Responses to Comments

The following comment letters were submitted on the initial study/proposed project during the public review period or at the public hearing. Each of these letters has been assigned a letter and each comment within the letter has been assigned a number. Therefore, individual comments have been labeled "A-1", "A-2", etc. Each bracketed comment is followed by the response. The complete set of bracketed letters has been included at the end of these responses.

Comment Letter	Commenter	Date Submitted
A	Antelope Valley Air Quality Management District	July 11, 2013
B	California Department of Transportation	June 21, 2013
C	Lahontan Regional Water Quality Control Board	July 12, 2013
D	California Native American Heritage Commission	July 9, 2013
E	Office of Planning and Research	July 15, 2013
F	Office of Planning and Research	July 15, 2013
G	City of Palmdale	July 11, 2013
H	Eva Kovacs	July 15, 2013
I	Lozeau Drury	July 10, 2013

Letter A

Antelope Valley Air Quality Management District
Bret Banks, Operations Manager
43301 Division Street, Suite 206
Lancaster, CA 493535-4649

Comment A-1

The Antelope Valley Air Quality Management District (District) has received Notice of Intent for the proposed 92.7 acres generally bounded by Avenue K-8, Avenue L, 20th Street East, and 30th Street East in Lancaster, California.

Prior to grading District Rule 403, *Fugitive Dust*, requires the submittal and approval of a Dust Control Plan. In addition to the Dust Control Plan the District recommends the City of Lancaster require phased construction and preserving vegetation as fugitive dust control measures. Compliance with the provisions of District Rule 403 must be implemented in the grading and construction phases of the project, and all unpaved roads and array areas must meet definition of stabilized surface upon completion of project. Also the proper signage must be posted at the Project site pursuant to the Rule (Rule 403 Appendix A).

Response to Comment A-1

This comment states the requirement to have a dust control plan approved by the Air District prior to the start of grading. This was identified in the Initial Study and is included as Mitigation Measure Number 5. No further response is necessary.

Comment A-2

Successful fugitive dust control and site stabilization would result in maintaining vegetation to the highest extent possible. Re-vegetation in desert environments is extremely difficult with 80 percent failure rates seen as typical, even with supplement irrigation. Project areas which retain vegetative ground cover may achieve stabilization without implementing reseeding efforts.

Response to Comment A-2

Grading of the project site will be kept to the minimum necessary to construct the proposed project. On much of the project site, the only grading necessary would be for the perimeter roads; pads for inverters and transformers; and installation of electrical cables. On the portion of the project site proposed for development by U.S. Topco, more extensive grading may be necessary in order to facilitate the removal of Joshua trees and other large shrubs. No revegetation of the project site is proposed; however, the developers are still required to maintain site stabilization after construction. The developers are also required to fence the entire perimeter of the project site and to provide a 10-foot wide landscaped area around the perimeter. The fencing and landscaping will help to minimize the amount of dust generated by the project site after construction.

Comment A-3

Pre-Activity for Earth-Moving Operations requires phased work to reduce the amount of Disturbed Surface Area at any one time AVAQMD Rule 403 (C)(4)(a)(i)b. Phasing construction limits the Disturbed Surface Area requiring mitigation measures in High Wind Conditions (instantaneous wind speeds (gusts) which exceed 25 miles per hour). High Wind Conditions are a regular, almost daily, occurrence in the Antelope Valley. Daily PM_{10} thresholds may be exceeded in just one hour in winds of 25 mile per hour with 200 acres of unstabilized Disturbed Surface.

Response to Comment A-3

The project site is a total of 92.7 acres and portions of the site have been leased to three separate developers. These developers have different timelines for the start of construction. PsomasFMG plans to start construction as soon as the project is approved. The construction start dates for the portions of the proposed project leased to U.S. Topco and Morgan Solar are currently unknown as neither party has a power purchase agreement or interconnection agreement. At most, only 38 acres would be under construction at any given time resulting in a phased construction of the overall project.

Comment A-4

When water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible Wind-Driven Fugitive Dust AVAQMD Rule 403-Fugitive Dust (11)(d). The Dust Control Plan shall demonstrate adequate water application equipment to mitigate all disturbed areas and provide contact information of the site dust control supervisor.

Thank you for the opportunity to review and comment on this planning document. If you have any questions regarding this letter, please contact me at (661) 723-8070 x2.

