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FINAL
Environmental Impact Report
SDG Commerce 220 Distribution Center Project
City of American Canyon, Napa County, California

State Clearinghouse Number 2023100842

Prepared for:
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
707.647.4337

Contact: William He, Senior Planner

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Janna Waligorski, Project Manager

Date: October 4, 2024

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SECTION 1: INTRODUCTION

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of American Canyon (Lead Agency) has evaluated the comments received on the SDG Commerce 220 Distribution Center Project Draft Environmental Impact Report (Draft EIR). Pursuant to CEQA Guidelines Section 15132, this Final EIR includes a list of persons, organizations, and agencies that provided comments on the Draft EIR; responses to the comments received regarding the Draft EIR; and errata, or revisions to the Draft EIR; as well as a Mitigation Monitoring and Reporting Program (MMRP) for use by the City of American Canyon during its review.

This document is organized into three sections:

- **Section 1—Introduction.** Provides an introduction to the Final EIR.
- **Section 2—Responses to Written Comments.** Provides a list of the agencies, organizations, and individuals who commented on the Draft EIR. Copies of all of the letters received regarding the Draft EIR and responses thereto are included in this section.
- **Section 3—Errata.** Includes an addendum listing refinements and clarifications on the Draft EIR, which have been incorporated.

The Final EIR includes the following contents:

- Draft EIR (provided under separate cover)
- Draft EIR Appendices (provided under separate cover)
- Responses to Written Comments on the Draft EIR and Errata (Section 2 and Section 3 of this document)
- Mitigation Monitoring and Reporting Program (provided under separate cover)

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SECTION 2: RESPONSES TO WRITTEN COMMENTS

2.1 - List of Authors

A list of public agencies, organizations, and individuals that provided comments on the SDG Commerce 220 Distribution Center Project Draft Environmental Impact Report (Draft EIR) is presented below. Each comment has been assigned a code. Individual comments within each communication have been numbered so comments can be crossed-referenced with responses. Following this list, the text of the communication is reprinted and followed by the corresponding response.

Author **Author Code**

State Agencies

California Department of Fish and Wildlife ..... CDFW
California Department of Transportation ..... CALTRANS

Organizations

El Puente Comunitario ..... EPC
Napa/Solano Residents for Responsible Development ..... NSRRD
Soil Water Air Protection Enterprise ..... SWAPE
Shawn Smallwood ..... SMALLWOOD
Wilson Ihrig ..... IHRIG

Individuals

Yvonne Baginski (First Letter) ..... BAGINSKI 1
Yvonne Baginski (Second Letter) ..... BAGINSKI 2
Jeannette Goyetche ..... GOYETCHE

2.2 - Responses to Comments

2.2.1 - Introduction

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15088, the City of American Canyon (City), as the Lead Agency, evaluated the comments received on the Draft EIR (State Clearinghouse No. 2023100842) for the SDG Commerce 220 Distribution Center Project and has prepared the following responses to the comments received. This Response to Comments document becomes part of the Final EIR for the proposed project in accordance with CEQA Guidelines Section 15132.

2.2.2 - Comment Letters and Responses

The comment letters reproduced in the following pages follow the same organization as used in the List of Authors.

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State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

July 22, 2024

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
WHe@cityofamericancanyon.org

Subject: SDG Commerce 220 Distribution Center Project, Draft Environmental Impact Report, SCH No. 2023100842, Napa County

Dear Mr. He:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a Draft Environmental Impact Report (EIR) from the City of American Canyon (City) for SDG Commerce 220 Distribution Center Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1] CDFW previously submitted comments in response to the Notice of Preparation of the Environmental Impact Report (NOP) in a letter dated November 17, 2023.

CDFW is submitting comments on the draft EIR to inform the City, as the Lead Agency, of potentially significant impacts to biological resources associated with the Project. **Thank you** for including in the draft EIR mitigation measures CDFW has recommended for past projects to mitigate impacts to special-status species such as burrowing owl (*Athene cunicularia*) and western pond turtle (*Actinemys marmorata*). 1

Based on Google Earth aerial imagery, it appears that Project construction may have prematurely started as recent equipment staging and earthmoving are visible. CDFW notified you of this issue via email on July 17, 2024 and you indicated that your records do not show any grading permits issued for the SDG Commerce 220 property and the Project should not start construction. **CDFW requests that the City investigate any unauthorized Project construction to uphold protection of fish and wildlife resources and compliance with CEQA and other environmental laws.**

CDFW ROLE 2

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

Species Act (CESA) or Native Plant Protection Act, the Lake and Streambed Alteration (LSA) Agreement, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources. 2 CONT

PROJECT DESCRIPTION SUMMARY

Proponent: SDG Commerce 220, LLC

Objective: The Project would develop a 219,834-square-foot wine storage and distribution center, including the construction of vehicular access areas and drive isles and sharing a driveway with a neighboring facility. Additional vehicle parking spaces will be built, including 134 car spaces, 23 truck parking stalls,19 electric vehicle stalls, and 3 bicycle storage lockers with room for 12 bicycles. Construction activities are expected to span 9.5 months and will include landscaping and the construction of large concrete slabs and wall panels using typical construction equipment.

Location: The Project site is located on 1055 Commerce Court in the City of American Canyon, Napa County; Latitude 38.185969 North, Longitude -122.274294 West; and encompasses approximately 10.45 acres.

REGULATORY REQUIREMENTS

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California Endangered Species Act

Please be advised that a CESA Incidental Take Permit (ITP) must be obtained if the Project has the potential to result in "take" of plants or animals listed under CESA either during construction or over the life of the Project. **The Project has the potential to impact Swainson's hawk (*Buteo swainsoni*), CESA listed as threatened species, as further described below.** Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, & 15065.). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Raptors and Other Nesting Birds

CDFW has jurisdiction over actions that may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections protecting birds, their eggs, and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nests or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). Migratory birds are also protected under the federal Migratory Bird Treaty Act. 3 CONT

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below, which are also included in **Attachment 1,** to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

I. Mitigation Measure Related Impact Shortcomings

MANDATORY FINDINGS OF SIGNIFICANCE. Does the Project have potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species? Does the Project have impacts that are individually limited, but cumulatively considerable?

AND

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service? 4

COMMENT 1: Swainson's hawk, draft EIR pages 3.3-15, 3.3-38, 3.3-39, and ES-8, Biological Resources Assessment page 42.

Issue: The draft EIR does not adequately mitigate potential impacts to Swainson's hawk. Mitigation Measure (MM) BIO-1b: Swainson's Hawk Avoidance and Minimization and Construction Monitoring of the draft EIR (page ES-8, 3.3-38) includes an insufficient buffer distance for occupied Swainson's hawk nests. Additionally, the draft EIR does not mitigate the loss of Swainson's hawk foraging habitat despite the Project site providing potentially suitable foraging habitat for this species and potentially suitable nest trees. There are unprocessed years 2023 and 2024 California Natural Diversity Database (CNDDB) records of potentially nesting Swainson's hawks approximately 1.4 miles north of the Project site, and a year 2021 CNDDB record of confirmed nesting Swainson's hawks along Fagan Creek approximately 1.9 miles north of the Project site,

which is part of a cluster of nesting records indicating the Project site is likely used for foraging by nesting Swainson's hawks. 4 CONT

Specific impacts, why they may occur and be potentially significant:

Nesting Swainson's hawks

Thank you for including in MM BIO-1b (b) protocol-level Swainson's hawk surveys pursuant to the 2000 *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline) (draft EIR pages 3.4-35, 3.4-36, and 3.4-37). However, the proposed buffer distance of 600 feet (200 yards) around any detected active nests is potentially inadequate and therefore the Project has the potential to impact nesting Swainson's hawk through auditory or visual disturbances above ambient levels, which may result in Swainson's hawk nest abandonment and loss of eggs or reduced health and vigor and loss of young. This above survey protocol includes project activities which occur greater than 200 yards in a category of low disturbance to the reproductive success of individuals (TAC 2000 page 5). However, this "low" level of disturbance may still result in take, and a 600-foot buffer may not be adequate to prevent take of nesting Swainson's hawk. A more protective 0.5-mile buffer is recommended in both the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline) and the *Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline) and should be implemented for this Project (CDFG 2012, and CEC and CDFG 2010). 5

Swainson's hawk foraging habitat

The Project's footprint will occupy approximately 10.45 acres (draft EIR page ES-1), displacing undeveloped grassland habitat. The draft EIR has established the potential for Swainson's hawk to nest in the vicinity of the Project site. However, it has not addressed mitigation for the loss of Swainson's hawk foraging habitat. Regarding nesting birds and all special-status bird species, the Biological Resources Assessment (page 42) states that "Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat." The draft EIR (page 3.3-15) states that "During the nesting season Swainson's hawk usually forage within 2 miles of the nest." Nesting Swainson's hawk adults and fledged young are limited in their foraging range and any in the vicinity of the Project site would likely rely on resources on it. Swainson's hawk chicks once fledged rely on nearby foraging resources to a greater extent than adults and are usually limited in their foraging scope to within just 0.5 miles from the nest (Woodbridge 1998). 6

Additionally, in 2016, CDFW released a Status Review for Swainson's hawk in California and recommended the species retain its status as threatened under CESA (CDFW 2016). The review states there is no indication the species has reoccupied its historical range and the distribution of Swainson's hawk remains largely unchanged and restricted. Additionally, the review cites the **primary threat** to Swainson's hawk continues to be habitat loss, **especially the loss of suitable foraging habitat.** One recent study done by CDFW scientists indicated Swainson's hawk populations have been increasing, but also cautioned using this data to inform conservation planning, stating this apparent stability remains largely unclear (Furnas et al. 2022). The study cites concerns regarding impacts to Swainson's hawk from urban development, reduction in grasslands, and orchard and vineyard cultivation, all of which are prominent impacts in Napa County, where the Project is proposed.

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Potentially significant impacts

Swainson's hawk is CESA listed as a threatened species and therefore is considered to be a threatened species pursuant to CEQA Guidelines section 15380. Therefore, if an active Swainson's hawk nest is disturbed by the Project or its foraging habitat is removed, the Project may result in a substantial reduction in the number or restriction in the range of a threatened species, which is considered a **Mandatory Finding of Significance** pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

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Other large development projects in Napa County have not been required to mitigate for Swainson's hawk foraging habitat, despite CDFW's recommendations. Therefore, the net loss of foraging habitat from the proposed Project, in conjunction with other projects that have not mitigated for loss of Swainson's hawk foraging habitat, may also contribute to a significant cumulative impact to Swainson's hawk, which is a **Mandatory Finding of Significance.**

Recommended Mitigation Measures: To reduce potential impacts to Swainson's hawk to less-than-significant and comply with CESA, CDFW recommends incorporating the following into Mitigation Measures into MM BIO-1.

Swainson's Hawk Surveys: If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to September 15), prior to beginning work on the Project, a qualified biologist shall conduct surveys according to the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline) and prepare a report documenting the survey results. Survey methods shall be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys shall be conducted: 1) within a minimum 0.5-mile radius of the

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Project site or a larger area if needed to identify potentially impacted active nests, unless otherwise approved by CDFW in writing, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall occur annually for the duration of the Project. The qualified biologist shall have a minimum of two years of experience implementing the survey methodology resulting in detections.

Swainson's Hawk Avoidance Buffer: If active Swainson's hawk nests are detected, the Project shall immediately notify CDFW and implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist, unless otherwise approved by CDFW in writing. Any detected nesting Swainson's hawk shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.

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Swainson's Hawk Foraging Habitat Mitigation: Prior to Project construction, the Project shall provide Swainson's hawk foraging habitat mitigation at a 1:1 ratio, which shall include: 1) permanent preservation of the species' foraging habitat through a conservation easement and implementing and funding a long-term management plan in perpetuity, or 2) purchase of Swainson's hawk foraging habitat credits at a mitigation bank, unless otherwise approved in writing by CDFW. The Project shall obtain CDFW's written approval of the habitat mitigation acreage and proposed habitat mitigation land or credits.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to CNDDB. The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

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ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is

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required in order for the underlying Project approval to be operative, vested, and final. (See Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.).

CONCLUSION

CDFW appreciates the opportunity to comment on the draft EIR to assist the City in identifying and mitigating Project impacts on biological resources. 10 CONT

Questions regarding this letter or further coordination should be directed to Nicholas Magnuson, Environmental Scientist, at Nicholas.Magnuson@wildlife.ca.gov or (707) 815-4166; or Melanie Day, Senior Environmental Scientist (Supervisory), at Melanie.Day@wildlife.ca.gov or (707) 210-4415.

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment 1. Draft Mitigation and Monitoring Reporting Plan

ec: Office of Planning and Research, State Clearinghouse (SCH No. 2023100842)

REFERENCES

CDFG, 2012. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni)* in the Central Valley of California. California Department of Fish and Game, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83992&inline

California Department of Fish and Wildlife (CDFW), 2016. 5-year Status Review: Swainson's hawk (*Buteo swainsoni*). Prepared for the California Fish and Game Commission. Nongame Bird and Mammal Program 1416 Ninth Street, Sacramento, CA.

CEC and CDFG, 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California. California Energy Commission and Department of Fish and Game, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline

TAC, 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee, Sacramento, CA. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline

Woodbridge, B. 1998. Swainson's Hawk (*Buteo swainsoni*). In The Riparian Bird Conservation Plan: a strategy for reversing the decline of riparian-associated birds in California. California Partners in Flight.

ATTACHMENT 1

Draft Mitigation and Monitoring Reporting Plan

Biological Resources (BIO)			
Mitigation Measure (MM)	**Description**	**Timing**	**Responsible Party**
BIO-1a	*Swainson's Hawk Surveys*: If Project activities are scheduled during the nesting season for Swainson's hawks (March 1 to September 15), prior to beginning work on the Project, a qualified biologist shall conduct surveys according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline) and prepare a report documenting the survey results. Survey methods shall be closely followed by starting early in the nesting season (late March to early April) to maximize the likelihood of detecting an active nest (nests, adults, and chicks are more difficult to detect later in the growing season because trees become less transparent as vegetation increases). Surveys shall be conducted: 1) within a minimum 0.5-mile radius of the Project site or a larger area if needed to identify potentially impacted active nests, unless otherwise approved by CDFW in writing, and 2) for at least the two survey periods immediately prior to initiating Project-related construction activities. Surveys shall occur annually for the duration of the Project. The qualified biologist shall have a minimum of two years of experience implementing the survey methodology resulting in detections.	Prior to Ground Disturbance	Project Applicant
BIO-1b	*Swainson's Hawk Nest Avoidance Buffer*: If active Swainson's hawk nests are detected, the Project shall immediately notify CDFW and implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a qualified biologist, unless otherwise approved by CDFW in writing. Any detected nesting Swainson's hawk shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be	Prior to Ground Disturbance and for Duration of Construction	Project Applicant

	avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.			
BIO-1c	*Swainson's Hawk Foraging Habitat Mitigation:* Prior to Project construction, the Project shall provide Swainson's hawk foraging habitat mitigation at a 1:1 ratio, which shall include: 1) permanent preservation of the species' foraging habitat through a conservation easement and implementing and funding a long-term management plan in perpetuity, or 2) purchase of Swainson's hawk foraging habitat credits at a mitigation bank, unless otherwise approved in writing by CDFW. The Project shall obtain CDFW's written approval of the habitat mitigation acreage and proposed habitat mitigation land or credits.	Prior to Ground Disturbance	Project Applicant	11 CONT

State Agencies

California Department of Fish and Wildlife (CDFW)

Response to CDFW-1
The commenter provides introductory statements saying that the agency has received the EIR and is submitting comments concerning it. The commenter also claims that project equipment staging and earthmoving were visible in recent aerial imagery and requests the City to investigate any unauthorized construction activities.

The recent grading on-site was completed as part of the construction of the adjacent SDG Commerce 217 Distribution Center Project (PL20-0008) and completed under a grading permit issued by the City of American Canyon. In accordance with CEQA, the grading was considered in the Initial Study prepared for the SDG Commerce 217 Project (Final Initial Study dated February 2012) and mitigation measures were implemented as applicable.

Response to CDFW-2
The commenter clarifies its role as a Trustee Agency/Responsible Agency regarding "take," unlisted species, and nesting birds and provides a related summary.

No environmental issues are raised, and no response is required.

Response to CDFW-3
The commenter provides background information on the proposed project and the regulatory requirements, such as the California Endangered Species Act (CESA) and raptors and other nesting birds.

No environmental issues are raised, and no response is required.

Response to CDFW-4
Comments were provided on the Draft EIR's mitigation measures regarding Swainson's hawk. The commenter states that the EIR did not adequately mitigate potential impacts to Swainson's hawk due to an insufficient buffer distance for occupied nests and unincorporated unprocessed California Natural Diversity Database (CNDDB) data of Swainson's hawk occurrences from 2023 and 2024.

Concerning the argument for an insufficient buffer distance for occupied nests, according to Jim Estep, an recognized expert on Swainson's hawk, a 0.5-mile buffer is not supported by any data-driven rationale (See Appendix A). Estep argues that this distance was selected to maximally ensure that nesting behavior/success would not be influenced and is therefore a highly conservative buffer distance. Now, 30 years after these guidelines were created, much more is known of Swainson's hawk, including their high degree of tolerance to noise and disturbances. Although no studies have been conducted to understand the most effective buffer distance, it is understood that a 0.5-mile buffer is unnecessarily large. Many successful nests have been documented in very close proximity to a multitude of disturbances with nest abandonment involving the direct impact to nest trees or disturbances next to active nests. Swainson's Hawk Technical Advisory Committee guidelines identify a 600-foot buffer based on the work of Mike Bradbury, a former California Department of Water Resources (DWR) employee. Through monitoring of nesting activity in the Sacramento-San Joaquin

Delta, Bradbury determined that a 600-foot buffer was a reasonable distance in most cases. Ultimately Estep argues that this species is quite tolerant of disturbance events and a 0.5-mile buffer is not necessary in most cases. He supports a 600-foot buffer with the caveat that specific site conditions should be taken into consideration.[1] As lead agency, the City has discretion to choose among differing expert opinions. (CEQA Guidelines § 15151).

Therefore, FirstCarbon Solutions (FCS) and the City agree that a 600-foot buffer is sufficient. Regarding unincorporated unprocessed CNDDB data, both occurrences are recorded over 1.5 miles from the project site, significantly outside of both the 600-foot and 0.5-mile buffer zones. Additionally, these occurrences were not confirmed nest but potentially nesting Swainson's hawk sightings. The nearest confirmed nest occurrence was recorded 1.9 mile from the site in 2021. Although these sightings do indicate that Swainson's hawk may forage within the project site, Mitigation Measure (MM) BIO-1a and MM BIO-1b would sufficiently mitigate for any Swainson's hawk found within 600 feet of the project site.

Response to CDFW-5
The commenter states that the Draft EIR does not adequately mitigate potential impacts to Swainson's hawk because it includes an insufficient buffer distance for occupied Swainson's hawk nests, and the commenter recommends specific edits to MM BIO-1b (Swainson's Hawk Avoidance and Minimization and Construction Monitoring) in the form of an extended proposed buffer distance of 0.5 mile.

Please see Response to CDFW-4. No further response is required.

Response to CDFW-6
The commenter states that the Draft EIR does not adequately mitigate potential impacts to Swainson's hawk foraging habitat.

FCS refutes the assumption that development of the project site would significantly impact Swainson's hawk foraging habitat. The project site constitutes 10.17 acres of disturbed land. East of the project site, there are thousands of acres of foraging habitat as seen via aerial satellite imagery. Additionally, the development of the site, is surrounded to the north and south by industrial development and has been anthropogenically disturbed recently, would not eliminate a significant area of foraging habitat for this species.

Response to CDFW-7
The commenter states that if an active Swainson's hawk nest is disturbed by the proposed project or its foraging habitat is removed, the proposed project may result in a substantial reduction in the number or restriction in the range of a threatened species, which is a Mandatory Finding of Significance, and since other large projects have not been required to mitigate foraging habitat, this may lead to a significant cumulative impact to Swainson's hawk.

FCS agrees that the disturbance of an active Swainson's hawk nest and removal of foraging habitat would result in a Mandatory Finding of Significance if such disturbance and removal were to occur.

[1] Estep, J. Estep Environmental Consulting. Received by Janna Waligorski. August 22, 2024.

However, FCS has implemented MM BIO-1a and MM BIO-1b to survey for Swainson's hawk nests within 600 feet of the project site to prevent such disturbances from occurring. Therefore, the project would not contribute to any cumulatively significant impact. Additionally, see Response to CDFW-6 for justification as to why development of the proposed project would not significantly impact Swainson's hawk foraging habitat.

Response to CDFW-8

The commenter offers suggested mitigations to reduce potential impacts to Swainson's hawk to less than significant. They recommend incorporating an increased survey distance of 0.5-mile radius in Swainson's hawk surveys, implementing an avoidance buffer distance of 0.5 mile if nests are detected, and mitigating for foraging habitat at a 1:1 ratio.

Please see Response to CDFW-4 for a response to increased Swainson's hawk survey and buffer distances, and please see Response to CDFW-6 for Swainson's hawk foraging habitat.

Response to CDFW-9

The commenter states that CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations and requests that the City report any special-status species and natural communities detected during project surveys to the CNDDB.

The proposed project would adhere to any and all reporting requirements under CEQA, including those related to the detection of any special-status species and natural communities.

Response to CDFW-10

The commenter notes that because the proposed project would have an impact on fish and/or wildlife, it would be required to pay the necessary filing fees due to the CDFW and then explains the timing requirements and legal implications of filing these fees. The commenter also provides conclusionary remarks.

The proposed project would be required to pay all applicable fees necessary under the law.

Response to CDFW-11

The commenter lays out three proposed mitigation measures for Swainson's hawk, including Swainson's Hawk Survey, Swainson's Hawk Nest Avoidance Buffer, and Swainson's Hawk Foraging Habitat Mitigation, consistent with comments previously provided.

These proposed mitigation measures are noted. Please see Response to CDFW-4 for a response to increased Swainson's hawk survey and buffer distances, and please see Response to CDFW-6 for Swainson's hawk foraging habitat.

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CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
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August 1, 2024

SCH #: 2023100842
GTS #: 04-NAP-2023-00364
GTS ID: 31389
Co/Rt/Pm: NAP/29/2.9

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Re: SDG Commerce 220 Distribution Center Project – Draft Environmental Impact Report (DEIR)

Dear William He:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the SDG Commerce 220 Distribution Center Project. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the June 2024 DEIR.

Please note this correspondence does not indicate an official position by Caltrans on this project and is for informational purposes only. 1

Project Understanding
The project proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. The warehouse would provide 23 truck doors and up to 4,400 square feet of office space.

Travel Demand Analysis
The project vehicle miles traveled (VMT) analysis and significance determination are undertaken in a manner consistent with the City's adopted VMT policy. Per the DEIR, this project is found to have significant and unavoidable VMT impacts. Caltrans commends the City of American Canyon for requiring the development of a Transportation Demand Management (TDM) program to reduce employee VMT. The proposed measures identified in the TDM plan should be documented with annual monitoring reports to demonstrate effectiveness. 2

Please also consider the measures listed below that are quantified by the California Air Pollution Control Officers Association (CAPCOA) and shown to have different efficiencies reducing regional VMT:

- Implement Commute Trip Reduction Program (Voluntary and/or Mandatory)
- Implement Commute Trip Reduction Marketing
- Implement Subsidized or Discounted Transit Program
- Provide Employer-Sponsored Vanpool
- Implement Employee Parking Cash-Out
- Provide Community Based Travel Planning
- Implement Preferential Parking Permit Program
- Implement Telecommute and/or Alternative Work Schedule Program
- Provide Electric Vehicle Charging Infrastructure
- Provide Secure Bike Parking
- Designate Zero Emissions Delivery Zones
- Implement Shared Vehicle Program (car/bike/E-bike/scooter)
- Provide Local Shuttle (gas or electric) to Increase Transit Outreach
- Provide Real-Time Transit Information

3

Construction-Related Impacts
Project work that requires movement of oversized or excessive load vehicles on State roadways requires a transportation permit that is issued by Caltrans. To apply, please visit Caltrans Transportation Permits (*link*).

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Llisel Ayon, Associate Transportation Planner, via LDR-D4@dot.ca.gov. For future early coordination opportunities or project referrals, please visit Caltrans LDR website (*link*) or contact LDR-D4@dot.ca.gov.

4

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

Local Agencies

California Department of Transportation (CALTRANS)

Response to CALTRANS-1
The commenter provides general introductory remarks, identifies that the comment letter is for informational purposes only, and provides a description of the proposed project.

No environmental issues are raised, and no further response is required.

Response to CALTRANS-2
The commenter commends the City for requiring the development of a Transportation Demand Management (TDM) program to reduce employee Vehicle Miles Traveled (VMT) and suggests that the measures in the TDM program should be documented with annual monitoring reports to demonstrate effectiveness.

The measures and effectiveness of the measures within the TDM program would be monitored and recorded as required by CEQA and the City.

Response to CALTRANS-3
The commenter provides various measures that are shown to have different efficiencies in reducing regional VMT.

Several of these measures are already included in MM TRANS-2, such as a commute trip reduction marketing initiative, encouraging ride sharing among project employees, and linking them to rideshare partners working nearby. The proposed project would also provide three bicycle lockers, each of which would accommodate up to four bicycles. Additionally, in compliance with the Cal Green Code the proposed project would provide five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. However, as concluded in the Draft EIR, even with the incorporation of all feasible mitigation, the proposed project would have a significant unavoidable impact related to VMT.

Response to CALTRANS-4
The commenter provides information on required transportation permits for project work that involves the movement of oversized or excessive load vehicles on State roadways, as well as general conclusionary remarks.

The proposed project would be required to comply with and obtain all applicable permits for oversized or excessive load vehicles.

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SDG 220 Distribution Center Draft Environmental Impact Report Project

Date * 07/22/2024

Name * Elena

Company El Puente Comunitario

Email *

Phone Number *

Please check all that apply *

- [ ] I own a home in American Canyon
- [ ] I rent a home in American Canyon
- [ ] I own a business in American Canyon
- [ ] I work in American Canyon
- [x] None of the above

Address *

Street Address

Address Line 2

City | State / Province / Region

Postal / Zip Code | Country

Comments *

If comments are being provided through the upload of a document, please indicate so.

love space a like see more space for seniors and accessibility entrance 1

File Upload

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Organizations

El Puente Comunitario (EPC)

Response to EPC-1
The commenter indicates they would like to see more space for seniors and an accessible entrance.

The commenter does not raise any environmental issues, and no response is required. All entrances would be required to meet applicable design and accessibility requirements.

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Of Counsel
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DANIEL L. CARDOZO

August 2, 2024

Via Email and Overnight Mail

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Email: whe@cityofamericancanyon.org

Re: Comments on the Draft Environmental Impact Report – SDG Commerce 220 Distribution Center Project (SCH No. 2023100842)

Dear Mr. He:

We are writing on behalf of the Napa/Solano Residents for Responsible Development ("Napa/Solano Residents") to provide comments on the Draft Environmental Impact Report[1] prepared for the SDG Commerce 220 Distribution Center Project SCH No. 2023100842 ("Project") prepared by the City of American Canyon ("City") pursuant to the California Environmental Quality Act ("CEQA")[2].

I. INTRODUCTION

The Project, proposed by SDG Commerce 220, LLC ("Applicant"), calls for development of a 219,834 square-foot wine storage and distribution center on a 10.45-acre parcel located at 1055 Commerce Court in the City of American Canyon ("City"), Napa County. The Project building includes 23 truck doors and approximately 4,400 square feet of office space and would be insulated and refrigerated at approximately 58 degrees Fahrenheit, making it suitable for storage of wine and related products.[3]

1

[1] City of American Canyon, Draft Environmental Impact Report, SDG Commerce 220 Distribution Center Project (June 5, 2024) (hereinafter, "DEIR"), *available at* https://ceqanet.opr.ca.gov/2023100842/2
[2] Pub. Resources Code ("PRC") §§ 21000 *et seq.*
[3] DEIR, p. 2-10.

The Project site is currently undeveloped land with no structures on-site. The Project site includes a linear wetland and three isolated wetlands located within the northern portion of the property, and several soil stockpiles that are intended for use at the neighboring SDG Commerce 217 Project are located on the southern portion of the property.[4]

Napa/Solano Residents have reviewed the DEIR and find that it fails to comply with CEQA's basic requirement to act as an "informational document." It lacks meaningful details in critical areas, such as air quality, health risk, biological resources, and noise impacts, without which the public and decisionmakers cannot adequately assess the Project's significant impacts. Because of the DEIR's shortcomings, it is deficient as a matter of law because it fails to properly disclose and mitigate the Project's potentially significant impacts. The DEIR also lacks substantial evidence to support the City's conclusions regarding the Project's impacts and proposed mitigation. These deficiencies render the document inadequate for purposes of compliance with CEQA. 1 CONT

We reviewed the DEIR, technical appendices, and reference documents with the assistance of our expert consultants, including environmental health, air quality and GHG expert Paul E. Rosenfield, PhD. and hazardous materials expert Matt Hagemann, P.G., C.Hg. of Soil Water Air Protection Enterprise ("SWAPE"), biological resources expert Shawn Smallwood PhD, and noise expert Luke Watry of Wilson Ihrig, whose comments and qualifications are included as Exhibit A, Exhibit B, and Exhibit C respectively.[5] The City must address and respond to their comments separately and fully.[6]

II. STATEMENT OF INTEREST

Napa/Solano Residents is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential environmental impacts associated with Project development. Napa/Solano Residents includes the International Brotherhood of Electrical Workers Local 180, Plumbers &

[4] *Id.,* p. 2-1.
[5] **Exhibit A**, Comment Letter from Soil Water Air Protection Enterprise (hereinafter, "SWAPE Comments"); **Exhibit B**, Comment Letter from Shawn Smallwood (hereinafter, "Smallwood Comments"); **Exhibit C,** Comment Letter from Luke Watry (hereinafter, "Watry Comments")
[6] 14 Cal. Code Regs. ("CCR") §§ 15088(a), (c).

Steamfitters Local 343, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, District Council of Ironworkers and their members and their families, and other individuals that live and/or work in the City of American Canyon and Napa/Solano Counties.

Napa/Solano Residents supports the development of sustainable commercial and industrial centers where properly analyzed and carefully planned to minimize impacts on public health and the environment. Logistics centers like the Project should avoid adverse impacts to air quality, biological resources, transportation, and public health, and should take all feasible steps to ensure unavoidable impacts are mitigated to the maximum extent feasible. Only by maintaining the highest standards can commercial and industrial development truly be sustainable. 1 CONT

The individual members of Napa/Solano Residents and the members of the affiliated labor organizations live, work, recreate and raise their families in and around American Canyon and Napa County. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work constructing the Project itself. They would be the first in line to be exposed to any health and safety hazards which may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts. 2

Napa/Solano Residents and its members also have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for the members they represent. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for industry to expand in American Canyon and Napa County, and by making it less desirable for businesses to locate and people to live and recreate in the City, including the Project vicinity. Continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduces future employment opportunities. 3

Finally, Napa/Solano Residents is concerned with projects that can result in serious environmental harm without providing countervailing economic benefits. CEQA provides a balancing process whereby economic benefits are weighed against significant impacts to the environment.[7] It is in this spirit we offer these comments. 4

[7] Pub. Resources Code § 21081(a)(3); *Citizens for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal.App.3d 151, 171.

III. LEGAL BACKGROUND

CEQA requires public agencies to analyze the potential environmental impacts of their proposed actions in an EIR.[8] "The foremost principle under CEQA is that the Legislature intended the act to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language."[9]

CEQA has two primary purposes. First, CEQA is designed to inform decisionmakers and the public about the potential significant environmental effects of a project.[10] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR 'protects not only the environment but also informed self-government.'"[11] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[12] As the CEQA Guidelines explain, "[t]he EIR serves not only to protect the environment but also to demonstrate to the public that it is being protected."[13]

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Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring consideration of environmentally superior alternatives and adoption of all feasible mitigation measures.[14] The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be

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[8] PRC § 21100.
[9] *Laurel Heights Improvement Assn. v. Regents of Univ. of Cal ("Laurel Heights I")* (1988) 47 Cal.3d 376, 390 (internal quotations omitted).
[10] Pub. Resources Code § 21061; CEQA Guidelines §§ 15002(a)(1); 15003(b)-(e); *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 517 ("[T]he basic purpose of an EIR is to provide public agencies and the public in general with detailed information about the effect [that] a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.").
[11] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, at p. 564 (quoting *Laurel Heights I*, 47 Cal.3d at 392).
[12] *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810; *see also Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal.App.4th 1344, 1354 ("*Berkeley Jets*") (purpose of EIR is to inform the public and officials of environmental consequences of their decisions *before* they are made).
[13] CEQA Guidelines § 15003(b).
[14] *Id.* § 15002(a)(2), (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at p. 564.

avoided or significantly reduced." If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment" to the greatest extent feasible and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns."[15]

While courts review an EIR using an "abuse of discretion" standard, "the reviewing court is not to 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference."[16] As the courts have explained, a prejudicial abuse of discretion occurs "if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process."[17] "The ultimate inquiry, as case law and the CEQA guidelines make clear, is whether the EIR includes enough detail 'to enable who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.'"[18]

5 CONT

IV. THE DEIR FAILS TO ADEQUATELY DESCRIBE THE PROJECT

The DEIR does not meet CEQA's requirements because it fails to include an accurate, complete and stable description of key Project components, rendering the DEIR's impact analysis inadequate. California courts have repeatedly held that "an accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR."[19] CEQA requires that a project be described with

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[15] PRC § 21081(a)(3), (b); CCR §§ 15090(a), 15091(a), 15092(b)(2)(A), (B); *Covington v. Great Basin Unified Air Pollution Control Dist*. (2019) 43 Cal.App.5th 867, 883.
[16] *Berkeley Jets*, 91 Cal.App.4th at p. 1355 (emphasis added) (quoting *Laurel Heights I*, 47 Cal.3d at 391, 409, fn. 12).
[17] *Berkeley Jets*, 91 Cal.App.4th at p. 1355; *see also San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 722 (error is prejudicial if the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process); *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* (1997) 60 Cal. App. 4th 1109, 1117 (decision to approve a project is a nullity if based upon an EIR that does not provide decision-makers and the public with information about the project as required by CEQA); *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 946 (prejudicial abuse of discretion results where agency fails to comply with information disclosure provisions of CEQA).
[18] *Sierra Club,* 6 Cal.5th at p. 516 (quoting *Laurel Heights I*, 47 Cal.3d at 405).
[19] *Stopthemillenniumhollywood.com v. City of Los Angeles* (2019) 39 Cal.App.5th 1, 17; *Communities for a Better Environment v. City of Richmond* ("*CBE v. City of Richmond*") (2010) 184 Cal.App.4th 70, 85–89; *County of Inyo v. City of Los Angeles* (3d Dist. 1977) 71 Cal.App.3d 185, 193.

enough particularity that its impacts can be assessed.[20] Without a complete project description, the environmental analysis under CEQA is impermissibly limited, thus minimizing the project's impacts and undermining meaningful public review.[21]

Here, the DEIR's description of the Project is inconsistent and unstable, in that the DEIR fails to disclose and, and therefore analyze, the use of natural gas during operation of the Project and the specifications for the Project's proposed battery energy storage systems. 6 CONT

1. The DEIR Fails to Consistently Describe the Use of Natural Gas During Project Operation

The DEIR states that the Project will "be built as all-electric and would not utilize natural gas during construction or operations."[22] Additionally, the DEIR states that "[e]lectric forklifts would be used during project operation."[23] Based on these assumptions, the DEIR concludes that the Project will not generate GHG emissions from the use of natural gas. However, the DEIR also states that operational vehicles at the Project site will use approximately 13,890 gallons of natural gas per year.[24] Additionally, the DEIR states that Project "[e]nergy sources include emissions from the combustion of natural gas for water heaters and other heat sources."[25] Finally, the DEIR fails to include any mitigation measures that prevent the use of natural gas at the Project site. The inconsistent description of the Project's use of natural gas results in a lack of relevant information that precludes informed decisionmaking and informed public participation. 7

Absent enforceable mitigation measures prohibiting the use of natural gas at the Project site, the City must disclose and analyze the potential GHG impacts from its use.

[20] CCR § 15124; *see, Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1988) 47 Cal.3d 376, 192–193.
[21] *Ibid.*
[22] DEIR, p. 3.5-15.
[23] *Id.* p. 3.2-31.
[24] DEIR, Appendix A, pdf. p. 185.
[25] DEIR, p, 3.2-52.

2. The DEIR Fails to Describe the Project's Battery Backup Systems

According to the DEIR, the Project will include "a Rooftop Solar Photovoltaic system with Battery Storage"[26] However, the DEIR contains no information regarding the type of batteries to be used in the Project, nor does it include information regarding the size of the batteries, the chemical components of each individual battery, or the proposed layout of battery units. This information is critically important for worker safety and on-site and off-site impacts in the event of an accident. Absent this information, the opportunity for meaningful public review is drastically limited.

According to the National Fire Protection Association, battery storage systems can create hazardous conditions from thermal runaway resulting in the release of toxic or flammable gasses and other environmental impacts.[27] The conditions leading to thermal runaway can be mitigated using explosion prevention systems or deflagration venting, fire suppression systems, battery management systems, and adequate spacing between battery arrays based on the number and type of batteries used.[28] Recent battery system failures have resulted in injuries to first responders[29], the release of hazardous gasses[30] and fires that are difficult to extinguish.[31] 8

The DEIR also fails to provide any information regarding the design of the backup battery systems, including battery types, layout, type of cooling system they will use, and the type of fire detection and fire suppression systems that will be

[26] *Id.* p. 3.2-58.
[27] National Fire Protection Association, Energy Storage Systems Safety Fact Sheet (hereinafter "ESS Fact Sheet") (June 2020) pp. 1-2. available at https://www.nfpa.org/~/media/Files/Code%20or%20topic%20fact%20sheets/-ESSFactSheet.ashx
[28] ESS Fact Sheet, p. 2.
[29] AZ Central, 'Reasons that are still unknown': 30 experts investigate Surprise battery explosion that injured 9 (April 23, 2019) available at https://www.azcentral.com/story/money/business/energy/2019/04/23/arizona-public-service-provides-update-investigation-battery-fire-aps-surprise/3540437002/
[30] KSBW Action News, Highway 1 reopened near Moss Landing, shelter-in-place lifted (September 21, 2022) available at https://www.ksbw.com/article/highway-1-reopened-near-moss-landing-shelter-in-place-lifted/41302918#
[31] AZ Central, Fire crews tend to massive, smoldering battery in Chandler facility (April 21, 2022) available at https://www.azcentral.com/story/money/business/energy/2022/04/21/fire-crews-tend-massive-smoldering-battery-chandler-facility/7405430001/

installed. This information is critical to determine the hazards and the potential environmental impacts posed by the batteries on site. The DEIR must be revised to include information, and an analysis of, the hazards presented regarding the proposed battery backup system at the Project site.

8 CONT

V. THE DEIR FAILS TO ADEQUATELY DESCRIBE THE EXISTING BASELINE

The DEIR fails to accurately disclose the baseline environmental conditions related to the Project's noise impacts and impacts to biological resources. As a result, the DEIR lacks the necessary baseline information against which to measure the Project's environmental impacts with regard to noise and wetlands and wildlife habitat.

The existing environmental setting is the starting point from which the lead agency must measure whether a proposed project may cause a significant environmental impact.[32] CEQA defines the environmental setting as the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and regional perspective.[33] Describing the environmental setting accurately and completely for each environmental condition in the vicinity of the Project is critical to an accurate, meaningful evaluation of environmental impacts. The courts have clearly stated that, "[b]efore the impacts of a project can be assessed and mitigation measures considered, an [environmental review document] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined."[34]

9

A. The DEIR Fails to Establish a Proper Baseline for Existing Noise

According to the DEIR, "[t]he dominant noise sources in the project vicinity are traffic on local roadways and railroad and airport activity."[35] However, the DEIR fails to include any data to support this statement. The DEIR lacks any

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[32] *See, e.g.*, *Communities for a Better Env't v. S. Coast Air Quality Mgmt. Dist.* (March 15, 2010) 48 Cal.4th 310, 316.
[33] CCR §15125(a) (emphasis added); *Riverwatch v. County of San Diego* (1999) 76 Cal.App.4th 1428, 1453 ("*Riverwatch*").
[34] *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 952.
[35] DEIR, p. 3.11-8.

measurement of existing ambient noise conditions at the Project site and at nearby sensitive receptors. Absent baseline noise measurements it is impossible to determine whether the Project will have significant impacts on noise. Mr. Watry states that the operation of this Project along with the SDG 217 project to the north will necessarily result in increased noise at nearby sensitive receptors from increased truck traffic onsite and on Commerce Boulevard.[36]

Establishing baseline noise conditions allows "decision-makers [to] effectively determine whether the project complies with noise regulations and identify any potential adverse effects on the surrounding environment and communities."[37]

10 CONT

The DEIR does not provide an adequate baseline for noise levels. Absent an accurate environmental setting, the public and the City cannot fully determine the Project's noise impacts, including Project-related increases in noise over existing baseline conditions.[38] Absent an adequate description of the environmental setting, the DEIR is inadequate as a matter of law, for failure to provide a baseline against which to measure Project impacts. The DEIR must be revised to properly set forth the baseline noise measurements to adequately describe the existing noise environment.

