 279
E-MAIL: [REDACTED]
ADDRESS: City of Perris
Development Services Department | Planning Division
135 North "D" Street
Perris, CA 92570

DOCUMENT AVAILABILITY: The Mitigated Negative Declaration (MND 2401) is available at the City Planning Division, located at the address above, and may also be viewed on the City's website at <http://www.cityofperris.org/departments/development-services/planning/environmental-documents-for-public-review>

RECEIVED
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March Plaza Project

Letter 5

COMMENTER: Amy McNeill; Riverside County Flood Control and Water Conservation District

DATE: December 16, 2024

Response 5.1

The commenter provides general information related to project requirements to address flood control and drainage issues. This information may be considered by the City as the basis for possible conditions of approval related to these issues. No detailed comments were provided with regard to the project itself, nor with respect to the adequacy of the Initial Study/MND.

December 6, 2024

Letter 6

From: malvarez@riversidetransit.com

To: NPerez@cityofperris.org

Good Morning Nathan,

Thank you for including RTA in the development review of DPR 22-00031, the project on the northwest corner of Perris Blvd & Harley Knox. After further review, there are no comments to submit for this particular project.

Thank you,

Mauricio Alvarez, MBA

Planning Analyst

Riverside Transit Agency

p: 951.565.5260 | e: malvarez@riversidetransit.com

[Website](#) | [Facebook](#) | [Twitter](#) | [Instagram](#)

1825 Third Street, Riverside, CA 92507

6.1

March Plaza Project

Letter 6

COMMENTER: Mauricio Alvarez; Riverside Transit Agency

DATE: December 6, 2024

Response 6.1

The Riverside Transit Agency stated in an email to the City that it has no comments on the project.



Letter 7

December 23, 2024

Nathan Perez, Senior Planner
City of Perris, Development Services Department
135 North "D" Street
Perris, CA 92570

SUBJECT: MARCH PLAZA PROJECT (MND 2401) – NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Dear Mr. Perez:

EMWD appreciates the opportunity to provide comments on the proposed March Plaza Project (MND 2401) Mitigated Negative Declaration. It appears the proposed development would require District water and wastewater service. The Draft Initial Study/Mitigated Negative Declaration should explicitly assess whether current pipeline capacity exists to service the proposal. The Draft Initial Study currently identifies the location of connections without assessing the capacity to accommodate project flows/demands. **7.1**

EMWD requests the Lead Agency/project proponent consult with the District via a one-hour complementary Due Diligence meeting. This meeting will inform the Lead Agency/project proponent as to whether facility/pipeline improvements are required to service the project. To set up this meeting the Lead Agency/project proponent should complete a Project Questionnaire (form NBD-058) and submit to EMWD. To download this form or for additional information, please visit our web page www.emwd.org, then select the "Developer" link, then select the "New Development Process Forms" link. This meeting will offer the following benefits: **7.2**

1. Describe EMWD's development process
2. Identify project scope and parameters
3. Provide a preliminary review of the project within the context of existing infrastructure

Board of Directors
Philip E. Paulo, *President* Stephen J. Corona, *Vice President* Jeff Armstrong Joe Grindstaff David J. Slawson

2270 Trumble Road • P.O. Box 8300 • Perris, CA 92572-8300
T 951.928.3777 • F 951.928.6177 www.emwd.org

4. Discuss potential candidacy for recycled water service
5. Identify project submittal requirements to start the Design Conditions review

Following the Due Diligence meeting, to proceed with this project, the Design Conditions will need to be developed by the developer's engineer and reviewed/approved by EMWD prior to submitting improvement plans for Plan Check. The DC process and approval will provide the following:

1. Technical evaluation of the project's demands and existing system capacities
2. Identification of impacts to existing facilities
3. Identification of required on-site and off-site facilities, necessary to serve the project
4. Identification of easement requirements, if necessary
5. Identification of potential EMWD's cost participation in facility oversizing, if applicable

7.2
(cont'd)

If you have questions or concerns, please do not hesitate to contact me at (951) 928-3777, extension 4468 or by e-mail at El-hagem@emwd.org.