Response to Comment A-4

This comment states the requirement for the dust control plan to identify how dust is proposed to be controlled and to prove that adequate water application equipment exists to implement the proposed plan. The dust control plan is a mitigation measure that must be implemented by the developer and approved by the AVAQMD. No further response is necessary.

Letter B

California Department of Transportation
Dianna Watson, IGR/CEQA Branch Chief
100 Main Street, MS #16
Los Angeles, CA 90012-3606

Comment B-1

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project consists of the construction and operation of a 13.3 megawatt (MW) photovoltaic (PV) solar energy farm on 92.7 acres.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan.

Response to Comment B-1

The project site is approximately 4 miles east of the Antelope Valley Freeway. No storm water from the project site would discharge onto the Freeway. The proposed solar developments would be designed to retain any storm water that is generated on site in accordance with the City's Municipal Code. No further response is necessary.

Comment B-2

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods.

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 130627AL.

Response to Comment B-2

The transportation of any equipment or materials required for the construction of the proposed project would comply with all Federal, State and local laws and regulations including obtaining the necessary permits from Caltrans. No further response is necessary.

Letter C

Lahontan Regional Water Quality Control Board
Tom Browne, PhD, PE, Water Resources Control Engineer
14440 Civic Drive, Suite 200
Victorville, CA 92392

Comment C-1

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Mitigated Negative Declaration (MND) for the above-referenced project (Project) on June 14, 2013. The City of Lancaster (City), acting as lead agency, prepared and submitted the MND in compliance with provisions of CEQA. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the MND, best management practices (BMPs) that effectively treat post-construction stormwater runoff should be included as part of the Project. We encourage the City to consider our comments and value our mission to protect waters of the State and maintain water quality in the Lahontan Region.

Project Description

The proposed Project involves the construction of a photovoltaic (PV) solar collection field and electricity generating station on 92.7 acres of undeveloped land in eastern Lancaster. The project site is bounded by Avenue L, Avenue K-8, 20th Street East, and 30th Street East. The field will be capable of generating up to 13.3 megawatts (MW) of solar electricity. The City will lease the property to three developers: PsomasFMG, U.S. Topco, and Morgan Solar. Each developer will construct and operate their own facilities, which will be separated from one another by fencing and a landscaped buffer to screen the PV panels from view. The facility owned by PsomasFMG will have enough panels to generate 3.8 MW of the total output; the facility owned by U.S. Topco will have enough PV panels to generate 8 MW of electricity; the facility owned by Morgan Solar will have enough PV panels to generate 1.5 MW. Electricity generated by the solar field will tie into an existing 12 kilovolt (kV) distribution line that runs along Avenue L via a buried cable.

Authority

All groundwater and surface waters are considered waters of the State. Surface waters include streams, ponds, lakes, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigned responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water

and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's website at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

Response to Comment C-1

This comment summarizes the project description and the legal authority of the Lahontan Regional Water Quality Control Board. No further response is necessary.

Comment C-2

Specific Comments

- Land disturbing activities such as trenching, grading, and excavation have the potential to degrade water quality through increased soil erosion or sedimentation. In addition, the compaction of soils in both construction and equipment staging areas can result in loss of infiltration and absorption capacity of soils. The environmental document should discuss mitigation measures to capture site run-on to promote groundwater re-charge and minimize erosion.

Response to Comment C-2

The City's Municipal Code requires the use of Best Management Practices (BMPs) to prevent stormwater runoff and erosion during and after construction. These BMPs are required to be shown on the construction plans. Additionally, the City's Municipal Code requires the developer to retain on-site the preconstruction stormwater flow.

Comment C-3

- An operations plan should be prepared that includes a post-construction monitoring and reporting schedule that specifically describes criteria to be used to evaluate whether or not the restoration of vegetation was successful. The plan should also include thresholds and contingencies should monitoring indicate that success criteria are not being met. None of the included technical documents adequately addresses permanent, post-construction erosion control. All temporary impacts should be restored (re-contoured and re-vegetated) to match pre-Project conditions. Water Board staff recommend that monitoring and maintenance of these revegetated areas be conducted for a period of no less than three years to ensure the success of the restored areas.

Response to Comment C-3

The proposed project is not required to revegetate the project site after construction. Grading and vegetation removal will kept to the minimum necessary in order to construction the project. Specifically, grading on most of the project site will be limited to the roadways, pads for inverters and transformers, and areas necessary for the installation of cables. On the portion of the project site leased to U.S. Topco, additional vegetation removal and grading may be necessary; however, they are still required to keep the grading to the absolute minimal necessary

to construct the project. Additionally, the proposed project would install a 10-foot wide landscaped buffer around the perimeter of each of the solar fields. This landscaping is required to be maintained for the life of the proposed project.