B. The DEIR Fails to Establish a Proper Baseline With Respect to Impacts to Biological Resources

The DEIR's review of the Project's biological setting is based on several studies and reports prepared for the SDG 217 Project and the instant SDG 220 Project conducted between 2020 and 2023.[39] However, Dr. Smallwood found that the DEIR does not include clear information about the surveys that is necessary for adequate review and interpretation of the survey outcomes.[40] Such missing information includes the surveys' start times, time on site, and names of biologists who performed each survey.[41] Furthermore, Dr. Smallwood found that the species surveys were improperly conducted. For example, he explains that the "Nesting Bird Surveys" described in the DEIR were conducted in January, when birds do not

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[36] Watry Comments, p. 3.
[37] *Id.* at 4.
[38] *Galante Vineyards,* 60 Cal. App. 4th 1109, 1122 ("Due to the inadequate description of the environmental setting for the project, a proper analysis of project impacts was impossible.").
[39] DEIR, pp. 3.3-30- 3.3-31.
[40] Smallwood Comments, p. 15.
[41] *Id.* p. 20.

nest.[42] Additionally, he found that the western pond turtle study described in the DEIR improperly focused on the wetland features of the Project site, resulting in a misleading conclusion that western pond turtles do not inhabit the Project site.[43] Dr. Smallwood explains that western pond turtle would not visit the site for the small wetlands, but instead, for the grassland sites to breed.[44]

11 CONT

1. Substantial Evidence Demonstrates the Presence of Additional Special Species at the Project Site

Dr. Smallwood presents substantial evidence from his own site surveys demonstrating that the Project site currently hosts several species, including special-status species, which the DEIR's surveys failed to detect due to poor or unsupported survey methods.[45]

Dr. Smallwood conducted two surveys at the Project site in 2019 and 2021. His observations revealed significantly more vertebrate wildlife species (79 species) than disclosed in the DEIR (46 species). Several of the species he detected included special status wildlife species such as bald eagle, coopers hawk, American kestrel, and northern harrier.[46] Dr. Smallwood modeled the pattern in species detections during the surveys he conducted to estimate the average number of species that actually occur at the site but were undetected during the DEIR's surveys. His models statistically demonstrate that the DEIR surveys missed dozens of species that are likely to occur on the Project site.[47] Dr. Smallwood's modeling demonstrates that the DEIR's environmental setting is incomplete and mischaracterizes the richness of wildlife on the Project site. Dr. Smallwood's modeling results also constitute substantial evidence that the Project's impacts on wildlife present on the site are greater than analyzed. In summary, Dr. Smallwood concludes, based on the evidence gathered in his surveys, that the Project site provides habitat for numerous special status species that would be adversely impacted by the loss of habitat resulting from the Project. The results of his surveys also demonstrate the deficiencies in the DEIR's limited survey methods.

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[42] *Id.* p. 16.
[43] *Id.* p. 17.
[44] *Ibid.*
[45] *Id.* pp. 12-15.
[46] *Id.* p. 2.
[47] *Id.* p. 13.

Dr. Smallwood states that a more realistic representation of species richness at the site could be obtained by implementing multiple survey methods and by repeating visual-scan surveys on various dates throughout the year. As a result of its deficient site surveys, the DEIR lacks substantial evidence to support its analysis of biological baseline conditions and conclusions regarding impacts to biological resources. The DEIR must be revised and recirculated to include a legally adequate baseline analysis.

12 CONT

2. The City Failed to Consult All Available Biological Resources Databases to Establish the Environmental Setting

The City relied on California Natural Diversity Database ("CNDDB") for determining occurrence likelihoods of special-status species. The City failed to consult other major databases such as eBird and iNaturalist. Dr. Smallwood reviewed these databases, and discovered that the actual of list of potentially-occurring species is much higher than are reported in the DEIR, finding that 114 special status species have the potential to occur at the Project site as opposed to the 28 reported in the DEIR.[48]

13

Sole reliance on CNDDB for desktop review is not supported by substantial evidence. The California Department of Fish and Wildlife cautions that sole reliance on CNDDB is inappropriate as a basis for narrowing a list of potentially occurring species:

> "We work very hard to keep the CNDDB and the Spotted Owl Database as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers…"[49]

[48] *Id*. pp. 22-26.
[49] California Natural Diversity Database, "About the CNDDB," https://wildlife.ca.gov/Data/CNDDB/About.

The DEIR thus fails to set forth an accurate biological baseline, which is necessary to correctly evaluate the Project's impacts. 13 CONT

VI. THE DEIR FAILS TO DISCLOSE, ANALYZE AND MITIGATE POTENTIALLY SIGNIFICANT IMPACTS

An EIR must fully disclose all potentially significant impacts of a Project and implement all feasible mitigation to reduce those impacts to less than significant levels. The lead agency's significance determination with regard to each impact must be supported by accurate scientific and factual data.[50] An agency cannot conclude that an impact is less than significant unless it produces rigorous analysis and concrete substantial evidence justifying the finding.[51]

Moreover, the failure to provide information required by CEQA is a failure to proceed in the manner required by CEQA.[52] Challenges to an agency's failure to proceed in the manner required by CEQA, such as the failure to address a subject required to be covered in an EIR or to disclose information about a project's environmental effects or alternatives, are subject to a less deferential standard than challenges to an agency's factual conclusions.[53] In reviewing challenges to an agency's approval of an EIR based on a lack of substantial evidence, the court will 'determine de novo whether the agency has employed the correct procedures, scrupulously enforcing all legislatively mandated CEQA requirements.'[54] 14

Even when the substantial evidence standard is applicable to agency decisions to certify an EIR and approve a project, reviewing courts will not 'uncritically rely on every study or analysis presented by a project proponent in support of its position. A clearly inadequate or unsupported study is entitled to no judicial deference.'"[55]

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[50] 14 CCR § 15064(b).
[51] *Kings Cty. Farm Bur. v. Hanford* (1990) 221 Cal.App.3d 692, 732.
[52] *Sierra Club v. State Bd. Of Forestry* (1994) 7 Cal.4th 1215, 1236.
[53] *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 435.
[54] *Id., Madera Oversight Coal., Inc. v. County of Madera* (2011) 199 Cal. App. 4th 48, 102.
[55] *Berkeley Jets*, 91 Cal.App.4th at 1355.
6941-007j

A. The DEIR Fails to Disclose, Analyze or Mitigate the Project's Significant Air Quality Impacts

The DEIR's air quality analysis concludes, with respect to health risks to sensitive receptors, that neither the Project's construction nor operation will cause a significant impact.[56] This conclusion is not supported by substantial evidence for several reasons.

First, SWAPE found that the construction health risk assessment ("HRA") prepared for the Project fails to consider age sensitivity factors and fraction of time at home for nearby sensitive receptors. Pursuant to the *Risk Assessment Guidelines* provided by the Office of Environmental Health Hazard Assessment ("OEHHA"), in order to properly calculate the Project's construction cancer risks, the health risk assessment must include age sensitivity factors in order to account for the increased sensitivity to carcinogens during early-in-life exposure and accurately assess risk for susceptible subpopulations such as children.[57] 15

Second, the City failed to conduct an operational health risk assessment for the Project, stating that because "project [heavy duty] truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook, an operational HRA is not necessary and therefore not analyzed."[58] However, SWAPE points out that the State of California Department of Justice ("DOJ") recommends that all warehouse projects prepare a quantitative HRA pursuant to the OEHHA guidelines which state that all projects lasting more than six months should be evaluated for the duration of the project.[59] Moreover, OEHHA recommends "that an exposure duration of 30 years be used to estimate individual cancer risk for the maximally exposed individual resident ("MEIR")."[60] Although the DEIR fails to disclose the expected Project life, it is reasonable to assume the Project will operate for at least 30 years and thus health risk impacts from Project operation must also be evaluated.[61] Construction equipment and trucks accessing the Project site during operations will emit diesel particulate matter ("DPM"), a known toxic air contaminant ("TAC") linked to serious health issues such as respiratory disease, lung damage, cancer, and premature death. The DEIR improperly omitted 16

[56] DEIR, pp. 3.2-56; 3.2-59.
[57] SWAPE Comments, p. 6.
[58] DEIR, p. 3.2-58.
[59] SWAPE Comments, p. 4.
[60] *Ibid.*
[61] *Ibid.*

analysis of health risks from DPM, and a revised EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions. 16 CONT

Finally, by claiming a less than significant impact without conducting a quantified operational HRA for nearby, existing sensitive receptors, the DEIR fails to compare the excess health risk impact to the applicable BAAQMD threshold of 10 in one million and lacks evidence to support its conclusion that the health risk would be less-than-significant.[62] For these reasons, and based on the analysis and recommendations offered in SWAPE's expert comments, a quantified HRA that analyzes the adverse health impacts that may be caused by exposure to TACs from the Project's operational emissions must be performed and included in a revised EIR for the Project. 17

SWAPE conducted a screening-level HRA, which "demonstrate[d] that construction and operation of the Project could result in a significant health risk impact, when correct exposure assumptions and up-to-date, applicable guidance are used."[63] Utilizing AERSCREEN[64] and applicable HRA methodologies recommended by OEHHA, SWAPE estimates that nearby sensitive receptors will be exposed to "an excess cancer risk of approximately 14.6 in one million over the course of a residential lifetime (30 years)", thereby exceeding the BAAQMD threshold of ten in one million.[65] This is a significant health risk impact that is not disclosed in the DEIR, and is not adequately mitigated. 18

The City must prepare a revised EIR to address the potentially significant health risk impacts described in this comment letter and the attached expert comments. As written, the DEIR is completely deficient as an informational document in failing to disclose the Project's potentially significant impacts to public health and does not provide any mitigation to reduce these impacts to less than significant levels. 19

[62] *Ibid.*
[63] *Id.* at 9.
[64] U.S. EPA, *AERSCREEN Released as the EPA Recommended Screening Model* (April 2011), available at:
http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[65] SWAPE Comments, p. 9.

In addition, SWAPE provides several mitigation measures in their comments which the City should consider implementing in the Project's MMRP in order to reduce the Project's health risk impacts from TAC emissions. SWAPE's proposed measures are based on the Southern California Association of Governments ("SCAG")'s 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures; and recommendations by CARB and the DOJ:

SCAG recommends:

- Minimizing unnecessary vehicular and machinery activities; and
- Requiring contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project.

CARB recommends:

- 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;
- 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 (NOx) standard starting in the year 2022;
- Requiring all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units;
- Requiring all TRUs entering the project-site be plug-in capable;
- Requiring all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero-emission;
- Requiring future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans;
- Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than **two minutes** while on site; and
- Require the installing of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

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The DOJ recommends:

- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations; and
- 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.[66]

20 CONT

The City must consider implementation of these feasible mitigation measures in a revised and recirculated EIR for the Project.

B. The DEIR Fails to Adequately Analyze Potentially Significant Noise Impacts

CEQA requires agencies to conduct noise analyses for projects that consider both the absolute noise levels expected, and the degree noise levels are expected to increase over existing ambient conditions. Noise studies that rely on a single measure that excludes possible significant impacts from noise increases or noise extremes do not receive deference by reviewing courts.

In *King & Gardiner Farms, LLC v. County of Kern*, the Court of Appeal held that an agency cannot simply rely on compliance with local noise regulations to conclude there will be no significant noise impacts without considering the impacts of increases in noise.[67] The County approved an EIR for proposed zoning amendments to streamline oil and gas permitting.[68] The EIR included an analysis of noise impacts that determined significance based solely on whether the 65 decibel day-night average ("dBA DNL") threshold in the County General Plan would be exceeded.[69] The Court of Appeal reasoned that the County General Plan did not conclude that all increases in the magnitude of noise are insignificant until the 65 dBA DNL threshold is exceeded, so the General Plan "does not constitute substantial evidence that the magnitude of an increase in ambient noise is irrelevant."[70] Rather, an EIR's noise analysis should consider both the increase in noise level and the absolute noise level associated with a project in determining the

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[66] *Id.* pp. 10-11.
[67] *King & Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 894.
[68] *Id.* at 829.
[69] *Id.* at 830, 889.
[70] *Id.* at 894.

significance of the project's noise impacts.[71] The Court of Appeal concluded that an agency cannot exclusively rely on "a single cumulative DNL metric for determining the significance of the project's noise impacts" while deciding "the magnitude of the increase in ambient noise is irrelevant."[72] 21 CONT

In *Berkeley Jets*, the Court of Appeal invalidated the Port of Oakland's EIR for expansion of the Oakland Airport because of its reliance on an improper noise standard.[73] The EIR evaluated the significance of noise impacts based on whether the estimated level of sound would exceed 65 dB Community Noise Equivalent Level ("CNEL").[74] However, as the Court of Appeal explained, the CNEL metric—which averages noise over the course of a day—could not be the sole indicator of significant effects from noise because it does not provide a meaningful analysis of the "degree single overflights will create noise levels over and above the existing ambient noise level at a given location, and the community reaction to aircraft noise, including sleep disturbance."[75] Therefore, the Court concluded, a revised EIR with additional study of noise impacts from flights was necessary.[76] 22

Here, the DEIR concludes that the Project's operational noise would not be significant. However, the DEIR fails to properly calculate the Project's operational noise and fails to consider the cumulative noise impacts from nearby warehouse developments which are underway resulting in a failure to analyze and mitigate the Project's significant operational noise impacts. 23

1. The DEIR Fails to Analyze and Mitigate Potentially Significant Operational Noise Impacts

Mr. Watry found that the DEIR's noise analysis fails to properly analyze the Project's operational noise because it assesses operational noise sources independently, comparing each source's noise level separately to the City's impact criteria.[77] Mr. Watry explains that this approach underestimates the Project's noise impact because operational noise sources, including parking lot activity, mechanical 24

[71] *Id.*
[72] *Id.*
[73] *Berkeley Jets*, 91 Cal.App.4th at 1381–1382.
[74] *Id.* at 1373.
[75] *Id.* at 1381–1382.
[76] *Id.* at 1382.
[77] Watry Comments, p. 3.

equipment, and truck loading activities, will all operate simultaneously.[78] Additionally, as discussed above, the DEIR fails to establish the existing noise environment, preventing an analysis of the relative increase in noise that will result from operation of the Project. 24 CONT

Furthermore, Mr. Watry found that the DEIR fails to account for the cumulative noise impacts that will result from operation of the SDG Commerce 217 project to the north. He explains that with these two new warehouses in operation, truck traffic on Commerce Boulevard could be expected to more than double, potentially resulting in a permanent increase in traffic noise levels over the City's established threshold, constituting a significant impact. 25

The DEIR lacks substantial evidence to support its conclusion that the Project's operational noise impacts will be less than significant because it failed to analyze the magnitude of noise increase from the Project and the cumulative noise impacts of the Project in conjunction with other projects on Commerce Boulevard. As a result, the DEIR fails to analyze and mitigate the Project's significant operational noise impacts. The DEIR must be revised and recirculated to analyze the Project's construction and operational noise impacts. 26

C. The DEIR Fails to Disclose, Analyze or Mitigate the Project's Biological Resources Impacts

1. The DEIR Fails to Adequately Analyze the Project's Habitat Loss Impacts and Substantial Evidence Shows the Project's Impacts Are Potentially Significant

Dr. Smallwood's comments demonstrate that habitat loss is a potentially significant impact not disclosed by the DEIR. He explains that habitat loss not only results in the immediate numerical decline of wildlife, but also in permanent loss of productive capacity.[79] His comments include calculations demonstrating the impacts the Project site would have on productive capacity. Dr. Smallwood found that the Project's 10.17 acres of grassland-wetland would support approximately 72 nest sites.[80] As Dr. Smallwood explains, assuming 1.39 broods per nest site, which is the average among 322 North American bird species, he calculates that the 27

[78] *Ibid.*
[79] Smallwood Comments, p. 22.
[80] *Id.* p. 29.

Project would cost California 100 nest attempts per year resulting in a loss of approximately 319 birds per year denied to California.[81] This predicted loss would be substantial and would qualify as a significant impact that is not addressed in the DEIR. The EIR must be revised to appropriately analyze potential Project impacts to wildlife. 27 CONT

2. The DEIR Fails to Adequately Analyze the Project's Traffic Collision Impacts and Substantial Evidence Shows the Project's Impacts Are Potentially Significant

The DEIR also provides no analysis of wildlife-traffic collision mortality that would result from the Project. The DEIR predicts annual vehicle miles traveled (VMT) of 2,568,115, which would put wildlife at dire risk of collision mortality along all reaches of roadway leading traffic to and from the Project site.[82] 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.[83] Dr. Smallwood calculates that the Project's traffic would result in 1,407 vertebrate wildlife fatalities per year,[84] which represents a significant impact to biological resources. The City must prepare a revised EIR for the Project which analyzes and mitigates this impact. 28

VII. THE CITY MAY NOT MAKE THE REQUIRED FINDINGS TO APPROVE THE PROJECT'S LOCAL LAND USE PERMITS.

The Project requires that the City issue discretionary approvals, including a Conditional Use Permit.[85] The Conditional Use Permit requires that the City find that the Project is consistent with the policies and programs of the General Plan and will not be materially detrimental to the general health, safety and welfare of the public and residents in the vicinity of the Project.[86] As discussed above, the DEIR fails to disclose, analyze or effectively mitigate the Project's potentially significant impacts on air quality, public health, biological resources and 29

[81] *Ibid.*
[82] *Id.* p. 32.
[83] *Ibid.*
[84] *Ibid.*
[85] DEIR, p. 2-22.
[86] American Canyon Municipal Code § 19.42.020 D.1 and D.5.

transportation. These impacts also create inconsistencies with General Plan policies which the DEIR fails to disclose and mitigate. As a result of these inconsistencies, the City is unable to make the necessary findings to approve the Project's local land use permits. 29 CONT

As an initial matter, the City may not make the required finding, pursuant to Municipal Code section 19.42.202 D.5., that the Project will not be materially detrimental to the general health, safety or general welfare of the public and residents in the vicinity of the Project. As discussed above, the Health Risk Assessment performed for the Project has serious flaws which prevent it from adequately analyzing health risks to sensitive receptors from the Project's air emissions. 30

The City is also precluded from making the required findings pursuant to Municipal Code section 19.42.020 D.1. because it cannot find that the Project complies with and is consistent with applicable General Plan policies. Analysis of the DEIR reflected in these comments show that the Project fails to comply with several key policies in the General Plan's Natural and Historic/Cultural Resources Element which includes policies relevant to the Project's impacts to biological resources.[87] For example, 31

- Policy 8.2.1 provides that land use applications for developments located within sensitive habitats, including riparian habitats or habitats within areas occupied by vernal pools, shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources and possible measures to reduce any identifiable impacts. As discussed in Dr. Smallwood's comments, the DEIR fails to examine the Project's impacts on foraging habitats for several special status bird species that inhabit the Project's wetland and grassland areas. 32

- Policy 8.4.2 requires preservation, where possible, of the habitat of rare, threatened or endangered species. This policy specifically references the northern harrier, which have been observed foraging at 33

[87] City of American Canyon, General Plan 2019, Chapter 8.0 Natural and Historic/Cultural Resources Element.

the Project site by Dr. Smallwood. The DEIR fails to evaluate the loss of foraging habitat for the northern harrier, let alone make any efforts to preserve such habitat. 33 CONT

Regarding noise impacts, the General Plan includes the following policy:

- Policy 11.2.4 requires that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. As explained above, the DEIR lacks the baseline analysis necessary to demonstrate compliance with this policy. 34

The DEIR fails to address or remedy these inconsistencies with General Plan policies, and the City accordingly may not make the necessary findings to support the required discretionary approvals for the Project.

VIII. CONCLUSION

For the reasons discussed above, the DEIR for the Project is wholly inadequate under CEQA. It must be thoroughly revised to provide legally adequate analysis of, and mitigation for, all of the Project's potentially significant impacts. These revisions will necessarily require that the DEIR be recirculated for additional public review. Until the DEIR has been revised and recirculated, as described herein, the City may not lawfully approve the Project. 35

Thank you for your attention to these comments. Please include them in the record of proceedings for the Project.

Sincerely,

Kevin Carmichael

KTC:ljl
6941-007j

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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July 23, 2024

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601 Gateway Blvd #1000
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Subject: Comments on the SDG Commerce 220 Distribution Center Project (SCH No. 2023100842)

Dear Ms. Rengifo,

We have reviewed the June 2024 Draft Environmental Impact Report ("DEIR") for the SDG Commerce 220 Distribution Center Project ("Project") located in the City of American Canyon ("City"). The Project proposes to construct 219,834-square-feet ("SF") of warehouse space, 134 car spaces, and 23 truck parking stalls on the 10.45-acre site.

Our review concludes that the DEIR fails to adequately evaluate the Project's health risk impacts. As a result, health risk impacts associated with construction and operation of the proposed Project may be underestimated and inadequately addressed. A revised Environmental Impact Report ("EIR") should be prepared to adequately assess and mitigate the potential health risk impacts that the Project may have on the environment. 1

Diesel Particulate Matter Emissions Inadequately Evaluated

The DEIR conducts a health risk analysis ("HRA") evaluating impacts from exposure to diesel particulate matter ("DPM") emissions during Project construction. Specifically, the DEIR estimates that the maximum cancer risk posed to nearby, existing residential sensitive receptors as a result of Project construction would be 0.8 in one million, which would not exceed the Bay Area Air Quality Management District ("BAAQMD") significance threshold of 10 in one million (see excerpt below) (p. 3.2-56, Table 3.2-16). 2

Table 3.2-16: Summary of Construction Health Risks at the Maximum Impacted Receptor

Impact Scenario	UTM E	UTM N	Cancer Risk[1] (risk per million)	Chronic Non-Cancer Hazard Index[2]	TAC Concentration[3] (µg/m³)
Residential MIR Impact	563979	4226674	0.8	0.001	0.0044
Worker MIR Impact	563625	4226775	1.0	0.019	0.0925
School MIR Impact	563877	4226209	0.2	0.002	0.00112
Thresholds of Significance			**10**	**1**	**0.3**
Exceeds Individual Source Threshold?			**No**	**No**	**No**

Notes:
DPM = diesel particulate matter
MIR = Maximally Impacted Sensitive Receptor
REL = Reference Exposure Level
TAC = toxic air contaminants
µg/m³ = micrograms per cubic meter
[1] Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000.
[2] Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as $PM_{2.5}$ exhaust) by the DPM REL of 5 µg/m³.
[3] TAC concentration taken from AERMOD is always at the MIR identified from the project air dispersion models. The school MIR was identified as the Napa Junction Elementary School.
Emissions Source: Appendix B.
Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed November 30, 2023.

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CONT

[43] Bay Area Air Quality Management District (BAAQMD). 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines. December. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en. Accessed September 16, 2023.

The DEIR, however, fails to provide the exposure assumptions or conduct an operational HRA. The DEIR's evaluation of the Project's potential health risk impacts, as well as the subsequent less-than-significant impact conclusion should be reevaluated in a revised EIR, for four reasons:

First, the DEIR fails to mention or provide the exposure assumptions for the HRA, such as the age sensitivity factors ("ASF") or fraction of time at home ("FAH") values. Until the DEIR substantiates the use of correct exposure assumptions, the HRA underestimates the cancer risk posed to nearby, existing sensitive receptors because of Project construction. Furthermore, according to the *Risk Assessment Guidelines* provided by the Office of Environmental Health Hazard Assessment ("OEHHA"), the organization responsible for providing guidance on conducting HRAs in California, the DEIR's model should have used the following equation:[1]

[1] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-7 Equation 8.2.4.

A. Equation 8.2.4 A: $RISK_{inh\text{-}res} = DOSE_{air} \times CPF \times ASF \times ED/AT \times FAH$

7. $RISK_{inh\text{-}res}$ = Residential inhalation cancer risk
8. $DOSE_{air}$ = Daily inhalation dose (mg/kg-day)
9. CPF = Inhalation cancer potency factor ($mg/kg\text{-}day^{-1}$)
10. ASF = Age sensitivity factor for a specified age group (unitless)
11. ED = Exposure duration (in years) for a specified age group
12. AT = Averaging time for lifetime cancer risk (years)
13. FAH = Fraction of time spent at home (unitless)

2 CONT

The DEIR and associated documents fail to include a dose and risk equation to calculate the Project's construction cancer risks. As such, we cannot verify that the DEIR's HRA is accurate, and the Project's cancer risks may be underestimated.

Second, the DEIR relies on guidance provided in the 2005 California Air Resources Board ("CARB")'s *Air Quality and Land Use Handbook* to omit an operational HRA. The DEIR states:

> "The traffic analysis estimates the daily HHD truck trips accessing the project site would be 128 trips, which is 64 HHD trucks per day. Since these project HHD truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook, an operational HRA is not necessary and therefore not analyzed in this study. As previously discussed, no TRUs would be operated while on-site. Therefore, risks due to DPM from this level of truck traffic would be less than significant" (p. 3.2-58).

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The DEIR concludes that an operational HRA is not required as the projected heavy-heavy-duty ("HHD") truck trip rate does not exceed the advisory threshold of 100 trucks per day. However, as it is now July 2024, the Project should rely on the most recently updated guidance from the California Environmental Quality Act ("CEQA"), OEHHA, and the Department of Justice ("DOJ"), as demonstrated below.

Third, the State of California DOJ recommends that all warehouse projects prepare a quantitative HRA pursuant to the OEHHA, the organization responsible for providing guidance on conducting HRAs in California, as well as local air district guidelines.[2] OEHHA released its most recent *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments* in February 2015. This guidance document describes the types of projects that warrant the preparation of an HRA. OEHHA recommends that all short-term projects lasting at least 2 months assess cancer risks. Specifically, according to OEHHA:

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[2] "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.

> "Exposure from projects lasting more than 6 months should be evaluated for the duration of the project. In all cases, for assessing risk to residential receptors, the exposure should be assumed to start in the third trimester to allow for the use of the ASFs (OEHHA, 2009)."[3]

OEHHA also recommends that an exposure duration of 30 years should be used to estimate the individual cancer risk at the maximally exposed individual resident ("MEIR").[4] While the DEIR fails to provide the expected lifetime of the proposed Project, we can reasonably assume that the Project would operate for at least 30 years, if not more. Operation of the Project exceeds the 2-month and 6-month requirements set forth by OEHHA and should be evaluated for the entire 30-year residential exposure duration, as indicated by OEHHA guidance. These recommendations reflect the most recent state health risk policies, and as such, a revised EIR should be prepared to include an analysis of health risk impacts posed to nearby sensitive receptors from Project-generated DPM emissions. 4 CONT

Fourth, by failing to prepare a quantified operational HRA, the Project is inconsistent with the CEQA requirements to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences."[5] According to the DEIR, operation of the Project is anticipated to generate about 372 daily vehicle trips, which would generate additional exhaust emissions and expose nearby sensitive receptors to DPM emissions (p. 3.13-12, Table 3.13-2). However, the DEIR fails to evaluate the toxic air contaminant ("TAC") emissions associated with Project operation or indicate the concentrations at which such pollutants would trigger adverse health effects. Without making a reasonable effort to connect the Project's operational TAC emissions to the potential health risks posed to nearby receptors, the Project is inconsistent with CEQA's requirement to correlate the Project-generated emissions with potential adverse impacts on human health. 5

Screening-Level Analysis Demonstrates Potentially Significant Health Risk Impact

In order to conduct our screening-level risk assessment we relied upon AERSCREEN, which is a screening level air quality dispersion model.[6] The model replaced SCREEN3, and AERSCREEN is included in the OEHHA and the California Air Pollution Control Officers Associated ("CAPCOA") guidance as the appropriate air dispersion model for Level 2 health risk screening assessments ("HRSAs").[7,8] A Level 2 HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an 6

[3] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.
[4] *Ibid*., p. 2-4.
[5] "Sierra Club v. County of Fresno." Supreme Court of California, December 2018, a*vailable at:* https://ceqaportal.org/decisions/1907/Sierra%20Club%20v.%20County%20of%20Fresno.pdf.
[6] "AERSCREEN Released as the EPA Recommended Screening Model," U.S. EPA, April 2011, *available at:* http://www.epa.gov/ttn/scram/guidance/clarification/20110411_AERSCREEN_Release_Memo.pdf
[7] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.
[8] "Health Risk Assessments for Proposed Land Use Projects." CAPCOA, July 2009, *available at:* http://www.capcoa.org/wp-content/uploads/2012/03/CAPCOA_HRA_LU_Guidelines_8-6-09.pdf.

unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project.

We prepared a preliminary HRA of the Project's operational health risk impact to residential sensitive receptors using the annual particulate matter 2.5 ("$PM_{2.5}$") exhaust estimates from the DEIR's CalEEMod output files, as recommended by the BAAQMD.[9] Consistent with recommendations set forth by OEHHA, we assumed residential exposure begins during the third trimester stage of life. [10] Subtracting the 347-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 29.05 years.[11] The DEIR's operational CalEEMod emissions indicate that operational activities will generate approximately 80 pounds of DPM per year throughout operation. 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 daily vehicle trips over Project operation, we calculated an average DPM emission rate by the following equation:

$$Emission\ Rate\ \left(\frac{grams}{second}\right) = \frac{80\ lbs}{365\ days} \times \frac{453.6\ grams}{lbs} \times \frac{1\ day}{24\ hours} \times \frac{1\ hour}{3{,}600\ seconds} = \mathbf{0.00115}\boldsymbol{g/s}$$

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CONT

Using this equation, we estimated an operational emission rate of 0.00115 g/s. Operation was simulated as a 10.45-acre rectangular area source in AERSCREEN, with approximate dimensions of 291- by 145-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 American Canyon was obtained from U.S. 2022 Census data.[12]

The AERSCREEN model generates maximum reasonable estimates of single-hour DPM concentrations from the Project Site. The United States Environmental Protection Agency ("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.[13] Review of the AERSCREEN output files demonstrates that the MEIR is located approximately 150 meters from the Project site. However, according to the DEIR, the nearest sensitive receptors are residential properties located 850 feet, or approximately 259.1 meters, to the east of the Project site (p. 2-26). Thus, the single-hour concentration estimated by AERSCREEN for Project operation is approximately 0.458 µg/m^3 DPM at approximately 300 meters

[9] "California Environmental Quality Act Air Quality Guidelines." BAAQMD, May 2017, *available at*: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, p. 8-8.
[10] "Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, *available at:* https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-18.
[11] See Attachment A for health risk calculations.
[12] "American Canyon." U.S. Census Bureau, 2022, *available at:* https://datacommons.org/place/geoId/0601640.
[13] "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.

downwind. Multiplying this single-hour concentration by 10%, we get an annualized average concentration of 0.0458 µg/m^3 for Project operation at the nearest sensitive receptor.

We calculated the excess cancer risk to the nearest sensitive receptor using applicable HRA methodologies prescribed by OEHHA, as recommended by BAAQMD.[14] Specifically, guidance from OEHHA and the CARB recommends the use of a standard point estimate approach, including high-point estimate (i.e. 95th percentile) breathing rates and ASF in order 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, such as the daily breathing rates ("BR/BW"), exposure duration ("ED"), ASF, FAH, and exposure frequency ("EF") utilized for the various age groups in our screening-level HRA are as follows:

6
CONT

[14] "California Environmental Quality Act Air Quality Guidelines." BAAQMD, May 2017, *available at:* http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en, p. 56; see also "Recommended Methods for Screening and Modeling Local Risks and Hazards." BAAQMD, May 2011, *available at:* http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/BAAQMD%20Modeling%20Approach.ashx, p. 65, 86.

Exposure Assumptions for Residential Individual Cancer Risk						
Age Group	**Breathing Rate** (L/kg-day)[15]	**Age Sensitivity Factor**[16]	**Exposure Duration** (years)	**Fraction of Time at Home**[17]	**Exposure Frequency** (days/year)[18]	**Exposure Time** (hours/day)
3rd Trimester	361	10	0.25	0.85	350	24
Infant (0 – 2)	1090	10	2	0.85	350	24
Child (2 – 16)	572	3	14	0.72	350	24
Adult (16 – 30)	261	1	14	0.73	350	24

6
CONT

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 ("CPF") in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day^{-1}) to derive the cancer risk estimate. Therefore, to assess exposures, we utilized the following dose algorithm:

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

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)
BR/BW = daily breathing rate normalized to body weight (L/kg/day)

[15] "Air Toxics NSR Program Health Risk Assessment Guidelines." BAAQMD, December 2016, available at: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en#:~:text=To%20assess%20potential%20inhalation%20exposure%20to%20offsite%20workers%2C%20OEHHA%20recommended,for%20an%20eight%2Dhour%20day, p. 6; see also "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf.

[16] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 8-5 Table 8.3.

[17] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24; see also: "Air Toxics NSR Program Health Risk Assessment Guidelines." BAAQMD, December 2016, available at: https://www.baaqmd.gov/~/media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en#:~:text=To%20assess%20potential%20inhalation%20exposure%20to%20offsite%20workers%2C%20OEHHA%20recommended,for%20an%20eight%2Dhour%20day, p. 4, 5.

[18] "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf, p. 5-24.

A = inhalation absorption factor (default = 1)
CF = conversion factor (1x10-6, µg to mg, L to m3)

To calculate the overall cancer risk, we used the following equation for each appropriate age group:

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

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)

Consistent with the 347-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 1.30 years of the infant stage of life, the entire child stage of life (2 – 16 years), and the entire adult stage of life (16 – 30 years). 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/m3)	Cancer Risk
3rd Trimester	Construction	0.25	*	*
	Construction	*0.70*	***	***
	Operation	*1.30*	*0.0458*	*8.30E-06*
Infant (0 - 2)	Total	2	*	*
Child (2 - 16)	Operation	14	0.0458	1.19E-05
Adult (16 - 30)	Operation	14	0.0458	1.84E-06
Lifetime		**30**		**1.38E-05**

As demonstrated in the table above, the excess cancer risks to infants, children, and adults at the nearest sensitive receptor located approximately 300 meters away, over the course of Project operation, are approximately 8.3, 11.9, and 1.84 in one million, respectively. The excess cancer risk associated with the Project operation over the course of a residential lifetime is approximately 13.8 in

6 CONT

one million. When summing the Project's operational cancer risk, as estimated by SWAPE, with the DEIR's construction-related cancer risk of 0.8 in one million, we estimate an excess cancer risk of approximately 14.6 in one million over the course of a residential lifetime (30 years) (p. 3.2-56, Table 3.2-16).[19] As such, the child and lifetime cancer risks exceed the BAAQMD threshold of 10 in one million, thus resulting in a potentially significant impact not previously addressed or identified by the DEIR and associated documents.

Our analysis represents a screening-level HRA, which is known to be conservative and tends to err on the side of health protection. The purpose of the screening-level HRA is to demonstrate the potential link between Project-generated emissions and adverse health risk impacts. According to the U.S. EPA:

> "EPA's Exposure Assessment Guidelines recommend completing exposure assessments iteratively using a tiered approach to 'strike a balance between the costs of adding detail and refinement to an assessment and the benefits associated with that additional refinement' (U.S. EPA, 1992).
>
> In other words, an assessment using basic tools (e.g., simple exposure calculations, default values, rules of thumb, conservative assumptions) can be conducted as the first phase (or tier) of the overall assessment (i.e., a screening-level assessment).
>
> The exposure assessor or risk manager can then determine whether the results of the screening-level assessment warrant further evaluation through refinements of the input data and exposure assumptions or by using more advanced models."

6 CONT

As demonstrated above, screening-level analyses warrant further evaluation in a refined modeling approach. As our screening-level HRA demonstrates that construction and operation of the Project would result in a potentially significant health risk impact, a revised EIR should be prepared including a refined health risk analysis which adequately and accurately evaluates health risk impacts associated with both Project construction and operation.

Mitigation

Feasible Mitigation Measures Available to Reduce Emissions

According to CEQA Guidelines § 15096(g)(2):

> "When an updated EIR has been prepared for a project, the Responsible Agency shall not approve the project as proposed if the agency finds any feasible alternative or feasible mitigation measures within its powers that would substantially lessen or avoid any significant effect the project would have on the environment."

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[19] Calculated: 13.8 in one million + 0.8 in one million = 14.6 in one million.

The DEIR is consequently required under CEQA to implement all feasible mitigation to reduce the Project's potential impacts. As demonstrated in the sections above, the Project would result in potentially significant health risk impacts that should be mitigated further.

In order to reduce the DPM emissions associated with Project construction and operation, we recommend the DEIR consider several mitigation measures (see list below).

Southern California Association of Governments ("SCAG")'s 2020 RTP/SCS PEIR's Air Quality Project Level Mitigation Measures ("PMM-AQ-1") recommends:[20]

- Minimizing unnecessary vehicular and machinery activities; and
- Requiring contractors to assemble a comprehensive inventory list (i.e., make, model, engine year, horsepower, emission rates) of all heavy-duty off-road (portable and mobile) equipment (50 horsepower and greater) that could be used an aggregate of 40 or more hours for the construction project.

CARB recommends: [21]

- 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;
- 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 (NOx) standard starting in the year 2022;
- Requiring all loading/unloading docks and trailer spaces be equipped with electrical hookups for trucks with transport refrigeration units (TRU) or auxiliary power units;
- Requiring all TRUs entering the project-site be plug-in capable;
- Requiring all service equipment (e.g., yard hostlers, yard equipment, forklifts, and pallet jacks) used within the project site to be zero-emission;
- Requiring future tenants to exclusively use zero-emission light and medium-duty delivery trucks and vans;
- Include contractual language in tenant lease agreements restricting trucks and support equipment from idling longer than **two minutes** while on site; and
- Require the installing of vegetative walls or other effective barriers that separate loading docks and people living or working nearby.

7
CONT

The DOJ recommends:[22]

[20] *Ibid.* p. 8 – 9.
[21] "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%20%20Oak%20Valley%20North%20Project%20DEIR.pdf; Attachment A, p. 5 – 8.
[22] *Ibid.* p. 8 – 9.

- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations; and
- 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.

7 CONT

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."[23]

As demonstrated above, we have provided several mitigation measures that would reduce Project-related, DPM emissions developed from sources including SCAG, CARB, and the DOJ. These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently reduce emissions released during Project construction and operation.

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A revised EIR should be prepared that includes *all* feasible mitigation measures, as well as health risk to ensure that the necessary mitigation measures are implemented to reduce emissions to the maximum extent feasible. The revised EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's potentially significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery 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 otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

9

Sincerely,

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

[23] "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.