Sincerely,



Anthony Budicin
Director of Environmental and Regulatory Compliance

Cc: Maroun El-Hage, MPA, MS, PE, EMWD Principal Civil Engineer, Dev. Services Dept.
Jose Ruiz, EMWD Assistant Engineer, Dev. Services Dept.

Attachment: Copy of Public Notice



Development Services Department Planning Division

135 North "D" Street, Perris
CA 92570

NOTICE OF INTENT TO ADOPT MITIGATED NEGATIVE DECLARATION (MND No. 2401) FOR THE CITY OF PERRIS, CALIFORNIA

PROJECT DESCRIPTION: Planned Development Overlay/Specific Plan Amendment (PDO/SPA)23-05029, Development Plan Review (DPR) 22-00031, and Tentative Parcel Map 38739 (PLN23-05028) - A proposal to construct three (3) multi-tenant business park buildings (Building A: 23,881 SF, Building B: 20,340 SF, and Building C: 22,465 SF) totaling 66,686 SF on 4.37 acres.

NOTES: *The Project site is located within Airport Overlay Zone D of the March Air Reserve Base/Inland Port (MARB/IP) Airport Land Use Compatibility Plan. The proposed Project does not conflict with the MARB/IP Land Use Compatibility Plan and is required to comply with the standard Conditions of Approval for this Airport Zone. In addition, Tribal Consultation has been concluded.*

PROJECT LOCATION: The Project site is located at the northwest corner of Perris Boulevard and Harley Knox Boulevard, in the Commercial Zone of the Perris Valley Commerce Center Specific Plan (APNs: 302-090-052, -053, -054, -056, -057, -058, -059, -060 and -061).

HAZARDOUS WASTE SITES: Pursuant to Section 15087c6 of the Guidelines for California Environmental Quality Act, the City acknowledges the non-existence of hazardous waste sites within the project area reviewed by this Mitigated Negative Declaration (MND 2401).

PUBLIC HEARINGS: The City of Perris will hold a formal public hearing with the City Planning Commission on the above-noted project and the Mitigated Negative Declaration (MND 2401). The specific public hearing date will be noticed 10 days prior to the hearing, in accordance with the Perris Municipal Code.

PUBLIC REVIEW AND WRITTEN COMMENTS: The review period for submitting written comments on the Mitigated Negative Declaration (MND 2401) pursuant to State CEQA Guidelines Section 15105, commences on November 29, 2024, and will close on December 30, 2024, at 5:00 p.m. Please submit comments regarding the project or Mitigated Negative Declaration (MND 2401), via regular mail or e-mail to the following:

PROJECT CONTACT: Nathan Perez, Senior Planner
PHONE: (951) 943-5003 Extension # 279
E-MAIL: Nperez@cityofperris.org
ADDRESS: City of Perris
 Development Services Department | Planning Division
 135 North "D" Street
 Perris, CA 92570

DOCUMENT AVAILABILITY: The Mitigated Negative Declaration (MND 2401) is available at the City Planning Division, located at the address above, and may also be viewed on the City's website at <http://www.cityofperris.org/departments/development-services/planning/environmental-documents-for-public-review>

Letter 7

COMMENTER: Anthony Budicin; Eastern Municipal Water District

DATE: December 23, 2024

Response 7.1

The commenter requests that the Initial Study assess whether there is sufficient pipeline capacity to provide water and wastewater service. A more intensive version of the project was approved in 2017 consistent with the PVCCSP and related citywide infrastructure plans, and at that time, the City Engineer confirmed that the necessary infrastructure including stubouts were in place to provide services for the entire project. At that time, the City coordinated with the EWMD, which has since been providing service to the first phase of the project, which has already been constructed.