Comment C-4

- The MND should include a detailed Hydrology Study for the Project site that examines surface flow direction, flow rates, soil types, and the potential for erosion for a range of potential storm events.

Response to Comment C-4

The City Engineering Department does not require the submittal of a hydrology study for solar projects as most of the property is not covered with impermeable surfaces during construction. However, as a condition of approval and in accordance with the City's Municipal, the proposed project is required to retain all stormwater on the project site and to identify best management practices to prevent erosion.

Comment C-5

- Water Board staff request that the MND include a discussion of the beneficial water uses for the Project Hydrologic Area, Basin No. 626.50 (within the greater Antelope Hydrologic Unit) of the Lahontan Region. The surface waters on the Project site area considered "minor surface waters" and "minor wetlands" and assigned the following beneficial uses: municipal supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); freshwater replenishment (FRSH); contact and non-contact recreational uses (REC-1, REC-2); commercial and sportfishing (COMM); warm freshwater habitat (WARM); cold freshwater habitat (COLD); wildlife habitat (WLD); water quality enhancement (WQE); and flood peak attenuation and storage (FLD). Water quality objectives and standards, both numerical and narrative, for these surface waters, are outlined in Chapter 3 of the Basin Plan. Implementation of the proposed Project must comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.

Response to Comment C-5

The project site does not contain any surface water nor does it contain any wetlands. Therefore, a discussion of the beneficial uses for surface water is not necessary.

Comment C-7

- Obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. The environmental document must specifically describe the BMPs and other measures used to mitigate Project impacts.

Response to Comment C-7

No significant hydrology or water quality impacts were identified in the Initial Study; therefore, no mitigation measures are required. Compliance with existing laws, rules, and regulations are not considered mitigation measures.

Comment C-8

Permitting Requirements

A number of activities associated with the proposed Project appear to have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include:

- Land disturbances of more than 1 acre may require a Clean Water Act (CWA), section 402 (p) stormwater permit, including a National Pollution Discharge Elimination System (NPDES) General Construction Stormwater Permit, Order 2009-0009-DWQ (as amended), obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board;
- Depending on the Standard Industrial Classification (SIC) code of industrial-type activities at the site, the Project may require a NPDES General Industrial Stormwater Permit, Order 97-03-DWQ, obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board; and
- Streambed alteration and/or discharge of fill material to a surface water may required a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board

Please be advised of the permits that may be required for the proposed Project, as outlined above. We request that specific Project activities that may trigger these permitting actions be identified in the appropriate sections of the MND. Should Project implementation result in activities that will trigger these permitting actions, the Project proponent must consult with Water Board staff. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

Thank you for the opportunity to comment on the MND. If you have any questions regarding this letter, please contact me at (760) 241-7391 (tbrowne@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (pcopeland@waterboards.ca.gov).

Response to Comment C-8

The proposed project would comply with all requirements of the Regional Board. The project site does not contain any streams, streambeds, or surface waters and does not require a streambed alteration agreement.

Letter D

Native American Heritage Commission
Dave Singleton, Program Analyst
1550 Harbor Boulevard
West Sacramento, CA 95691

Comment D-1

The Native American Heritage Commission (NAHC) has reviewed the CEQA Notice regarding the above referenced project. In the 1985 Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites. This project is also subject to California Government Code Sections 65352.3m et seq.

The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archaeological resources, is a significant effect requirement the preparation of an EIR (CEQA Guidelines 15064.5(b)). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine: If a part or all of the area of project effect (APE) has been previously surveyed for cultural place(s). The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

Response to Comment D-1

The above comment states the NAHC's legal authority to review and comment on CEQA documents. Additionally, it states that the lead agency should contact the Information Center for a record search. A Phase I Cultural Resources Survey was conducted for the project and included a records search at the appropriate information center (California State University, Fullerton). No resources were listed on the CHPI, CHL, CRHR, NRHP or the California Historic Resources Inventory for the project site. Four previous cultural resources surveys have been conducted on portions of the project site and one historic period site was identified. All of this information is documented in the Initial Study for the proposed project and in the Cultural Resources Report. No further response is necessary.

Comment D-2

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential

addendum, and not be made available for public disclosure pursuant to California Government Code Section 6254.10.

Contact has been made to the Native American Heritage Commission for a consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of subsurface evidence of archaeological resources does not preclude their subsurface existence.