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	
Annual Emissions (tons/year)	0.04
Daily Emissions (lbs/day)	0.219178082
Construction Duration (days)	121
Total DPM (lbs)	26.52054795
Total DPM (g)	12029.72055
Start Date	9/2/2024
End Date	1/1/2025
Construction Days	121
2025	
Annual Emissions (tons/year)	0.03
Daily Emissions (lbs/day)	0.164383562
Construction Duration (days)	226
Total DPM (lbs)	37.15068493
Total DPM (g)	16851.55068
Start Date	1/1/2025
End Date	8/15/2025
Construction Days	226

Total	
Total DPM (lbs)	63.67123288
Total DPM (g)	28881.27123
Emission Rate (g/s)	0.000963326
Release Height (meters)	3
Total Acreage	10.45
Max Horizontal (meters)	290.83
Min Horizontal (meters)	145.41
Initial Vertical Dimension (meters)	1.5
Setting	American Canyon
Population	21,432
Start Date	9/2/2024
End Date	8/15/2025
Total Construction Days	347
Total Years of Construction	0.95
Total Years of Operation	29.05

Operation	
Emission Rate	
Annual Emissions (tons/year)	0.04
Daily Emissions (lbs/day)	0.219178082
Total DPM (lbs)	80
Emission Rate (g/s)	0.001150685
Release Height (meters)	3
Total Acreage	10.45
Max Horizontal (meters)	290.83
Min Horizontal (meters)	145.41
Initial Vertical Dimension (meters)	1.5
Setting	American Canyon
Population	21,432

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	*	*
	Construction	*0.70*	*	*
	Operation	*1.30*	*0.0458*	*8.31E-06*
Infant (0 - 2)	Total	2	*	*
Child (2 - 16)	Operation	14	0.0458	1.19E-05
Adult (16 - 30)	Operation	14	0.0458	1.84E-06
Lifetime		**30**		**1.38E-05**

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CONT

Attachment B

AERSCREEN 21112 / AERMOD 21112 07/22/24
15:58:41

TITLE: SDGCommerce220, Operational

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

SOURCE EMISSION RATE:	0.115E-02	g/s	0.913E-02	lb/hr
AREA EMISSION RATE:	0.272E-07	g/(s-m2)	0.216E-06	lb/(hr-m2)
AREA HEIGHT:	3.00	meters	9.84	feet
AREA SOURCE LONG SIDE:	290.83	meters	954.17	feet
AREA SOURCE SHORT SIDE:	145.41	meters	477.07	feet
INITIAL VERTICAL DIMENSION:	1.50	meters	4.92	feet
RURAL OR URBAN:	URBAN			
POPULATION:	21432			
INITIAL PROBE DISTANCE =	5000.	meters	16404.	feet

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********** 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	1.182	15	150.0	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 ADUSTED

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

11
CONT

********** 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	0.8881	2525.00	0.2991E-01

25.00	0.9513	2550.00	0.2951E-01
50.00	1.009	2575.00	0.2913E-01
75.00	1.061	2600.00	0.2875E-01
100.00	1.107	2625.00	0.2839E-01
125.00	1.149	2650.00	0.2802E-01
150.00	1.182	2675.00	0.2767E-01
175.00	0.9642	2700.00	0.2771E-01
200.00	0.7492	2725.00	0.2736E-01
225.00	0.6371	2750.00	0.2702E-01
250.00	0.5608	2775.00	0.2669E-01
275.00	0.5047	2800.00	0.2636E-01
300.00	0.4577	2825.00	0.2604E-01
325.00	0.4178	2850.00	0.2573E-01
350.00	0.3835	2875.00	0.2542E-01
375.00	0.3535	2900.00	0.2513E-01
400.00	0.3275	2925.00	0.2483E-01
425.00	0.3045	2950.00	0.2454E-01
450.00	0.2840	2975.00	0.2426E-01
475.00	0.2659	3000.00	0.2399E-01
500.00	0.2496	3025.00	0.2372E-01
525.00	0.2349	3050.00	0.2345E-01
550.00	0.2217	3075.00	0.2319E-01
575.00	0.2098	3100.00	0.2293E-01
600.00	0.1987	3125.00	0.2268E-01
625.00	0.1887	3150.00	0.2244E-01
650.00	0.1796	3175.00	0.2220E-01
675.00	0.1711	3200.00	0.2196E-01
700.00	0.1633	3225.00	0.2173E-01
725.00	0.1562	3250.00	0.2150E-01
750.00	0.1496	3275.00	0.2127E-01
775.00	0.1433	3300.00	0.2105E-01
800.00	0.1375	3325.00	0.2084E-01
825.00	0.1321	3350.00	0.2062E-01
850.00	0.1271	3375.00	0.2042E-01
875.00	0.1225	3400.00	0.2021E-01
900.00	0.1181	3425.00	0.2001E-01
925.00	0.1140	3450.00	0.1981E-01
950.00	0.1100	3475.00	0.1962E-01
975.00	0.1063	3500.00	0.1943E-01
1000.00	0.1028	3525.00	0.1924E-01
1025.00	0.9958E-01	3550.00	0.1905E-01
1050.00	0.9649E-01	3575.00	0.1887E-01
1075.00	0.9357E-01	3600.00	0.1869E-01
1100.00	0.9079E-01	3625.00	0.1851E-01
1125.00	0.8813E-01	3650.00	0.1834E-01
1150.00	0.8560E-01	3675.00	0.1817E-01
1175.00	0.8320E-01	3700.00	0.1800E-01
1200.00	0.8092E-01	3725.00	0.1784E-01
1225.00	0.7875E-01	3750.00	0.1768E-01
1250.00	0.7667E-01	3775.00	0.1752E-01

11
CONT

1275.00	0.7468E-01	3800.00	0.1736E-01
1300.00	0.7278E-01	3825.00	0.1720E-01
1325.00	0.7096E-01	3850.00	0.1705E-01
1350.00	0.6923E-01	3875.00	0.1690E-01
1375.00	0.6757E-01	3900.00	0.1675E-01
1400.00	0.6597E-01	3925.00	0.1661E-01
1425.00	0.6443E-01	3950.00	0.1646E-01
1450.00	0.6295E-01	3975.00	0.1632E-01
1475.00	0.6152E-01	4000.00	0.1618E-01
1500.00	0.6016E-01	4025.00	0.1604E-01
1525.00	0.5885E-01	4050.00	0.1591E-01
1550.00	0.5758E-01	4075.00	0.1578E-01
1575.00	0.5637E-01	4100.00	0.1564E-01
1600.00	0.5520E-01	4125.00	0.1551E-01
1625.00	0.5407E-01	4150.00	0.1539E-01
1650.00	0.5299E-01	4175.00	0.1526E-01
1675.00	0.5194E-01	4200.00	0.1514E-01
1700.00	0.5092E-01	4225.00	0.1501E-01
1725.00	0.4994E-01	4250.00	0.1489E-01
1750.00	0.4899E-01	4275.00	0.1478E-01
1775.00	0.4807E-01	4300.00	0.1466E-01
1800.00	0.4717E-01	4325.00	0.1454E-01
1825.00	0.4631E-01	4350.00	0.1443E-01
1850.00	0.4548E-01	4375.00	0.1432E-01
1875.00	0.4467E-01	4400.00	0.1420E-01
1900.00	0.4388E-01	4425.00	0.1409E-01
1925.00	0.4311E-01	4450.00	0.1399E-01
1950.00	0.4236E-01	4475.00	0.1388E-01
1975.00	0.4164E-01	4500.00	0.1377E-01
2000.00	0.4094E-01	4525.00	0.1367E-01
2025.00	0.4026E-01	4550.00	0.1357E-01
2050.00	0.3960E-01	4575.00	0.1347E-01
2075.00	0.3895E-01	4600.00	0.1337E-01
2100.00	0.3833E-01	4625.00	0.1327E-01
2125.00	0.3773E-01	4650.00	0.1317E-01
2150.00	0.3714E-01	4675.00	0.1307E-01
2175.00	0.3656E-01	4700.00	0.1298E-01
2200.00	0.3600E-01	4725.00	0.1289E-01
2225.00	0.3546E-01	4750.00	0.1279E-01
2250.00	0.3493E-01	4775.00	0.1270E-01
2275.00	0.3441E-01	4800.00	0.1265E-01
2300.00	0.3391E-01	4825.00	0.1260E-01
2325.00	0.3342E-01	4850.00	0.1256E-01
2350.00	0.3294E-01	4875.00	0.1251E-01
2375.00	0.3247E-01	4900.00	0.1247E-01
2400.00	0.3202E-01	4925.00	0.1242E-01
2425.00	0.3158E-01	4950.00	0.1238E-01
2450.00	0.3114E-01	4975.00	0.1233E-01
2475.00	0.3072E-01	5000.00	0.1229E-01
2500.00	0.3031E-01		

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CONT

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--------------------------------------------------------------------------------
**********  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

                    MAXIMUM      SCALED      SCALED      SCALED      SCALED
                     1-HOUR      3-HOUR      8-HOUR     24-HOUR      ANNUAL
  CALCULATION          CONC        CONC        CONC        CONC        CONC
   PROCEDURE         (ug/m3)     (ug/m3)     (ug/m3)     (ug/m3)     (ug/m3)
--------------    ----------  ----------  ----------  ----------  ----------
FLAT TERRAIN        1.183       1.183       1.183       1.183         N/A