The updated project would result in less intensive development in the remaining phases, and therefore less water and sewer demand as compared to what had been previously approved. As stated in the Initial Study, preliminary studies for the project confirm that the proposed infrastructure improvements will not require the construction of new water or wastewater treatment facilities or expansion of existing facilities. Please refer to Sections XIX.b. and XIX.c of the Initial Study/MND for additional analysis related to water demand and wastewater generation, which are within the assumptions included in the PVCCSP, the planning document that forms the basis for land use buildout that underlies the assumptions related to providing utility infrastructure in the planning area.

Response 7.2

The commenter requests that City and project applicant consult with the EWMD via a one-hour due diligence meeting to coordinate issues related to providing service to the project. As part of the project approval process, the City and applicant intend to coordinate with the EWMD as appropriate. This action is outside of the CEQA process, and does not reflect on the adequacy of the Initial Study/MND.

4 MITIGATION MONITORING AND REPORTING PROGRAM

This document is the Mitigation Monitoring and Reporting Program for the March Plaza Project in the City of Perris, California. Public Resources Code Section 21081.6(a)(1) requires that a Lead Agency adopt a mitigation monitoring and reporting program before approving a project in order to mitigate or avoid significant impacts that have been identified through the CEQA process. As stated in that section:

“The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation.”

The mitigation monitoring table below lists those mitigation measures that are to be adopted for the project. To ensure that the mitigation measures are properly implemented, a monitoring and reporting program has been devised which identifies the timing and responsibility for monitoring each measure. The project developer will have the responsibility for implementing the measures and the various City of Perris departments and divisions will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

March Plaza Project
Mitigation Monitoring and Reporting Program

Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
					Initial	Date	Compliance
Aesthetics							
	MM A-1: Prior to issuance of grading permits, the project developer shall provide evidence to the City that any temporary nighttime lighting installed for security purposes shall be downward facing and hooded or shielded to prevent security light spillage by one foot candle to surrounding properties outside of the staging area or direct broadcast of security light into the sky.	Prior to issuance of grading permits.	City Planning Division	Verify that construction contracts include required restriction			
Air Quality							
	MM Air 2: Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.	Prior to issuance of a grading permit	City Engineering Department	Approval of required Traffic Control Plan			
	MM Air 3: To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with SCAQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the SCAQMD-approved dust control plan, or other sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to: <ul style="list-style-type: none"> • Requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain); • Keeping disturbed/loose soil moist at all times; • Requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered; • Installation of wheel washers or gravel construction entrances where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip; • Posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved portions of the project site; • Suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour; 	Prior to issuance of grading permits.	City Planning Division	Submittal of dust control plan approved by the South Coast AQMD or other proof of compliance with Rule 403			

March Plaza Project
Mitigation Monitoring and Reporting Program

Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
					Initial	Date	Compliance
	<ul style="list-style-type: none"> Appointment of a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM-10 generation; Sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials; and/or, Replacement of ground cover in disturbed areas as quickly as possible. 						
	MM Air 4: Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.	Prior to issuance of grading and building permits.	City Planning Division	Verify that construction contracts include the required restriction			
	MM Air 5: Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the city the City of Perris Building Division prior to issuance of grading permits.	Prior to issuance of grading permits	City Planning Division	Verify that this requirement is included in contractor contracts			
	MM Air 6: The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or USEPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNO _x unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris Building Division prior to issuance of a grading permit.	Prior to issuance of grading permits	City Building Division	Verify that this requirement is included in contractor contracts			
	MM Air 7: During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris Building Division.	Prior to issuance of a grading permit and Infrequently during grading and construction	City Building Division	Verify that this requirement is included in contractor contracts Periodic review of equipment maintenance records and equipment			