Response to Comment D-2

One historic period site was previously identified and relocated during the cultural resources survey conducted for the proposed project. This site was previously determined to be ineligible for listing; however, the boundaries of the relocated site are different then the originally recorded site. Therefore, a mitigation measure was identified to update the Department of Parks and Recreation form for the project site prior to it being destroyed during construction.

Additionally, consultation letters were sent out to Native American contacts provided by the NAHC on March 12, 2013 to determine if any Native American tribes had any concerns regarding the proposed project. To date, no response from any of the contacts has been received.

Comment D-3

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archaeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.

Also, CEQA Guidelines Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5(a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Response to Comment D-3

It is unlikely that subsurface archaeological resources or human remains would be uncovered during the course of construction on the project site. However, in the event that they are uncovered during construction, the requirement to cease work until the proper authorities are notified and the disposition of the artifacts/remains are determined is existing law and does not need to be listed as a mitigation measure. These requirements are summarized in the cultural resources discussion included in the Initial Study. No further response is necessary.

Letter E

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit
Scott Morgan, Director, State Clearinghouse
1400 10th Street West
Sacramento, CA 95812-3044

Comment E-1

The State Clearinghouse submitted the above names Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 11, 2013 and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

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

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

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

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

Response to Comment E-1

This letter acknowledges that the City has complied with the environmental review requirements of the State Clearinghouse and forwards letters received from State Agencies on the proposed project. Specifically, this comment letter forwards letters received from the California Department of Transportation (Caltrans) and the Native American Heritage Commission (NAHC). These comment letters were also received directly from the two agencies and have been responded to separately as Comment Letter B (Caltrans) and Comment Letter D (NAHC). No further response is necessary.

Letter F

Governor's Office of Planning and Research
State Clearinghouse and Planning Unit
Scott Morgan, Director, State Clearinghouse
1400 10th Street West
Sacramento, CA 95812-3044

Comment F-1

The enclosed comment (s) on your Mitigated Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on July 11, 2013. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2013061022) when contacting this office.

Response to Comment F-1

This comment letter forwards a comment letter from the Lahontan Regional Water Quality Control Board that was received after the close of the comment period. This letter was also received directly from the Regional Board and has been responded to separately as Comment Letter C. No further response is necessary.

Letter G

City of Palmdale
Richard Kite, Planning Manager
38300 Sierra Highway
Palmdale, CA 93550-4798

Comment G-1

Thank you for the opportunity to review and reply to your Notice of Availability/Notice of Intent to adopt a Mitigated Negative Declaration for the above referenced project. The Planning Department staff has reviewed the documents and at this time the City of Palmdale has no comment on the proposed project.

If you have any questions regarding this matter, please contact Susan Koleda, AICP, Senior Planner or me at (661) 276-5200.

Response to Comment G-1

This comment states that the City of Palmdale has reviewed the Initial Study for the proposed project and does not have any comments. No further response is necessary.

Letter H

Eva Kovacs

Comment H-1

Pursuant to California Government Code Section 65009, I am notifying you with my concern regarding Proposed Action: General Plan Amendment No. 13-01/Zone Change No. 13-01/Conditional Use Permit No 13-05 whose project proponent is PsomasFMG, US Topco, & Morgan Solar c/o Psomas at 28480 Avenue Stanford, Santa Clarita, CA 91355.

Response to Comment H-1

This comment states that the writer is concerned with the proposed project. This concern is forwarded to the Planning Commission for consideration and no further response is necessary.

Comment H-2

I am protesting this project because of its potential to adversely affect the value of my property due to reasons such as, but not limited to:

1) Deterrent to investors and developers

Response to Comment H-2

Under the California Environmental Quality Act (CEQA), socioeconomic impacts such as property value are not considered an environmental impact. As such, property values are not addressed in the Initial Study; however, the Planning Commission does have the ability to take such issues under consideration when deciding whether to approve or deny a proposed project.

The commenter's property is located within the City of Palmdale and is currently zoned for industrial uses. The proposed project is a solar electric generating facility and such uses are typically compatible with industrial uses. It is not likely that the proposed project would prevent or discourage industrial developers from utilizing the property south of Avenue L.

Comment H-3

2) Hindering airport plans

Response to Comment H-3

An agency mailing was conducted, which included sending the site plans to Air Force Plant 42, to ensure that any concerns regarding the proposed project were identified. Air Force Plant 42 responded that they have no issues or concerns regarding the proposed project. The Initial Study was also mailed to Air Force Plant 42 and no response has been received.