DISTANCE FROM SOURCE        150.99 meters



IMPACT AT THE
AMBIENT BOUNDARY   0.8881      0.8881      0.8881      0.8881         N/A

DISTANCE FROM SOURCE          1.00 meters
```

11
CONT

Attachment C

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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

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M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.
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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 – 2104, 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.

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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:

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- 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 nation-wide 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.

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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.

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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, Coloradao.

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 repesentatives, 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.

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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., Fukanaga, 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 Cleanup 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.

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

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Other Experience:

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

Attachment D

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

SOIL WATER AIR PROTECTION ENTERPRISE
2656 29th Street, Suite 201
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Paul Rosenfeld, Ph.D.

Chemical Fate and Transport & Air Dispersion Modeling

Principal Environmental Chemist

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 H_2O 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

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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 Aermod 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.

Tam L. K.., Wu C. D., Clark J. J. and **Rosenfeld, P.E.** (2008). Methods For Collect Samples For Assessing Dioxins And Other Environmental Contaminants In Attic Dust: A Review. *Organohalogen Compounds*, 70, 000527-000530.

Hensley, A.R. A. Scott, J. J. J. Clark, **Rosenfeld, P.E.** (2007). Attic Dust and Human Blood Samples Collected near a Former Wood Treatment Facility. *Environmental Research.* 105, 194-197.

Rosenfeld, P.E., J. J. J. Clark, A. R. Hensley, M. Suffet. (2007). The Use of an Odor Wheel Classification for Evaluation of Human Health Risk Criteria for Compost Facilities. *Water Science & Technology* 55(5), 345-357.

Rosenfeld, P. E., M. Suffet. (2007). The Anatomy Of Odour Wheels For Odours Of Drinking Water, Wastewater, Compost And The Urban Environment. *Water Science & Technology* 55(5), 335-344.

Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities.* Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004.* New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash, *Water Science and Technology*, 49(9), 171-178.

Rosenfeld, P. E., Grey, M. A., Sellew, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office*, Publications Clearinghouse (MS–6), Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

Rosenfeld, P.E., and Henry C. L., (2000). Wood ash control of odor emissions from biosolids application. *Journal of Environmental Quality.* 29, 1662-1668.

Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

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Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld. (**1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

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

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

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.

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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). Perfluoroctanoic Acid (PFOA) and Perfluoroactane 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 Florala, 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.

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CONT

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.

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CONT

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 Conferenc*e. 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.

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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

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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

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CONT

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

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CONT

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 Agrosciences, LLC, et al., Defendants
Cause No. 1923
Rosenfeld Deposition 11-17-2017

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CONT

In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintifs 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 Gilber, 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

13
CONT

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
Jaeanette 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

EXHIBIT B

Shawn Smallwood, PhD
3108 Finch Street
Davis, CA 95616

William He, Senior Planner
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

21 July 2024

RE: SDG Commerce 220 Distribution Center

Dear Mr. He,

I write to comment on potential impacts to biological resources from the proposed SDG Commerce 220 Distribution Center Project, which I understand would add a 35-foot-tall 219,834 sf wine storage and distribution center on 10.17 acres of open space sandwiched between two recently constructed warehouses north to south and eucalyptus groves east to west. I comment on the analyses of impacts to biological resources in FirstCarbon Solutions (FCS 2023a) and the DEIR prepared by the City of American Canyon.

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. 1

SITE VISITS

To prepare expert testimony on the potential impacts to biological resources resulting from the SDG Commerce 330 and SDG Commerce 217 projects, I twice visited the site of proposed SDG 220 Distribution Center Project, first on 23 January 2019 from 06:15 hours to 10:50 hours, and again on 5 January 2021 from 08:23 to 09:25 hours. Because the site of the SDG Commerce 220 Industrial Center is located between the other two project sites I was there to visit, my surveys overlapped the site of the SDG Commerce 220 project. All three of the SDG sites originally composed one contiguous patch of grassland with scattered coyote brush and wetlands inclusions, all surrounded by groves of blue gum eucalyptus (Photo 1). Upon my second visit, the SDG Commerce 330 project had been developed (Photo 2). 2

In total I surveyed the project site and its surround for 5.62 hours. I walked the site's perimeter where accessible, stopping to scan for wildlife with use of binoculars. I recorded all species of vertebrate wildlife I 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.

Photos 1 and 2. *Views of the SDG Commerce 330 site before and after construction, and to the right side of the images, part of the neighboring SDG Commerce 220 Industrial Commerce site before it was graded.*

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At and around the site of the proposed project, I saw a juvenile bald eagle (Photos 3 and 4), Cooper's hawk and northern harrier (Photos 5 and 6), American kestrel (Photo 7), and golden-crowned sparrow, song sparrow and white-crowned sparrow (Photos 8–10), among many others, some of which I photo-documented in my comment letters to the City regarding the SDG Commerce 330 and 217 projects. In total I detected 60 species of vertebrate wildlife, including 10 special-status species (Table 1). Having spent only 5.62 hours at and around the site, 60 species indicated the site is inherently rich in wildlife.

Reconnaissance surveys, such as those completed at the project site, cannot support species' absence determinations, as protocol-level detection surveys are needed to do that, but they can confirm the presence of species that happen to be detected. Such surveys can also support an estimate of the number of species that were not detected, thereby revealing the degree to which the survey sampled the local wildlife community that was available at the time of the survey. One way to do this is to model the pattern in species detections with time into a survey. The cumulative number of species' detections

increases with increasing survey time, but eventually with diminishing numbers of newly-detected species. In the case of my first 2.58-hour survey at the project site, a model fit to the pattern in the data predicted that had I spent more time on site, or had I help from more biologists, I would have detected 79 species (Figure 1).

Photos 3 and 4. *A juvenile bald eagle flew along the eucalyptus trees surrounding the project site on 23 January 2019. On 5 January 2021, Bay Trail visitors informed me that two bald eagles had been living in the area this winter.*

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Photos 5 and 6. *Cooper's hawk (top) and northern harrier (bottom) fly over the project site, 23 January 2019.*

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Photo 7. *American kestrel perches on a Eucalyptus branch on southern boundary of proposed project site, 23 January 2019 (left) and on a pole just south of the project site on 5 January 2021 (right).*

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Photos 8 and 9. *Golden-crowned sparrow and song sparrow next to project site, 5 January 2021.*

Photo 10. *White-crowned sparrow next to the site of the proposed project, 23 January 2019.*

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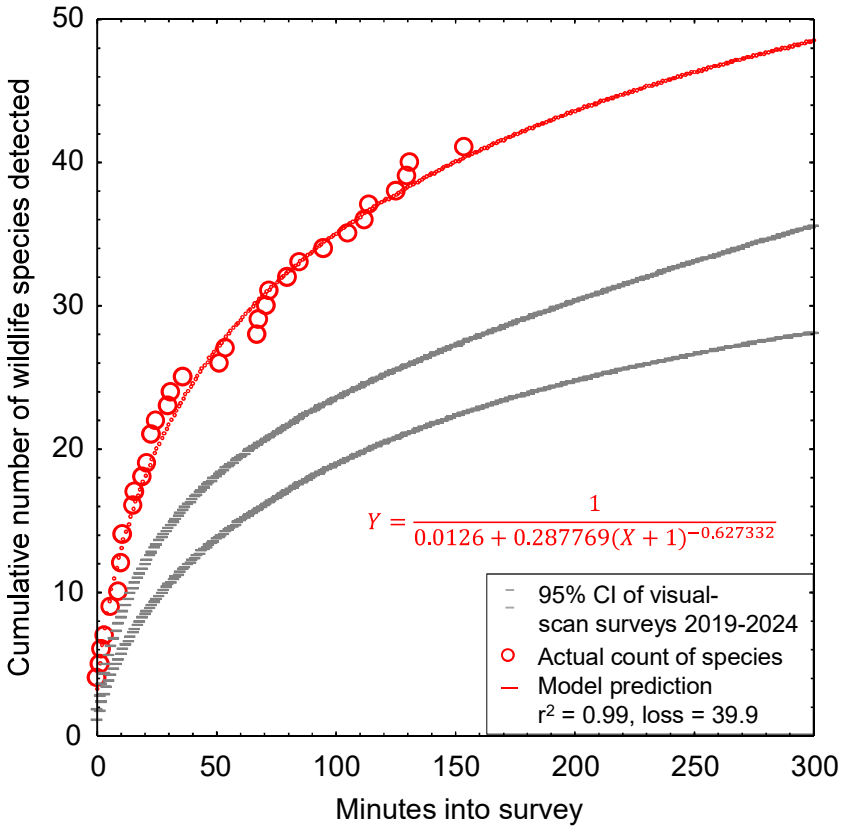
The patterns in the data also indicate that my rate of species detections at the project site far exceeded the upper bound of the 95% confidence interval I estimated from all 18 surveys I completed at other project sites on the east side of the San Francisco Bay (Figure 1). In other words, wildlife species richness at the project site far exceeds the species richness I have found at other project sites in the region. This is more evidence that the project site is inherently rich in wildlife species.

The site supports many species of wildlife than I could detect during two brief reconnaissance surveys. However, although this modeling approach is useful for more realistically representing the species richness of the site at the time of a survey, it cannot represent the species richness throughout the year or across multiple years because many species are seasonal or even multi-annual in their movement patterns and in their occupancy of habitat. I surveyed only in January, and therefore was unlikely to see some of the species that would use the site in spring, summer or fall. That other species occur at the site is in evidence in Table 1, which also reports species of vertebrate wildlife observed by consultants who focused their surveys on the entirety of the original patch of grassland, or on specific portions of it. Their results combined with mine total 98 species of vertebrate wildlife having been detected there, including 18 special-status

species (Table 1). Even this documented species richness is short of the true species richness at the project site.

Figure 1. *Actual and predicted relationships between the number of vertebrate wildlife species detected and the elapsed survey time based on my survey on the morning of 23 January 2019. The 95% confidence interval (CI) was based on 18 surveys at sites on the east side of the Bay Area.*



By use of an analytical bridge, I can apply a model developed from a much larger, more robust data set at a research site to predict the number of wildlife species that would make use of the project 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, Alameda County, 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 used at the project site. At each of the 46 survey stations at my research site, I tallied new species detected with each sequential survey at that station, and then related the cumulative species detected to the hours (number of surveys, as each survey lasted 1 hour) used to accumulate my counts of species detected. I used combined quadratic and simplex methods of estimation in Statistica to estimate least-squares, best-fit nonlinear models of the number of cumulative species detected regressed on hours of survey (number of surveys) at the station: $\hat{R} = \frac{1}{1/a+b\times(Hours)^c}$, where $\hat{R}$ represented cumulative species richness detected. The models' coefficients of determination, r^2, 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.

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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. 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 detected 18.5 species over the first 5.62 hours of surveys in the Altamont Pass (5.62 hours to match the number of hours I surveyed at the project site), which composed 32.4% of the total predicted species I would detect with a much larger survey effort. Given the example illustrated in Figure 2, the 60 species I detected after my 5.62 hours of survey at the project site likely represented 33.4% 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, I would likely detect $^{60}/_{0.324} = 185$ diurnally-active species of vertebrate wildlife at the site. Assuming my ratio of special-status to non-special-status species was to hold through the detections of all 185 predicted species, then continued surveys would eventually detect 31 special-status species of vertebrate wildlife. To check on these predictions, I analytically bridged my findings at the SDG Commerce site to another site I surveyed 41 times in Rancho Cordova. That analytical bridge predicted 170 species if I was to continue surveys throughout a year or longer, so not very different from my bridge to the Altamont Pass study area.

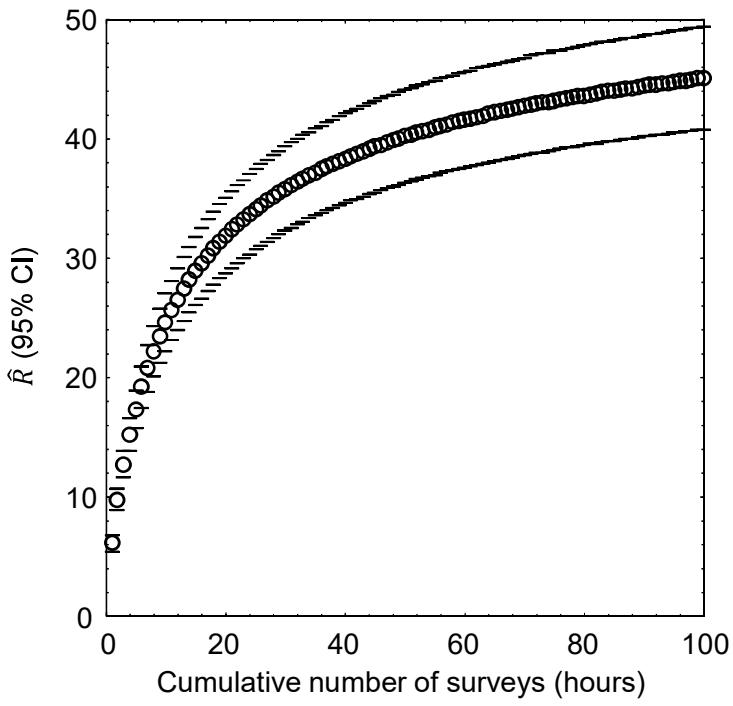

Figure 2. *Mean (95% CI) predicted wildlife species richness, $\hat{R}$, as a nonlinear function of hour-long survey increments across 46 visual-scan survey stations across the Altamont Pass Wind Resource Area, Alameda and Contra Costa Counties, 2015–2019.*

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With surveys to detect nocturnal wildlife such as owls and bats, the true number of species composing the wildlife community of the site must be larger. A series of reconnaissance surveys cannot alone reveal the inventory of a site's wildlife community.

Table 1. *Species of wildlife I observed during visits on 23 January 2019 and 5 January 2021 at the site of the proposed SDG Commerce 217 Warehouse*, during an *offsite visit during my 2021 survey that includes a walk along Napa River and Bay Trails just south and west of the project site, during surveys conducted by myself (KSS), Monk & Associates (M&A), Pinecrest Research Corp, (PRC), and FirstCarbon Solutions (FCS).*

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
Sierran treefrog	*Pseudacris sierra*		X		X	X		
Western fence lizard	*Sceloporus occidentalis*					X		
Canada goose	*Branta canadensis*		X			X	X	X
Northern shoveler	*Anas clypeata*				X			
Mallard	*Anas platyrhynchos*		X				X	X
California quail	*Callipepla californica*		X			X		
Wild turkey	*Meleagris gallopavo*	Non-native				X	X	
Pied-billed grebe	*Podilymbus podiceps*				X			
Ring-necked pheasant	*Phasianus colchicus*	Non-native				X		
Mourning dove	*Zenaida macroura*		X		X	X	X	X
Eurasian collared-dove	*Streptopelia decaocto*	Non-native	X			X		
Black-chinned hummingbird	*Archilochus alexandri*		X					
Anna's hummingbird	*Calypte anna*		X	X	X	X	X	X
Allen's hummingbird	*Selasphorus sasin*	BCC					X	
Virginia rail	*Rallus limicola*					X		
American coot	*Fulica americana*				X		X	X
Black-necked stilt	*Himantopus mexicanus*				X			
American avocet	*Recurvirostra americanus*				X			
Killdeer	*Charadrius vociferus*						X	
Long-billed dowitcher	*Limnodromus scolopaceus*				X			
Least sandpiper	*Caladris minutilla*				X			
Ring-billed gull	*Larus delawarensis*		X		X			
California gull	*Larus californicus*	BCC, TWL					X	X
Herring gull	*Larus argentatus*		X		X			

2 CONT

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC					X	X
Great blue heron	*Ardea herodias*					X	X	X
Turkey vulture	*Cathartes aura*	BOP			X	X	X	X
Osprey	*Pandion haliaetus*	TWL, BOP				X	X	
White-tailed kite	*Elanus leucurus*	CFP, BOP				X	X	X
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	X		X			
Cooper's hawk	*Accipiter cooperii*	WL, BOP	X					
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP	X					
Red-shouldered hawk	*Buteo lineatus*	BOP			X	X	X	X
Red-tailed hawk	*Buteo jamaicensis*	BOP	X	X	X	X	X	
Barn owl	*Tyto alba*	BOP				X		
Great horned owl	*Bubo virginianus*	BOP	X					
Belted kingfisher	*Ceryle alcyon*					X		
Nuttall's woodpecker	*Picoides nuttallii*	BCC	X		X	X	X	X
Northern flicker	*Colaptes auratus*		X	X	X	X	X	X
American kestrel	*Falco sparverius*	BOP	X		X	X		
Peregrine falcon	*Falco peregrinus*	BOP			X		X	
Black phoebe	*Sayornis nigricans*		X		X	X	X	X
Say's phoebe	*Sayornis saya*		X		X	X		
California scrub-jay	*Aphelocoma californica*		X			X	X	X
American crow	*Corvus brachyrhynchos*		X	X		X	X	X
Common raven	*Corvus corax*		X		X	X	X	X
Hutton's vireo	*Vireo huttoni*		X					
Chestnut-backed chickadee	*Poecile rufescens*					X	X	X
Tree swallow	*Tachycineta bicolor*					X	X	X
Northern rough-winged swallow	*Stelgidopteryx serripennis*		X					

2
CONT

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
Violet-green swallow	*Tachycineta thalassina*						X	
Barn swallow	*Hirundo rustica*		X			X		
Cliff swallow	*Petrochelidon pyrrhonota*					X	X	X
Bushtit	*Psatriparus minimus*		X	X		X		
Wrentit	*Chamaea fasciata*	BCC				X		
Ruby-crowned kinglet	*Regulus calendula*					X	X	X
Cedar waxwing	*Bombycilla cedrorum*						X	X
Brown creeper	*Certhia americana*					X	X	
Rock wren	*Salpinctes obsoletus*						X	X
Bewick's wren	*Thryomanes bewickii*					X	X	X
House wren	*Troglodytes aedon*		X				X	X
Marsh wren	*Cistothorus palustris*				X	X		
Northern mockingbird	*Mimus polyglottos*		X		X	X	X	
European starling	*Sturnus vulgaris*	Non-native	X	X	X	X	X	X
Western bluebird	*Sialia mexicana*		X			X	X	X
Hermit thrush	*Catharus guttatus*						X	X
American robin	*Turdus migratorius*					X	X	X
House sparrow	*Passer domesticus*	Non-native				X	X	
American pipit	*Anthus rubescens*						X	
House finch	*Carpodacus mexicanus*		X		X	X	X	X
Purple finch	*Haemorhous purpureus*						X	X
Lesser goldfinch	*Carduelis psaltria*				X	X	X	X
American goldfinch	*Carduelis tristis*		X				X	X
Fox sparrow	*Passerella iliaca*				X		X	X
Dark-eyed junco	*Junco hyemalis*		X	X	X	X	X	X
White-crowned sparrow	*Zonotrichia leucophrys*		X		X	X	X	X
Golden-crowned sparrow	*Zonotrichia atricapilla*		X		X		X	X
Savannah sparrow	*Passerculus sandwichensis*					X		

2
CONT

Species	***Scientific name***	**Status[1]**	**KSS 2019**	**KSS 2021**	**KSS offsite 2019, 2021**	**M&A 2006-2019**	**PRC 2023**	**FCS 2023**
Song sparrow	*Melospiza melodia*				X	X	X	X
Lincoln's sparrow	*Melospiza lincolnii*				X			
California towhee	*Pipilo crissalis*		X		X		X	X
Spotted towhee	*Pipilo maculatus*					X		
Western meadowlark	*Sturnella neglecta*		X					
Bullock's oriole	*Icterus bullockii*	BCC				X		
Red-winged blackbird	*Agelaius phoeniceus*		X		X	X	X	X
Brown-headed cowbird	*Molothrus ater*				X	X	X	X
Brewer's blackbird	*Euphagus cyanocephalus*		X		X	X	X	
Yellow-rumped warbler	*Setophaga coronata*		X	X	X	X	X	X
Black-tailed jackrabbit	*Lepus californicus*					X	X	X
Botta's pocket gopher	*Thomomys bottae*				X			
Western gray squirrel	*Sciurus griseus*					X		
California ground squirrel	*Otospermophilus beecheyi*				X	X		
Raccoon	*Procyon lotor*			X				
Coyote	*Canis latrans*					X		
House cat	*Felis catus*					X	X	X
Mule deer	*Odocoileus hemionus*						X	X
Columbian black-tailed deer	*Odocoileus hemionus ssp. columbianus*					X		
California vole	*Microtus californicus*						X	X

[1] Listed as FT or FE = federal threatened or endangered, CT or CE = California threatened or endangered, CFP = California Fully Protected (CFG Code 3511), SSC = California Species of Special Concern, BCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, TWL = Taxa to Watch List (Shuford and Gardali 2008), and BOP = Birds of Prey (California Fish and Game Code 3503.5).

2 CONT

EXISTING ENVIRNMENTAL SETTING

The first step in analysis of potential project impacts to biological resources is to accurately characterize the existing environmental setting, including the biological species that use the site, their relative abundances, how they use the site, key ecological relationships, and known and ongoing threats to those species with special status. A reasonably accurate characterization of the environmental setting can provide the basis for determining whether the site holds habitat value to wildlife, as well as a 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 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 needed steps have been completed but their results misrepresented in the DEIR. 3

Environmental Setting Informed by Field Surveys

To 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 project site or nearby, 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.

Having completed many surveys on and around the project site between 2006 and 2019, Monk & Associates detected 62 species of vertebrate wildlife, including 10 special-status species (Table 1). However, Monk & Associates reported no details of their surveys, such as names and qualifications of survey personnel, survey start times, and survey duration. The reporting did not include the information needed to interpret findings. Nevertheless, 61 species is a lot of species to be found during what were reconnaissance surveys. 4

Pinecrest Research Corp completed 11 surveys in 2023, accumulating a list of 61 species detected, including 10 special-status species (Table 1). However, did not report how long their surveys lasted, and this missing detail impinges on interpretation of the survey findings. Nevertheless, 62 species is a lot of species to be found during what were essentially reconnaissance surveys.

FCS (2023a) reports to have detected 46 species of vertebrate wildlife at the project site, which is a lot of species relative to most other reconnaissance survey efforts I have reviewed involving hundreds of other project sites. Six (13%) of the 46 species were special-status species. These species detections resulted from two surveys, the first on December 2, 2022, and the second on March 17, 2023, plus "Seven pre-construction surveys … between January 18 and April 7, 2023, for a total of approximately 30 survey hours … for the entirety of the Commerce 217 project site and relevant adjacent areas (which included the adjacent SDG Commerce 220 site). FCS's detection of 46 species

over 30+ hours reflected a less productive survey effort compared to Monk & associates and Pinecrest Research Corp.

FCS (2023a) neglects to report critically important methodological details about the two site-specific surveys, such as what time the surveys began and how long they lasted. Nothing was reported about weather conditions. There is no report of the number of biologists who performed the surveys. Therefore, it is difficult to determine why the species detections numbered fewer than I would expect. 4 CONT

The objectives of FCS's (2023a) reconnaissance surveys were "to ascertain general site conditions, wildlife use, and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field survey for mapping accuracy." Unclear was whether these multiple objectives were pursued sequentially or simultaneously. If simultaneously, then I suggest the biologists would have been disadvantaged by trying to see too much at once, and therefore achieved an inferior species detection rate. 5

As for the preconstruction surveys, they were described as focused on burrowing owl detections, nesting Swainson's hawks, other nesting birds, and pond turtles. Focused surveys would have detracted from seeing as many of the available species of wildlife as possible, which is the principal objective of reconnaissance surveys. In other words, preconstruction surveys are in pursuit of objectives other than those typical of reconnaissance surveys. Furthermore, preconstruction surveys lose their focus for a given species if the surveys are performed simultaneously for burrowing owls, Swainson's hawks, other nesting raptors, other nesting birds, and pond turtles, and they would have lost focus had they been performed simultaneously for any combination of two of these groups, let alone all four groups. Preconstruction surveys should be performed separately for burrowing owls, Swainson's hawks, nesting birds, and pond turtles. In fact, the CDFW (2000) guidelines clearly state, "Surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson's hawks" and "Minimize distractions while surveying." 6

Regarding preconstruction surveys for nesting Swainson's hawks on the neighboring SDG Commerce 217 site, FCS (2023a:19) reports, "Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) and the Staff Report on Burrowing Owl Mitigation*." In fact, the surveys did not meet the timing recommendations of the cited Swainson's hawk guidelines. No surveys were completed in Period V. I will also note that although the three surveys of Period III were technically within the date range of Period III, the survey dates were 5, 6, and 7 April, which are the very first three days of Period III, and when most Swainson's hawks have yet to return from their migration to Mexico. The dates of the surveys appear to me to have been selected to minimize the likelihood of detection of Swainson's hawks. This impression is inconsistent with the first line of the CDFW's (2020) survey guidelines under Methodology, where it states "Surveys should be

conducted in a manner that maximizes the potential to observe the adult Swainson's hawks…"

6 CONT

Pinecrest Research Corp reportedly completed special-status species surveys across the entirety of the SDG Commerce 220 site. Survey personnel from Pinecrest were the same survey personnel identified for the SDG Commerce 217 site on the same dates, so it appears that the same two biologists performed the surveys for the same named taxa on the same dates. FCS (2023a:20) reports, "Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) and the Staff Report on Burrowing Owl Mitigation*." In fact, the Swainson's hawk surveys did not meet the timing recommendations of the cited guidelines, as noted above. Additionally at the SDG 220 site, three surveys were completed during Period IV of the guidelines even though the guidelines state in bold font not to survey during Period IV. Only one of the three surveys were completed in Period V.

7

Moreover, FCS (2023a) neglects to mention in the context of the reporting of these special-status species surveys that the SDG Commerce 220 site of the surveys was graded on 29 May 2023, and that the site was in a graded condition over the last 35 days of the surveys. If Swainson's hawks were nesting adjacent to the site, the grading activity likely would have disturbed the nests to the degree that the Swainson's hawks abandoned the nest attempt. This grading activity should have been immediately reported to CDFW, and it should have been clearly reported biological technical reports that were prepared for the DEIR.

8

The special-status species surveys did not achieve the minimum standards of CDFW's (2012) burrowing owl survey guidelines, either. FCS (2023b) identifies the first three burrowing owl surveys as breeding-season surveys. They were not. Burrowing owls do not breed in January, which means the 18 January survey was not a breeding-season survey as reported. Although CDFW (2012) recommends one survey between 15 February and 15 April, burrowing owls are only sorting out pair bonds and scouting out nest sites during this time. In my experience, burrowing owls do not commit to nest attempts until late April and early May (Smallwood et al. 2013). Therefore, the two surveys in March were not really breeding-season surveys. CDFW (2012) recommends 2-3 surveys between 15 April and 15 July, but FCS might have completed one survey on 24 April (it is unclear that FCS did do a survey on 24 April), but failed to meet the survey standard. Furthermore, FCS (2023b) is silent on the grading of the project site on 29 May 2023. The grading of the site could have affected the likelihood of detection of burrowing owls, and should have been reported as recommended by CDFW (2012).

9

The special-status species surveys are also described as "Nesting bird surveys" (FCS 2023a). Birds do not nest in January, which means the 18 January survey was not a nesting-season survey as reported. Having surveyed to estimate total nest density at two research sites, I can point out that the surveys did not extend far enough into the breeding season to detect all of the available nests. More importantly, however, if it was true that "FCS Biologists observed no active nests within the vicinity of the project site," then the FCS biologists were not qualified to survey for nesting birds. I find nesting

10

birds at every site I survey for nesting birds, even in grasslands, but most especially at a site surrounded by trees. It is not believable that presumably competent biologists would have surveyed the site repeatedly through the breeding season only to have found no nesting attempts by birds.

10 CONT

FCS (2023b:3) reports, "No evidence of western pond turtle activity was observed during any of the field surveys. There are some wetland features on-site, however no ponds or streams suitable for western pond turtle exist onsite and no signs of adults or nests were observed." This reporting is misleading. Western pond turtles would not visit the project site for the small wetlands that occur on it. Western pond turtles visit grassland sites to breed. They lay their eggs in ground squirrel or pocket gopher burrows.

11

Though there can be some overlap in methodology, the methods required for the detection of each of the targeted taxonomic groups of special-status species surveys are unique. As examples, surveys for Swainson's hawks requires scans toward the sky, whereas surveys for western pond turtles required scans toward the ground. Each taxonomic group has its own survey guidelines, and those who prepared each set of guidelines expected survey personnel to focus on the taxon that is the subject of the guidelines. The surveys performed by FCS and Pinecrest Research Corp targeted Swainson's hawk, burrowing owl, other nesting raptors, other nesting birds and western pond turtle simultaneously and using a common methodology. I therefore do not see how the survey guidelines of each taxonomic group could have been implemented.

12

Lastly, with regard to the IS/MND prepared for the SDG Commerce 217 project, FCS (2023b:3) asserts that "With implementation of the pre-construction surveys, and implementation of the recommendations for Swainson's hawk, burrowing owl, nesting birds, and western pond turtle, the project is in compliance with MM BIO-1, MM BIO-2, MM BIO-3, MM BIO-4 and MM BIO-5." First, there was no MM BIO-5. But second, the preconstruction surveys of all four mitigation measures failed to meet their scheduling standards relative to the date when ground was broken for project construction.

Field notes reported by Pinecrest Research Corp. reveal that site 217 was graded on 29 April 2023, and site 220 was graded on 28 May 2023. FCS (2023a:2) reports "as part of the SDG Commerce 217 development, much of the SDG Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil[1] for use as clean fill material for the SDG Commerce 217 site." This the use of site 220 as a soil borrow in support of the SDG Commerce 217 project was addressed in an IS/MND circulated by the City in 2020. The whole of the project, as acknowledged by FCS's above-quoted reporting, included the SDG Commerce 217 construction and the soil-borrow from adjacent site 220. The mitigation measures directed to biological resources

13

[1] Monk & Associates (2020b) does not refer to any stockpiled soil on site 220, and I did not see any there when I visited the site in January 2021. Google Earth Imagery shows no evidence of stockpiled soil on the SDG Commerce 220 site on 10 July 2022, nor on earlier dates.

of the SDG Commerce 217 project therefore applied to the soil-borrow portion of the project on site 220 as well. Ground-breaking of the SDG Commerce 217 project included the grading of site 220 for the soil borrow.

According to Mitigation Measure BIO-1 of the IS/MND prepared for the SDG Commerce 217 project, "A preconstruction survey for burrowing owls shall be conducted 14 days prior or less to initiating ground disturbance." The last survey completed, however, was on 28 April 2023, which was 31 days prior to ground-breaking. The project went forward out of compliance with Mitigation Measure BIO-1, and therefore it is unknown whether take of burrowing owls was avoided.

According to Mitigation Measure BIO-2 of the IS/MND, "Pre-construction surveys for nesting Swainson's hawks shall be conducted for a quarter-mile radius around all project activities and shall be completed for at least two survey periods immediately prior to a project's initiation. The surveys shall be conducted in accordance with CDFW's "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" (CDFG 2000), …" However, no Swainson's hawk surveys were completed in period V. In fact, construction of site 217 and ground-breaking of site 220 both began in period IV – the most delicate period of the Swainson's hawk breeding season. The project went forward out of compliance with Mitigation Measure BIO-2, and therefore it is unknown whether take of Swainson's hawks was avoided.

13
CONT

According to Mitigation Measure BIO-3 of the IS/MND, "In order to avoid impacts to nesting raptors, a preconstruction nesting survey shall be conducted by a qualified raptor biologist prior to commencing with earth-moving or construction work if this work would commence between February 1st and August 31st. The survey shall be conducted within the 30-day period prior to site disturbance." However, no ground-nesting raptor survey or raptor survey of any kind was completed within 30 days of earth-moving work on the site of SDG Commerce 220. The project went forward out of compliance with Mitigation Measure BIO-3, and therefore it is unknown whether take of nesting raptors was avoided.

According to Mitigation Measure BIO-4 of the IS/MND, "To ensure that impacts to nesting passerine birds are avoided, a nesting survey shall be conducted within 15 days prior to commencing construction/ grading or tree removal activities if this work would commence between March 1 and September 1." No such survey was completed within 15 days prior to grading. The project went forward out of compliance with Mitigation Measure BIO-4, and therefore it is unknown whether take of nesting passerine birds was avoided.

The City failed to enforce the implementation of all four of the IS/MND's mitigation measures intended to protect special-status species of wildlife on the SDG Commerce 220 site. There were no other mitigation measures directed towards biological resources – there were only these four measures – none of which were implemented as prescribed. By not implementing the measures as prescribed, the last several surveys completed by Pinecrest Research Corp detected many fewer species of wildlife indicative of adverse

effects of both mowing and groundbreaking (Figure 3). The survey that followed mowing yielded only 21% of the number of species that had been detected in early April, and the survey that followed the grading of the site yielded 0% of the number of species that had been detected earlier. The impacts to wildlife due to mowing and ground-breaking were significant.

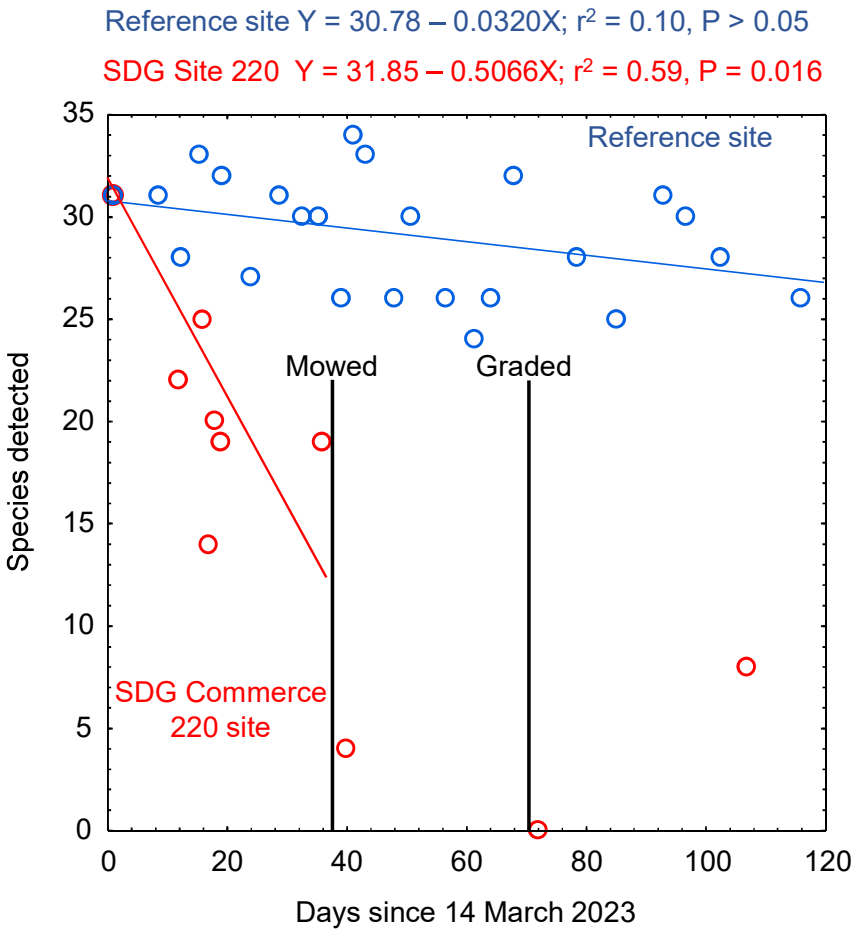

Figure 3. *The number of vertebrate wildlife species detected by survey date completed by myself within 40 minutes of the survey start time at a reference site (blue), and by Pinecrest Research Corp on the SDG Commerce 220 site (red), which as of 28 May 2023 was used as the soil borrow site for the SDG Commerce 217 project. Vertical lines depict about when site 220's vegetation was mowed and when ground was broken (graded) for the soil borrow.*

13
CONT

During the breeding season of 2023, I happened to survey for wildlife over the same date range in Rancho Cordova, which I use herein as a reference site. All of my reference site surveys began in early morning, and from these surveys I restricted my species tallies to the first 40 minutes of each survey in order to establish a comparable maximum count of species (my actual survey times lasted hours per survey). Whereas the number of species I detected within 40 minutes at my reference site did not decline significantly, the number of species detected by Pinecrest Research Corp did decline significantly through the date of mowing of the site's vegetation (Figure 3). My surveys at the reference site established that the decline at site 220 was unlikely due to season. A

likely explanation for the decline until the date of mowing was a decline in the time spent surveying. Had the number of species declined at my reference site due to a decline in survey time, then I would have had to lessen my survey time to only 8.5 minutes by 24 April 2023 in order to achieve the same level of decline measured at site 220. Such a survey duration would have been much too brief for a 10.17-acre site. However, whether the survey time was reduced at site 220 remains unknown because survey duration was not reported.

13 CONT

Not only were the preconstruction surveys not performed when they were supposed to be performed just prior to ground-breaking on site 220, but as noted earlier, they were not implemented to achieve the minimum standards of their respective survey protocols. This means that absence determinations were unsupportable for Swainson's hawk, burrowing owl, nesting raptors, other nesting birds, western pond turtle, and any other species for which detection survey protocols or guidelines are available, or for which detection survey protocols or guidelines are unavailable but for which survey methods linked to scientific standards can be appropriated. The entries of Absent and None under Occurrence Potential of Table 2 are unsupported, and therefore unreliable.

14

FCS (2023a) reports that Pinecrest Research Corp completed protocol-level rare plant surveys. However, the surveys did not achieve the minimum standards of the CDFW (2018) survey guidelines. For one thing, the last survey was completed after site 220 was graded, thereby restricting the survey to the graded field's periphery. There was also no survey of a reference site. The same biologists who did the wildlife surveys also did the plant surveys, and they surveyed for both plants and wildlife on the same dates. If the wildlife and plant surveys were simultaneous, then the focus needed for either taxonomic group was lacking.

15

Environmental Setting Informed by Desktop Review

The purpose of literature and database review, and of consulting with local experts, is to inform the reconnaissance-level survey, to augment it, and to help determine which protocol-level detection surveys should be implemented. 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 site conditions. This step is important because the reconnaissance survey is not going to detect all of the species of wildlife that make use of the site. This step can identity those species yet to be detected at the site but which have been documented to occur nearby or whose available habitat associations are consistent with site conditions. Some special-status species can be ruled out of further analysis, but only if compelling evidence is available in support of such determinations (see below).

16

FCS (2023a) lists its literature and database sources relied upon in its desktop analysis, including reports by Monk & Associates and Pinecrest Research Corp. that were prepared for SDG Commerce 217 and 330. I note that it would have been appropriate to have also relied on my expert testimony I provided on SDG Commerce 330 and SDG Commerce 217. One of CEQA's primary objectives is that the environmental review be informative of the current environmental setting. My testimony provided observations

of wildlife – including special-status species of wildlife – on the project site. One such species was bald eagle. Another adjacent to the site was peregrine falcon. These and other observations should be included in the DEIR.

To compile its list of potentially-occurring special-status species for inclusion in its analysis of occurrence likelihoods, the DEIR relies principally on queries of the iPac and the California Natural Diversity Data Base (the CNDDB). FCS (2023a:19) adds, "Online resources such as eBird and California Herps were also consulted, as necessary." However, it is unclear how "as necessary" applies, nor is it clear how California Herps could have been used other than to check site 220's location and environmental setting against the geographic range maps and habitat characterizations of each species in California Herps. It is also clear from my review of eBird that FCS (2023a) did not consult eBird (Table 2).

The DEIR's Exhibit 3.3-3 (FCS 2023a: Exhibit 6) depicts a map of the results of the CNDDB queries. It is uninformative, as it fails to identify any of the species depicted on the map.

According to the DEIR, the initial pool of special-status species considered for inclusion in its analysis of occurrence potential was drawn from queries of the CNDDB occurrence records on the local 7.5-minute Quadrangle and the eight surrounding Quads. This screening step, however, is flawed. The CNDDB is intended to aid the formulation of a list of species for inclusion in the analyses of occurrence likelihoods, but it is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community. As noted by the CNDDB, "*The CNDDB is a positive sighting database. It does not predict where something may be found. We map occurrences only where we have documentation that the species was found at the site. There are many areas of the state where no surveys have been conducted and therefore there is nothing on the map. That does not mean that there are no special status species present.*" FCS (2023a) and the DEIR misuse the CNDDB. 16 CONT

The CNDDB relies entirely on volunteer or permit reporting from biologists who were allowed access to whatever properties they report from. Many properties have never been surveyed by biologists. Many properties have been surveyed, but the survey outcomes never reported to the CNDDB. Many properties have been surveyed multiple times, but not all survey outcomes reported to the CNDDB. Furthermore, CNDDB is interested only in the findings of special-status species, which means that species more recently assigned special status will have been reported many fewer times to the CNDDB than were species assigned special status since the CNDDB's inception. The lack of CNDDB records for species only recently assigned special status would have been due to insufficient time having elapsed since the assignments. And because negative findings are not reported to the CNDDB, the CNDDB cannot provide the basis for estimating occurrence likelihoods, either. The DEIR's analysis of special-status species occurrence likelihoods is fundamentally flawed.

Table 2. *Occurrence likelihoods of special-status bird species according to Monk & Associates (M&A), Pinecrest Research Corp, (PRC), and FirstCarbon Solutions (FCS), and my own review of site visits and eBird/iNaturalist records (https://eBird.org, https://www.inaturalist.org), where 'Very close' indicates records within 1.5 miles of the site, "nearby" indicates records within 1.5 and 4 miles, and "in region" indicates records within 4 and 30 miles, and 'in range' means the species' geographic range overlaps the site. Entries in bold font identify species I detected.*

Common name	***Species name***	**Status[1]**	**Occurrence potential**			
			FCS	**M&A**	**PRC**	**KSS**
Conservancy fairy shrimp	*Branchinecta conservatio*	FE				In region
Vernal pool fairy shrimp	*Branchinecta lynchi*	FT	Absent	None		In region
California freshwater shrimp	*Syncaris pacifica*	FE, CE	Absent			In region
Monarch	*Danaus plexippus*	FC	Low			Very close
Crotch's bumble bee	*Bombus crotchii*	CCE	Absent			Nearby
California tiger salamander	*Ambystoma californiense*	FT, CT, WL				In region
California giant salamander	*Dicamptodon ensatus*	SSC	Absent			In region
Red-bellied newt	*Taricha rivularis*	SSC	Absent			In region
Foothill yellow-legged frog	*Rana boylii*	CT, SSC	Absent	None		In region
California red-legged frog	*Rana draytonii*	FT, SSC	Absent	None		In region
Western pond turtle	*Emys marmorata*	SSC	Low	None	Absent	Very close
Brant	*Branta bernicla*	SSC2				Nearby
Cackling goose (Aleutian)	*Branta hutchinsii leucopareia*	WL				Very close
Redhead	*Aythya americana*	SSC2				Very close
Harlequin duck	*Histrionicus histrionicus*	SSC2				In region
Barrow's goldeneye	*Bucephala islandica*	SSC				Very close
Western grebe	*Aechmophorus occidentalis*	BCC				Very close
Clark's grebe	*Aechmophorus clarkii*	BCC				Very close
Western yellow-billed cuckoo	*Coccyzus americanus occidentalis*	FT, CE, BCC				In region
Black swift	*Cypseloides niger*	SSC3, BCC	Absent			Nearby

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CONT

Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
Vaux's swift	*Chaetura vauxi*	SSC2, BCC				Very close
Costa's hummingbird	*Calypte costae*	BCC				In region
Rufous hummingbird	*Selasphorus rufus*	BCC				Very close
Allen's hummingbird	*Selasphorus sasin*	BCC				On site
Yellow rail	*Coturnicops noveboracensis*	SSC, BCC	Absent			In region
California Ridgway's rail	*Rallus obsoletus obsoletus*	FE, CE, CFP	Absent	None		Very close
American avocet[2]	*Recurvirostra americana*	BCC				Very close
Mountain plover	*Charadrius montanus*	SSC2, BCC				In region
Snowy plover	*Charadrius nivosus*	BCC				Very close
Western snowy plover	*Charadrius nivosus nivosus*	FT, SSC, BCC	Absent			In region
Whimbrel[2]	*Numenius phaeopus*	BCC				Very close
Long-billed curlew	*Numenius americanus*	WL				Very close
Marbled godwit	*Limosa fedoa*	BCC				Very close
Red knot (Pacific)	*Calidris canutus*	BCC				Very close
Short-billed dowitcher	*Limnodromus griseus*	BCC				Very close
Willet	*Tringa semipalmata*	BCC				Very close
Laughing gull	*Leucophaeus atricilla*	WL				In region
Heermann's gull	*Larus heermanni*	BCC				In region
Western gull	*Larus occidentalis*	BCC				Very close
California gull	*Larus californicus*	BCC, WL				On site
California least tern	*Sternula antillarum browni*	FE, CE, FP				Very close
Black tern	*Chlidonias niger*	SSC2, BCC				Nearby
Elegant tern	*Thalasseus elegans*	BCC, WL				Nearby
Black skimmer	*Rynchops niger*	BCC, SSC3				Nearby
Common loon	*Gavia immer*	SSC				Very close
Brandt's cormorant	*Urile penicillatus*	BCC				In region
Double-crested cormorant	*Phalacrocorax auritus*	WL				Very close
American white pelican	*Pelacanus erythrorhynchos*	SSC1, BCC				On site

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CONT

Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
California brown pelican	*Pelecanus occidentalis californicus*	FP				Very close
Least bittern	*Ixobrychus exilis*	SSC2				In region
White-faced ibis	*Plegadis chihi*	WL				Very close
Turkey vulture	*Cathartes aura*	BOP				On site, **Very close**
Osprey	*Pandion haliaetus*	WL, BOP				On site
White-tailed kite	*Elanus luecurus*	CFP, BOP	Low			On site
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP, BOP, WL	Low			Very close
Northern harrier	*Circus cyaneus*	BCC, SSC3, BOP	Low	Unlikely to nest onsite		**On site**
Sharp-shinned hawk	*Accipiter striatus*	WL, BOP				Very close
Cooper's hawk	*Accipiter cooperii*	WL, BOP				**On site**
Bald eagle	*Haliaeetus leucocephalus*	CE, BGEPA, BOP				**On site**
Red-shouldered hawk	*Buteo lineatus*	BOP				On site, **Very close**
Swainson's hawk	*Buteo swainsoni*	CT, BOP	Low	Unlikely to nest adjacent to project site	Absent	Very close
Red-tailed hawk	*Buteo jamaicensis*	BOP				**On site**
Ferruginous hawk	*Buteo regalis*	WL, BOP		None		Very close
Rough-legged hawk	*Buteo lagopus*	BOP				Nearby
Barn owl	*Tyto alba*	BOP				On site
Western screech-owl	*Megascops kennicotti*	BOP				Nearby
Great horned owl	*Bubo virginianus*	BOP				**On site**
Burrowing owl	*Athene cunicularia*	BCC, SSC2, BOP	Low	Unlikely to nest on the project site	Absent	Very close
Long-eared owl	*Asio otus*	BCC, SSC3, BOP				In region
Short-eared owl	*Asia flammeus*	BCC, SSC3, BOP				In region
Lewis's woodpecker	*Melanerpes lewis*	BCC				Nearby

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Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
Nuttall's woodpecker	*Picoides nuttallii*	BCC				**On site**
American kestrel	*Falco sparverius*	BOP				**On site**
Merlin	*Falco columbarius*	WL, BOP				Very close
Peregrine falcon	*Falco peregrinus*	BOP	Absent	None		On site, **Very close**
Prairie falcon	*Falco mexicanus*	WL, BOP				Very close
Olive-sided flycatcher	*Contopus cooperi*	BCC, SSC2				Very close
Willow flycatcher	*Empidonax trailii*	CE				Very close
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2				In region
Loggerhead shrike	*Lanius ludovicianus*	SSC2				Very close
Oak titmouse	*Baeolophus inornatus*	BCC				Very close
California horned lark	*Eremophila alpestris actia*	WL				Very close
Bank swallow	*Riparia riparia*	CT	Absent			Nearby
Purple martin	*Progne subis*	SSC2				Nearby
Wrentit	*Chamaea fasciata*	BCC				Very close
California thrasher	*Toxostoma redivivum*	BCC				Nearby
Cassin's finch	*Haemorhous cassinii*	BCC				In region
Lawrence's goldfinch	*Spinus lawrencei*	BCC				Very close
Grasshopper sparrow	*Ammodramus savannarum*	SSC2				Nearby
Samuel's song sparrow	*Melospiza melodia samuelis*	BCC, SSC	Absent	None		In range
Black-chinned sparrow	*Spizella atrogularis*	BCC				In region
Bell's sparrow	*Amphispiza b. belli*	WL				In region
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC2, BCC				Nearby
Yellow-breasted chat	*Icteria virens*	SSC3				In region
Yellow-headed blackbird	*X. xanthocephalus*	SSC3	Absent			Very close
Bullock's oriole	*Icterus bullockii*	BCC				Very close
Tricolored blackbird	*Agelaius tricolor*	CT, BCC, SSC1	Absent	None		Very close
Lucy's warbler	*Leiothlypis luciae*	SSC3, BCC				In region
Virginia's warbler	*Leiothlypis virginiae*	WL, BCC				In region
San Francisco common yellowthroat	*Geothlypis trichas sinuosa*	SSC3, BCC	Absent	None		In range

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CONT

Common name	*Species name*	Status[1]	Occurrence potential			
			FCS	M&A	PRC	KSS
Yellow warbler	*Setophaga petechia*	SSC2				Very close
Summer tanager	*Piranga rubra*	SSC1				Very close
Pallid bat	*Antrozous pallidus*	SSC, WBWG:H	Low			In region
Townsend's big-eared bat	*Corynorhinus townsendii*	SSC, WBWG:H				In region
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M				In region
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H				In region
Hoary bat	*Lasiurus cinereus*	WBWG:M				In region
Miller's myotis	*Myotis evotis*	WBWG:M				In region
Little brown myotis	*Myotis lucifugus*	WBWG:M				In region
Fringed myotis	*Myotis thysanodes*	WBWG:H				In range
Yuma myotis	*Myotis yumanensis*	WBWG:LM				In region
Suisun shrew	*Sorex ornatus sinuosus*	SSC	Absent			In range
Salt-marsh harvest mouse	*Reithrodontomys raviventris*	FE, CE, FP	Absent	None		In region
American badger	*Taxidea taxus*	SSC	Absent			In region

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CONT

[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).
[2] Uncertain if BCC based on 2021 Bird of Conservation Concern list.

As an example of how the CNDDB fails to serve as a comprehensive database of special-status species occurrences, FCS (2023a:42) reports, "The closest [white-tailed kite] CNDDB record was documented 5.3 miles north of the project site (CNDDB Occurrence No. 181)." Had Monk & Associates reported its observation(s) of white-tailed kite during its surveys of 2006–2019, then the nearest CNDDB record(s) would have been on the site.

In another example, FCS (2023a:41) reports, "The closest [northern harrier] CNDDB record was documented 2.8 miles west of the project site (CNDDB Occurrence No. 29). No individual northern harriers or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023." In fact, a northern harrier was observed just south of the site by me, as it flew right over my head. My observation was reported to the City via my comment letter on the potential impacts of the SDG Commerce 330 project, but it is not in the CNDDB. 16 CONT

Regarding Swainson's hawks, FCS (2023a:40) reports that "No individual Swainson's hawk or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023." A shortfall of this reporting is the failure to note that about a third of the cited surveys were completed while Swainson's hawks were yet to return from their annual migration to Mexico. Another shortfall is the failure to note seven eBird records of Swainson's hawks on American Canyon Wetlands, and one of the records as recently as 28 June 2024. I have twice found Swainson's hawks in the area, including a nesting pair with at least one fledgling only three miles north-northeast of the project site. 17

In my assessment based on database reviews and a site visit, 114 special-status species of wildlife are known to occur near enough to the site to be analyzed for occurrence potential at one time or another (Table 2). Of these, 16 (14%) have been reported on the project site, and 43 (38%) have been documented in databases within 1.5 miles of the site ('Very close'), 14 (12%) within 1.5 and 4 miles ('Nearby'), and another 37 (32%) within 4 to 30 miles ('In region'). More than half (62) of the special-status species in Table 2 have been reportedly seen within 4 miles of the project site. The site therefore likely supports many special-status species of wildlife. On any given day, one or more yet-to-be documented special-status species likely makes use of the project site, but being there to document that use probably requires multiple surveys (see Figures 1 and 2). Reconnaissance surveys are not designed to support absence determinations of any of these species. Therefore, sufficient survey effort should be directed to the site to either confirm that the species in Table 2 use the site or to support absence determinations. 18

Of the 114 special-status species in Table 2, FCS (2023a) and the DEIR analyze the occurrence likelihoods of only 28 (25%) of them. Of these 25 species analyzed by FCS, three are inconsistent in their occurrence likelihood determinations between FCS, Monk & Associates, and Pinecrest Research Corp. These inconsistencies apply to western pond

turtle, Swainson's hawk, and burrowing owl – three of the species of greatest special concern. Three more species were assigned occurrence likelihoods of low and absent, but I detected all three of these species – northern harrier, white-tailed kite and peregrine falcon – at or next to the project site. Nine more species were assigned occurrence likelihoods of low and absent, but occurrence records exist for these species within 1.5 miles of the project site. Two more species were assigned occurrence likelihoods of absent, but occurrence records exist for these species between 1.5 and 4 miles of the project site. Half of the special-status species analyzed by FCS (2023a) for occurrence likelihoods are assigned likelihoods that comport poorly with databases of occurrence records and my site visits. 18 CONT