March Plaza Project
Mitigation Monitoring and Reporting Program

Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
					Initial	Date	Compliance
				design			
	MM Air 8: Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.	Prior to issuance of building permits	City Building Division	Verify that this requirement is included in contractor contracts			
	MM Air 9: To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.	Prior to issuance of building permits	City Building Division	Verify that this requirement is included in contractor contracts			
	MM Air 13: In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero- Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for NOx] funding programs, as identified on SCAQMD's website (http://www.aqmd.gov). Tenants would be required to use those funds, if awarded.	Prior to issuance of a Certificate of Occupancy and annually thereafter	City Planning Division	Verify that tenants have been provided with required information			
	MM Air 14: Each implementing development project shall designate parking spaces for high-occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.	Prior to issuance of an occupancy permit	City Planning Division	Confirmation that designated parking spaces for high-			

March Plaza Project
Mitigation Monitoring and Reporting Program

Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
					Initial	Date	Compliance
				occupancy vehicles and vans are included in building plans			
	MM Air 19: In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris Building Division) prior to conveyance of applicable streets.	Prior to issuance of a building permit	City Building Division	Verify that lighting plans provide energy-efficient street lighting			
	MM Air 20: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.	Prior to issuance of a building permit	City Building Division	Submission of a checklist documenting calculations with building plans			
	MM Air 21: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.	Prior to issuance of a building permit	City Building Division	Submission of a checklist documenting calculations with building plans			

March Plaza Project
Mitigation Monitoring and Reporting Program

Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
					Initial	Date	Compliance
Biological Resources							
	<p>MM BR-1: The project proponent shall retain a qualified biologist to conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities on the Project site. The survey shall include the project site and all suitable burrowing owl habitat within a 500-foot buffer. The results of the survey shall be submitted to the City prior to obtaining a grading permit. If ground disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. The pre-construction survey and any relocation activity will be conducted in accordance with the current Burrowing Owl Survey Instructions for the Western Riverside MSHCP.</p> <p>If burrowing owl are detected, the CDFW shall be sent written notification by the City, within three days of detection of burrowing owls. If active nests are identified during the pre-construction survey, the nests shall be avoided and the qualified biologist and project proponent shall coordinate with the City of Perris Planning Department, the USFWS, and the CDFW to develop a Burrowing Owl Plan to be approved by the City in consultation with the CDFW and the USFWS prior to commencing project activities. The Burrowing Owl Plan shall be prepared in accordance with guidelines in the CDFW Staff Report on Burrowing Owl (March 2012) and the MSHCP. The Burrowing Owl Plan shall describe proposed avoidance, minimization, relocation, and monitoring as applicable. The Burrowing Owl Plan shall include the number and location of occupied burrow sites and details on proposed buffers if avoiding the burrowing owls and/or information on the adjacent or nearby suitable habitat available to owls for relocation. If no suitable habitat is available nearby for relocation, details regarding the creation and funding of artificial burrows (numbers, location, and type of burrows) and management activities for relocated owls may also be required in the Burrowing Owl Plan. The permittee shall implement the Burrowing Owl Plan following CDFW and USFWS review and concurrence. A final letter report shall be prepared by the qualified biologist documenting the results of the Burrowing Owl Plan. The letter shall be submitted to the CDFW prior to the start of project activities. When a qualified biologist determines that burrowing owls are no longer occupying the project site per the criteria in the Burrowing Owl Plan, project activities may begin.</p> <p>If burrowing owls occupy the project site after project activities have started, then construction activities shall be halted immediately. The project proponent shall notify the City and the City shall notify the CDFW and the USFWS within 48 hours of detection. A Burrowing Owl Plan, as detailed above, shall be implemented.</p>	No more than 30 days before any ground-disturbing activity	City Planning Division	<p>Verify that owl survey has been completed as specified.</p> <p>If burrowing owls are detected, the City shall send written notification to the CDFW.</p> <p>If burrowing owls are detected, a burrowing owl plan shall be to the City of Perris Planning Division for approval in consultation with the CDFW and USFWS</p>			