FCS (2023a) repeatedly concludes that occurrences on the project site of various taxa, such as burrowing owl, white-tailed kite, bird nests, western pond turtle, bats, and monarch, "cannot be ruled out." This question of whether a species, guild, or nests can be ruled out appears supererogatory. Without the support of protocol-level detection surveys, very few wildlife species whose geographic ranges overlap the project site can be determined absent, which means they cannot be ruled out.

FCS (2023a) also characterizes potential occurrences of special-status species as the occurrences of vagrants. For example, burrowing owls that might visit the site are referred to as vagrants. Having researched burrowing owls over many years, it is unclear to me what FCS means by vagrant burrowing owls. I suggest the term is meaningless. 19

FCS (2023a:41) claims that "Nesting white-tailed kite habitat consists mainly of oak and sycamore woodlands…" This is not the case in my experience (Erichsen et al. 1996; monitoring over past four years by K. S. Smallwood, unpublished data). I see no reason why white-tailed kites would not nest next to or nearby the project site. The white-tailed kites observed on site by Pinecrest Research Corp were likely foraging in support of a nest attempt nearby, as the kites were seen during the breeding season. In my experience, white-tailed kites will travel up to several miles from nest sites to forage, but nest sites are abandoned after too much forage is eliminated within the breeding territory; that is, white-tailed kites are sensitive to habitat loss. 20

Another flaw of the characterization of the existing environmental setting is found where FCS (2023a:42) speculates, "Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat." No evidence is presented in support of the claim that the project site provides only marginal foraging opportunities to nesting birds. 21

POTENTIAL BIOLOGICAL IMPACTS

An impacts analysis should consider whether and how a proposed project would affect members of a species, larger demographic units of the species, the whole of a species, and ecological communities. The accuracy of this analysis depends on an accurate characterization of the existing environmental setting. In the case of the proposed project, the existing environmental setting has not been accurately characterized, and 22

several important types of potential project impacts have been inadequately analyzed. These types of impacts include habitat loss, interference with wildlife movement, and wildlife-automobile collision mortality.

HABITAT LOSS

Habitat loss results in a reduced productive capacity of affected wildlife species, but the DEIR 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, I surveyed patches of open space in northern California throughout the breeding seasons of 2023 and 2024. The most relevant study site to the vegetation cover on the project site consisted of a 4.22-acre patch of Grassland with a small wetland inclusion and two small willows east of Davis, where I estimated 7.11 nest sites/acre in 2024. Applying this estimate to the 10.17 acres of grassland-wetland on the project site would predict 72 nest sites. Assuming 1.39 broods per nest site, which is the average among 322 North American bird species, then I predict the project would cost California 100 nest attempts/year. 22 CONT

The loss of 72 nest sites and 100 nest attempts per year would qualify as significant impacts that have not been analyzed in the DEIR. 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 290 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 × chicks/nest × number of years) + (2 adults/nest × nests/year) × (number of years ÷ years/generation)} ÷ (number of years) = 319 birds per year denied to California.

INTERFERENCE WITH WILDLIFE MOVEMENT

One of CEQA's principal concerns regarding potential project impacts is whether a proposed project would interfere with wildlife movement in the region. Unfortunately, the DEIR's analysis of whether the project would interfere with wildlife movement in the region is flawed and misleading. According to FCS (2023a:44), the site is not a wildlife movement corridor because it "has a history of disturbance associated with eucalyptus 23

tree removal in 2012, and continued disturbance associated with the paintball facility located immediately to the southeast." And at page 44, "Field surveys and a query of CDFW's BIOS6 information on wildlife linkages in the Bay Area confirm the that the proposed project will not interfere with the movement of native wildlife." CDFEW's BIO6 does not pretend to know where all wildlife corridors and linkages are located. Moreover, and more importantly, whether the site functions as a wildlife movement corridor or is located within 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.

Moreover, the conclusions regarding whether the site functions as a corridor or is located within a corridor lack supporting evidence. Although FCS (2023a:21) reports "The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey… Conclusions are based on the information compiled during the literature review, aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity," this reporting fails to identify any specific field method and only vaguely connects potential lines of evidence. There was no sampling regime. There was no program of observation to record wildlife movement patterns, nor to quantify them or to qualitatively assess them. Based on what is reported, FCS (2023a) did not record or measure wildlife movement in any way. The conclusions of FCS (2023a) and the DEIR regarding wildlife movement on the project site are speculative and conclusory. 23 CONT

A site such as the project site is critically important for wildlife movement because it composes an increasingly diminishing area of open space within a growing expanse of anthropogenic uses, forcing more species of volant wildlife to use the site for stopover and staging during migration, dispersal, and home range patrol (Warnock 2010, Taylor et al. 2011, Runge et al. 2014). The project, due to its elimination of 10.17 acres of open space This impact would be significant, and as the project is currently proposed, it would be unmitigated.

TRAFFIC IMPACTS TO WILDLIFE

Project-generated traffic would endanger wildlife that must, for various reasons, cross roads used by the project's traffic to get to and from the project site (Photos 11—13), including along roads far from the project footprint. 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. 24

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 12,187 animals killed by traffic on the road. This fatality number over 1.25 years and 2.5 miles of road translates to 3,900 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 243,740 animals killed per 100 km of road per year, or 29 times that of Loss et al.'s (2014) upper bound estimate and 68 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.

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CONT

Photo 11. *A Gambel's quail dashes across a road* on *3 April 2021. Such road crossings are usually successful, but too often prove fatal to the animal. Photo by Noriko Smallwood.*

Photo 12. *Mourning dove killed by vehicle on a California road. Photo by Noriko Smallwood, 21 June 2020.*

Photo 13. *Raccoon killed on Road 31 just east of Highway 505 in Solano County. Photo taken on 10 November 2018.*

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 3,900 animals killed per mile along a county road in Contra Costa County. Two percent of the estimated number of fatalities were birds, and the balance was composed of 34% mammals (many mice and pocket mice, but also ground squirrels, desert cottontails, striped skunks, American badgers, raccoons, and others), 52.3% 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 11.7% 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.

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Predicting project-generated traffic impacts to wildlife

The DEIR predicts 2,568,115 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 × 2.5 miles × 365 days/year × 1.25 years = 22,242,187.5 vehicle miles per 12,187 wildlife fatalities, or 1,825 vehicle miles per fatality. This rate divided into the predicted annual VMT would predict 1,407 vertebrate wildlife fatalities per year.

Based on my analysis, the project-generated traffic would cause substantial, significant impacts to wildlife. The DEIR does not analyze this potential impact, nor does it 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.

CUMULATIVE IMPACTS

The DEIR (p. 3.3-46) establishes a flawed geographic scope of analysis, where it claims, "The geographic scope of the cumulative biological resources analysis is the project vicinity as the project activity would only affect the surrounding project area." This assertion is conclusory and inaccurate. For one thing, project-generated traffic would kill wildlife on roads as far from the project site as the project-generated traffic would extend. In another example, the loss of foraging opportunities at the project site could result in Swainson's hawks or white-tailed kites abandoning their nest sites 1 to 3 miles away.

The DEIR presents a flawed analysis of cumulative impacts, including to biological resources. The DEIR asserts that all biological impacts would be mitigated, thereby avoiding cumulative impacts to biological resources. The DEIR contrives the false standard that a given project impact is cumulatively considerable only when it has not been fully mitigated at the project level. It claims, "The proposed project's incremental contribution to these less than significant cumulative impacts would not be significant with adherence to the mitigation measures related to special-status species identified above (see MM BIO1a through MM BIO-1g) and compliance with other applicable standards and requirements under the comprehensive regulatory framework." The DEIR implies that cumulative impacts are really residual impacts left over by inadequate mitigation of project impacts. This notion of residual impacts being the source of cumulative impacts is inconsistent with CEQA's definition of cumulative effects. Individually mitigated projects do not negate the significance of cumulative impacts. If they did, then CEQA would not require a cumulative effects analysis. 25

The DEIR establishes a false standard: "If there is no impact associated with respect to a particular CEQA threshold, discussion of cumulative impacts is not required." This standard is inconsistent with the very CEQA definition of cumulative effects.

Regarding potential project contributions of cumulative effects to special-status species, the DEIR (p. 3.3-46) explains, "numerous laws and regulations are in place to protect biological resource within the cumulative project area, including, but not limited to CESA, federal Endangered Species Act, CWA, and applicable General Plan and Municipal Code requirements. Future projects within the cumulative geographic context would be required to comply with applicable federal, State, and local laws, regulations and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact special-status species. Because cumulative development has limited potential to support special-status species and would be required to comply with the above requirements, cumulative impacts related to special-status species would be less than significant." Similarly, at page 3.3-47, the DEIR claims, "none of the identified cumulative projects include wildlife corridors that connect to the proposed project site. Other areas surrounding the project site consist primarily of urban development or undeveloped land significantly surrounded by urban development. Any future development that occurs within the cumulative 26

analysis area would have to take into account the potential impacts to these corridors and mitigate as required under applicable laws and regulations. The cumulative projects are primarily located in urban or commercially developed areas and therefore are not likely to significantly impact wildlife movement corridors. Therefore, it can be reasonably assumed that there would be no cumulative impacts to fish and wildlife movement corridors." However, 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 provides no explanation of how implementing the particular requirements of the laws and regulations it cites would ensure that the project's incremental contributions to cumulative effects would not be cumulatively considerable. 26 CONT

Even if the cited policies and regulations were implemented in full, the same could be said of many other development projects. If the policies and regulations that all development projects must implement were effective, then one should not be able to measure significant changes to wildlife abundance and species richness that result from development projects. To test the efficacy of existing policies and regulations, Noriko Smallwood and I measured the impacts of habitat loss to wildlife caused by mitigated development projects. 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 laws and regulations. 27

The project's contribution to the cumulative effects of project-generated traffic mortality of wildlife can be predicted by comparing my findings above (or the findings of another suitable analytical approach) and comparing them to the cumulative predicted mortality from similar projects already built or in the planning stages or reasonably foreseeable in the future. For example, the SDG Commerce 217 project was predicted to generate 2,355 daily VMT, which project to one year would be 859,575 annual VMT. I do not know what the annual VMT might have resulted from the SDG Commerce 330 project, but assuming for the sake of argument that VMT is proportional the square-footage of floor space of the project warehouses, then annual VMT at the 330 site would be 1,307,508, and the total annual VMT of the three neighboring SDG Commerce projects would be 28

4,735,198. Assuming the rate of wildlife fatalities per annual VMT measured along Vasco Road in Contra Costa County would apply to the roadways in the region surrounding the SDG Commerce projects, then using the same methodology I used earlier would predict 2,595 wildlife fatalities per year. This same type of calculation should be extended to the other warehouses in the City of American Canyon to predict the cumulative traffic toll to wildlife in this region. 28 CONT

MITIGATION

MM BIO-1a Pre-construction Surveys for Swainson's Hawk

It is hard to take this measure seriously, because the City failed to enforce it in the case of the SDG Commerce 217 project (see my earlier comments on this issue). 29

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of Swainson's hawks caused by the project's habitat destruction.

MM BIO-1b Swainson's Hawk Avoidance and Minimization and Construction Monitoring

This measure, if implemented, would not avoid the reduction in productive capacity of Swainson's hawks caused by the project's habitat destruction. 30

MM BIO-1c Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)

It is hard to take this measure seriously, because the City failed to enforce it in the case of the SDG Commerce 217 project (see my earlier comments on this issue). 31

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of burrowing owls caused by the project's habitat destruction. Also, CDFW (2012) warns that passive relocation can be regarded as take.

MM BIO-1d Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

It is hard to take this measure seriously, because the City failed to enforce it in the case of the SDG Commerce 217 project (see my earlier comments on this issue). Moreover, the consultants hired to perform the preconstruction surveys before the SDG Commerce 217 project failed to detect any nesting birds, which is unbelievable. 32

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of birds caused by the project's habitat destruction. I predict that the loss of habitat caused by the project would deny Californians 290 birds per year, and impact that would not be avoided by preconstruction nest surveys.

MM BIO-1e Roosting Bat Pre-construction Survey and Avoidance

It is hard to take this measure seriously, because the City failed to enforce the preconstruction survey requirements in the case of the SDG Commerce 217 project (see my earlier comments on this issue). 33

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of bats caused by the project's habitat destruction.

MM BIO-1f Protection of Western Pond Turtles

It is hard to take this measure seriously, because the City failed to enforce the preconstruction survey requirements in the case of the SDG Commerce 217 project (see my earlier comments on this issue). 34

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of western pond turtles caused by the project's habitat destruction.

MM BIO-1g Protection of Overwintering Monarch Butterfly

It is hard to take this measure seriously, because the City failed to enforce the preconstruction survey requirements in the case of the SDG Commerce 217 project (see my earlier comments on this issue). 35

Furthermore, this measure, if implemented, would not avoid the reduction in productive capacity of monarchs caused by the project's habitat destruction.

RECOMMENDED 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). 36

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

Thank you for your attention,

Shawn Smallwood, Ph.D.

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Kenneth Shawn Smallwood
Curriculum Vitae

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

Ecologist

Expertise

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

Education

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

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Experience

- 480 professional publications, including:
- 83 peer reviewed publications
- 24 in non-reviewed proceedings
- 371 reports, declarations, posters and book reviews
- 8 in mass media outlets
- 87 public presentations of research results

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

Member, Alameda County Scientific Review Committee (SRC), August 2006 to April 2011. The five-member committee investigated causes of bird and bat collisions in the Altamont Pass Wind Resource Area, and recommended mitigation and monitoring measures. The SRC

reviewed the science underlying the Alameda County Avian Protection Program, and advised the County on how to reduce wildlife fatalities.

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

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

Part-time Lecturer, 1998-2005, California State University, Sacramento. Instructed Mammalogy, Behavioral Ecology, and Ornithology Lab, Contemporary Environmental Issues, Natural Resources Conservation.

Senior Ecologist, 1999-2005, BioResource Consultants. Designed and implemented research and monitoring studies related to avian fatalities at wind turbines, avian electrocutions on electric distribution poles across California, and avian fatalities at transmission lines.

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Chairman, Conservation Affairs Committee, The Wildlife Society--Western Section, 1999-2001. Prepared position statements and led efforts directed toward conservation issues, including travel to Washington, D.C. to lobby Congress for more wildlife conservation funding.

Systems Ecologist, 1995-2000, Institute for Sustainable Development. Headed ISD's program on integrated resources management. Developed indicators of ecological integrity for large areas, using remotely sensed data, local community involvement and GIS.

Associate, 1997-1998, Department of Agronomy and Range Science, University of California, Davis. Worked with Shu Geng and Mingua Zhang on several studies related to wildlife interactions with agriculture and patterns of fertilizer and pesticide residues in groundwater across a large landscape.

Lead Scientist, 1996-1999, National Endangered Species Network. Informed academic scientists and environmental activists about emerging issues regarding the Endangered Species Act and other environmental laws. Testified at public hearings on endangered species issues.

Ecologist, 1997-1998, Western Foundation of Vertebrate Zoology. Conducted field research to determine the impact of past mercury mining on the status of California red-legged frogs in Santa Clara County, California.

Senior Systems Ecologist, 1994-1995, EIP Associates, Sacramento, California. Provided consulting services in environmental planning, and quantitative assessment of land units for their

conservation and restoration opportunities basedon ecological resource requirements of 29 special-status species. Developed ecological indicators for prioritizing areas within Yolo County to receive mitigation funds for habitat easements and restoration.

Post-Graduate Researcher, 1990-1994, Department of Agronomy and Range Science*, U.C. Davis*. Under Dr. Shu Geng's mentorship, studied landscape and management effects on temporal and spatial patterns of abundance among pocket gophers and species of Falconiformes and Carnivora in the Sacramento Valley. Managed and analyzed a data base of energy use in California agriculture. Assisted with landscape (GIS) study of groundwater contamination across Tulare County, California.

Work experience in graduate school: Co-taught Conservation Biology with Dr. Christine Schonewald, 1991 & 1993, UC Davis Graduate Group in Ecology; Reader for Dr. Richard Coss's course on Psychobiology in 1990, UC Davis Department of Psychology; Research Assistant to Dr. Walter E. Howard, 1988-1990, UC Davis Department of Wildlife and Fisheries Biology, testing durable baits for pocket gopher management in forest clearcuts; Research Assistant to Dr. Terrell P. Salmon, 1987-1988, UC Wildlife Extension, Department of Wildlife and Fisheries Biology, developing empirical models of mammal and bird invasions in North America, and a rating system for priority research and control of exotic species based on economic, environmental and human health hazards in California. Student Assistant to Dr. E. Lee Fitzhugh, 1985-1987, UC Cooperative Extension, Department of Wildlife and Fisheries Biology, developing and implementing statewide mountain lion track count for long-term monitoring.

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

Projects

Repowering wind energy projects through careful siting of new wind turbines using map-based collision hazard models to minimize impacts to volant wildlife. Funded by wind companies (principally NextEra Renewable Energy, Inc.), California Energy Commission and East Bay Regional Park District, I have collaborated with a GIS analyst and managed a crew of five field biologists performing golden eagle behavior surveys and nocturnal surveys on bats and owls. The goal is to quantify flight patterns for development of predictive models to more carefully site new wind turbines in repowering projects. Focused behavior surveys began May 2012 and continue. Collision hazard models have been prepared for seven wind projects, three of which were built. Planning for additional repowering projects is underway.

Test avian safety of new mixer-ejector wind turbine (MEWT). Designed and implemented a before-after, control-impact experimental design to test the avian safety of a new, shrouded wind turbine developed by Ogin Inc. (formerly known as FloDesign Wind Turbine Corporation). Supported by a $718,000 grant from the California Energy Commission's Public Interest Energy Research program and a 20% match share contribution from Ogin, I managed a crew of seven field biologists who performed periodic fatality searches and behavior surveys, carcass detection trials, nocturnal behavior surveys using a thermal camera, and spatial analyses with the collaboration of a GIS

analyst. Field work began 1 April 2012 and ended 30 March 2015 without Ogin installing its MEWTs, but we still achieved multiple important scientific advances.

Reduce avian mortality due to wind turbines at Altamont Pass. Studied wildlife impacts caused by 5,400 wind turbines at the world's most notorious wind resource area. Studied how impacts are perceived by monitoring and how they are affected by terrain, wind patterns, food resources, range management practices, wind turbine operations, seasonal patterns, population cycles, infrastructure management such as electric distribution, animal behavior and social interactions.

Reduce avian mortality on electric distribution poles. Directed research toward reducing bird electrocutions on electric distribution poles, 2000-2007. Oversaw 5 founds of fatality searches at 10,000 poles from Orange County to Glenn County, California, and produced two large reports.

Cook *et al*. v. Rockwell International *et al*., No. 90-K-181 (D. Colorado). Provided expert testimony on the role of burrowing animals in affecting the fate of buried and surface-deposited radioactive and hazardous chemical wastes at the Rocky Flats Plant, Colorado. Provided expert reports based on four site visits and an extensive document review of burrowing animals. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals. I testified in federal court in November 2005, and my clients were subsequently awarded a $553,000,000 judgment by a jury. After appeals the award was increased to two billion dollars.

Hanford Nuclear Reservation Litigation. Provided expert testimony on the role of burrowing animals in affecting the fate of buried radioactive wastes at the Hanford Nuclear Reservation, Washington. Provided three expert reports based on three site visits and extensive document review. Predicted and verified a certain population density of pocket gophers on buried waste structures, as well as incidence of radionuclide contamination in body tissue. Conducted transect surveys for evidence of burrowing animals and other wildlife on and around waste facilities. Discovered substantial intrusion of waste structures by burrowing animals.

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Expert testimony and declarations on proposed residential and commercial developments, gas-fired power plants, wind, solar and geothermal projects, water transfers and water transfer delivery systems, endangered species recovery plans, Habitat Conservation Plans and Natural Communities Conservation Programs. Testified before multiple government agencies, Tribunals, Boards of Supervisors and City Councils, and participated with press conferences and depositions. Prepared expert witness reports and court declarations, which are summarized under Reports (below).

Protocol-level surveys for special-status species. Used California Department of Fish and Wildlife and US Fish and Wildlife Service protocols to search for California red-legged frog, California tiger salamander, arroyo southwestern toad, blunt-nosed leopard lizard, western pond turtle, giant kangaroo rat, San Joaquin kangaroo rat, San Joaquin kit fox, western burrowing owl, Swainson's hawk, Valley elderberry longhorn beetle and other special-status species.

Conservation of San Joaquin kangaroo rat. Performed research to identify factors responsible for the decline of this endangered species at Lemoore Naval Air Station, 2000-2013, and implemented habitat enhancements designed to reverse the trend and expand the population.

Impact of West Nile Virus on yellow-billed magpies. Funded by Sacramento-Yolo Mosquito and Vector Control District, 2005-2008, compared survey results pre- and post-West Nile Virus epidemic for multiple bird species in the Sacramento Valley, particularly on yellow-billed magpie and American crow due to susceptibility to WNV.

Workshops on HCPs. Assisted Dr. Michael Morrison with organizing and conducting a 2-day workshop on Habitat Conservation Plans, sponsored by Southern California Edison, and another 1-day workshop sponsored by PG&E. These Workshops were attended by academics, attorneys, and consultants with HCP experience. We guest-edited a Proceedings published in Environmental Management.

Mapping of biological resources along Highways 101, 46 and 41. Used GPS and GIS to delineate vegetation complexes and locations of special-status species along 26 miles of highway in San Luis Obispo County, 14 miles of highway and roadway in Monterey County, and in a large area north of Fresno, including within reclaimed gravel mining pits.

GPS mapping and monitoring at restoration sites and at Caltrans mitigation sites. Monitored the success of elderberry shrubs at one location, the success of willows at another location, and the response of wildlife to the succession of vegetation at both sites. Also used GPS to monitor the response of fossorial animals to yellow star-thistle eradication and natural grassland restoration efforts at Bear Valley in Colusa County and at the decommissioned Mather Air Force Base in Sacramento County.

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Mercury effects on Red-legged Frog. Assisted Dr. Michael Morrison and US Fish and Wildlife Service in assessing the possible impacts of historical mercury mining on the federally listed California red-legged frog in Santa Clara County. Also measured habitat variables in streams.

Opposition to proposed No Surprises rule. Wrote a white paper and summary letter explaining scientific grounds for opposing the incidental take permit (ITP) rules providing ITP applicants and holders with general assurances they will be free of compliance with the Endangered Species Act once they adhere to the terms of a “properly functioning HCP.” Submitted 188 signatures of scientists and environmental professionals concerned about No Surprises rule US Fish and Wildlife Service, National Marine Fisheries Service, all US Senators.

Natomas Basin Habitat Conservation Plan alternative. Designed narrow channel marsh to increase the likelihood of survival and recovery in the wild of giant garter snake, Swainson’s hawk and Valley Elderberry Longhorn Beetle. The design included replication and interspersion of treatments for experimental testing of critical habitat elements. I provided a report to Northern Territories, Inc.

Assessments of agricultural production system and environmental technology transfer to China. Twice visited China and interviewed scientists, industrialists, agriculturalists, and the Directors of the Chinese Environmental Protection Agency and the Department of Agriculture to assess the need and possible pathways for environmental clean-up technologies and trade opportunities between the US and China.

Yolo County Habitat Conservation Plan. Conducted landscape ecology study of Yolo County to spatially prioritize allocation of mitigation efforts to improve ecosystem functionality within the

County from the perspective of 29 special-status species of wildlife and plants. Used a hierarchically structured indicators approach to apply principles of landscape and ecosystem ecology, conservation biology, and local values in rating land units. Derived GIS maps to help guide the conservation area design, and then developed implementation strategies.

Mountain lion track count. Developed and conducted a carnivore monitoring program throughout California since 1985. Species counted include mountain lion, bobcat, black bear, coyote, red and gray fox, raccoon, striped skunk, badger, and black-tailed deer. Vegetation and land use are also monitored. Track survey transect was established on dusty, dirt roads within randomly selected quadrats.

Sumatran tiger and other felids. Upon award of Fulbright Research Fellowship, I designed and initiated track counts for seven species of wild cats in Sumatra, including Sumatran tiger, fishing cat, and golden cat. Spent four months on Sumatra and Java in 1988, and learned Bahasa Indonesia, the official Indonesian language.

Wildlife in agriculture. Beginning as post-graduate research, I studied pocket gophers and other wildlife in 40 alfalfa fields throughout the Sacramento Valley, and I surveyed for wildlife along a 200 mile road transect since 1989 with a hiatus of 1996-2004. The data are analyzed using GIS and methods from landscape ecology, and the results published and presented orally to farming groups in California and elsewhere. I also conducted the first study of wildlife in cover crops used on vineyards and orchards.

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Agricultural energy use and Tulare County groundwater study. Developed and analyzed a data base of energy use in California agriculture, and collaborated on a landscape (GIS) study of groundwater contamination across Tulare County, California.

Pocket gopher damage in forest clear-cuts. Developed gopher sampling methods and tested various poison baits and baiting regimes in the largest-ever field study of pocket gopher management in forest plantations, involving 68 research plots in 55 clear-cuts among 6 National Forests in northern California.

Risk assessment of exotic species in North America. Developed empirical models of mammal and bird species invasions in North America, as well as a rating system for assigning priority research and control to exotic species in California, based on economic, environmental, and human health hazards.

Peer Reviewed Publications

Smallwood, K. S. and M. L. Morrison. 2018. Nest-site selection in a high-density colony of burrowing owls. Journal of Raptor Research 52:454-470.

Smallwood, K. S., D. A. Bell, E. L. Walther, E. Leyvas, S. Standish, J. Mount, B. Karas. 2018. Estimating wind turbine fatalities using integrated detection trials. Journal of Wildlife Management 82:1169-1184.

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wind turbines. Wildlife Society Bulletin 41:224-230.

Smallwood, K. S. 2017. The challenges of addressing wildlife impacts when repowering wind energy projects. Pages 175-187 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

May, R., Gill, A. B., Köppel, J. Langston, R. H.W., Reichenbach, M., Scheidat, M., Smallwood, S., Voigt, C. C., Hüppop, O., and Portman, M. 2017. Future research directions to reconcile wind turbine–wildlife interactions. Pages 255-276 in Köppel, J., Editor, Wind Energy and Wildlife Impacts: Proceedings from the CWW2015 Conference. Springer. Cham, Switzerland.

Smallwood, K. S. 2017. Monitoring birds. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Smallwood, K. S., L. Neher, and D. A. Bell. 2017. Siting to Minimize Raptor Collisions: an example from the Repowering Altamont Pass Wind Resource Area. M. Perrow, Ed., Wildlife and Wind Farms - Conflicts and Solutions, Volume 2. Pelagic Publishing, Exeter, United Kingdom. www.bit.ly/2v3cR9Q

Johnson, D. H., S. R. Loss, K. S. Smallwood, W. P. Erickson. 2016. Avian fatalities at wind energy facilities in North America: A comparison of recent approaches. Human–Wildlife Interactions 10(1):7-18.

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Fitzhugh, E.L. and K.S. Smallwood. 1987. Methods Manual – A statewide mountain lion population index technique. California Department of Fish and Game, Sacramento.

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Fitzhugh, E.L., K.S. Smallwood, and R. Gross. 1985. Mountain lion track count, Marin County, 1985. Report on file at Wildlife Extension, University of California, Davis.

Comments on Environmental Documents

I was retained or commissioned to comment on environmental planning and review documents, including:

- The Villages of Lakeview EIR (2017; 28 pp);
- Notes on Proposed Study Options for Trail Impacts on Northern Spotted Owl (2017; 4 pp);
- San Gorgonio Crossings EIR (2017; 22 pp);
- Replies to responses on Jupiter Project IS and MND (2017; 12 pp);
- MacArthur Transit Village Project Modified 2016 CEQA Analysis (2017; 12 pp);
- Central SoMa Plan DEIR (2017; 14 pp);
- Colony Commerce Center Specific Plan DEIR (2016; 16 pp);
- Fairway Trails Improvements MND (2016; 13 pp);
- Review of Avian-Solar Science Plan (2016; 28 pp);
- Replies to responses on Initial Study for Pyramid Asphalt (2016; 5 pp);
- Initial Study for Pyramid Asphalt (2016; 4 pp);
- Agua Mansa Distribution Warehouse Project Initial Study (2016; 14 pp);
- Santa Anita Warehouse IS and MND (2016; 12 pp);
- CapRock Distribution Center III DEIR (2016: 12 pp);
- Orange Show Logistics Center Initial Study and MND (2016; 9 pp);
- City of Palmdale Oasis Medical Village Project IS and MND (2016; 7 pp);
- Comments on proposed rule for incidental eagle take (2016, 49 pp);
- Grapevine Specific and Community Plan FEIR (2016; 25 pp);
- Grapevine Specific and Community Plan DEIR (2016; 15 pp);
- Clinton County Zoning Ordinance for Wind Turbine siting (2016);
- Hallmark at Shenandoah Warehouse Project Initial Study (2016; 6 pp);
- Tri-City Industrial Complex Initial Study (2016; 5 pp);
- Hidden Canyon Industrial Park Plot Plan 16-PP-02 (2016; 12 pp);
- Kimball Business Park DEIR (2016; 10 pp);
- Jupiter Project IS and MND (2016; 9 pp);
- Revised Draft Giant Garter Snake Recovery Plan of 2015 (2016, 18 pp);
- Palo Verde Mesa Solar Project Draft Environmental Impact Report (2016; 27 pp);

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- Reply Witness Statement on Fairview Wind Project, Ontario, Canada (2016; 14 pp);
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- Supplementary Reply Witness Statement Amherst Island Wind Farm, Ontario (2015, 38 pp);
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- Second Reply Witness Statement on White Pines Wind Farm, Ontario (2015, 6 pp);
- Reply Witness Statement on White Pines Wind Farm, Ontario (2015, 10 pp);
- Witness Statement on White Pines Wind Farm, Ontario (2015, 9 pp);
- Proposed Section 24 Specific Plan Agua Caliente Band of Cahuilla Indians DEIS (2015, 9 pp);
- Replies to comments 24 Specific Plan Agua Caliente Band of Cahuilla Indians FEIS (2015, 6 pp);
- Willow Springs Solar Photovoltaic Project DEIR (2015; 28 pp);
- Sierra Lakes Commerce Center Project DEIR (2015, 9 pp);
- Columbia Business Center MND (2015; 8 pp);
- West Valley Logistics Center Specific Plan DEIR (2015, 10 pp);
- World Logistic Center Specific Plan FEIR (2015, 12 pp);
- Bay Delta Conservation Plan EIR/EIS (2014, 21 pp);
- Addison Wind Energy Project DEIR (2014, 32 pp);
- Response to Comments on the Addison Wind Energy Project DEIR (2014, 15 pp);
- Addison and Rising Tree Wind Energy Project FEIR (2014, 12 pp);
- Alta East Wind Energy Project FEIS (2013, 23 pp); 37
- Blythe Solar Power Project Staff Assessment, California Energy Commission (2013, 16 pp); CONT
- Clearwater and Yakima Solar Projects DEIR (2013, 9 pp);
- Cuyama Solar Project DEIR (2014, 19 pp);
- Draft Desert Renewable Energy Conservation Plan (DRECP) EIR/EIS (2015, 49 pp);
- Kingbird Solar Photovoltaic Project EIR (2013, 19 pp);
- Lucerne Valley Solar Project Initial Study & Mitigated Negative Declaration (2013, 12 pp);
- Palen Solar Electric Generating System Final Staff Assessment of California Energy Commission, (2014, 20 pp);
- Rebuttal testimony on Palen Solar Energy Generating System (2014, 9 pp);
- Rising Tree Wind Energy Project DEIR (2014, 32 pp);
- Response to Comments on the Rising Tree Wind Energy Project DEIR (2014, 15 pp);
- Soitec Solar Development Project Draft PEIR (2014, 18 pp);
- Comment on the Biological Opinion (08ESMF-00-2012-F-0387) of Oakland Zoo expansion on Alameda whipsnake and California red-legged frog (2014; 3 pp);
- West Antelope Solar Energy Project Initial Study and Negative Declaration (2013, 18 pp);
- Willow Springs Solar Photovoltaic Project DEIR (2015, 28 pp);
- Alameda Creek Bridge Replacement Project DEIR (2015, 10 pp);
- Declaration on Tule Wind project FEIR/FEIS (2013; 24 pp);
- Sunlight Partners LANDPRO Solar Project Mitigated Negative Declaration (2013; 11 pp);
- Declaration in opposition to BLM fracking (2013; 5 pp);
- Rosamond Solar Project Addendum EIR (2013; 13 pp);
- Pioneer Green Solar Project EIR (2013; 13 pp);
- Reply to Staff Responses to Comments on Soccer Center Solar Project Mitigated Negative

Declaration (2013; 6 pp);
- Soccer Center Solar Project Mitigated Negative Declaration (2013; 10 pp);
- Plainview Solar Works Mitigated Negative Declaration (2013; 10 pp);
- Reply to the County Staff's Responses on comments to Imperial Valley Solar Company 2 Project (2013; 10 pp);
- Imperial Valley Solar Company 2 Project (2013; 13 pp);
- FRV Orion Solar Project DEIR (PP12232) (2013; 9 pp);
- Casa Diablo IV Geothermal Development Project (3013; 6 pp);
- Reply to Staff Responses to Comments on Casa Diablo IV Geothermal Development Project (2013; 8 pp);
- FEIS prepared for Alta East Wind Project (2013; 23 pp);
- Metropolitan Air Park DEIR, City of San Diego (2013;);
- Davidon Homes Tentative Subdivision Map and Rezoning Project DEIR (2013; 9 pp);
- Analysis of Biological Assessment of Oakland Zoo Expansion Impacts on Alameda Whipsnake (2013; 10 pp);
- Declaration on Campo Verde Solar project FEIR (2013; 11pp);
- Neg Dec comments on Davis Sewer Trunk Rehabilitation (2013; 8 pp);
- Declaration on North Steens Transmission Line FEIS (2012; 62 pp);
- City of Lancaster Revised Initial Study for Conditional Use Permits 12-08 and 12-09, Summer Solar and Springtime Solar Projects (2012; 8 pp);
- J&J Ranch, 24 Adobe Lane Environmental Review (2012; 14 pp);
- Reply to the County Staff's Responses on comments to Hudson Ranch Power II Geothermal Project and the Simbol Calipatria Plant II (2012; 8 pp);
- Hudson Ranch Power II Geothermal Project and the Simbol Calipatria Plant II (2012; 9 pp);
- Desert Harvest Solar Project EIS (2012; 15 pp);
- Solar Gen 2 Array Project DEIR (2012; 16 pp);
- Ocotillo Sol Project EIS (2012; 4 pp);
- Beacon Photovoltaic Project DEIR (2012; 5 pp);
- Declaration on Initial Study and Proposed Negative Declaration for the Butte Water District 2012 Water Transfer Program (2012; 11 pp);
- Mount Signal and Calexico Solar Farm Projects DEIR (2011; 16 pp);
- City of Elk Grove Sphere of Influence EIR (2011; 28 pp);
- Comment on Sutter Landing Park Solar Photovoltaic Project MND (2011; 9 pp);
- Statement of Shawn Smallwood, Ph.D. Regarding Proposed Rabik/Gudath Project, 22611 Coleman Valley Road, Bodega Bay (CPN 10-0002) (2011; 4 pp);
- Declaration of K. Shawn Smallwood on Biological Impacts of the Ivanpah Solar Electric Generating System (ISEGS) (2011; 9 pp);
- Comments on Draft Eagle Conservation Plan Guidance (2011; 13 pp);
- Comments on Draft EIR/EA for Niles Canyon Safety Improvement Project (2011; 16 pp);
- Declaration of K. Shawn Smallwood, Ph.D., on Biological Impacts of the Route 84 Safety Improvement Project (2011; 7 pp);
- Rebuttal Testimony of Witness #22, K. Shawn Smallwood, Ph.D, on Behalf of Intervenors Friends of The Columbia Gorge & Save Our Scenic Area (2010; 6 pp);
- Prefiled Direct Testimony of Witness #22, K. Shawn Smallwood, Ph.D, on Behalf of

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Intervenors Friends of the Columbia Gorge & Save Our Scenic Area. Comments on Whistling Ridge Wind Energy Power Project DEIS, Skamania County, Washington (2010; 41 pp);

- Evaluation of Klickitat County's Decisions on the Windy Flats West Wind Energy Project (2010; 17 pp);
- St. John's Church Project Draft Environmental Impact Report (2010; 14 pp.);
- Initial Study/Mitigated Negative Declaration for Results Radio Zone File #2009-001 (2010; 20 pp);
- Rio del Oro Specific Plan Project Final Environmental Impact Report (2010;12 pp);
- Answers to Questions on 33% RPS Implementation Analysis Preliminary Results Report (2009: 9 pp);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Second Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Dec 2008; 17 pp);
- Comments on Draft 1A Summary Report to CAISO (2008; 10 pp);
- County of Placer's Categorical Exemption of Hilton Manor Project (2009; 9 pp);
- Protest of CARE to Amendment to the Power Purchase and Sale Agreement for Procurement of Eligible Renewable Energy Resources Between Hatchet Ridge Wind LLC and PG&E (2009; 3 pp);
- Tehachapi Renewable Transmission Project EIR/EIS (2009; 142 pp);
- Delta Shores Project EIR, south Sacramento (2009; 11 pp + addendum 2 pp);
- Declaration of Shawn Smallwood in Support of Care's Petition to Modify D.07-09-040 (2008; 3 pp);
- The Public Utility Commission's Implementation Analysis December 16 Workshop for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 9 pp);
- The Public Utility Commission's Implementation Analysis Draft Work Plan for the Governor's Executive Order S-14-08 to implement a 33% Renewable Portfolio Standard by 2020 (2008; 11 pp);
- Draft 1A Summary Report to California Independent System Operator for Planning Reserve Margins (PRM) Study (2008; 7 pp.);
- SEPA Determination of Non-significance regarding zoning adjustments for Skamania County, Washington. Declaration to Friends of the Columbia Gorge, Inc. and Save Our Scenic Area (Sep 2008; 16 pp);
- California Energy Commission's Preliminary Staff Assessment of the Colusa Generating Station (2007; 24 pp);
- Rio del Oro Specific Plan Project Recirculated Draft Environmental Impact Report (2008: 66 pp);
- Replies to Response to Comments Re: Regional University Specific Plan Environmental Impact Report (2008; 20 pp);
- Regional University Specific Plan Environmental Impact Report (2008: 33 pp.);
- Clark Precast, LLC's "Sugarland" project, Negative Declaration (2008: 15 pp.);
- Cape Wind Project Draft Environmental Impact Statement (2008; 157 pp.);
- Yuba Highlands Specific Plan (or Area Plan) Environmental Impact Report (2006; 37 pp.);
- Replies to responses to comments on Mitigated Negative Declaration of the proposed

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Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 5 pp);

- Mitigated Negative Declaration of the proposed Mining Permit (MIN 04-01) and Modification of Use Permit 96-02 at North Table Mountain (2006; 15 pp);
- Windy Point Wind Farm Environmental Review and EIS (2006; 14 pp and 36 Powerpoint slides in reply to responses to comments);
- Shiloh I Wind Power Project EIR (2005; 18 pp);
- Buena Vista Wind Energy Project Notice of Preparation of EIR (2004; 15 pp);
- Negative Declaration of the proposed Callahan Estates Subdivision (2004; 11 pp);
- Negative Declaration of the proposed Winters Highlands Subdivision (2004; 9 pp);
- Negative Declaration of the proposed Winters Highlands Subdivision (2004; 13 pp);
- Negative Declaration of the proposed Creekside Highlands Project, Tract 7270 (2004; 21 pp);
- On the petition California Fish and Game Commission to list the Burrowing Owl as threatened or endangered (2003; 10 pp);
- Conditional Use Permit renewals from Alameda County for wind turbine operations in the Altamont Pass Wind Resource Area (2003; 41 pp);
- UC Davis Long Range Development Plan of 2003, particularly with regard to the Neighborhood Master Plan (2003; 23 pp);
- Anderson Marketplace Draft Environmental Impact Report (2003: 18 pp + 3 plates of photos);
- Negative Declaration of the proposed expansion of Temple B'nai Tikyah (2003: 6 pp);
- Antonio Mountain Ranch Specific Plan Public Draft EIR (2002: 23 pp);
- Response to testimony of experts at the East Altamont Energy Center evidentiary hearing on biological resources (2002: 9 pp);
- Revised Draft Environmental Impact Report, The Promenade (2002: 7 pp);
- Recirculated Initial Study for Calpine's proposed Pajaro Valley Energy Center (2002: 3 pp);
- UC Merced -- Declaration of Dr. Shawn Smallwood in support of petitioner's application for temporary restraining order and preliminary injunction (2002: 5 pp);
- Replies to response to comments in Final Environmental Impact Report, Atwood Ranch Unit III Subdivision (2003: 22 pp);
- Draft Environmental Impact Report, Atwood Ranch Unit III Subdivision (2002: 19 pp + 8 photos on 4 plates);
- California Energy Commission Staff Report on GWF Tracy Peaker Project (2002: 17 pp + 3 photos; follow-up report of 3 pp);
- Initial Study and Negative Declaration, Silver Bend Apartments, Placer County (2002: 13 pp);
- UC Merced Long-range Development Plan DEIR and UC Merced Community Plan DEIR (2001: 26 pp);
- Initial Study, Colusa County Power Plant (2001: 6 pp);
- Comments on Proposed Dog Park at Catlin Park, Folsom, California (2001: 5 pp + 4 photos);
- Pacific Lumber Co. (Headwaters) Habitat Conservation Plan and Environmental Impact Report (1998: 28 pp);
- Final Environmental Impact Report/Statement for Issuance of Take authorization for listed

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species within the MSCP planning area in San Diego County, California (Fed. Reg. 62 (60): 14938, San Diego Multi-Species Conservation Program) (1997: 10 pp);

- Permit (PRT-823773) Amendment for the Natomas Basin Habitat Conservation Plan, Sacramento, CA (Fed. Reg. 63 (101): 29020-29021) (1998);
- Draft Recovery Plan for the Giant Garter Snake (*Thamnophis gigas*). (Fed. Reg. 64(176): 49497-49498) (1999: 8 pp);
- Review of the Draft Recovery Plan for the Arroyo Southwestern Toad (*Bufo microscaphus californicus*) (1998);
- Ballona West Bluffs Project Environmental Impact Report (1999: oral presentation);
- California Board of Forestry's proposed amended Forest Practices Rules (1999);
- Negative Declaration for the Sunset Skyranch Airport Use Permit (1999);
- Calpine and Bechtel Corporations' Biological Resources Implementation and Monitoring Program (BRMIMP) for the Metcalf Energy Center (2000: 10 pp);
- California Energy Commission's Final Staff Assessment of the proposed Metcalf Energy Center (2000);
- US Fish and Wildlife Service Section 7 consultation with the California Energy Commission regarding Calpine and Bechtel Corporations' Metcalf Energy Center (2000: 4 pp);
- California Energy Commission's Preliminary Staff Assessment of the proposed Metcalf Energy Center (2000: 11 pp);
- Site-specific management plans for the Natomas Basin Conservancy's mitigation lands, prepared by Wildlands, Inc. (2000: 7 pp);
- Affidavit of K. Shawn Smallwood in Spirit of the Sage Council, et al. (Plaintiffs) vs. Bruce Babbitt, Secretary, U.S. Department of the Interior, et al. (Defendants), Injuries caused by the No Surprises policy and final rule which codifies that policy (1999: 9 pp).

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Comments on other Environmental Review Documents:

- Proposed Regulation for California Fish and Game Code Section 3503.5 (2015: 12 pp);
- Statement of Overriding Considerations related to extending Altamont Winds, Inc.'s Conditional Use Permit PLN2014-00028 (2015; 8 pp);
- Draft Program Level EIR for Covell Village (2005; 19 pp);
- Bureau of Land Management Wind Energy Programmatic EIS Scoping document (2003: 7 pp.);
- NEPA Environmental Analysis for Biosafety Level 4 National Biocontainment Laboratory (NBL) at UC Davis (2003: 7 pp);
- Notice of Preparation of UC Merced Community and Area Plan EIR, on behalf of The Wildlife Society—Western Section (2001: 8 pp.);
- Preliminary Draft Yolo County Habitat Conservation Plan (2001; 2 letters totaling 35 pp.);
- Merced County General Plan Revision, notice of Negative Declaration (2001: 2 pp.);
- Notice of Preparation of Campus Parkway EIR/EIS (2001: 7 pp.);
- Draft Recovery Plan for the bighorn sheep in the Peninsular Range (*Ovis candensis*) (2000);
- Draft Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*), on behalf of The Wildlife Society—Western Section (2000: 10 pp.);
- Sierra Nevada Forest Plan Amendment Draft Environmental Impact Statement, on behalf of The Wildlife Society—Western Section (2000: 7 pp.);

- State Water Project Supplemental Water Purchase Program, Draft Program EIR (1997);
- Davis General Plan Update EIR (2000);
- Turn of the Century EIR (1999: 10 pp);
- Proposed termination of Critical Habitat Designation under the Endangered Species Act (Fed. Reg. 64(113): 31871-31874) (1999);
- NOA Draft Addendum to the Final Handbook for Habitat Conservation Planning and Incidental Take Permitting Process, termed the HCP 5-Point Policy Plan (Fed. Reg. 64(45): 11485 - 11490) (1999; 2 pp + attachments);
- Covell Center Project EIR and EIR Supplement (1997).

Position Statements I prepared the following position statements for the Western Section of The Wildlife Society, and one for nearly 200 scientists:

- Recommended that the California Department of Fish and Game prioritize the extermination of the introduced southern water snake in northern California. The Wildlife Society--Western Section (2001);
- Recommended that The Wildlife Society—Western Section appoint or recommend members of the independent scientific review panel for the UC Merced environmental review process (2001);
- Opposed the siting of the University of California's 10th campus on a sensitive vernal pool/grassland complex east of Merced. The Wildlife Society--Western Section (2000);
- Opposed the legalization of ferret ownership in California. The Wildlife Society--Western Section (2000);
- Opposed the Proposed "No Surprises," "Safe Harbor," and "Candidate Conservation Agreement" rules, including permit-shield protection provisions (Fed. Reg. Vol. 62, No. 103, pp. 29091-29098 and No. 113, pp. 32189-32194). This statement was signed by 188 scientists and went to the responsible federal agencies, as well as to the U.S. Senate and House of Representatives.

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Posters at Professional Meetings

Leyvas, E. and K. S. Smallwood. 2015. Rehabilitating injured animals to offset and rectify wind project impacts. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S., J. Mount, S. Standish, E. Leyvas, D. Bell, E. Walther, B. Karas. 2015. Integrated detection trials to improve the accuracy of fatality rate estimates at wind projects. Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 9-12 March 2015.

Smallwood, K. S. and C. G. Thelander. 2005. Lessons learned from five years of avian mortality research in the Altamont Pass WRA. AWEA conference, Denver, May 2005.

Neher, L., L. Wilder, J. Woo, L. Spiegel, D. Yen-Nakafugi, and K.S. Smallwood. 2005. Bird's eye view on California wind. AWEA conference, Denver, May 2005.

Smallwood, K. S., C. G. Thelander and L. Spiegel. 2003. Toward a predictive model of avian

fatalities in the Altamont Pass Wind Resource Area. Windpower 2003 Conference and Convention, Austin, Texas.

Smallwood, K.S. and Eva Butler. 2002. Pocket Gopher Response to Yellow Star-thistle Eradication as part of Grassland Restoration at Decommissioned Mather Air Force Base, Sacramento County, California. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and Michael L. Morrison. 2002. Fresno kangaroo rat (*Dipodomys nitratoides*) Conservation Research at Resources Management Area 5, Lemoore Naval Air Station. White Mountain Research Station Open House, Barcroft Station.

Smallwood, K.S. and E.L. Fitzhugh. 1989. Differentiating mountain lion and dog tracks. Third Mountain Lion Workshop, Prescott, AZ.

Smith, T. R. and K. S. Smallwood. 2000. Effects of study area size, location, season, and allometry on reported *Sorex* shrew densities. Annual Meeting of the Western Section of The Wildlife Society.

Presentations at Professional Meetings and Seminars

Repowering the Altamont Pass. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

Developing methods to reduce bird mortality in the Altamont Pass Wind Resource Area, 1999-2007. Altamont Symposium, The Wildlife Society – Western Section, 5 February 2017.

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Conservation and recovery of burrowing owls in Santa Clara Valley. Santa Clara Valley Habitat Agency, Newark, California, 3 February 2017.

Mitigation of Raptor Fatalities in the Altamont Pass Wind Resource Area. Raptor Research Foundation Meeting, Sacramento, California, 6 November 2015.

From burrows to behavior: Research and management for burrowing owls in a diverse landscape. California Burrowing Owl Consortium meeting, 24 October 2015, San Jose, California.

The Challenges of repowering. Keynote presentation at Conference on Wind Energy and Wildlife Impacts, Berlin, Germany, 10 March 2015.

Research Highlights Altamont Pass 2011-2015. Scientific Review Committee, Oakland, California, 8 July 2015.

Siting wind turbines to minimize raptor collisions: Altamont Pass Wind Resource Area. US Fish and Wildlife Service Golden Eagle Working Group, Sacramento, California, 8 January 2015.

Evaluation of nest boxes as a burrowing owl conservation strategy. Sacramento Chapter of the Western Section, The Wildlife Society. Sacramento, California, 26 August 2013.

Predicting collision hazard zones to guide repowering of the Altamont Pass. Conference on wind

power and environmental impacts. Stockholm, Sweden, 5-7 February 2013.

Impacts of Wind Turbines on Wildlife. California Council for Wildlife Rehabilitators, Yosemite, California, 12 November 2012.

Impacts of Wind Turbines on Birds and Bats. Madrone Audubon Society, Santa Rosa, California, 20 February 2012.

Comparing Wind Turbine Impacts across North America. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. California Energy Commission Staff Workshop: Reducing the Impacts of Energy Infrastructure on Wildlife, 20 July 2011.

Siting Repowered Wind Turbines to Minimize Raptor Collisions. Alameda County Scientific Review Committee meeting, 17 February 2011

Comparing Wind Turbine Impacts across North America. Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 3 May 2011.

Update on Wildlife Impacts in the Altamont Pass Wind Resource Area. Raptor Symposium, The Wildlife Society—Western Section, Riverside, California, February 2011.

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Siting Repowered Wind Turbines to Minimize Raptor Collisions. Raptor Symposium, The Wildlife Society - Western Section, Riverside, California, February 2011.

Wildlife mortality caused by wind turbine collisions. Ecological Society of America, Pittsburgh, Pennsylvania, 6 August 2010.

Map-based repowering and reorganization of a wind farm to minimize burrowing owl fatalities. California burrowing Owl Consortium Meeting, Livermore, California, 6 February 2010.

Environmental barriers to wind power. Getting Real About Renewables: Economic and Environmental Barriers to Biofuels and Wind Energy. A symposium sponsored by the Environmental & Energy Law & Policy Journal, University of Houston Law Center, Houston, 23 February 2007.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Meeting with Japan Ministry of the Environment and Japan Ministry of the Economy, Wild Bird Society of Japan, and other NGOs Tokyo, Japan, 9 November 2006.

Lessons learned about bird collisions with wind turbines in the Altamont Pass and other US wind farms. Symposium on bird collisions with wind turbines. Wild Bird Society of Japan, Tokyo, Japan, 4 November 2006.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. California Society for Ecological Restoration (SERCAL) 13th Annual Conference, UC Santa

Barbara, 27 October 2006.

Fatality associations as the basis for predictive models of fatalities in the Altamont Pass Wind Resource Area. EEI/APLIC/PIER Workshop, 2006 Biologist Task Force and Avian Interaction with Electric Facilities Meeting, Pleasanton, California, 28 April 2006.

Burrowing owl burrows and wind turbine collisions in the Altamont Pass Wind Resource Area. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, February 8, 2006.

Mitigation at wind farms. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Incorporating data from the California Wildlife Habitat Relationships (CWHR) system into an impact assessment tool for birds near wind farms. Shawn Smallwood, Kevin Hunting, Marcus Yee, Linda Spiegel, Monica Parisi. Workshop: Understanding and resolving bird and bat impacts. American Wind Energy Association and Audubon Society. Los Angeles, CA. January 10 and 11, 2006.

Toward indicating threats to birds by California's new wind farms. California Energy Commission, Sacramento, May 26, 2005.

Avian collisions in the Altamont Pass. California Energy Commission, Sacramento, May 26, 2005.

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Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. EPRI Environmental Sector Council, Monterey, California, February 17, 2005.

Ecological solutions for avian collisions with wind turbines in the Altamont Pass Wind Resource Area. The Wildlife Society—Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Associations between avian fatalities and attributes of electric distribution poles in California. The Wildlife Society - Western Section Annual Meeting, Sacramento, California, January 19, 2005.

Minimizing avian mortality in the Altamont Pass Wind Resources Area. UC Davis Wind Energy Collaborative Forum, Palm Springs, California, December 14, 2004.

Selecting electric distribution poles for priority retrofitting to reduce raptor mortality. Raptor Research Foundation Meeting, Bakersfield, California, November 10, 2004.

Responses of Fresno kangaroo rats to habitat improvements in an adaptive management framework. Annual Meeting of the Society for Ecological Restoration, South Lake Tahoe, California, October 16, 2004.

Lessons learned from five years of avian mortality research at the Altamont Pass Wind Resources Area in California. The Wildlife Society Annual Meeting, Calgary, Canada, September 2004.

The ecology and impacts of power generation at Altamont Pass. Sacramento Petroleum Association,

Sacramento, California, August 18, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Consortium meeting, Hayward, California, February 7, 2004.

Burrowing owl mortality in the Altamont Pass Wind Resource Area. California Burrowing Owl Symposium, Sacramento, November 2, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. National Wind Coordinating Committee, Washington, D.C., November 17, 2003.

Raptor Behavior at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

Raptor Mortality at the Altamont Pass Wind Resource Area. Annual Meeting of the Raptor Research Foundation, Anchorage, Alaska, September, 2003.

California mountain lions. Ecological & Environmental Issues Seminar, Department of Biology, California State University, Sacramento, November, 2000.

Intra- and inter-turbine string comparison of fatalities to animal burrow densities at Altamont Pass. National Wind Coordinating Committee, Carmel, California, May, 2000.

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Using a Geographic Positioning System (GPS) to map wildlife and habitat. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Suggested standards for science applied to conservation issues. Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

The indicators framework applied to ecological restoration in Yolo County, California. Society for Ecological Restoration, September 25, 1999.

Ecological restoration in the context of animal social units and their habitat areas. Society for Ecological Restoration, September 24, 1999.

Relating Indicators of Ecological Health and Integrity to Assess Risks to Sustainable Agriculture and Native Biota. International Conference on Ecosystem Health, August 16, 1999.

A crosswalk from the Endangered Species Act to the HCP Handbook and real HCPs. Southern California Edison, Co. and California Energy Commission, March 4-5, 1999.

Mountain lion track counts in California: Implications for Management. Ecological & Environmental Issues Seminar, Department of Biological Sciences, California State University, Sacramento, November 4, 1998.

“No Surprises” -- Lack of science in the HCP process. California Native Plant Society Annual Conservation Conference, The Presidio, San Francisco, September 7, 1997.

In Your Interest. A half hour weekly show aired on Channel 10 Television, Sacramento. In this episode, I served on a panel of experts discussing problems with the implementation of the Endangered Species Act. Aired August 31, 1997.

Spatial scaling of pocket gopher (*Geomyidae*) density. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Estimating prairie dog and pocket gopher burrow volume. Southwestern Association of Naturalists 44th Meeting, Fayetteville, Arkansas, April 10, 1997.

Ten years of mountain lion track survey. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Study and interpretive design effects on mountain lion density estimates. Fifth Mountain Lion Workshop, San Diego, February 27, 1996.

Small animal control. Session moderator and speaker at the California Farm Conference, Sacramento, California, Feb. 28, 1995.

Small animal control. Ecological Farming Conference, Asylomar, California, Jan. 28, 1995.

Habitat associations of the Swainson's Hawk in the Sacramento Valley's agricultural landscape. 1994 Raptor Research Foundation Meeting, Flagstaff, Arizona.

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Alfalfa as wildlife habitat. Seed Industry Conference, Woodland, California, May 4, 1994.

Habitats and vertebrate pests: impacts and management. Managing Farmland to Bring Back Game Birds and Wildlife to the Central Valley. Yolo County Resource Conservation District, U.C. Davis, February 19, 1994.

Management of gophers and alfalfa as wildlife habitat. Orland Alfalfa Production Meeting and Sacramento Valley Alfalfa Production Meeting, February 1 and 2, 1994.

Patterns of wildlife movement in a farming landscape. Wildlife and Fisheries Biology Seminar Series: Recent Advances in Wildlife, Fish, and Conservation Biology, U.C. Davis, Dec. 6, 1993.

Alfalfa as wildlife habitat. California Alfalfa Symposium, Fresno, California, Dec. 9, 1993.

Management of pocket gophers in Sacramento Valley alfalfa. California Alfalfa Symposium, Fresno, California, Dec. 8, 1993.

Association analysis of raptors in a farming landscape. Plenary speaker at Raptor Research Foundation Meeting, Charlotte, North Carolina, Nov. 6, 1993.

Landscape strategies for biological control and IPM. Plenary speaker, International Conference on Integrated Resource Management and Sustainable Agriculture, Beijing, China, Sept. 11, 1993.

Landscape Ecology Study of Pocket Gophers in Alfalfa. Alfalfa Field Day, U.C. Davis, July 1993.

Patterns of wildlife movement in a farming landscape. Spatial Data Analysis Colloquium, U.C. Davis, August 6, 1993.

Sound stewardship of wildlife. Veterinary Medicine Seminar: Ethics of Animal Use, U.C. Davis. May 1993.

Landscape ecology study of pocket gophers in alfalfa. Five County Grower's Meeting, Tracy, California. February 1993.

Turbulence and the community organizers: The role of invading species in ordering a turbulent system, and the factors for invasion success. Ecology Graduate Student Association Colloquium, U.C. Davis. May 1990.

Evaluation of exotic vertebrate pests. Fourteenth Vertebrate Pest Conference, Sacramento, California. March 1990.

Analytical methods for predicting success of mammal introductions to North America. The Western Section of the Wildlife Society, Hilo, Hawaii. February 1988.

A state-wide mountain lion track survey. Sacramento County Dept Parks and Recreation. April 1986.

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CONT

The mountain lion in California. Davis Chapter of the Audubon Society. October 1985.

Ecology Graduate Student Seminars, U.C. Davis, 1985-1990: Social behavior of the mountain lion; Mountain lion control; Political status of the mountain lion in California.

Other forms of Participation at Professional Meetings

- Scientific Committee, Conference on Wind energy and Wildlife impacts, Berlin, Germany, March 2015.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Stockholm, Sweden, February 2013.
- Workshop co-presenter at Birds & Wind Energy Specialist Group (BAWESG) Information sharing week, Bird specialist studies for proposed wind energy facilities in South Africa, Endangered Wildlife Trust, Darling, South Africa, 3-7 October 2011.
- Scientific Committee, Conference on Wind energy and Wildlife impacts, Trondheim, Norway, 2-5 May 2011.
- Chair of Animal Damage Management Session, The Wildlife Society, Annual Meeting, Reno, Nevada, September 26, 2001.

- Chair of Technical Session: Human communities and ecosystem health: Comparing perspectives and making connection. Managing for Ecosystem Health, International Congress on Ecosystem Health, Sacramento, CA August 15-20, 1999.

- Student Awards Committee, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

- Student Mentor, Annual Meeting of the Western Section of The Wildlife Society, Riverside, CA, January, 2000.

Printed Mass Media

Smallwood, K.S., D. Mooney, and M. McGuinness. 2003. We must stop the UCD biolab now. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 2002. Spring Lake threatens Davis. Op-Ed to the Davis Enterprise.

Smallwood, K.S. Summer, 2001. Mitigation of habitation. The Flatlander, Davis, California.

Entrikan, R.K. and K.S. Smallwood. 2000. Measure O: Flawed law would lock in new taxes. Op-Ed to the Davis Enterprise.

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Smallwood, K.S. 2000. Davis delegation lobbies Congress for Wildlife conservation. Op-Ed to the Davis Enterprise.

Smallwood, K.S. 1998. Davis Visions. The Flatlander, Davis, California.

Smallwood, K.S. 1997. Last grab for Yolo's land and water. The Flatlander, Davis, California.

Smallwood, K.S. 1997. The Yolo County HCP. Op-Ed to the Davis Enterprise.

Radio/Television

PBS News Hour,

FOX News, Energy in America: Dead Birds Unintended Consequence of Wind Power Development, August 2011.

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Mountain lion attacks (with guest Professor Richard Coss). 23 April 2009;

KXJZ Capital Public Radio -- Insight (Host Jeffrey Callison). Wind farm Rio Vista Renewable Power. 4 September 2008;

KQED QUEST Episode #111. Bird collisions with wind turbines. 2007;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. December 27, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. May 3, 2001;

KDVS Speaking in Tongues (host Ron Glick), Yolo County HCP: 1 hour. February 8, 2001;

KDVS Speaking in Tongues (host Ron Glick & Shawn Smallwood), California Energy Crisis: 1 hour. Jan. 25, 2001;

KDVS Speaking in Tongues (host Ron Glick), Headwaters Forest HCP: 1 hour. 1998;

Davis Cable Channel (host Gerald Heffernon), Burrowing owls in Davis: half hour. June, 2000;

Davis Cable Channel (hosted by Davis League of Women Voters), Measure O debate: 1 hour. October, 2000;

KXTV 10, In Your Interest, The Endangered Species Act: half hour. 1997.

Reviews of Journal Papers (Scientific journals for whom I've provided peer review)

Journal	**Journal**
American Naturalist	Journal of Animal Ecology
Journal of Wildlife Management	Western North American Naturalist
Auk	Journal of Raptor Research
Biological Conservation	National Renewable Energy Lab reports
Canadian Journal of Zoology	Oikos
Ecosystem Health	The Prairie Naturalist
Environmental Conservation	Restoration Ecology
Environmental Management	Southwestern Naturalist
Functional Ecology	The Wildlife Society--Western Section Trans.
Journal of Zoology (London)	Proc. Int. Congress on Managing for Ecosystem Health
Journal of Applied Ecology	Transactions in GIS
Ecology	Tropical Ecology
Wildlife Society Bulletin	Peer J
Biological Control	The Condor

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Committees

- Scientific Review Committee, Alameda County, Altamont Pass Wind Resource Area
- Ph.D. Thesis Committee, Steve Anderson, University of California, Davis
- MS Thesis Committee, Marcus Yee, California State University, Sacramento

Other Professional Activities or Products

Testified in Federal Court in Denver during 2005 over the fate of radio-nuclides in the soil at Rocky Flats Plant after exposure to burrowing animals. My clients won a judgment of $553,000,000. I have also testified in many other cases of litigation under CEQA, NEPA, the Warren-Alquist Act, and other environmental laws. My clients won most of the cases for which I testified.

Testified before Environmental Review Tribunals in Ontario, Canada regarding proposed White Pines, Amherst Island, and Fairview Wind Energy projects.

Testified in Skamania County Hearing in 2009 on the potential impacts of zoning the County for development of wind farms and hazardous waste facilities.

Testified in deposition in 2007 in the case of O'Dell et al. vs. FPL Energy in Houston, Texas.

Testified in Klickitat County Hearing in 2006 on the potential impacts of the Windy Point Wind Farm.

Memberships in Professional Societies

The Wildlife Society
Raptor Research Foundation

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Honors and Awards

Fulbright Research Fellowship to Indonesia, 1987
J.G. Boswell Full Academic Scholarship, 1981 college of choice
Certificate of Appreciation, The Wildlife Society—Western Section, 2000, 2001
Northern California Athletic Association Most Valuable Cross Country Runner, 1984
American Legion Award, Corcoran High School, 1981, and John Muir Junior High, 1977
CIF Section Champion, Cross Country in 1978
CIF Section Champion, Track & Field 2 mile run in 1981
National Junior Record, 20 kilometer run, 1982
National Age Group Record, 1500 meter run, 1978

Community Activities

District 64 Little League Umpire, 2003-2007
Dixon Little League Umpire, 2006-07
Davis Little League Chief Umpire and Board member, 2004-2005
Davis Little League Safety Officer, 2004-2005
Davis Little League Certified Umpire, 2002-2004
Davis Little League Scorekeeper, 2002
Davis Visioning Group member
Petitioner for Writ of Mandate under the California Environmental Quality Act against City of Woodland decision to approve the Spring Lake Specific Plan, 2002
Served on campaign committees for City Council candidates

Representative Clients/Funders

Law Offices of Stephan C. Volker	EDF Renewables
Blum Collins, LLP	National Renewable Energy Lab
Eric K. Gillespie Professional Corporation	Altamont Winds LLC
Law Offices of Berger & Montague	Salka Energy
Lozeau | Drury LLP	Comstocks Business (magazine)
Law Offices of Roy Haber	BioResource Consultants
Law Offices of Edward MacDonald	Tierra Data
Law Office of John Gabrielli	Black and Veatch
Law Office of Bill Kopper	Terry Preston, Wildlife Ecology Research Center
Law Office of Donald B. Mooney	EcoStat, Inc.
Law Office of Veneruso & Moncharsh	US Navy
Law Office of Steven Thompson	US Department of Agriculture
Law Office of Brian Gaffney	US Forest Service
California Wildlife Federation	US Fish & Wildlife Service
Defenders of Wildlife	US Department of Justice
Sierra Club	California Energy Commission
National Endangered Species Network	California Office of the Attorney General
Spirit of the Sage Council	California Department of Fish & Wildlife
The Humane Society	California Department of Transportation
Hagens Berman LLP	California Department of Forestry
Environmental Protection Information Center	California Department of Food & Agriculture
Goldberg, Kamin & Garvin, Attorneys at Law	Ventura County Counsel
Californians for Renewable Energy (CARE)	County of Yolo
Seatuck Environmental Association	Tahoe Regional Planning Agency
Friends of the Columbia Gorge, Inc.	Sustainable Agriculture Research & Education Program
Save Our Scenic Area	Sacramento-Yolo Mosquito and Vector Control District
Alliance to Protect Nantucket Sound	East Bay Regional Park District
Friends of the Swainson's Hawk	County of Alameda
Alameda Creek Alliance	Don & LaNelle Silverstien
Center for Biological Diversity	Seventh Day Adventist Church
California Native Plant Society	Escuela de la Raza Unida
Endangered Wildlife Trust	Susan Pelican and Howard Beeman
and BirdLife South Africa	Residents Against Inconsistent Development, Inc.
AquAlliance	Bob Sarvey
Oregon Natural Desert Association	Mike Boyd
Save Our Sound	Hillcroft Neighborhood Fund
G3 Energy and Pattern Energy	Joint Labor Management Committee, Retail Food Industry
Emerald Farms	Lisa Rocca
Pacific Gas & Electric Co.	Kevin Jackson
Southern California Edison Co.	Dawn Stover and Jay Letto
Georgia-Pacific Timber Co.	Nancy Havassy
Northern Territories Inc.	Catherine Portman (for Brenda Cedarblade)
David Magney Environmental Consulting	Ventus Environmental Solutions, Inc.
Wildlife History Foundation	Panorama Environmental, Inc.
NextEra Energy Resources, LLC	Adams Broadwell Professional Corporation
Ogin, Inc.	

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Representative special-status species experience

Common name	Species name	Description
Field experience		
California red-legged frog	*Rana aurora draytonii*	Protocol searches; Many detections
Foothill yellow-legged frog	*Rana boylii*	Presence surveys; Many detections
Western spadefoot	*Spea hammondii*	Presence surveys; Few detections
California tiger salamander	*Ambystoma californiense*	Protocol searches; Many detections
Coast range newt	*Taricha torosa torosa*	Searches and multiple detections
Blunt-nosed leopard lizard	*Gambelia sila*	Detected in San Luis Obispo County
California horned lizard	*Phrynosoma coronatum frontale*	Searches; Many detections
Western pond turtle	*Clemmys marmorata*	Searches; Many detections
San Joaquin kit fox	*Vulpes macrotis mutica*	Protocol searches; detections
Sumatran tiger	*Panthera tigris*	Track surveys in Sumatra
Mountain lion	*Puma concolor californicus*	Research and publications
Point Arena mountain beaver	*Aplodontia rufa nigra*	Remote camera operation
Giant kangaroo rat	*Dipodomys ingens*	Detected in Cholame Valley
San Joaquin kangaroo rat	*Dipodomys nitratoides*	Monitoring & habitat restoration
Monterey dusky-footed woodrat	*Neotoma fuscipes luciana*	Non-target captures and mapping of dens
Salt marsh harvest mouse	*Reithrodontomys raviventris*	Habitat assessment, monitoring
Salinas harvest mouse	*Reithrodontomys megalotus distichlus*	Captures; habitat assessment
Bats		Thermal imaging surveys
California clapper rail	*Rallus longirostris*	Surveys and detections
Golden eagle	*Aquila chrysaetos*	Numerical & behavioral surveys
Swainson's hawk	*Buteo swainsoni*	Numerical & behavioral surveys
Northern harrier	*Circus cyaeneus*	Numerical & behavioral surveys
White-tailed kite	*Elanus leucurus*	Numerical & behavioral surveys
Loggerhead shrike	*Lanius ludovicianus*	Large area surveys
Least Bell's vireo	*Vireo bellii pusillus*	Detected in Monterey County
Willow flycatcher	*Empidonax traillii extimus*	Research at Sierra Nevada breeding sites
Burrowing owl	*Athene cunicularia hypugia*	Numerical & behavioral surveys
Valley elderberry longhorn beetle	*Desmocerus californicus dimorphus*	Monitored success of relocation and habitat restoration
Analytical		
Arroyo southwestern toad	*Bufo microscaphus californicus*	Research and report.
Giant garter snake	*Thamnophis gigas*	Research and publication
Northern goshawk	*Accipiter gentilis*	Research and publication
Northern spotted owl	*Strix occidentalis*	Research and reports
Alameda whipsnake	*Masticophis lateralis euryxanthus*	Expert testimony

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EXHIBIT C

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

CALIFORNIA
WASHINGTON
NEW YORK

WI #24-001.xx

July 24, 2024

Kevin T. Carmichael
Associate Attorney
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, California 94080

SUBJECT: **SDG Commerce – 220 Distribution Center**
American Canyon, CA
Review and Comments on EIR Noise Analysis

Dear Mr. Carmichael,

As requested, we have reviewed the information and noise impact analysis for the SDG Commerce 220 Distribution Center Project in American Canyon, CA. The project proposes to construct a 219,834-square-foot wine storage and distribution center on a currently empty site. The surrounding properties are primarily other warehouses, with the nearest noise-sensitive receptor being a residence 900 feet east of the project site. This letter comments on the Environmental Impact Report (EIR) prepared by FirstCarbon Solutions, with an emphasis on Section 3.11 – Noise, and Appendix H - Noise Supporting Information.

1

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 Noise[1]

Learning Outcomes.[2] There is a link between acoustical barriers in the classroom such as background noise and speech intelligibility and the scholastic achievement of students. ANSI Standard S12.60-2002 sets acoustical performance criteria and design requirements for classrooms and other learning spaces.

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 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.

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

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result. 2

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.

[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)

[2] More information on classroom acoustical criteria and studies related to educational outcomes may be found in ANSI Standard S12.60-2002.

Baseline Noise Is Not Properly Established

Despite a section titled "Existing Noise Levels[3]," no measurements or estimates are provided for the existing noise conditions around the Project site. In *King & Gardiner Farms LLC v. County of Kern*, the Court of Appeal ruled that an agency cannot rely solely on compliance with local noise regulations to conclude that there will be no significant noise impacts without considering the effects of noise increases. Therefore, without measuring or calculating the existing Ldn/CNEL level using generally accepted methodology, it is infeasible to assess the increase in the Ldn/CNEL level due to the Project.

The existing noise levels at the residence 900 feet east of the Project site are likely relatively low, given the lack of major noise sources within 2,500 feet. The cumulative effect of two new warehouses in the area, including the SDG Commerce 220 Distribution Center and the new warehouse directly to the north, could significantly increase noise levels over the existing conditions primarily due to increased truck traffic both on-site and along Commerce Boulevard. 3

The EIR should be updated to consider the existing noise levels and the cumulative increase over the existing level that will occur from the addition of both new warehouses on Commerce Boulevard. An EIR must properly document the typical baseline noise conditions to determine impact.

Operational Noise Levels Not Properly Calculated

The EIR's impact analysis assesses each of the Project's operational noise sources independently, comparing each source's noise level separately to the City's impact criteria[4]. This approach is incorrect and underestimates the operational noise produced by the Project, as the operational noise sources, including parking lot activity, mechanical equipment, and truck loading activities, will all operate simultaneously. 4

The EIR should be updated to combine these sources into a single estimate of on-site operational noise at each sensitive receiver. The same methodology should be applied to the second warehouse north of the Project site, and the cumulative operational noise levels should be compared with the existing noise levels (discussed above) as well as the City's criteria.

Cumulative Traffic Increases Not Considered

In Section 3.11.5 – Mobile Source Operational Noise Impacts the EIR states, "for the purposes of this analysis, a doubling of the existing ADT volumes would result in a substantial permanent increase in traffic noise levels.[4]" The EIR estimates that the SDG Commerce 220 Distribution Center would add 372 daily trips to Commerce Boulevard. While this is not a doubling of the 559 daily trips from the existing Valley Wine Warehouse south of the Project, Section 3.11.6 on Cumulative Impacts fails to consider the additional daily truck trips from the new warehouse under construction directly to the north of the Project site. Since Commerce Boulevard terminates at the Valley Wine Warehouse, all existing traffic along Commerce Boulevard is assumed to be associated with the Valley Wine Warehouse. With these two new warehouses in operation, truck traffic on Commerce Boulevard 5

[3] Page 3.11-8, Environmental Impact Report, SDG Commerce 220 Distribution Center Project, June 2024
[4] Section 3.11.5, Environmental Impact Report, SDG Commerce 220 Distribution Center Project, June 2024

could be expected to more than double, potentially resulting in a substantial permanent increase in traffic noise levels, constituting an impact.

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The EIR should be updated to consider the cumulative traffic noise impacts of both new warehouse Projects on Commerce Boulevard.

Conclusions

There are several errors and omissions in the EIR noise analysis, including insufficient determination of the existing noise environment, improper calculations of operational noise estimates, and a failure to consider the cumulative effects of the two warehouse projects on Commerce Boulevard. Correcting these would potentially identify significant impacts which require mitigation. Please feel free to contact me with any questions on this information.

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Very truly yours,

WILSON IHRIG

Luke Watry

Senior Consultant

WILSON IHRIG
ACOUSTICS, NOISE & VIBRATION

LUKE WATRY

Senior Consultant

Luke joined Wilson Ihrig in 2016 and is involved in a wide array of projects including building acoustic design, construction monitoring, modal analysis, as well as transit noise and vibration mitigation. He works out of our Seattle office, has been an important team member on several multi-year transit expansion projects, and has experience on the full breadth of project design work from conception to certification. He is well versed in the use of SoundPLAN, ME'scope, ArcGIS, MATLAB, AutoCAD, Envy, Excel, and experimental design concepts.

Education

- B.S. Mechanical Engineering, University of Colorado, Boulder, CO

Project Experience

BNSF Cowlitz River Bridge Replacement Hydroacoustic Monitoring, WA
Provided hydroacoustic monitoring and reporting services for pile driving activities during the construction of a new rail bridge.

BNSF Northern Pacific Depot Vibration Assessment, Sandpoint, ID
Provided hydroacoustic monitoring and reporting services for pile driving activities in the Pend Oreille River during the construction of a new BNSF rail bridge.

CAHSR EIR/EIS: San Francisco to San Jose & San Jose to Merced Segments, CA
Provided noise modeling and mitigation design services for over 120 miles of high-speed rail alignment through densely populated areas of the San Francisco Peninsula, San Jose, Gilroy, and the Central Valley. Noise impact to sensitive wildlife was also analyzed alongside the standard human-centric criteria.

CTA CRCC 7000-Series Vehicle Noise Consulting, Chicago, IL
Certified the noise and vibration specifications of a new range of CRRC 7000-series "L" vehicles. The specifications included ride quality, exterior vibration, interior noise, and exterior noise across a variety of track types.

Fred Hutchinson Cancer Center, Seattle, WA
Documented the existing acoustic conditions prior to a renovation of animal research laboratories. Developed acoustic criteria and control recommendations for the new laboratories and support facilities.

Houston METRO University BRT, Houston, TX
Conducted an environmental noise and vibration assessment for a new 25-mile BRT project. Provided the client with a technical report outlining the assessment and recommended noise and vibration control measures.

North Mercer Island/Enatai Sewer Upgrade, WA
Provided construction vibration monitoring in accordance with county permit requirements. Remote vibration monitors were installed at residential properties adjacent to construction sites.

Metropolitan Atlanta Rapid Transit Authority (MARTA) On-Call Task, Atlanta, GA
Performed a full modal analysis on five bridges owned by MARTA. The results from the field-testing were analyzed and compared against AISC and AASHTO engineering standards.

Microsoft Building 87 Redmond Link Extension Noise and Vibration, Redmond, WA
Analyzed the potential for ground borne noise and vibration disruption due to Redmond Link Extension. The building contains multiple anechoic chambers, including the "quietest room on earth," as well as sensitive prototype manufacturing facilities.

Microsoft Building 87 Redmond Link Extension Ballast Mat Installation, Redmond, WA
Provided daily construction quality inspections during the installation of a high-performance ballast mat system. Quality issues identified during construction were resolved with the contractor and the completed installation was approved by the ballast mat manufacturer and Sound Transit.

MicroSurgical Technology, Redmond, WA
Conducted a noise survey in a surgical instrument production facility. Developed a report assessing the workers daily noise exposure and provided noise control recommendations.

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Mount Bay Apartments, Tacoma, WA
Provided noise and vibration mitigation services for the design of a mid-rise apartment building located adjacent to a busy rail corridor. Specific recommendations for wall construction and windows were provided to the client.

Nisqually Tribe / Joint Base Lewis-McChord Test Noise Monitoring Review, Olympia, WA
Recorded and analyzed rocket artillery being tested at Joint Base Lewis-McChord, adjacent to the Nisqually Indian Community.

Safeway #2870 Claremont / College Avenue Construction, Oakland, CA
Drafted reports and addressed noise exceedances during demolition and reconstruction of a Safeway and shopping complex.

San Francisco Department of Public Works On-Call Tasks, San Francisco, CA
Implemented construction noise and vibration monitoring for various pipe improvement projects. Long-term monitors were positioned based on predicted work scheduling; short-term attended monitoring was conducted during high-risk activities such as pile driving.

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

Sound Transit Auburn Parking Garage, Auburn, WA
Measured existing long-term vibration levels inside a medical facility adjacent to the site of a future Sound Transit parking garage. The medical facility contains sensitive equipment including a Varian linear accelerator.

Sound Transit Redmond Link Extension, Redmond, WA
Produced vibration prediction models and mitigation design for future light rail track extending through the Microsoft campus and into Downtown Redmond.

Sound Transit Northgate Link Extension, Seattle, WA
Monitored construction vibration and ground-borne noise created by a tunnel boring machine drilling under the University of Washington and surrounding neighborhoods.

Sound Transit Northgate Link Extension Performance Certification, Seattle, WA
Certified the performance of a 5 Hz floating slab constructed in the tunnels underneath the University of Washington (UW) as a part of Sound Transit's Northgate Link Extension**.** Tests were conducted before, during, and after the floating slab construction. One test included measuring vibration levels simultaneously at 16 locations spread across UW and the transit tunnels below.

Sound Transit Rolling Noise Investigation, Seattle, WA
Assisted in developing a computational model of light rail noise. Wheel roughness, rail roughness, and track decay rates were measured for use as model inputs. Wayside noise measurements were used to validate the noise model.

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Sound Transit Tacoma Link Expansion, Tacoma, WA
Provided vibration modeling and mitigation design services for a 2.4-mile expansion of streetcar service. Building vibration response testing was conducted at various residences, medical centers, and community buildings to improve modeling accuracy.

Sound Transit, Siemens Mobility LRV Testing, Seattle, WA
Certified the noise and vibration specifications of a new range of Siemens LRVs. In addition to certifying ride quality, interior noise, and exterior noise specifications, force density levels of the new vehicles were measured and compared to the existing Kinkisharyo fleet.

State Route 520 Interchange Hydroacoustics, Seattle, WA
Provided hydroacoustic monitoring and reporting services for pile driving activities in Lake Washington during the construction of SR520.

Valley Metro, Siemens Mobility LRV Testing, Phoenix, AZ
Certified the noise and vibration specifications of a new range of LRVs. The specifications included ride quality, exterior vibration, interior noise, and exterior noise.

Napa/Solano Residents for Responsible Development (NSRRD)

Note to Reader: This letter includes attachments from Soil/Water/Air Protection Enterprise (SWAPE), Kenneth Shawn Smallwood (SMALLWOOD), and Wilson Ihrig (IHRIG).

Response to NSRRD-1
The organization provides general introductory remarks, summarizes the proposed project, asserts the Draft EIR failed to comply with CEQA, and expresses general opposition to the proposed project. The organization referenced three attachments from its consultants. The organization also provided a statement of interest.

Responses to the three attachments are provided as discussed in the following responses. There is no evidence to support the organization's claims that the Draft EIR failed to comply with CEQA requirements.

Response to NSRRD-2
The commenter states that individual members of the organization and affiliated labor organizations would be directly impacted by the proposed project's environmental, health, and safety impacts and may work in constructing the proposed project. As such, the organization has an interest in protecting the project vicinity from adverse environmental and public health impacts.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-3
The commenter states that the organization has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. The comment states that environmentally detrimental projects can jeopardize future jobs and reduce future employment opportunities.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-4
The commenter states that the organization is concerned with projects that can result in serious environmental harm without providing countervailing economic benefits.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-5
The organization provides general legal background regarding CEQA.

No environmental issues specific to the proposed project are raised, and no further response is necessary.

Response to NSRRD-6
The organization asserts the Draft EIR failed to adequately describe the proposed project, and the comment alleges the project description is inconsistent and unstable. The organization further states that use of natural gas during operation was not disclosed or analyzed and that the specifications for the proposed project's battery energy storage systems were not included.

The comment is noted. The organization's specific comments in this regard are addressed in Responses to NSRRD-7 and NSRRD-8.

Response to NSRRD-7
The organization asserts that the proposed project does not consistently describe the use of natural gas during project operation. The organization states that the proposed project failed to include any mitigation measures that would prevent the use of natural gas at the project site, and the organization further asserts that the inconsistent description of the use of natural gas results in a lack of relevant information for informed decision-making and public participation.

As described in Chapter 2, Project Description, Section 2.3, Project Characteristics, the proposed project would not use natural gas. Furthermore, as indicated in Section 3.2, Air Quality, and Section 3.7, Greenhouse Gas Emissions, of the Draft EIR, the proposed project would not include natural gas appliances or natural gas plumbing, because it is subject to Tier 3 of the Industrial Use Greenhouse Gas Standards found in Chapter 19.01.061 of the City's Municipal Code. As further described in Section 3.5, Energy, the proposed project would not utilize natural gas as a building fuel. The commenter mentioned 13,980 gallons of natural gas, as referenced in Appendix B (not A, they made a typo), page 185. This is natural gas projected to be used during construction. When referring to the use of natural gas during construction and operation, the Draft EIR refers to natural gas used for construction equipment, appliances, and plumbing, not vehicles, as is an appropriate characterization when comparing against the Bay Area Air Quality Management District (BAAQMD) thresholds of significance. However, it should be noted that the use of natural gas powered construction equipment is a conservative assumption as the project applicant has indicated that use of such equipment is unlikely. The Draft EIR does state that, in evaluating potential air quality impacts associated with a project, "energy sources include emissions from the combustion of natural gas for water heaters and other heat sources." As is shown in the corresponding Table 3.2-15, the air pollutant emissions associated with energy are zero (because the proposed project is all-electric). As described throughout the Draft EIR, operation of the proposed project would not utilize natural gas, and as such, no mitigation measures would be required related to natural gas.

Response to NSRRD-8
The organization asserts that the Draft EIR does not contain information regarding the type, size, chemical components, or proposed layout of battery units related to the battery storage for the rooftop solar photovoltaic system. The organization alleges that this information is important for worker safety and impacts in the event of an emergency. The organization further states that battery storage systems can create hazardous conditions from thermal runaway and may require cooling, fire detection, and fire suppression systems. The organization asserts that Draft EIR must be revised to include information and analysis of potential hazards from the proposed battery storage system.

As demonstrated by *Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014) 227 CA4th, 1053, a CEQA document's description of the project description should identify the project's main features and other information needed for an analysis of the proposed project's environmental impacts. The project description "should not supply extensive detail beyond that needed for evaluation and review of the environmental impact" (CEQA Guidelines § 15124). The proposed project is thoroughly described within the Draft EIR and supporting documents, which provide the level of detail needed for the evaluation of the proposed project by the public and decision-makers and for the review of the proposed project's environmental impacts. As such, detailed plans such as grading plans, floor plans, or elevations are not required to be included in the Draft EIR's project description and a general description of the proposed project and conceptual plans are allowed. Battery storage specifications are not required components of the CEQA document.

The comment does not provide substantial evidence regarding any significant environmental impact. The proposed project would provide battery storage in accordance with the requirements of the California Code of Regulations Title 24, Part 6, Section 140.10(b) as described in Draft EIR Section 3.2, Air Quality. The proposed project would comply with all requirements described in Title 24 of the California Code of Regulations, also known as the California Building Standards Code (CBC), and the California Fire Code, which is a component of the CBC, containing fire safety-related building standards.

Response to NSRRD-9
The organization asserts that the Draft EIR fails to accurately disclose the baseline environmental conditions related to potential noise and biological resources impacts. The comment then provides legal background regarding the existing environmental setting within CEQA.

Responses related to the Draft EIR's disclosure of baseline conditions for noise and biological resources are discussed under Responses NSRRD-10 and NSRRD-11, respectively.

Response to NSRRD-10
The commenter states the Draft EIR fails to include any data to support that traffic on local roadways and railroad and airport activity are dominant noise sources in the project vicinity. The commenter asserts that absent baseline noise measurements make it impossible to determine whether the proposed project will have significant impacts to noise.

The commenter concedes that the Draft EIR adequately demonstrates that the proposed project would not result in noise levels that would result in a substantial increase in excess of the City's applicable noise performance thresholds. Furthermore, they do not dispute the assumptions or calculations of the reasonable worst-case construction and operational noise levels identified in the Draft EIR. However, they assert that this does not negate the need to provide evidence that the proposed project would not result in a substantial increase above existing ambient noise levels. They claim that without baseline ambient noise measurements and a comparison of the proposed project's noise impacts, it cannot be determined whether there would be a substantial increase or not above existing noise levels.

However, the commenter fails to provide any evidence that demonstrates that any potential impact could occur. They do not dispute the evidence presented in the Draft EIR which, by common reason, negates the possibility of a potential substantial increase in existing ambient noise levels as measured at the nearest receptor. For example, the Draft EIR identifies that the highest calculated construction noise levels would be 40 A-weighted decibels (dBA) day/night average noise level (L_{dn}) as measured at the exterior façade of the nearest receptor; and the highest calculated operational noise level would be 38 dBA L_{dn} as measured at the exterior of the nearest receptor, a single-family residence. These noise levels are below typical suburban ambient noise levels, and the Draft EIR correctly identifies that these noise levels are also well below levels that the City considers to be acceptable for residential land uses.

However, it can easily be shown that these noise levels would not result in even an audible increase in interior noise levels as measured at the nearest residential receptor. For example, based on the United States Environmental Protection Agency (EPA) Protective Noise Levels,[2] a combination of standard construction walls, doors, and windows, in accordance with building code requirements for multi-family residential developments, would provide 25 dBA in exterior-to-interior noise reduction with windows closed and 15 dBA or more in exterior-to-interior noise reduction with windows open. Therefore, the proposed project's reasonable worst-case construction and operational noise levels would attenuate to below 25 dBA and 23 dBA L_{dn}, respectively, as measured in the interior of the nearest residential receptor with the residential windows being open.

These noise levels, by common reason, are so low that they could not be constituted as a substantial increase in existing ambient noise levels as measured at the nearest receptor. For example, the report by Wilson Ihrig upon which the commenter bases their opinion (attached to their letter), states that typical indoor speech levels are 45 to 50 dBA at 1 meter. Therefore, the reasonable worst-case construction and operational noise levels, as measured at the interior of the nearest residential receptor would be more than 20 dBA below the level of typical conversational speech. Again, the report by Wilson Ihrig upon which the commenter bases their opinion identifies that, for complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Therefore, the proposed project's reasonable worst-case construction and operational noise levels of 25 dBA and 23 dBA L_{dn}, as measured inside the nearest residential receptor with windows open, are well below the level that would be considered to have the potential to interfere with speech. It should further be noted that the proposed project's reasonable worst-case construction and operational noise levels would attenuate to below 15 dBA and 13 dBA L_{dn} as measured inside the nearest residential receptor with the residential windows being closed.

Therefore, as the Draft EIR logically concludes, due to distance attenuation, the proposed project's construction and operational noise levels would not result in even an audible increase in interior noise levels as measured at the nearest residential receptor, and therefore could not reasonably result in a temporary or permanent substantial increase in ambient noise levels, as measured at the nearest residential receptor. Therefore, the proposed project's reasonable worst-case construction and operational noise levels would be less than significant.

[2] EPA 550/9-79-100, November 1978.

Response to NSRRD-11
To preface this response, as discussed on Draft EIR Section 3.3, Biological Resources, pages 3.3-30 and 3.3-33, two separate biological consulting firms (Monk & Associates and Pinecrest Research Corporation) assessed the project site between 2006 and 2023. The studies included biological resource reports, habitat assessments, special-status plant and animal survey reports, and an aquatic resource jurisdictional determination. Additionally, FirstCarbon Solutions (FCS) peer reviewed these biological firms' work prior to the release of the Draft EIR and determined it to be adequate. In sum, the project site has been substantially studied and there is an abundance of information about its baseline biological conditions.

With that in mind, the Draft EIR used this abundance of information to describe the existing biological conditions in Draft EIR Section 3.3, Biological Resources, on pages 3.3-1 through 3.3-20. This discussion included (1) soil, typography, and hydrology; (2) vegetation communities and land cover types; (3) sensitive natural communities; (4) common wildlife; (5) special-status species; (6) State or federally protected waters and wetlands; and (7) wildlife movement corridors and nursery sites. Draft EIR Exhibit 3.3-1 provided a soils map, Exhibit 3.3-2 provided a vegetation communities and land cover map, Exhibit 3.3-3 provided a CNDDB special-status species occurrences map, and Exhibit 3.3-4 provided a biological impacts map. By any objective standard, this constitutes an adequate description of the existing baseline conditions of the project site and is supported by substantial evidence. The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-4, -11, and -12.

Response to NSRRD-12
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-2 and -19.

Response to NSRRD-13
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the EIR. These comments are addressed independently in Response to SMALLWOOD-17.

Response to NSRRD-14
The commenter provides their interpretation of legal requirements and case law. The legal statutes and case law speak for themselves. The general claims and information presented by the commenter regarding legal standards of review are not specific to the proposed project and do not specifically raise any issues concerning the proposed project or the Draft EIR and do not provide substantial evidence to support the claim that the Draft EIR is inadequate. The comment does not raise any specific environmental issue with respect to the proposed project or the analysis in the Draft EIR.

The City finds that the studies relied on in the Draft EIR are adequate and supported and that the Draft EIR provides all required information. Moreover, the City notes that under CEQA, an EIR is required to evaluate a reasonable analysis of impacts. It is not required to perform every study or undertake every investigation suggested. It must be prepared with a sufficient degree of analysis to provide decision-makers with the information needed to make an intelligent decision concerning a project's environmental consequences (CEQA Guidelines Sections 15151, 15204(a); *San Joaquin Raptor Rescue Ctr. v County of Merced* (2007) 149 CA4th 645, 666.) Because this comment recites

general legal provisions regarding CEQA without any direct application to the proposed project, it requires no further response.

Response to NSRRD-15
The commenter states that the conclusion in the Draft EIR with respect to health risks to sensitive receptors from construction-related impacts is not supported by substantial evidence. To support this claim, the commenter states that the construction health risk assessment (HRA) prepared for the proposed project fails to consider age sensitivity factors (ASF) and fraction of time at home (FAH) for nearby sensitive receptors.

The construction HRA was prepared and followed the methodologies presented in the California Environmental Protection Agency (Cal/EPA)/California Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015), which was adopted in 2015, replacing the previous 2003 guidance manual. As summarized in the Draft EIR and shown in detail in Appendix B, the appropriate ASF and FAH assumptions were utilized. Section 3.2, Air Quality, of the Draft EIR provides an overview of the HRA assumptions, as well as a summary of the HRA results. Detailed HRA assumptions and results are provided in Appendix B of the Draft EIR. As described more fully therein, the Hot Spots Analysis and Reporting Program 2 (HARP2) was used to automatically calculate the health risk for the proposed project. Use of the HARP2 modeling ensures that the calculational procedures for cancer and non-cancer risk follow the OEHHA 2015 Guidelines and that ASF and FAH parameters are applied correctly. The HARP2 output files, which are included in Appendix B of the Draft EIR, detail how the HARP2 model was applied and document the appropriate HRA parameters for ASF and FAH for exposure.

Age Sensitivity Factors
As described in Section 3.2, Air Quality, as well as Appendix B of the Draft EIR, the HRA prepared for the proposed project evaluated cancer and non-cancer chronic hazard risks from construction at the Maximally Exposed Individual Resident (MEIR), the Maximally Exposed Individual Worker (MEIW), and other sensitive receptors of interest, such as schools. As described in the Draft EIR and shown in the HARP summary report in Appendix B, the HRA prepared for the proposed project does apply the appropriate ASF as recommended by the OEHHA Risk Assessment Guidelines. An age sensitivity factor of 10 was applied for infants with exposure starting in the third trimester (pre-birth) until age 2. Children from ages 2 to 16 are assumed to be 3 times more sensitive than adults. No adjustments were made for adult exposure for ages greater than 16. As stated in the Draft EIR, "OEHHA Health Risk assessment protocols specify HRAs for residential exposure should start with exposure starting at third trimester and this approach is used for both the Construction and Operational HRA for the proposed project."

Fraction of Time at Home
As described in Section 3.2, Air Quality of the Draft EIR, the analysis utilized OEHHA guidance for evaluating an individual receptor based on a 30-year residential exposure over a 70-year averaging period. Specifically, the OEHHA guidance recommends using the 95th percentile breathing rate for age groups less than 2 years old and the 80th percentile breathing rate for age groups that are greater than or equal to 2 years old. The construction exposure period is less than 2 years and, as

per OEHHA guidance, exposure was evaluated starting in the third trimester and conservatively evaluated exposure for ages less than 2 years based on the 95th percentile breathing rate. Residents less than 16 years of age are assumed to be exposed continuously 24 hours per day, 7 days per week (fraction of time at home). The Construction HRA considers exposure starting in third trimester of pregnancy and continuing for 11 months.

Accordingly, the Draft EIR and related technical appendices adequately disclosed all assumptions and methodologies utilized in the HRA, including, among others, the ASF and FAH, and accurately evaluated and disclosed the proposed project's potential health risk impacts according to established standards. The commenter's assertions related to ASF and FAH are incorrect and unsubstantiated. The comment does not provide any specific evidence related to emissions nor does it raise any issues that require a revision of the Draft EIR, and no further response is necessary.

Response to NSRRD-16

The commenter states that the conclusion in the Draft EIR with respect to health risks to sensitive receptors from project operation is not supported by substantial evidence because the City failed to conduct an operational HRA for the proposed project.