March Plaza Project
Mitigation Monitoring and Reporting Program

Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
					Initial	Date	Compliance
Cultural Resources and Tribal Cultural Resources							
	<p>MM CR-1: Prior to the issuance of grading permits, the project proponent/developer shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeology (U.S. Department of Interior, 2012; Registered Professional Archaeologist preferred). The primary task of the consulting archaeologist shall be to monitor the initial ground-disturbing activities at both the subject site and any off-site project-related improvement areas for the identification of any previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of Perris Director of Development Services and no ground-disturbing activities shall occur at the site or within off-site project improvement areas until the archaeologist has been approved by the City.</p> <p>The archaeologist shall be responsible for monitoring ground-disturbing activities, maintaining daily field notes and a photographic record, and for reporting all finds to the developer and the City of Perris in a timely manner. The archaeologist shall be prepared and equipped to record and salvage cultural resources that may be unearthed during ground-disturbing activities and shall be empowered to temporarily halt or divert ground-disturbing equipment to allow time for the recording and removal of the resources.</p> <p>In the event that archaeological resources are discovered at the project site or within off-site project improvement areas, the handling of the discovered resource(s) will differ, depending on the nature of the find. Consistent with California Public Resources Code Section 21083.2(b) and Assembly Bill 52 (Chapter 532, Statutes of 2014), avoidance shall be the preferred method of preservation for Native American/tribal cultural/archaeological resources. However, it is understood that all artifacts, with the exception of human remains and related grave goods or sacred/ceremonial/religious objects, belong to the property owner. The property owner shall commit to the relinquishing and curation of all artifacts identified as being of Native American origin. All artifacts, Native American or otherwise, discovered during the monitoring program shall be recorded and inventoried by the consulting archaeologist.</p> <p>If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the project proponent and project archaeologist shall notify the City of Perris Planning Division and the Soboba Band of Luiseño Indians and the Pechanga Band of Indians. A designated Native American representative from either the Soboba Band of Luiseño Indians or the Pechanga Band of Indians shall be retained to assist the project archaeologist in the significance determination of the Native American artifacts as deemed</p>	Prior to issuance of a grading permit during construction	City Planning Division	Verify that archaeologist has been retained and contracted for specified work Verify that Native American tribal agreement has been signed Submittal of Report of Findings			

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	<p>possible. The designated Native American tribal representative will be given ample time to examine the find. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Native American tribe. If the find is determined to be of sacred or religious value, the Native American tribal representative will work with the City and consulting archaeologist to protect the resource in accordance with tribal requirements. All analysis shall be undertaken in a manner that avoids destruction or other adverse impacts.</p> <p>In the event that human remains are discovered at the project site or within off-site project improvement areas, mitigation measure CR-2 shall immediately apply and all items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.</p> <p>Native American artifacts that are relocated/reburied at the project site would be subject to a fully executed relocation/reburial agreement with the assisting Native American tribe. This shall include, but not be limited to, an agreement that artifacts will be reburied on-site and in an area of permanent protection, and that reburial shall not occur until all cataloging and basic recordation have been completed by the consulting archaeologist.</p> <p>Native American artifacts that cannot be avoided or relocated at the project site shall be prepared for curation at an accredited curation facility in Riverside County that meets federal standards (per 36 CFR Part 79) and available to archaeologists/researchers for further study. The project archaeologist shall deliver the Native American artifacts, including title, to the identified curation facility within a reasonable amount of time, along with applicable fees for permanent curation.</p> <p>Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation, as deemed appropriate, or returned to the property owner.</p> <p>Once grading activities have ceased and/or the archaeologist, in consultation with the designated Native American representative, determines that monitoring is no longer warranted, monitoring activities can be discontinued following notification to the City of Perris Planning Division.</p> <p>A report of findings, including an itemized inventory of artifacts, shall be prepared upon completion of the tasks outlined above. The report shall</p>						