The California Air Resources Board (ARB) in the Land Use Planning Handbook (Handbook) provides guidance, standards, methodologies, and procedures for conducting air quality analyses and was used extensively in the preparation of the air quality analysis for the proposed project.

For purposes of this project, the Draft EIR followed the guidance issued by the ARB in the Land Use Planning Handbook (Handbook) that states, "avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week). The ARB recommendation is based on distance-related findings that demonstrate that cancer risks decrease to acceptable levels with distance based on truck volumes in the range of 100 per day.

Lead agencies have discretion to use guidance recommended by other public agencies as the basis for establishing thresholds of significance and making significance determinations. See CEQA Guidelines Section 15064.7(c). Using the ARB guidance to inform its thresholds of significance, the City found that there was no quantitative analysis required for future cancer risk within the project area as the proposed project is consistent with recommendations regarding truck trips and siting of new sensitive land uses. The traffic analysis in the Draft EIR estimates 64 daily truck trips associated with the proposed project's operation. Additionally, no TRUs would be operated while on-site. Accordingly, the proposed project is not considered a substantial source of diesel particulate emissions because the proposed project's truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook; and because no TRUs would be operated while on-site, health risks were found to be less than significant. Based on this information, the analysis in the Draft EIR correctly concluded that an operational HRA was not warranted. In light of the information presented in the Draft EIR, the commenter did not provide any substantial evidence to support the claim that an operational HRA should have been conducted. The commenter did not provide

evidence or reasoning as to why the ARB guidance should not be followed. Therefore, the comment does not raise any issues that require a revision of the Draft EIR.

Response to NSRRD-17
The commenter stated that the Draft EIR's finding of a less than significant impact to nearby existing sensitive receptors as a result of operation of the proposed project is lacking in its evidence and that a revised EIR should include an operational HRA.

Preparation of an operational HRA pursuant to OEHHA guidance is not required under CEQA, nor is it required for any permits or approvals. There is no evidence to suggest that the proposed project would generate emissions that are excessive or above acceptable levels that already occur in the environment. As stated in Response to NSRRD-16, the analysis in the Draft EIR cited the recommendations by ARB which are based on risk assessment for distribution centers based on TRU activity and truck traffic. The assessment finds a significant drop off in cancer risk to levels in the 10 to 100 per 1 million range (for the year 2000) starting at 800 feet from the facility (the risk assessment was conducted for TRUs and assumes, based on an emissions basis, similar risks for a facility with truck volumes of less than 100 trucks per day). However, it should be noted that the risk assessment evaluated emission rates for the years 2000, 2010, and 2020 and found that as the fleet became cleaner over time, the health risks continued to drop significantly. The estimated risk range versus distance from the center of TRU activity area for the year 2020 was estimated to be less than 10 in 1 million at 650 feet. The closest sensitive receptor to the proposed project is approximately 850 feet in distance. The closest school is more than 1,200 feet in distance from the proposed project. As mentioned, the Handbook benchmarked approximately 100 trucks per day as having a similar risk profile to TRUs. Therefore, because the traffic analysis estimates 64 daily truck trips associated with the proposed project's operation (which is less than 100 daily truck trips), and no TRUs in operation while on-site, based on ARB guidance and recommendations, the health risks could be reasonably assumed to be 10 in 1 million or less at 850 feet from the proposed project site, and health risks from project operation would be less than significant. Therefore, the comment does not raise any issues that require a revision of the Draft EIR.

Response to NSRRD-18
The commenter stated that SWAPE conducted a screening level HRA (HRSA) which demonstrated that construction and operation of the proposed project could result in significant health risk impacts when correct assumptions and up-to-date, applicable guidance are used.

Please refer to Response NSRRD-15, which outlines how the Draft EIR correctly followed the guidance and recommendations by BAAQMD and OEHHA in preparing the HRA for construction-related impacts. The HRA for construction found health risks that are below the BAAQMD threshold of 10 in 1 million, and therefore represent less than significant impacts. The Draft EIR adequately disclosed the potential health risks and mitigation is not required.

Regarding operational impacts, please refer to Response to SWAPE-6, which outlines the flawed HRSA analysis utilizing inappropriate emissions and assumptions. The commenter has not provided any substantial evidence to support the assertion that the HRSA demonstrated that the proposed project could result in significant health risk impacts from project operation.

Response to NSRRD-19
The commenter states that the City must prepare a revised EIR to address the potentially significant health risk impacts described in the comment letter and in the expert comments attached therein. The commenter further stated that the Draft EIR is completely deficient as an informational document in failing to disclose the proposed project's potentially significant impacts to public health and does not provide mitigation to reduce these impacts.

As noted in Responses to NSRRD-15 through NSRRD-19 and Response to SWAPE-6, the commenter has not provided any substantial evidence to support the assertion that the Draft EIR is deficient or fails to disclose the proposed project's potential impacts. As discussed above, the preparation of an HRA is not required, there is no evidence of potentially significant health risks that have not already been addressed in the Draft EIR, and the submission of general comments from experts does not trigger recirculation. The Draft EIR reflects a reasoned analysis that thoughtfully discloses the project's air quality impacts and identifies mitigation measures to reduce significant impacts to the extent feasible. The Draft EIR is sufficient under the law, no changes are warranted based on the information submitted in this comment, and recirculation is not triggered.

No further response is required.

Response to NSRRD-20
The commenter provided several mitigation measures that the City should consider implementing in order to reduce the proposed project's health risk impacts from toxic air contaminant (TAC) emissions.

As stated on page 3.2-58 of the Draft EIR, the proposed project includes several design features and best management strategies specific to warehouse projects. However, CEQA only requires mitigation to minimize the project's significant environmental impact (Public Resources Code [PRC] § 21002.1(a); State CEQA Guidelines § 15126.4(a)(3)). CEQA does not require, or grant authority to a lead agency to impose, mitigation for impacts that are less than significant. For example, in *North Coast Rivers Alliance v Marin Mun. Water Dist.* (2013) 216 CA4th 614, 649, the court held that an EIR was not required to discuss green energy credits as a mitigation measure for energy impacts when the EIR had determined that the project's energy impacts would be less than significant. The Draft EIR found less than significant impacts from the proposed project's health risks, and therefore, consistent with CEQA case law and the Public Resources Code, no mitigation measures are required. Accordingly, the City rejects each of the commenter's recommendations suggested in this comment as unnecessary.

Response to NSRRD-21
The commenter states that CEQA requires agencies to conduct noise analysis for projects that consider both the absolute noise levels expected and the degree noise levels are expected to increase over existing ambient conditions.

No assertion about this proposed project is contained in the comment and therefore no response is required.

Response to NSRRD-22
The commenter references a court case.

No assertion about this proposed project is contained in the comment and therefore no further response is required.

Response to NSRRD-23
The commenter asserts the Draft EIR fails to properly calculate the proposed project's operational noise and fails to consider the cumulative noise impacts from nearby warehouse developments which are underway, resulting in a failure to analyze and mitigate the proposed project's significant operational noise impacts.

This comment is a general introductory comment. Please see Responses to NSRRD-24 through 26. The Draft EIR thoroughly calculated the proposed project's operational noise and cumulative impacts in Section 3.11. The operational noise was calculated in the Draft EIR by demonstrating that the reasonable worst-case scenario for all sources of operational noise would be less than significant. The Draft EIR states that there is only one project on the cumulative projects list that is within 1,000 feet of the project site (the project immediately north of this project site). That project is currently under construction and will be completed before this project begins construction. Therefore, there would not be an existing cumulative construction noise impact condition.

Refer to response to comment NSRRD-10 regarding the assertion related to an inadequate baseline noise level comparison of the proposed project's noise impacts.

Response to NSRRD-24
The commenter asserts that the Draft EIR fails to analyze and mitigate potentially significant operational noise impacts because it underestimates the operational noise sources. The commenter also states that the Draft EIR fails to establish the existing noise environment.

The Draft EIR did calculate the reasonable worst-case scenario for all sources of operational noise and demonstrated that impacts were less than significant. However, the commenter does not provide any evidence that the combination of the proposed project's various operational noise levels would result in a significant impact. Even if the noise sources combined, they would be less than significant. A-weighted decibels are based on a logarithmic scale. They cannot be added or subtracted in the usual arithmetic way.

As is documented in the Draft EIR, the proposed project's parking lot activity could result in a reasonable worst-case average noise level of 38 dBA L_{dn} as measured at the nearest receptor; mechanical system operations could result in a reasonable worst-case average noise level of 23 dBA L_{dn} as measured at the nearest receptor; and reasonable worst-case truck loading and unloading noise levels could average 35 dBA L_{dn} as measured at the nearest receptor. If these various reasonable worst-case operational noise levels were to occur at the same time over a 24-hour period, they could result in a combined reasonable worst-case operational noise level of 39.8 dBA L_{dn} as measured at the nearest receptor. This is below the reasonable worst-case construction noise level identified in the Draft EIR that was also demonstrated to result in a less than significant impact as measured at the nearest receptor. Therefore, The Draft EIR correctly identifies that the proposed

project's combined operational noise levels would not cause ambient noise levels to exceed the City's exterior substantial increase noise level criterion. Refer to response to comment NSRRD-10 regarding the assertion related to an inadequate baseline noise level comparison of the proposed project's noise impacts. Therefore, the proposed project's combined operation noise level would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of the combined noise produced by project-related operations to off-site sensitive receptors would be less than significant.

Response to NSRRD-25
The commenter asserts that the Draft EIR fails to account for the cumulative noise impacts that will result from operation of the SDG Commerce 217 project to the north of the proposed project site and that traffic noise levels from the combined operations of both warehouses are expected to more than double traffic on Commerce Boulevard.

The commenter does not provide any evidence to support the claim that the proposed project would double traffic on Commerce Boulevard or Commerce Court (note that the proposed project and SDG Commerce 217 are located on Commerce Court) and result in a substantial increase in traffic noise levels as measured at a sensitive receptor in the project vicinity. In fact, the commenter does not dispute the proposed project's calculated average daily project trips or the documented average daily project trips of the project that is located directly south of the project site on Commerce Court. Furthermore, the commenter avoids the fact that Commerce Court ends just south of the project site and that all project traffic will travel north on Commerce Court away from the closest off-site sensitive receptors. The commenter also fails to consider the fact that the SDG Commerce 217 project that is north of the project site has already gone through its own CEQA review and has been approved and is therefore now considered part of the baseline condition.

The Draft EIR shows that documented existing average daily traffic volumes along Commerce Court/Boulevard adjacent to the project are 559 trips each weekday. These existing average daily trips all travel north along Commerce Court and pass the proposed project site continuing on to Commerce Boulevard. In fact, they are the only trips that pass the proposed project site since Commerce Court terminates adjacent to the project site immediately south of the proposed project site. The Draft EIR goes on to identify that the proposed project would result in 372 average daily trips, which would clearly not double traffic on the roadway segment adjacent to the proposed project site. These project trips would not result in even a 1 dBA increase in existing traffic noise levels on the roadway segment adjacent to the project site and, therefore, would result in an increase that would be well below the 3 dBA increase that the Draft EIR identifies would be a substantial increase above existing conditions (See Draft EIR Section 3.11, page 3.11-17).

It can reasonably be deduced that, since the proposed project would not double traffic on the lowest traffic volume segment of Commerce Court, it would similarly not result in a doubling of traffic volumes on segments of Commerce Court that have even higher traffic volumes. In addition, as pointed out previously, those segments are even further from the nearest residential receptors in the project vicinity. Thus, it is evident that the proposed project would not result in a substantial permanent increase in existing traffic noise levels as measured at the nearest sensitive receptors in the project vicinity.

Therefore, the proposed project would result in a less than significant contribution to existing cumulative traffic noise levels and the commenter does not provide any evidence to the contrary.

Response to NSRRD-26
The commenter asserts that the Draft EIR lacks substantial evidence to support its conclusion that the proposed project's operational noise impacts will be less than significant because it failed to analyze the magnitude of noise increase from the proposed project and the cumulative noise impacts of the proposed project in conjunction with other projects on Commerce Boulevard.

Please refer to Responses to NSRRD-10, NSRRD-23, NSRRD-24, and NSRRD-25.

Response to NSRRD-27
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-11 and -23.

Response to NSRRD-28
The commenter summarizes findings from Dr. Shawn Smallwood, PhD regarding wildlife traffic collision mortality, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-25.

Response to NSRRD-29
The organization asserts that the Draft EIR fails to disclose, analyze, or effectively mitigate the proposed project's potentially significant impacts on air quality, public health, biological resources, and transportation. The organization further alleges that these impacts create inconsistencies with General Plan policies and that the City cannot make the requisite findings to approve the proposed project's local land use permits.

Please refer to Responses to NSRRD-14 through NSRRD-28 for a discussion of the Draft EIR's analysis and mitigation related to air quality, public health, biological resources, and transportation. As noted in those responses, the Draft EIR provided sufficient analysis and mitigation for these potentially significant impacts as feasible. Therefore, the Draft EIR adequately analyzed potential inconsistencies with the General Plan policies applicable to the proposed project. Please refer to Responses to NSRRD-30 through NSRRD-34 for more discussion on the proposed project's consistency with specific General Plan policies.

Response to NSRRD-30
The organization alleges that the City may not make required findings to approve the proposed project entitlements because the proposed project is in conflict with Municipal Code Section 19.42.202 D.5, which states that a project will not be materially detrimental to the general health, safety, and welfare. The organization reiterated its previous comments about the alleged deficiencies of the HRA.

Refer to Responses to NSRRD-15 through NSRRD-20 and SWAPE-2 through SWAPE-8, which show that the project-specific HRA provided in the Draft EIR is sufficient for the purposes of CEQA and demonstrates compliance with the applicable federal, State, and local regulations. As such, the City may make the required finding pursuant to Municipal Code Section 19.42.202 D.5 that the proposed project would not be materially detrimental to the general health, safety, or welfare of the public.

Response to NSRRD-31
The organization alleges that the City may not make required findings to approve the proposed project entitlements because the proposed project is in conflict with Municipal Code Section 19.42.020 D.1, which require consistency with applicable General Plan policies. The organization claims that the proposed project would not comply with several key policies in the General Plan's Natural and Historic/Cultural Resources Element, relevant to biological resources.

As stated in *Families Unafraid to Uphold Rural etc. v. Board of Supervisors* (1998) 62 Cal.App.4th 1332, 1336: A project is consistent with the general plan "if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment… A given project need not be in perfect conformity with each and every general plan policy. To be consistent, a [project] must be 'compatible with' the objectives, policies, general land uses and programs specified in the general plan." (See also *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal. App. 4th 704, 719). Please also refer to Responses to NSRRD-32 through NSRRD-34 and SMALLWOOD-2 through SMALLWOOD-36, which discuss potential impacts related to biological resources. As such, the City may make the required finding pursuant to Municipal Code Section 19.42.020 D.1 that the proposed project would be consistent with the General Plan.

Response to NSRRD-32
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-22.

Response to NSRRD-33
The commenter summarizes findings from Dr. Shawn Smallwood, PhD, in response to the Draft EIR. These comments are addressed independently in Response to SMALLWOOD-19 and Response to SMALLWOOD-22.

Response to NSRRD-34
The commenter mentions Policy 11.2.4, which requires that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. The commenter asserts that the Draft EIR lacks the baseline analysis necessary to demonstrate compliance with this policy.

Please refer to Responses to NSRRD-10.

Response to NSRRD-35
The organization states that the Draft EIR is wholly inadequate under CEQA and must be revised and recirculated.

As indicated in Responses NSRRD-1 through NSRRD-34, as well as responses to SWAPE-1 through SWAPE-13, SMALLWOOD-1 through SMALLWOOD-38, and IHRIG-1 through IHRIG-7, none of the alleged deficiencies are supported by substantial evidence, and, therefore, there is no legal basis to revise and recirculate the Draft EIR.

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Soil Water Air Protection Enterprise (SWAPE)

Response to SWAPE-1

The commenter notes that they reviewed the June 2024 Draft EIR for the proposed project and that their review concludes that the Draft EIR fails to adequately evaluate the proposed project's health risk impacts. The commenter further notes that health risk impacts associated with construction and operation of the proposed project may be underestimated and are inadequately addressed, and a revised EIR should be prepared.

Pursuant to CEQA, a general response to a general comment is sufficient (CEQA Guidelines § 15088(c)). The comment alleges general objections to the Draft EIR but does not provide substantial evidence regarding any alleged deficiencies. The City finds that the Draft EIR contains a thoughtful, accurate analysis of the proposed project's potential impacts that complies with CEQA guidelines; therefore, there is no legal basis to revise and recirculate the Draft EIR.

Response to SWAPE-2

The commenter noted that the Draft EIR conducted a HRA to evaluate impacts from exposure to diesel particulate matter (DPM) emissions during the proposed project's construction. The commenter stated that the Draft EIR failed to provide exposure assumptions and, therefore, the proposed project's cancer risks may be underestimated.

As noted in Response to NSRRD-15, the Draft EIR provided the appropriate exposure assumptions as recommended by OEHHA guidance at page 3.2-35. As previously stated and shown in the Draft EIR, the construction HRA that was prepared for the proposed project followed the methodologies described in the Cal/EPA/OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2015), which was adopted in 2015, replacing the previous 2003 guidance manual. As disclosed in the Draft EIR, the HRA was prepared using ARB's HARP2, which is the recommended model for calculating and presenting HRA results because it follows the risk assessment guidance and methodology recommended by OEHHA. The Draft EIR provides an overview of the HRA assumptions, as well as a summary of the HRA results. Detailed HRA assumptions and results are provided in Appendix B. As detailed more fully therein, the HARP2 modeling was used to automatically calculate the health risk for the proposed project. Use of HARP2 ensures that the calculational procedures for cancer and non-cancer risk follow the OEHHA 2015 Guidelines and that ASF and FAH parameters are applied correctly. The HARP2 output files, which are included in Appendix B, detail how the HARP2 model was applied and documents the appropriate HRA parameters for ASF and FAH for exposure. The methodology used to prepare the HRA, including modeling parameters and assumptions, was properly disclosed in the Draft EIR, as required by CEQA.

Response to SWAPE-3

The commenter notes that the Draft EIR relies on guidance provided in the 2005 ARB Air Quality and Land Use Handbook (Handbook) to omit an operational HRA and should rely on OEHHA and Department of Justice (DOJ) guidance.

The commenter did not provide justification or evidence as to why the 2005 ARB Air Quality and Land Use Handbook is inappropriate for purposes of the analysis, nor did the commenter provide justification outlining why the DOJ document is more appropriate for purposes of the analysis.

Response to SWAPE-4
The commenter notes that the DOJ recommends that all warehouse projects prepare a quantitative HRA pursuant to OEHHA and that the HRA follow OEHHA guidance in terms of exposure duration.

As noted in Response to NSRRD-15, the HRA conducted for the proposed project fully analyzed all construction-related impacts and followed OEHHA guidance, including an exposure duration of 30 years to estimate individual cancer risk at the MEIR. As noted in Response to NSRRD-16 and Response to NSRRD-17, the Draft EIR found a less than significant impact related to health risks associated with operation of the proposed project. The Draft EIR followed recommendations and guidance by the ARB in reaching this conclusion. There are no requirements set forth by OEHHA to assess the potential health risks from warehouse projects.

Response to SWAPE-5
The commenter states that by failing to prepare an operational HRA, the proposed project is inconsistent with the CEQA requirements to make "a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." The commenter stated that the proposed project would generate about 372 daily vehicle trips, which would generate additional exhaust emissions and exposure to nearby sensitive receptors to DPM emissions; however, the commenter states that the Draft EIR fails to evaluate the TAC emissions associated with the proposed project's operation. The commenter further stated that the Draft EIR did not make a reasonable effort to connect the proposed project's operational TAC emissions to the potential health risks posed to nearby receptors, and therefore the proposed project is inconsistent with CEQA's requirement to correlate the project-generated emissions with potential adverse impacts on human health.

The commenters' assertions are unsubstantiated. First, the Draft EIR does include an analysis of the proposed project's potential health risks from project operation. The analysis in the Draft EIR is based upon ARB guidance and recommendations and found that potential operational-related health risks would be less than significant, which represents a connection to the proposed project's air quality impacts and likely health consequences. Please refer to Responses to NSRRD-15 and NSRRD-16 for an overview of the screening level analysis that was conducted in the Draft EIR to support these findings.

Second, as described in Responses NSRRD-15 and NSRRD-16, the Draft EIR utilized a screening level analysis to evaluate the potential impacts from TAC emissions associated with the proposed project's operation. A screening level analysis may be conducted to demonstrate potential health risk impacts (as stated by the commenter themself in SWAPE-6); only if the screening analysis finds unacceptable health risks then a more refined modeling approach should be conducted. The Draft EIR utilized the ARB Air Quality and Land Use Handbook as a mechanism to conduct a screening level analysis. Please refer to comment NSRRD-15 and NSRRD-16.

Response to SWAPE-6

The commenter provided a screening level HRA (HRSA) for the proposed project's operational-related health risk impacts which was prepared with AERSCREEN. The commenter noted that "the HRSA utilizes a limited amount of site-specific information to generate maximum reasonable downwind concentrations of air contaminants to which nearby sensitive receptors may be exposed. If an unacceptable air quality hazard is determined to be possible using AERSCREEN, a more refined modeling approach is required prior to approval of the Project." In other words, the HRSA is a conservative screening analysis that is not meant to portray the health risks associated with the proposed project; rather, it is a screening tool to be used to determine whether an additional level of analysis should be conducted.

AERSCREEN will produce estimates of "worst-case" 1-hour concentrations for a single source rather than the annual average. AERSCREEN is intended to produce concentration estimates that are equal to or greater than the estimates produced by AERMOD with a fully developed set of meteorological and terrain data. As stated, AERSCREEN is an intentionally conservative screening tool. In addition, the HRSA utilized assumptions that serve to make the HRSA findings even more conservative. For example, the mobile source emissions associated with project operation (including the passenger vehicles and trucks) are represented in AERSCREEN as a uniform area source.

Furthermore, the emissions utilized in the HRSA (80 pounds of $PM_{2.5}$ annually, which are assumed as DPM for purposes of the HRSA) are based on emissions from a mix of passenger vehicles and medium-duty and heavy-duty trucks and are calculated based on an average truck trip length of 35.6 miles. However, emissions from the full truck trip length of 35.6 miles should not be utilized in a health risk analysis because, unlike regional emissions, localized emissions are evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. In other words, all the emissions along the entirety of 35.6 miles (the assumed trip length) will not be experienced within the localized area that is analyzed in a HRA (typically 1,000 feet to 0.25 mile around the project site). Therefore, the HRSA provided by the commenter is flawed because it does not accurately reflect the localized emissions that should be evaluated in a health risk assessment. Because the HRSA is inaccurate, it does not constitute substantial evidence of the proposed project's effects, nor does it provide substantial evidence that a more refined HRA should be prepared to assess potential operational-related health impacts.

For informational purposes only, a screening level estimate of potential cancer risks associated with the proposed project operation was prepared by utilizing the corrected emission rates. VMT-based DPM from trucks based on a 0.24-mile trip length from the proposed project site combined with trip-based DPM from truck idling and ignition starts is 0.95 pounds annually (not the 80 pounds referenced in the HRSA). When utilizing the correct total DPM emissions (0.95 pounds annually) with the same methodology as presented by the commenter in the HRSA, the total lifetime cancer risk at the MEIR is estimated to be 0.96 in 1 million, which supports the less than significant finding presented in the Draft EIR. For informational purposes, the details of this analysis are presented below:

According to CalEEMod estimates, VMT-based DPM from trucks (as PM_{10} exhaust) is 85.45 pounds annually and DPM from truck idling/ignition starts is 0.348 pounds annually (as PM_{10} exhaust). The

truck trip emissions are adjusted based on a 0.25-mile trip length and combined with 100 percent of the emissions associated with truck idling/ignition starts.

The average DPM emission rate is calculated by the following equation:

> *Emission Rate* (grams/second) = (0.95 lbs/365 days) x (453.6 grams/lbs) x (1 day/24 hours) x (1 hour/3,600 seconds) = 0.00001355 grams/second.

The concentration is directly proportional to emissions simulated in AERSCREEN for a 291 meter by 145 meter area source and therefore is calculated with the exact ratio of emission rates. The operational lifetime cancer risk calculated in the commenter's HRSA is then scaled to account for the difference in emission rates as follows:

> Corrected cancer risk = 13.8 in a million (HRSA) x (0.95/80) = 0.163875
>
> Construction cancer risk = 0.8
>
> Total lifetime Cancer Risk at MEIR: 0.96 in 1 million

In addition to the flawed HRSA analysis utilizing inappropriate emissions and assumptions, the commenter did not provide any evidence as to why the use of AERSCREEN as a screening tool is more appropriate than the use of the ARB Air Quality and Land Use Handbook as a screening tool. Therefore, neither the HRSA nor the alleged deficiencies of the analysis are supported by substantial evidence, and, therefore, there is no legal basis to reassess the less than significant impacts as outlined in the Draft EIR.

Response to SWAPE-7
The commenter states that the Draft EIR is required under CEQA to implement all feasible mitigation to reduce the proposed project's potential impacts.

Please refer to Responses NSRRD-15 and NSRRD-16 which outline the less than significant finding for potential health risks related to project operation, and the associated analysis. As stated in Responses NSRRRD-15 and NSRRD-16, none of the alleged deficiencies are supported by substantial evidence, and, therefore, there is no legal basis to require additional mitigation measures.

Response to SWAPE-8
The commenter states that 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." The commenter further stated that several mitigation measures would offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed project, which would subsequently reduce emissions from the proposed project's construction. The commenter states that a revised EIR should be prepared that includes all feasible mitigation measures, and an analysis with mitigation measures incorporated.

As stated in Response to SWAPE-7, the health risks from the proposed project's construction and operation were found to be less than significant. CEQA does not require mitigation measures to be applied to a project with less than significant impacts. (CEQA Guidelines § 15126.4 (a)(3)). The commenter did not provide substantial evidence demonstrating why the proposed project's construction or operational-related health risks are significant, and therefore the recommendation that all feasible mitigation measures be implemented does not have legal basis. Therefore, the comment does not raise any issues that require a revision of the Draft EIR.

Response to SWAPE-9
The commenter provided a disclaimer stating that SWAPE has received limited discovery regarding this proposed project. Comment is noted. However, no assertion about this proposed project is contained in the comment and therefore no response is required.

Response to SWAPE-10
Commenter provided health risk calculations. No further response is required.

Response to SWAPE-11
Commenter provided AERSCREEN output files. No further response is required.

Response to SWAPE-12
The commenter (Matthew Hagemann) provided his curriculum vitae. No further response is required.

Response to SWAPE-13
The commenter (Paul Rosenfeld) provided his curriculum vitae. No further response is required.

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Shawn Smallwood (SMALLWOOD)

Response to SMALLWOOD-1
The commenter provides background information regarding their expertise and the proposed project.

No environmental issues are raised, and no further response is required.

Response to SMALLWOOD-2
The commenter describes the environmental conditions and lists species observed during his two site visits. Photos and a species table are attached dictating evidence of species observed. The commenter also predicts potential species richness present within the site. None of commenter's observations, if accurate, would result in revisions to the conclusions in the Draft EIR.

The commenter describes the presence of 18 special-status species observed on-site during his surveys. All 18 special-status species observed by the commenter are avian species. The protection of these species is covered under Draft EIR MM BIO-1a through MM BIO-1d with species-specific mitigations for Swainson's hawk and burrowing owl described under MM BIO-1a through MM BIO-1c and mitigations for additional nesting bird species, including northern harrier, golden eagle, white-tailed kite, and others, described in MM BIO-1d.

The comment also alleges that a series of reconnaissance surveys cannot alone reveal the inventory of a site's wildlife community but does not offer alternative suggestions. Additionally, surveys performed for and relied upon in the EIR are based on industry established standards. CDFW has reviewed the EIR and did not have any comments regarding the methodology relating to the analysis. The predictions of potential species used by the commenter are entirely speculative and are not a recognized method for identifying potential species on a site. Speculation does not constitute substantial evidence under CEQA. (CEQA Guidelines §§ 15145; 15384).

Response to SMALLWOOD-3
The commenter states that the needed steps in characterizing environmental setting have been completed but the results are misrepresented in the EIR. As addressed above, CDFW reviewed the EIR and did not have any comments regarding the methodology relating to the analysis, including the characterization of environmental settings.

Response to SMALLWOOD-4
The commenter addresses how previous surveys conducted by Monk & Associates and Pinecrest Research Corp did not provide survey details such as names, qualifications, and survey start times and durations and that the species counts attained from these surveys were, in his opinion, "a lot of species to be found during these reconnaissance surveys." The commenter then notes how FCS detected less species over their survey period than the previously stated surveys and also failed to provide information such as survey duration, weather conditions and the number of biologists.

Please refer to Response to SMALLWOOD-3.

Response to SMALLWOOD-5
The commenter recounts FCS's objectives for reconnaissance surveys and questions whether these objectives were pursued sequentially or simultaneously. If simultaneously, the commenter suggest the biologists would have been disadvantaged by trying to see too much at once and, therefore, achieved an inferior species detection rate than Monk & Associates and Pinecrest Research Corp.

The commenter, in a type of Goldilocks effect, neglects to specify what number he expects to be justified by the survey hours conducted by each company but simply states that the results of Monk & Associates and Pinecrest seem to be too high while FCS's seems to be too little. It should also be noted that Monk & Associates conducted their surveys prior to development of the southern property, which likely contributed to their larger number of observed species. As noted above, CDFW reviewed the EIR and did not have any comments regarding the methodology relating to the analysis, including the species count attained by FCS.

Response to SMALLWOOD-6
The commenter states that there are issues with FCS's pre-construction surveys. The commenter states that pre-construction surveys lose their focus for a given species if the surveys are performed simultaneously for burrowing owls, Swainson's hawks, other nesting raptors, other nesting birds, and pond turtles, and they would have lost focus had they been performed simultaneously for any combination of two of these groups, let alone all four groups. The commenter argues that pre-construction surveys should be performed separately.

CDFW reviewed the EIR and did not have any comments regarding the previous survey methodology used for any species. No further response is required in this respect.

The commenter also alleges that FCS Swainson's hawk pre-construction survey protocol for the adjacent Commerce 217 site was not met, as no surveys took place during Period V and Period III's surveys were performed too close together. The commenter argues that this was done to "minimize the likelihood of detection of Swainson's hawk." This comment is noted. However, as stated above, CDFW reviewed the EIR and did not have any comments regarding the previous survey methodology used for this species on either site. Furthermore, mitigation applicable to the adjacent Commerce 217 project is beyond the purview of this project's CEQA documentation. Additionally, the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) states that "to meet the minimum level of protection for the species, surveys should be completed for at least the two survey periods immediately prior to a project's initiation." Swainson's hawk detection surveys for the Commerce 217 site took place during the first four survey periods (starting in January and ending in April 2023), meeting the Protocol's requirement.

Finally, the purpose of the EIR is to ascertain biological impacts to the Commerce 220 site (not the Commerce 217 site). Accordingly, Swainson's hawk protocol-level surveys were conducted of this site by Pinecrest Research Corp Biologist Dr. Christopher T. DiVittorio. Additionally, MM BIO-1a through MM BIO-1c in the EIR would require additional Swainson's hawk surveys, further lowering any potential impacts to this species to less than significant under CEQA.

Response to SMALLWOOD-7
The commenter states that Pinecrest Research Corp did not meet the timing requirements for Swainson's hawk surveys as stipulated in the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol). The commenter states that three surveys were completed during Period IV of the guidelines even though the guidelines state in bold font not to survey during Period IV and only one of the three surveys were completed in Period V.

The commenter is not incorrect in his recounting of the Pinecrest Swainson's hawk survey timing. However, as stated above, the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol) states that "to meet the minimum level of protection for the species, surveys should be completed for at least the two survey periods immediately prior to a project's initiation." Large areas of vegetation within Commerce 220 were graded between May 29 and July 2, 2023, via an approved grading plan issued by the City of American Canyon in March 2023. Therefore, the minimum level of protection for this species was met by the Pinecrest surveys performed in Period I, II, III, and IV. The grading that occurred on-site made Period V surveys optional to meet survey protocol. Lastly, MM BIO-1a through MM BIO-1b in the EIR would require additional Swainson's hawk surveys, lowering any impacts to this species to less than significant under CEQA.

Response to SMALLWOOD-8
The commenter states that FCS neglected to mention in the context of the reporting of these special-status species surveys that the SDG Commerce 220 site of the surveys was graded on May 29, 2023. The commenter argues that this grading activity should have been immediately reported to CDFW, and it should have been clearly reported in biological technical reports that were prepared for the Draft EIR.

This comment assumes that FCS did not clearly report this grading activity in technical reports prepared for the EIR. However, the Biological Resource Assessment (BRA) located in Appendix C.1 of the EIR clearly states on multiple occasions that, as part of the SDG Commerce 217 development, much of the Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil for use as clean fill material for the Commerce 217 site. The BRA also states that a Monk & Associates (M&A) authored an Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site in September 2020 analyzed grading impacts (BRA Appendix D.1). Additionally, an approved grading plan was issued by the City of American Canyon in March 2023 (BRA Appendix D.1). Therefore, grading activity was reported and clearly defined in technical reports for the EIR.

Response to SMALLWOOD-9
The commenter states that FCS burrowing owl surveys did not achieve the minimum standards of CDFW's (2012) burrowing owl survey guidelines due to the labeling of three burrowing owl surveys as breeding season surveys between January and April 2023 and only one conducted survey between April 15 and July 15, 2023. The commenter also states that FCS is silent on the grading of the project site on May 29, 2023, and should have reported the grading to CDFW.

Based on CDFW's Staff Report on Burrowing Owl Mitigation, in California, the burrowing owl breeding season extends from February 1 to August 31, with some variances by geographic location

and climatic conditions.[3,4] However, breeding has also been documented in December based off the CDFW's Staff Report on Burrowing Owl Mitigation.[5,6] Therefore, in accordance with CDFW, FCS's use of breeding season terminology for its surveys was not incorrect.

Although FCS did not conduct two burrowing owl surveys between April 15 and July 15, 2023, Pinecrest Research Corp did. It is the joint findings of both company's surveys that were used in the negative declaration of burrowing owls on the project site during the time of the surveys. As stated in the Draft EIR (3.3-36), no western burrowing owls have been observed on the project site during the 18 field surveys conducted by FCS and Pinecrest in 2023. However, out of an abundance of caution, FCS still requires MM BIO-1c to mitigate potential impacts to burrowing owl. With implementation of MM BIO-1c, impacts to burrowing owl on-site would be less than significant. For comments related to the May 29, 2023 grading on-site, see Response to SMALLWOOD-8.

Response to SMALLWOOD-10
The commenter states that a survey conducted by FCS on January 18, 2023, was called a nesting bird survey. The commenter then states that "birds do not nest in January." The commenter then questions the qualifications of surveyors who did not note nests within the project vicinity as the commenter "finds nesting birds at every site I survey for nesting birds."

The commenter is correct in stating that most birds do not begin their nesting season in January. However, species such as the bald eagle do. The bald eagle's nesting season occurs between January and July/August. As this species was observed by the commenter during his surveys, it is correct in calling a January survey in areas associated with bald eagle a nesting bird survey. Additionally, the commenter questioned the qualifications of a surveyor who did not find nests within the project vicinity. However, the commenter did not note the identification of any nests in his survey report of the property either. .

Response to SMALLWOOD-11
The commenter states that FCS's comments on western pond turtles are misleading due to the lack of acknowledgment that western pond turtles visit grassland sites to breed and lay their eggs in ground squirrel or pocket gopher burrows.

CDFW has reviewed the EIR and did not have any comments regarding western pond turtle methodology. Additionally, surveys were conducted of the entire project site, not just wetland areas. (See *Existing Docuentation* on page 3.3-30 and -31 of the Draft EIR). Therefore, although the commenter may find it misleading, FCS's negative declaration of western pond turtle activity on-site holds true.

[3] Haug, E. A., B. A. Millsap, and M. S. Martell. 1993. Burrowing owl (Speotyto cunicularia), in A. Poole and F. Gill, editors, The Birds of North America, The Academy of Natural Sciences, Philadelphia, Pennsylvania, and The American Ornithologists' Union, Washington, D.C., USA.

[4] Thomsen, L. 1971. Behavior and ecology of burrowing owls on the Oakland Municipal Airport. Condor 73: 177-192.

[5] Ibid.

[6] Gervais, J. A., D. K. Rosenberg, and L. A. Comrack. Burrowing Owl (Athene cunicularia) in Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento, California, USA.

Response to SMALLWOOD-12
The commenter states that the surveys performed by FCS and Pinecrest Research Corp targeted Swainson's hawk, burrowing owl, other nesting raptors, other nesting birds and western pond turtle simultaneously and using a common methodology and, therefore, the survey guidelines of each taxonomic group could not have been properly implemented.

The inability of surveyors to successfully conduct different surveys at the same time is speculation and, as stated previously, speculation does not constitute substantial evidence under CEQA. Furthemore, CDFW has reviewed the EIR and did not have any comments regarding survey methodology. Finally, the Draft EIR has proposed mitigation measures for the species (Swainson's hawk, burrowing owl, western pond turtle, and other nesting birds) the commenter has questioned using a common methodology for and, therefore, would still mitigate to ensure any potential impacts to these species would be less than signifcant under CEQA.

Response to SMALLWOOD-13
The commenter states that there is no MM BIO-5, although the IS/MND prepared for the SDG Commerce 217 project states there is. The commenter also argues that the pre-construction surveys of all four mitigation measures required of the IS/MND prepared for the adjacent Commerce 217 site failed to meet their scheduling standards relative to the date when ground was broken for project construction.

FCS acknowledges that reference to MM BIO-5 is a typo and has been corrected in Section 4, Errata. Mitigation applicable to the adjacent Commerce 217 project is beyond the purview of this proposed project's CEQA documentation. Ground-disturbing work that occurred on the Commerce 220 project site was covered by the IS/MND prepard for the Commerce 217 project. Furthermore, CDFW has reviewed the EIR for this project (Commerce 220) and did not have any comments regarding the proposed failure of scheduling standards related to the date when ground was broken for project construction. See Response to BAGINSKI1 for justification on the continued applicability of MM BIO-1a through MM BIO-1g.

Response to SMALLWOOD-14
The commenter states that, not only were the pre-construction surveys for the Commerce 217 project not performed when they were supposed to be performed just prior to ground-breaking on the Commerce 220 project, but as noted earlier, they were not implemented to achieve the minimum standards of their respective survey protocols.

See Response to SMALLWOOD -13 regarding the Commerce 217 mitigation measures and for justification on the continued applicability of MM BIO-1a through MM BIO-1g. See also, Response to SMALLWOOD-7 through Response to SMALLWOOD-11 for how each survey met the minimum standards of their respective survey protocols.

Response to SMALLWOOD-15
The commenter states that Pinecrest Research Corp's protocol-level rare plant surveys did not achieve the minimum standards of the CDFW (2018) survey guidelines due to a lack of reference site survey, ground disturbance via grading, and simultaneous surveying.

CDFW has reviewed the EIR and did not have any comments regarding rare plant survey methodology. Ground disturbance occurred as permitted for the Commerce 217 project.

Response to SMALLWOOD-16
The commenter described the purpose of literature and database reviews. The commenter also states that FCS included reports by M&A and Pinecrest Research Corp in its literature and database sources but that it also should have referenced the commenter's "expert testimony" that was provided on SDG Commerce 330 and SDG Commerce 217. The commenter complains that the Draft EIR Exhibit 3.3-3 is uninformative as it does not identify any of the species on the map. The commenter also states that using CNDDB as a screening step is flawed as, according to the commenter, it is not designed to support absence determinations or to screen out species from characterization of a site's wildlife community, and therefore, the Draft EIR's analysis of special-status species occurrence likelihoods is fundamentally flawed.

The purpose of Exhibit 3.3-3 is not to demonstrate where special-status species are directly, but to demonstrate the breadth of occurrences within the United States Geological Survey (USGS) nine-quadrangle map area of the project site. The literature and database review in the Draft EIR was completed based on standard industry practice for the preparation of an EIR, including a preliminary literature search of special-status species with potential to occur in the area, followed by observations by FCS, M&A, and Pinecrest Biologists during numerous field surveys of the site covering the better part of 18 years (e.g., the first field survey of the site occurred on March 1, 2006). The literature search included a search of theCDFW's CNDDB, which is included in Appendix C of the Draft EIR. The CNDDB search queried all special-status species recorded in the *Cuttings Wharf, California* 7.5-minute USGS Topographic Quadrangle and its eight neighboring quadrangles. The CNDDB search was used in combination with on-site observations in preparation of the Draft EIR. The use of CNDDB is a standard industry practice and does not make the Draft EIR's analysis fundamentally flawed.

Response to SMALLWOOD-17
The commenter argues that a shortfall of the EIR's Swainson's hawk analysis is the failure to note that about a third of the cited surveys were completed while Swainson's hawks were yet to return from their annual migration to Mexico. The commenter argues that another shortfall is the failure to note seven eBird records of Swainson's hawks on American Canyon wetlands, one as recently as June 28, 2024.

Swainson's hawk returns northward from Mexico between February and May.[7] However, according to the Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Protocol), surveys begin for this species in January to determine potential nest locations. Therefore, surveys conducted before Swainson's hawk typical return from Mexico are in accordance with Swainson's hawk survey protocol. Additionally, although eBird is sometimes used as a additonal resource by FCS, its use is not based on standard industry practice for the preparation of

[7] eBird. Swainson's Hawk. 29 May 2023. Website: https://ebird.org/news/swainsons-hawk#:~:text=It%20breeds%20commonly%20on%20the%20Great%20Plains%2C%20as,South%20America%2C%20returning%20northward%20from%20February%20to%20May. Accessed September 24, 2024.

an EIR. Moreover, the Draft EIR prescribes mitigation measures for Swainson's hawk to ensure any potential impacts to this speices is reduced to less than significant levels under CEQA.

Response to SMALLWOOD-18
The commenter argues that occurrence likelihoods for several special-status species were identified as low or absent in the EIR but the commenter identified these individuals flying over or next to the project site. These species include northern harrier, white-tailed kite, and peregrine falcon. The commenter argues that reconnaissance surveys are not enough to confirm absence of species on-site and that without protocol-level detection surveys, no species with overlap in range can be ruled out as having the potential to occur on the site.

FCS is in alignment with the commenter's assessment that northern harrier and white-tailed kite have the potential to be present within the project site. MM BIO-1d of the Draft EIR accounts for special-status species such as the northern harrier, golden eagle, white-tailed kite, and others (including peregrine falcon, if present), and offers protection guidelines to lower impacts to these species to less than significant levels.

Concerning FCS's assertion that the additional special-status species identified by the commenter are absent from the site, the information in Appendix C to the EIR provides a scientifically sound basis for establishing existing conditions necessary for an analysis of potential species impacted. Consistent with industry standards and based on the experience of an expert Biologist, habitats were assessed based on a combination of literature review, aerial photographs, soil surveys, and site visits. Additionally, the Special-status Species Evaluation Tables located in Draft EIR Appendix C.2 evaluates special-status species recorded within the *Cuttings Wharf, California* 7.5-minute USGS Topographic Quadrangle Map and its eight neighboring quadrangles by the CNDDB and California Native Plant Society Electronic Inventory (CNPSEI). This table depicts these species' required habitat and potential to occur within the project site based on habitat types observed on-site. As shown in this table, species likelihood of occurrence can be ruled out based on habitat presence on-site. Therefore, the commenter's assertion that no species with overlapping range with the project site can be ruled out as having the potential to occur is incorrect.

Response to SMALLWOOD-19
The commenter suggests that the term "vagrant" in relation to burrowing owls is meaningless.

The term "vagrant" is used by FCS to describe a species that could disperse or wander into the project site prior to project construction but does not nest on-site. This definition as been added to the EIR, see Section 3, Errata of this Final EIR.

Response to SMALLWOOD-20
The commenter argues that nesting white-tailed kite habitat is more varied than oak and sycamore woodlands and could therefore nest next to or near the site.

FCS agrees that this species could nest in the adjacent eucalyptus trees, as stated on 3.3-17 of the Draft EIR, and MM BIO-1d would protect would protect any such adjacent nests within the applicable buffer distance.

Response to SMALLWOOD-21
The commenter argues that there is no evidence in support of the claim that the project site provides only marginal foraging opportunities to nesting birds.

As stated in the EIR, the project site's grassland has been significantly disturbed in the past by anthropogenic means and is directly bounded by warehouse developments to the north and south. This has resulted in habitat fragmentation and lowered habitat suitability to provide more than marginal foragaing habitat for nesting birds. Based on the numerous field surveys conducted between March 1, 2006 and July 2, 2023, there is no evidence to support that the project site provides more than marginal foraging opportunities to nesting birds. FCS maintains its original statement.

Response to SMALLWOOD-22
The commenter argues that several important types of potential project impacts have been inadequately analyzed. These types of impacts include habitat loss, interference with wildlife movement, and wildlife-automobile collision mortality. Concerning habitat loss, the commenter argues that FCS makes no attempt to estimate the loss of wildlife productive capacity on-site.

It should also be noted that the protection of productive capacity is not a stipulation held under CEQA and is therefore not a necessary component that will be addressed in this response. Moreover, the vast majority of the habitat present on-site is not considered sensitive by CDFW as it has been significantly disturbed by anthropogenic effects.

Regarding habitat loss, the key State resource agency, CDFW, has been consulted regarding the proposed project and has determined that the mitigation proposed by the project would be sufficient, with minor species-specific alterations, to mitigate the proposed project's impacts on species and associated habitat. Additionally, the commenter's formula for speculating habitat loss is not recognized by CEQA industry professionals as a methodology for assessing habitat loss and is based on conjecture. Measures specific to migratory and nesting birds have been incorporated into the EIR as binding mitigation measures (see MM BIO-1a, -1b, -1c, and -1d).

Response to SMALLWOOD-23
The commenter argues that the Draft EIR's analysis of whether the proposed project would interfere with wildlife movement in the region is flawed and misleading. The commenter argues this is due to a lack of evidence on whether the site functions as a corridor or is located within a corridor. The commenter also argues that no sampling regime or record of wildlife movement patterns was obtained by FCS and that results are speculative. The commenter argues impacts to wildlife movement would be significant and unmitigated.

While the proposed project would result in loss of local wildlife habitat, it would not significantly interfere with wildlife movement. Extensive suitable alternative stopover habitat (e.g., undeveloped) for migratory birds and bats can be found to the east and west of the project site. These areas are less fragmented, isolated, and less prone to disturbance from human activities and therefore may be more desirable for some migratory species.

The movement of any terrestrial species or species with limited dispersal ability is likely currently inhibited given the semi-commercial location of the project site. Areas directly south and north of the project site are composed of extensive commercial developments. The project site does not contain habitat features such as riparian corridors that could function as wildlife corridors. Importantly, the project site is not within a designated wildlife corridor based on the CDFW's Essential Connectivity Areas geospatial data set, which uses habitat modeling to identify areas of land with value as wildlife corridors. As such, the site is not recognized as being "critically important" as suggested by commenter.

Response to SMALLWOOD-24
The commenter argues that increased wildlife mortality will be caused by the proposed project's contribution to increased road traffic in the region and that this would produce a potentially significant adverse biological impact.

The photographs included in this comment are not from the project site. Also, the traffic study cited in this comment was conducted in Contra Costa County and the commenter includes numerous unsupported assumptions in applying that study's conclusions to the proposed project. The mathematical analysis provided is based on speculative assumptions from non-related projects outside of Napa County.

As discussed above, the proposed project is not within a designated wildlife corridor. Instead, the project site is bounded by existing industrial development that limits species movement on-site. The site plan and design of the proposed project would not encourage species to traverse internal roadways to reach habitat. The proposed project's traffic generation would amount to only a small portion of existing traffic in the project vicinity and greater region. As such, the operation of the proposed project is not anticipated to result in significant impacts related to wildlife traffic fatalities. See Response to SMALLWOOD-23.

Response to SMALLWOOD-25
The commenter argues that FCS's geographic scope of analysis is conclusory and inaccurate due to traffic fatalities and the loss of foraging opportunities leading to Swainson's hawk and white-tailed kite nest abandonment.

See Response to SMALLWOOD-24 regarding wildlife traffic facitilities. To see how impacts to Swainson's hawk and white-tailed kite are being mitigated, see Response to SMALLWOOD-22.

Response to SMALLWOOD-26
The commenter argues that the Draft EIR provides no explanation of how implementing the particular requirements of the laws and regulations it cites would ensure that the proposed project's incremental contributions to cumulative effects would not be cumulatively considerable.

Compliance with relevant regulatory standards is an appropriate basis for determining that the proposed project will not have a significant environmental impact. (*Tracy First v City of Tracy* (2009) 177 CA4th 912). The commenter incorrectly assumes that the Draft EIR only views residual impacts unsuccessfully mitigated as potential cumulative impacts. This is speculation and not supported by the Cumulative Impacts analysis. The commenter also argues that FCS does not address how

implementation of laws and regulations would contribute to cumulative effects not being cumulatively considerable. However, EIR Impact Bio-4 goes into detail regarding how the proposed project meets any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. This is then referenced in the Local Policies and Ordinances section of the Cumulative Impacts analysis. Therefore, the Draft EIR does justify how the proposed project's incremental contributions to cumulative effects would not be cumulatively considerable.

Response to SMALLWOOD-27
The commenter argues that implementation of cited policies and regulations are not effective as changes in species abundance and richness still occur with the implementation of development. The commenter then argues this point through survey models done by the commenter.

The study of species richness and abundance post-development is not required by any regulation or industry established standard. CDFW has reviewed the EIR and did not have any comments regarding the methodology relating to the Cumulative Impacts analysis. The predictions of the loss of species richness and abundance used by the commenter are not a recognized method for identifying the cumulative effects of project site development. Speculation does not constitute substantial evidence under CEQA. (CEQA Guidelines § 15384(a)).

Response to SMALLWOOD-28
The commenter argues that wildlife fatalities via traffic would be very large due to the proposed project and that his same calculations should be extended to the other warehouses in the City of American Canyon to predict the cumulative traffic toll to wildlife in this region.

See Response to SMALLWOOD-24 regarding traffic facillities.

Response to SMALLWOOD-29
The commenter argues that MM BIO-1a is hard to take seriously as it was not enforced by the City prior to grading SDG Commerce 217 and the mitigation would not avoid the reduction in productive capacity of Swainson's hawks caused by the project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. Please see Response to SMALLWOOD-22 for reductions to productive capacity caused by habitat loss.

Response to SMALLWOOD-30
The commenter argues that MM BIO-1b would not avoid the reduction in productive capacity of Swainson's hawks caused by the proposed project's habitat destruction.

See Response to SMALLWOOD-22.

Response to SMALLWOOD-31
The commenter argues that MM BIO-1c is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of burrowing owl caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-32
The commenter argues that MM BIO-1d is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and he is flabbergasted that the surveyor did not identify any nesting birds. The commenter also argues that the mitigation would not avoid the reduction in productive capacity of nesting birds caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. See Response to SMALLWOOD-10 for nesting bird comment. Please see Response to SMALLWOOD-22 for productive capacity comment.

Response to SMALLWOOD-33
The commenter argues that MM BIO-1e is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of roosting bats caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this Draft EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-34
The commenter argues that MM BIO-1f is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of western pond turtle caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-35
The commenter argues that MM BIO-1g is hard to take seriously as it was not enforced by the City prior to grading Commerce 217 and the mitigation would not avoid the reduction in productive capacity of monarch butterfly caused by the proposed project's habitat destruction.

Enforcement of mitigation measures for previously certified environmental documents is beyond the purview of this EIR. See Response to SMALLWOOD-22.

Response to SMALLWOOD-36
The commenter argues that compensatory mitigation is needed for the increased wildlife mortality that will be caused by the proposed project's contribution to increased road traffic in the region, and mitigation is suggested.

Please see Response to SMALLWOOD-24.

Response to SMALLWOOD-37
The commenter (Kenneth Shawn Smallwood) provided his curriculum vitae. No response is required.

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Wilson Ihrig (IHRIG)

Response to IHRIG-1
The commenter provides background information regarding their expertise and the proposed project.

No environmental issues are raised, and no response is required.

Response to IHRIG-2
The commenter provides a description of the adverse effects of noise, including learning outcomes, cognitive performance, hearing loss, speech interference, sleep disturbance, and other physiological effects.

No project-specific environmental issues are raised, and no response is required.

Response to IHRIG-3
The commenter asserts that the Draft EIR should be updated to consider the existing noise levels and the cumulative increase over the existing level that would occur from the addition of both new warehouses on Commerce Court. Furthermore, they state that the Draft EIR must properly document the typical baseline noise conditions to determine impact.

The commenter does not provide any evidence that existing ambient noise levels are so low that the proposed project's construction or operational noise levels could result in a potential substantial temporary or permanent increase in ambient noise levels as measured at the nearest sensitive receptors in the project vicinity. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-4
The commenter asserts the EIR should be updated to combine operational noise sources into a single estimate of on-site operational noise at each sensitive receiver. The same methodology should be applied to the second warehouse north of the project site, and the cumulative operational noise levels should be compared with the existing noise levels (discussed above) as well as the City's criteria.

The commenter does not provide any evidence to support their implied conclusion that a significant operational noise impact could be potential with implementation of the proposed project. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions, but rather, it provides a conservative reasonable worst-case calculation of combined operational noise estimates as measured at the nearest receptors and demonstrates that the proposed project would not result in a substantial permanent increase in ambient noise levels as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-5
The commenter asserts that the EIR should be updated to consider the cumulative traffic noise impacts of both new warehouse projects on Commerce Court.

The commenter does not provide any evidence to support their implied conclusion that a significant impact could be potential with implementation of the proposed project. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions, but rather it provides a conservative reasonable worst-case calculation of that demonstrate that project-related traffic would not result in a substantial contribution to a cumulative traffic noise impact as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-6
The commenter provides a summary of their previous assertions that there are several errors and omissions in the EIR noise analysis, including insufficient determination of the existing noise environment, improper calculations of operational noise estimates, and a failure to consider the cumulative effects of the two warehouse projects on Commerce Court and that correcting these would potentially identify significant impacts which require mitigation.

The commenter does not provide any evidence to support their implied conclusion that a potentially significant impact could occur with implementation of the proposed project. Refer to Response to NSRRD-21, -22, -23, -24, -25, 2-6, and -34, as well as Response to IHRIG-1, -2, -3, -4, and -5. Please refer to Response to NSRRD-10, -23, -24, and -25. As indicated therein, the Draft EIR noise analysis includes sufficient determination of how the proposed project would not result in a substantial increase in ambient noise levels compared to existing conditions; it provides a conservative reasonable worst-case calculation of combined operational noise estimates as measured at the nearest receptors; and provides clear calculations that demonstrate that project-related traffic would not result in a substantial contribution to a cumulative traffic noise impact as measured at the nearest sensitive receptors in the project vicinity.

Response to IHRIG-7
The commenter (Luke Watry) provided his curriculum vitae. No response is necessary.

Response to DEIR, 1055 Commerce Ct.

From: Yvonne Baginski, yvonnebaginski@gmail.com

June 26, 2024

Thank you for the opportunity to respond to the DEIR for the SDG project on 1055 Commerce Ct. in American Canyon.

Here is a list of my questions/concerns and recommendations:

1. This DEIR is frankly, moot. This property has been graded, the trees cutdown and it 2qw parking lot for laborers working to build out on the the warehouses on adjoining property. With the exception of two small wetlands, property is devoid of any vegetation to support wildlife. The wetlands are also cordoned off with orange plastic fencing, thereby making them inaccessible to wildlife. It is just packed dirt now. There is no accurate measure of environmental or wildlife impact. 1
2. Knowing this, one cannot ignore the surrounding and adjacent lands that support a number of species of wildlife that are on the threatened or "special" species list. While this DEIR is specific to this piece of land, there are animals in the adjacent lands needing protection. There is a cumulative effect of the construction of three warehouses, and this is noted in the DEIR. As is, the decline in wildlife is evident after construction started. If there was no verified count of wildlife species living in this area, we cannot accurately measure the decline in wildlife, Wildlife decline is an assumption based on anecdotal evidence. For example, there are fewer ground squirrels seen when walking the trails. We don't see many nocturnal species unless we are on the gounds at night,etc. 2
3. In February, 2024, I saw numerous monarch butterflies in the Eucalyptus trees directly adjacent to the property. It was a warm sunny day, and I estimate 20-30 monarchs flying around. It is possible that there are overwintering monarchs in those eucalyptus trees. The time to see these overwintering monarchs is in the WINTER months, and that's not when the EIR biologist was in the field. I asked on the NEXT DOOR website whether other people have noticed the monarchs, and received several photos and stories, so I know they are in the area. At this time, there is no protection in place for the eucalyptus trees behind the site. I also suspect that construction noise and lights will make it more difficult for the 3

monarchs to continue living in those trees. The excessiveness of noise, lighting, dust and fumes will also be driving out any other animals living there...including the birds and bats. I am asking whether there could be a time-limited intervention preventing construction work during certain times of the day/night. Can this be made a quiet/dark site at during nighttime hours so that the nocturnal animals have someplace to live/hunt? No lights or trucks after 5 p.m.? This would be extended to when the warehouses become operational. 3 CONT

4. Re; the wetlands: How will they be maintained, managed and protected? Who will be responsible for their upkeep? There are three wetlands on the property and they have a building/asphalt barrier between them. If wildlife is denied access to these wetlands, what is the purpose to keeping them intact? Can the asphalt barrier in-between the wetlands be removed? Can a wildlife corridor be made on the property from the wetlands to the North Slough? Or, just between the two wetlands? Is there a management plan in place for the wetlands? 4
5. Where do the roosting bats go when they're evicted? The eucalyptus trees are not protected and are slated to be cleared. There is no conservation area for the bats/birds/butterflies. Would this property owner consider placing bat roosting boxes and a raptor nest site on the property? 5
6. Due to the proximity of the property to the estuary, is it possible for the landscaping to be native trees and plants conducive to the local wildlife? Specifically live oaks, willows, and developing a riparian habitat around the wetlands. Shouldn't the landscape architect be working with a wildlife biologist to develop the best habitat to replace what has been destroyed? Can the landscaping planned for this area be traded out for native plants?
7. The proximity of monarchs and other butterflies would also point to the necessity of building pollinator-friendly landscaping...including milkweed and other native flowering plants. In reviewing the landscaping for this property, the recommended plantings are standard-issue and not specific to this micro-climate or location. Will the landscaper consider a native plants, pollinator friendly landscape? 6
8. Pesticide use is especially destructive to bees, and butterflies. Having native plants and a riparian habitat will reduce the use of pesticides. Would the property developer agree to a no pesticide/herbicide policy ? This is especially relevant with the use of bait station boxes. This area is used by raptors (hawks, eagles, etc.) for hunting. The bait station boxes are filled with a poison which takes 3-4 days to kill the rodent. During this time, the rodent is "slowing" down in the fields and becomes easy prey. While bait stations are legal (the pesticide industry has very powerful lobbyists), there are snap trap alternatives that won't 7

harm the wildlife up the chain or cause undue suffering. Please consider no pesticides/herbicides/bait stations to protect wildlife. Restrict rodent killing to snap traps only. 7 CONT

9. Right now, the biggest risk to the local wildlife is the continual destruction of their habitat with no replacement/restoratkl . The animals have nowhere to go. This translates to a certain death. There are no surveys or "before and after" wildlife counts after the construction of a warehouse. These building developers aren't planting or replacing habitat. Switching to native, local landscaping would be an easy transition. No lighting/trucks during dark hours. Will the landscape architect consult with wildilfe biologists on what could be done to enhance wildlife habitat on the property? 8
10. As American Canyon works towards meeting carbon reduction goals, there's no mention in this DEIR on whether this warehouse will be using MCE, rather than PG&E for electricity. What about rooftop solar? Will there be an EV station on site for employee/visitor vehicles? 9
11. Re: Swainson Hawks and other birds...could the landscaping professionals meet with the Napa-Solano Audobon Society to create a plants and nesting site plan that would be conducive to the area? 10
12. A jurisdictional "no killing of any wildlife" rule during and after construction. Any wildlife injured would be taken immediately to the local wildlife rehabilitation center. I am asking that signs be posted throughout the construction area to that effect, with the name, phone number and location of the wildlife rehabilitation center prominently posted. 11

Those are my current thoughts, and I would appreciate a response and an opportunity to work with you all in creating a wildlife friendly site on this property.

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Individuals

Yvonne Baginski (First Letter) (BAGINSKI 1)

Response to BAGINSKI 1-1
The commenter states that the Draft EIR is moot and argues that there is no accurate measure of environmental or wildlife impact due to the fenced off wetlands and graded portions of the project site.

The recent grading on-site was completed as part of the construction of the adjacent SDG Commerce 217 Distribution Center Project (PL20-0008) and completed under a grading permit issued by the City of American Canyon. In accordance with CEQA, the grading was considered in the Initial Study prepared for the SDG Commerce 217 Project (Final Initial Study dated February 2021) and mitigation measures were implemented as applicable.

The biological analysis for the proposed project is based on pre-graded site conditions, as noted in the Draft EIR Section 3.3.3, Environmental Settings, and describes the site's pre-graded habitat as containing Avena spp. -Bromus spp. Herbaceous Semi-Natural stands, a linear wetland, and seasonal wetlands. The Project Impacts and Mitigation Measures sections of the Draft EIR were based on impacts to these habitat types and therefore demonstrates accurate measures to mitigate environmental and wildlife impacts. Large areas of vegetation were graded between May 29 and July 2, 2023, via an approved grading permit issued by the City of American Canyon in March 2023 in relation to the adjacent SDG Commerce 217 project. The grading did not encroach into the wetlands features or associated wetland buffer areas, but effectively eliminated non-native grassland throughout much of the site. However, MM BIO-1a through MM BIO-1e account for surveying outside of the project site and into ungraded buffer zones and would therefore account for project-related impacts to environmental conditions and listed species. Additionally, if graded habitat is left untouched, habitat for special-status species could reemerge on-site. Therefore, regardless of City-approved grading on-site, MM BIO-1a through MM BIO-1e remain valid because they would reduce environmental and wildlife impacts to less than significant levels under CEQA.

Response to BAGINSKI 1-2
The commenter argues that the decline in wildlife after construction is not verifiable without a previous understanding of wildlife levels on the project site and within the project area, but a decline in wildlife is evident since construction started.

Under CEQA, the proposed project is responsible for demonstrating that project impacts would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or United States Fish and Wildlife Service (USFWS). Additionally, under CEQA, the proposed project must not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of wildlife nursery sites. Draft EIR Section 3, Biological Resources, provides information on the status of the project site (and surrounding areas as applicable), including wildlife, prior to project implementation. With implementation of MM BIO-1a through MM

BIO-1e, project impacts to CEQA-protected resources would be less than significant. CEQA does not mandate that projects mitigate for apparent declines in general wildlife levels post-construction.

Response to BAGINSKI 1-3

The commenter states that monarch butterflies have been seen in the eucalyptus trees directly adjacent to the project site and argues that, at this time, there are no protections in place for the eucalyptus trees or species (such as birds, bats, or monarchs) that may be affected by noise, light, fumes, or dust produced through construction activities.

As described in Impact BIO-1 in Section 3.3.7 of the Draft EIR, there is a potential for the monarch butterfly to overwinter in the eucalyptus woodland adjacent to the site. It is also acknowledged that construction activities, including dust, noise, and vibration adjacent to overwintering colonies could result in loss of overwintering monarch butterflies. As stated in Baginski 1, large areas of vegetation were graded between May 29 and July 2, 2023, via an approved grading plan issued by the City of American Canyon in March 2023. Moreover, grading occurred between November 1 and July 31, 2023, which, as stipulated in MM BIO-1g, is outside of the overwintering season. However, regardless of grading in 2023, MM BIO-1g requires a pre-construction survey (and avoidance of all direct and indirect impacts to overwintering colonies) for construction activities that take place during the overwintering season. Therefore, MM BIO-1g remains valid because it would reduce any potential impacts on monarch butterfly to less than significant levels under CEQA.

Similarly, Impact BIO-1 also states that areas adjacent to the project site provide suitable nesting habitat for a variety of species of nesting birds, including special-status bird species such as northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Additionally, trees adjacent to the site could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Construction activities that occur during the avian nesting season (generally February 1 to August 31) and the roosting season could disturb protected nesting and roosting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting and roosting season could result in direct harm to nesting birds and roosting bats, while noise, light, and other construction-related disturbances may cause nesting birds or roosting bats adjacent to the vegetation removal areas to abandon their nests/roosts. City-approved grading did occur between May 29 and July 2, 2023 (in relation to the adjacent SDG Commerce 217 project), but construction related to Commerce 220 has not commenced. Therefore, regardless of City-approved grading on-site, with implementation of MM BIO-1d and MM BIO-1e, which require pre-construction nesting bird and roosting bat surveys and avoidance of direct and indirect impacts on nests and roosts, potential project-related impacts on protected bird nests and bats would be reduced to a less than significant level under CEQA. Therefore, special-status species would be protected prior to project initiation.

Response to BAGINSKI 1-4

The commenter questions how the wetlands on-site will be maintained, managed, and protected and who will be responsible for their upkeep. The commenter also questions what the purpose of the wetlands is if wildlife is potentially denied access to them due to current barriers. The commenter wonders if the asphalt barrier in between the wetlands can be removed, if a wildlife

corridor can be made from the wetlands to the North Slough or between the two wetlands, and if there is a management plan for the wetlands.

CEQA requires the proposed project not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Because hydrological connection for the wetlands would not be impacted by the proposed project due to compliance with applicable laws and regulations related to jurisdictional waters and wetlands (see Section 3.3.4, Regulatory Framework) and the implementation of wetland buffer avoidance areas, additional maintenance, management, and protection is not required for these wetlands. Additionally, as described in Impact BIO-2 of the Draft EIR, protected wetlands fall under the jurisdiction of State and federal agencies. These agencies require protection of potential jurisdictional wetland features regardless of their availability to support wildlife.[8]

Response to BAGINSKI 1-5
The commenter questions where roosting bats go when evicted and states that eucalyptus trees are not protected and slated to be cleared. The commenter also states that there are no conservation areas for bats, birds, and butterflies and wonders if the property owner would consider placing bat roosting boxes and a raptor nest site on the property.

These comments are noted. There is significant adjacent eucalyptus habitat to the east and west of the project site that would provide adequate habitat to any evicted bats, though evictions would only be necessary from May 1 through October 1 and would be conducted by a qualified Biologist. There are no eucalyptus tree protections in place within the Draft EIR because no eucalyptus trees are located within the project boundary and therefore no eucalyptus trees would be removed as part of project initiation. Therefore, no eucalyptus tree protection is required. Removal of eucalyptus trees on adjacent property is beyond the purview of the proposed project and related CEQA analysis. Additionally, roosting bat and nesting bird (including raptor) mitigations are covered under MM BIO-1a through MM BIO-1e and would reduce impacts to roosting bats and nesting birds to a less than significant level under CEQA. Therefore, roosting bat boxes and raptor nest sites on the property are not required under CEQA, but the applicant shall be consulted as to the optional addition of these elements.

Response to BAGINSKI 1-6
The commenter asks whether it is possible for landscaping within the project site to contain native plants, including milkweed and flowering plants for monarchs and questions whether the landscape architect is working with a wildlife Biologist to develop habitat replacement.

The project's proposed landscaping plan incorporates drought-tolerant species in accordance with the provisions of the Water Conservation and Landscape Act, but no laws or regulations require the project to plant native species or meet additional landscaping criteria. The comment discusses a

[8] California Department of Transportation (Caltrans). Chapter 3 – Waters of the U.S. and the State. 2024. Website: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-3-biological-resources/ch-3-waters-of-the-us-and-state#3-3.1. Accessed September 24, 2024.

non-mandatory request of the applicant. No project-specific environmental issues are raised, and no CEQA response is required.

Response to BAGINSKI 1-7
The commenter requests that the project developer please consider no pesticides/herbicides/bait stations to protect wildlife and restrict rodent killing to snap traps only.

The comment discusses a non-mandatory request of the applicant. No project-specific environmental issues are raised, and no CEQA response is required. Response to BAGINSKI 1-8
The commenter questions whether the landscape architect will consult with wildlife biologists on what could be done to enhance wildlife habitat on the property due to the loss of wildlife habitat on-site.

Sensitive natural community (seasonal wetlands) located within the project site has been actively avoided through a buffer. The remaining site does not contain significant habitat value. Please see Response to BAGINSKI 1-6 above.

Response to BAGINSKI 1-9
The commenter questions whether the proposed project would utilize Marin Clean Energy (MCE) or Pacific Gas and Electric Company (PG&E) for electricity, whether there would be rooftop solar systems, and whether there would be an EV charging station on-site for employee/visitor vehicles.

The proposed project would utilize MCE or PG&E for electricity. There would be rooftop solar systems, and there would be an EV charging station on-site for employee/visitor vehicles. As described in Section 3.5, Energy, of the Draft EIR, MCE would procure and PG&E would deliver electricity to the proposed project. Furthermore, the proposed project would install solar on the building rooftop and would produce an estimated 235,000 kilowatt-hours (kWh) per year. Additionally, the proposed project would provide five EVSE stalls, one van accessible EVSE stall, and 19 EV-capable stalls.

Response to BAGINSKI 1-10
The commenter questions whether the landscaper could meet with the Napa-Solano Audubon Society to create a plants and nesting site plan that would be conducive to the area.

Please see Response to BAGINSKI 1-6 above.

Response to BAGINSKI 1-11
The commenter recommends implementing a jurisdictional “no killing of any wildlife” rule during and after construction where any wildlife injured would be taken immediately to the local wildlife rehabilitation center and that signs be posted throughout the construction area to that effect.

Implementation of MM BIO-1a through MM BIO-6 would reduce the likelihood of loss of wildlife. Additionally, pursuant to CEQA requirements, only special-status species require mitigation to reduce/avoid impacts (see MM BIO-1a through MM BIO-6).

New eComment for Rescheduled Regular Planning Commission Meeting

noreply@granicusideas.com <noreply@granicusideas.com>

Mon 7/29/2024 1:36 PM

To:CityClerk <CityClerk@cityofamericancanyon.org>;Nicolle Hall <nhall@cityofamericancanyon.org>;Martha Banuelos <mbanuelos@amcanfire.com>;Brent Cooper <bcooper@cityofamericancanyon.org>;William He <whe@cityofamericancanyon.org>;Bill Ross - External <wross@lawross.com>;cbellardo@lawross.com <cbellardo@lawross.com>;Brando Cruz <bcruz@cityofamericancanyon.org>;Davet Mohammed <dmohammed@cityofamericancanyon.org>;Andrew Goff <agoff@cityofamericancanyon.org>;Eric Altman <ealtman@cityofamericancanyon.org>;Crystal Mallare <cmallare@cityofamericancanyon.org>

City of American Canyon

New eComment for Rescheduled Regular Planning Commission Meeting

Yvonne Baginski submitted a new eComment.

Meeting: Rescheduled Regular Planning Commission Meeting

Item: 3.) SDG Commerce 220 Distribution Center Draft Environmental Impact Report (DEIR) Public Review Workshop

eComment: 1. This property has already been graded and the trees cut down. There is nothing left to protect except two small wetlands. Who will manage these wetlands and protect them from further destruction? Will the wetlands include a protected corridor so they can be accessible to wildlife? Who will measure the wildlife numbers using these wetlands? 2. The surrounding areas support a number of wildlife species that are currently threatened or endangered. The monarch butterflies are currently using the eucalyptus trees adjacent to this property for overwintering roosting. They were seen this past February and there have been numerous sightings by local walkers. There are also bats and raptors using these trees. This is an important area for wildlife protection. There is a cumulative effect of the recent decline in wildlife as these three warehouses have been built. We have no measure of the loss of wildlife and their absence only assumes that they've died because there isn't any place to relocate along this corridor of development. Nocturnal species are especially difficult to gauge. Excessive noise, lighting, dust and fumes will continue to drive out animals, birds and bats. Is there a possibility that all construction be halted between the hours of 6 p.m. to 6 a.m.? That would give animals at least 12 hours of respite. Also, the property should eliminate all-night lighting. Will the owner of the property consider putting up bat boxes and roosting areas for the wildlife? Can native trees and vegetation be planted in the landscaping? 3. The wetlands will be surrounded by concrete, and trucks lumbering daily will destroy any wildlife attempting access to them. Can a riparian habitat be developed around the wetlands? And, would wildlife corridors be considered? The property is close to the estuary, thereby making it a natural place for animals to cross and congregate. Would the landscape architect work with a wildlife biologist to develop the best habitat possible

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to replace what's been destroyed? Should pollinator friendly landscaping (ie. milkweed) be planted? Will the landscaper consider native plants ? 4. Will the developer agree to a "no pesticide, no herbicide" policy? This is especially relevant with poison bait stations. This area is heavily used by rodents, including ground squirrels They are food for the raptors. No bait stations or poisons, please. 5. Will this warehouse be using MCE instead of PG&E?

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View and Analyze eComments

Yvonne Baginski (Second Letter) (BAGINSKI 2)

Response to BAGINSKI 2-1

The commenter states that the project site has already been graded and the trees have been cut down, leaving only two small wetlands to protect. The commenter asks who will manage these wetlands and protect them from further destruction. The commenter further asks whether the wetlands will be a protected corridor accessible to wildlife and who will measure the wildlife numbers using these wetlands.

In 2011, the Napa County Superior Court granted an approval to grade the property as part of a cleanup plan to comply with a Final Judgment and Stipulation (Case No. 26-07165 *City of American Canyon vs. Robert L. Couch Jur,* et al.). More recently, additional grading on-site was completed as part of the construction of the adjacent SDG Commerce 217 Distribution Center Project (PL20-0008) and completed under a grading permit issued by the City of American Canyon (GR23-0001). In accordance with CEQA, the grading was considered in the Initial Study prepared for the SDG Commerce 217 Project (Final Initial Study dated February 2021) and mitigation measures were implemented as applicable.

The biological analysis for the proposed project is based on pre-graded site conditions, as noted in the Draft EIR Section 3.3.3, Environmental Setting, and depicts the site's pre-graded habitat as containing Avena spp. -Bromus spp. Herbaceous Semi-Natural stands, a linear wetland, and seasonal wetlands. The Project Impacts and Mitigation Measures section of the Draft EIR was based on impacts to these habitat types and therefore demonstrates accurate measures to mitigate environmental and wildlife impacts pre-grading. Section 3.3, Biological Resources, of the Draft EIR, provides information on the status of the project site (and surrounding areas as applicable), including wildlife, prior to project implementation. With implementation of MM BIO-1a through MM BIO-1e, project impacts to CEQA-protected resources would be less than significant.

As described in the Draft EIR, the proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area, and the project site does not function as a critical wildlife movement corridor. Therefore, potential impacts on wildlife movement are less than significant. Additionally, the wetlands present on-site provide only marginal habitat and do not require future management or mitigation outside out what has already been detailed within the EIR's mitigation measures.

Response to BAGINSKI 2-2

The commenter states that monarch butterflies have been seen in the eucalyptus trees directly adjacent to the project site and argues that, at this time, there are no protections in place for the eucalyptus trees or species (such as birds, bats, or monarchs) that may be affected by noise, light, fumes, or dust produced through construction activities. The commenter also asks if the proposed project could put bat boxes and roosting areas for wildlife, as well as plant native trees and vegetation in the landscaping.

As described in Impact BIO-1 in Section 3.3.7 of the Draft EIR, there is a potential for the monarch butterfly to overwinter in the eucalyptus woodland adjacent to the site. It is also acknowledged that construction activities, including dust, noise, and vibration adjacent to overwintering colonies could

result in loss of overwintering monarch butterflies. However, MM BIO-1g includes a pre-construction survey and, if found, avoidance in coordination with USFWS and CDFW would be implemented to reduce any potential impacts on monarch butterfly to less than significant levels under CEQA.

Similarly, Impact BIO-1 also states that areas adjacent to the project site provide suitable nesting habitat for a variety of species of nesting birds, including special-status bird species such as northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Additionally, trees adjacent to the site could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Construction activities that occur during the avian nesting season (generally February 1 to August 31) and the roosting season could disturb protected nesting and roosting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting and roosting season could result in direct harm to nesting birds and roosting bats, while noise, light, and other construction-related disturbances may cause nesting birds or roosting bats adjacent to the vegetation removal areas to abandon their nests/roosts. However, with implementation of MM BIO-1d and MM BIO-1e, requiring pre-construction nesting bird and roosting bat surveys and avoidance of direct and indirect impacts on nests and roosts, potential project-related impacts on protected bird nests and bats would be reduced to a less than significant level under CEQA. Therefore, special-status species would be protected, and no roosting bat boxes or raptor nest sites on the project site would be required.

The project's proposed landscaping plan incorporates drought-tolerant species in accordance with the provisions of the Water Conservation and Landscape Act, but no laws or regulations require the project to plant native species or meet additional landscaping criteria. Because the comment discusses a non-mandatory request of the applicant, no project-specific environmental issues are raised, and no further CEQA response is required.

Response to BAGINSKI 2-3
The commenter argues that the wetlands would be surrounded by concrete and the truck movements would destroy any wildlife attempting to access them. The commenter asks whether a riparian habitat could be developed around the wetlands and if wildlife corridors would be considered. The commenter states that the project site is close to the estuary, making it a natural congregation place for wildlife. The commenter further asks whether the landscape architect would work with a wildlife Biologist to develop the best habitat possible to replace what has been removed, if pollinator-friendly landscaping could be included, and if the landscaper would consider native plants.

CEQA requires that the proposed project not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. The on-site wetlands do not currently have a hydrological connection to any other wetlands. Project-related wetlands impacts will comply with applicable laws and regulations related to jurisdictional waters and wetlands (see Section 3.3.4, Regulatory Framework). Implementation of a wetland buffer avoidance area, additional maintenance, management, and protection is not required for these wetlands. Additionally, as

described in Impact BIO-2 of the Draft EIR, protected wetlands fall under the jurisdiction of State and federal agencies.

The existing temporary and proposed barriers surrounding the wetlands cannot be removed as they define the buffer avoidance areas that protect the wetlands from encroaching construction and operational activities. Elimination of the barriers would potentially subject the wetlands to construction- and operational-related impacts and remove the project from CEQA compliance. Additionally, it is inadvisable to argue for a wildlife corridor to travel through an active, graded construction site nor an active warehouse operation. This could potentially expose wildlife to additional risks. Furthermore, the project site does not serve as a wildlife movement corridor, as discussed in Impact BIO-3 of the Draft EIR. Lastly, a management plan is not required under CEQA for these wetlands as adherence to applicable laws and regulations listed in Section 3.3.4, Regulatory Framework, of the Draft EIR would lower impacts to the wetlands to a less than significant level under CEQA.

The project's proposed landscaping plan incorporates drought-tolerant species in accordance with the provisions of the Water Conservation and Landscape Act, but no laws or regulations require the project to plant native species or meet additional landscaping criteria.

Response to BAGINSKI 2-4
The commenter requests that the project developer please consider no pesticides/herbicides/bait stations to protect wildlife.

The comment discusses a non-mandatory request of the applicant. No project-specific environmental issues are raised, and no further CEQA response is required.

Response to BAGINSKI 2-5
The commenter asks whether the proposed project would utilize MCE or PG&E.

As discussed in Section 3.5, Energy, of the Draft EIR, the proposed project would utilize electricity procured by MCE and delivered by PG&E.

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New eComment for Rescheduled Regular Planning Commission Meeting

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Tue 7/30/2024 10:45 AM

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New eComment for Rescheduled Regular Planning Commission Meeting

Jeannette Goyetche submitted a new eComment.

Meeting: Rescheduled Regular Planning Commission Meeting

Item: 3.) SDG Commerce 220 Distribution Center Draft Environmental Impact Report (DEIR) Public Review Workshop

eComment: My comments & concerns regarding the DEIR for proposed SDG Commerce 220 Distribution Center Project. I wonder what kind of environmental report can honestly be done on this property. I walked the area some time ago & the area had already been graded & looked like it was being prepared for construction. If an environmental report is to be done, seems like it is too late. Surrounding the area , according to Special-Status & Sensitive Natural Communities (p.7) of the report,are many endangered species of mammals, plants, fish,birds, amphibians & reptiles. The cumulative effect on construction will impact all these species. I understand there are 3 small wetlands on the property. What I witnessed were the areas cordoned off with plastic orange fencing. My concern is what is the plan for these wetlands? How does a wetland survive amidst the concrete & noise of a warehouse? Are there biologists assisting with the planning of keeping the wetlands viable? Has there been any study on the proximity of the warehouse development to our treasured wetlands to the west...American Canyon's jewel. According to the DEIR there will be a cumulative significant unavoidable impact on the environment as a result of the vehicles miles traveled (VMT) report based on the number of cars & diesel trucks traveling in& out of the facilities. According to the DEIR,the facilities will employ 225 workers when fully operational.The impact of the air & noise pollution on the wildlife& neighboring elementary school is worrisome. One last comment: I find it confusing that this area was zoned Commercial Recreation by City of American Canyon General Plan & a Recreation Zoning District Code Amendment was adopted by the City Council in January 2018. This ordinance allows wine related warehousing & distribution facilities as a condition permitted use within the REC Zone

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district. My question is, how is a warehouse considered "Recreation" ? Thank you for listening to my thoughts and concerns. Jeannette Goyetche , American Canyon resident

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CONT

View and Analyze eComments

Jeannette Goyetche (GOYETCHE)

Response to GOYETCHE-1
The commenter asks what kind of environmental report can be done for the project site because it appears that the project site has already been graded and prepared for construction.

See Response to BAGINSKI 2-1 regarding recent on-site grading.

Response to GOYETCHE-2
The commenter states that there are many endangered species within the project vicinity and argues that the cumulative effect of construction would impact these special-status species.

As described in Section 3.3, Biological Resources, of the Draft EIR, the proposed project would have less than significant impacts on special-status species within the project vicinity with the implementation of MM BIO-1a through MM BIO-1g. Section 3.3.8 of the Draft EIR also analyzed potential cumulative impacts with regard to biological resources, which would be less than significant with mitigation incorporated.

Response to GOYETCHE-3
The commenter asks about the plan for the wetlands on-site, which are currently fenced off. The commenter asks about the protection features for the wetlands, expressing concern about concrete and noise. The commenter also asks if there has been a study on the proximity of the proposed project on the wetlands to the west of the project site.

Refer to Response to BAGINSKI 2-3.

Response to GOYETCHE-4
The commenter states that the proposed project would have a significant and unavoidable cumulative impact related to VMT.

As discussed in Section 3.13, Transportation, of the Draft EIR, the proposed project would have significant and unavoidable impacts related to VMT, both individually and cumulatively, even with the incorporation of mitigation. The proposed project would implement MM TRANS-2, which requires the implementation of a TDM program to reduce VMT to the greatest extent feasible. The nearest bus stop to the project site is 1.3 miles away and serves only limited destinations; therefore, given the land use context of the project area and per the California Air Pollution Control Officers Association (CAPCOA) Handbook, a TDM program is estimated to result in a VMT reduction of approximately 4 percent. As such, even with the implementation of mitigation, impacts related to VMT would remain significant and unavoidable.

Response to GOYETCHE-5
The commenter expresses concern about the potential impacts of air and noise pollution on the wildlife and the neighboring elementary school.

As described in Section 3.2, Air Quality, of the Draft EIR, the proposed project would have less than significant impacts related to air quality with mitigation incorporated. The proposed project would not expose sensitive receptors to substantial pollutant concentrations, such as students at the

elementary school. Additionally, as described in MM AIR-1, the proposed project would be required to implement BAAQMD Best Management Practices (BMPs) to control dust during construction. This would reduce impacts related to air quality to the greatest extent feasible.

As described in Section 3.11, Noise, of the Draft EIR, the proposed project would have less than significant impacts related to noise without mitigation. As such, the proposed project would not significantly impact sensitive receptors with regard to noise.

Additionally, as discussed in Section 3.3, Biological Resources, of the Draft EIR, the proposed project would implement MM BIO-1a through MM BIO-1g, which would reduce impacts to special-status species during construction.

Response to GOYETCHE-6
The commenter explains the Zoning District for the proposed project and questions how a warehouse is considered Recreation.

As described in the Draft EIR, the project site is zoned Recreation (REC) by the City's Zoning Map. A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district. Per Municipal Code Section 19.15.020, winery related uses, including such activities as bottling, storage, logistics, distribution, wine packing and wine-related services, are conditionally permitted within the Recreation zone subject to approval of a use permit by the planning commission. The proposed project would develop a 219,834-square-foot wine warehouse on the project site. As such, the proposed project would be consistent with the conditionally permitted uses of the REC zoning district.

The proposed project would also be consistent with the Municipal Code's applicable development standards for the Recreation zone as outlined in Table 3.10-3 of the Draft EIR.

SECTION 3: ERRATA

The following are revisions to the Draft EIR for the SDG Commerce 220 Distribution Center Project. These revisions are minor modifications and clarifications to the document, and do not change the significance of any of the environmental issue conclusions within the Draft EIR. The revisions are listed by page number. All additions to the text are underlined (underlined) and all deletions from the text are stricken (~~stricken~~).

3.1 - Changes in Response to Specific Comments

Section 3.2, Air Quality

Page 3.2-52, first paragraph

The following text has been added to provide clarification.

Operational emissions typically include area, energy, and mobile sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. Energy sources would include emissions from the combustion of natural gas for water heaters and other heat sources; however, there is no natural gas for heaters and other heat sources associated with the proposed project. Therefore, as shown in Table 3.215, emissions associated with energy are zero. Mobile sources include exhaust and road dust emissions from the automobiles that would travel to and from the project site. Pollutants of concern include ROG, NO_X, PM_{10}, and $PM_{2.5}$.

Section 3.3, Biological Resources

Page 3.3-12, Special Status Wildlife Species

The following edit has been made to clarify the use of the term, vagrant.

The remaining eight species (and functional groups like nesting birds and roosting bats that include special-status species) could have at least theoretical potential to occur on-site, perhaps as vagrant, dispersing, or foraging individuals, and are therefore discussed in more detail below. Note that the term vagrant is used in this context to describe a species that could disperse or wander into the project site prior to project construction but does not nest on-site.

Page 3.3-30, last bullet

The following edit has been made to fix an erroneous typo.

- FirstCarbon Solutions (FCS). 2023. Pre-Construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4, ~~and BIO-5~~ per the Mitigation Monitoring and Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California. April 2023.

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