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	include all data outlined by the Office of Historic Preservation guidelines, including a conclusion of the significance of all recovered, relocated, and reburied artifacts. A copy of the report shall also be filed with the City of Perris Planning Division, the University of California, Riverside, Eastern Information Center, and the Native American tribe(s) involved with the project.						
	<p>MM CR-2: In the event that human remains (or remains that may be human) are discovered at the project site or within the off-site project improvement areas during ground-disturbing activities, the construction contractors, project archaeologist, and/or designated Native American tribal representative shall immediately stop all activities within 100 feet of the find. The project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).</p> <p>If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC), which will identify the "Most Likely Descendent" (MLD). Despite the affiliation with any Native American tribal representative(s) at the site, the NAHC's identification of the MLD will stand. The MLD shall be granted access to inspect the site of the discovery of Native American human remains and may recommend to the project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains will be determined in consultation between the project proponent and the MLD. In the event that there is disagreement regarding the disposition of the remains, State law will apply and median with the NAHC will make the applicable determination (see Public Resources Code Section 5097.98(e) and 5097.94(k)).</p> <p>The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the Eastern Information Center.</p>	If human remains are found during grading	City Planning Division	Confirmation of coroner and NAHC contact and submittal of Report of Findings, if applicable			

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Issue	Mitigation Measure	Implementation Timing	Responsible Party	Method of Verification	Compliance Verification		
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Geology and Soils							
	<p>MM GS-1: Prior to the issuance of grading permits, the project proponent/developer shall submit to and receive approval from the City, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP). The PRIMMP shall include the provision of a qualified professional paleontologist (or his or her trained paleontological representative) to be on-site fulltime for any project-related subsurface excavation. Selection of the paleontologist shall be subject to the approval of the City of Perris Planning Manager and no grading activities shall occur at the project site or within off-site project improvement areas until the paleontologist has been approved by the City.</p> <p>Monitoring shall be restricted to undisturbed subsurface areas of older quaternary alluvium. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.</p> <p>Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.</p> <p>A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to paleontological resources.</p>	Prior to issuance of a grading permit and during subsurface excavation	City Planning Division	Verify that PRIMMP has been prepared and implemented			

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Noise							
	MM Noise 1: During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.	Prior to issuance of a grading permit	City Planning Division	Verify that this requirement is included in contractor contracts			
	MM Noise 2: During all construction, stationary construction equipment, stockpiling and vehicle staging areas will be placed a minimum of 446 feet from the closest sensitive receptor.	Prior to issuance of a grading permit and prior to issuance of a building permit	City Planning Division	Verify that this requirement is included in contractor contracts			
	MM Noise 3: No combustion-powered equipment, such as pumps or generators, shall be allowed to operate within 446 feet of any occupied residence unless the equipment is surrounded by a noise protection barrier.	Prior to issuance of a grading permit and prior to issuance of a building permit	City Planning Division	Verify that this requirement is included in contractor contracts			
	MM Noise 4: Construction contractors of implementing development projects shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.	Prior to issuance of a grading permit and prior to issuance of a building permit	City Planning Division	Verify that this requirement is included in contractor contracts			
Transportation							
	MM Trans 3: Each implementing development project shall particulate in the phased construction of off-site traffic signals through payment of that project's fair share of traffic signal mitigation fees and the cost of other off-site improvements through payment of fair share mitigation fees which include TUMF (Transportation Uniform Mitigation Fee), DIF (Development Impact Fee) and the NPRBBB (North Perris Road and Bridge Benefit District). The fees shall collected and utilized as needed by the City of Perris to construct the improvements necessary to maintain the required level of service and build or improve roads to their buildout level.	Prior to issuance of a Certificate of Occupancy	City Engineering Department	Verify that all required fees have been paid			
	MM Trans 5: Bike racks shall be installed in all parking lots in compliance with City of Perris standards.	Prior to issuance of a Certificate of Occupancy	City Building Division	Verify placement of bike racks			