The proposed project is a solar electric generating facility which is not the type of use, such as residential uses, that typically affects airport operations. Therefore, the development of the solar facility on the project site would not cause significant impacts to current or future airport plans.

Comment H-4

3) Aesthetic blemish on the land

Response to Comment H-4

Aesthetics and aesthetic impacts are subjective and the degree of impact generally varies depending upon the observer. The proposed project will change the appearance of the project site by developing three separate solar electric generating facilities on what is currently vacant, disturbed desert. However, these facilities will be fenced with an 8-foot chain link fence and a 10-foot wide landscaped buffer around the perimeter. Upon maturity the vegetation will screen the project site from view. The solar panels on the project site will not exceed 8 feet in height. While the tops of the panels might be visible during operation, most of the project site will be completely screened from view. This area does not contain any scenic highways and the proposed project will not block views of any scenic areas or the mountains surrounding the valley. All aesthetic impacts would be less than significant.

Comment H-5

4) Impact on the environment

Response to Comment H-5

The environmental impacts of the proposed project were analyzed in the Initial Study. These impacts have been determined to be less than significant with the implementation of the identified mitigation measures. Without the commenter identifying a specific environmental impact that causes concern, no further response can be provided.

Comment H-6

5) Any unforeseen hazards

Response to Comment H-6

CEQA does not require the analysis of speculative impacts or the analysis of a worse-case scenario. Without the identification of a hazard that is of concern to the commenter, a detailed response to this comment cannot be provided.

Letter I

Lozeau Drury
Richard Drury/Cathy D. Lee
410 12th Street, Suite 250
Oakland, CA 94607

Comment I-1

This letter is submitted on behalf of the Laborers International Union of North America, Local Union 300 and its members living in Los Angeles County ("LiUNA") regarding the Soccer Center Solar Facility (SCE #2013061022), Conditional Use Permit ("CUP") 13-05 ("Project") and the Initial Study/Mitigated Negative Declaration ("IS/MND") proposed for the Project.

We have prepared these comments with the assistance of Matt Hagemann, P.G., C.Hg., QSD, QSP, an expert hydrogeologist. His comments and curriculum vitae are attached as Exhibit A hereto and are incorporated by reference in its entirety. In addition, we have obtained the consultation of Shawn Smallwood, Ph.D., an expert wildlife biologist who has expertise in the areas relevant to the IS/MND. His comments and curriculum vitae are attached as Exhibit B hereto and are incorporated herein by reference in their entirety. The City should respond to the expert comments separately.

Response to Comment I-1

This comment states who Lozeau Drury represents and who helped prepare the comments on the Initial Study. No response is required.

Comment I-2

We ask the City to prepare an environmental impact report ("EIR") for the Project because:

1. The IS/MND omits an accurate project description.
    a. The IS/MND fails to describe the exact location of the Project site.

Response to Comment I-2

The exact location of the proposed project was identified in the Initial Study. Most of the document references the location as "generally bounded by Avenue K-8, Avenue L, 20th Street East and 30th Street East". However, the specific Assessor Parcel Numbers (APNs) that each of the developers would be building a solar facility on is provided in the project description and in other locations throughout the document.

Comment I-3

2. The IS/MND fails to accurately establish the Project's environmental settings or "baseline" for hazardous materials and biological resources.

Response to Comment I-3

The reader is referred to the following responses to comments which address the environmental setting or baseline for both hazardous materials and biological resources: I-10 and I-12.

Comment I-4

3. There is a fair argument that the Project may have significant unmitigated impacts, both individually and cumulatively, including:
    a. Significant and unmitigated hazardous materials impacts.
    b. Significant and unmitigated construction emissions.
    c. Failure to adequately analyze the Project's GHG emissions.
    d. Significant and unmitigated impacts to important biological resources.

Response to Comment I-4

The commenter states that there is a fair argument that the proposed project may have significant unmitigated impacts on the four major categories identified above. These issues have been responded to in the following responses to comments:

- Significant and unmitigated hazardous materials impacts: I-13, I-A2, I-A3, I-A4, and I-A5
- Significant and unmitigated construction emissions: I-14
- Failure to adequately analyze the Project's GHG emissions: I-15
- Significant and unmitigated impacts to biological resources: I-16, I-19, I-B1, I-B2, I-B3, I-B4, I-B5, I-B6, I-B7, I-B8, and I-B9

The reader is referred to the responses to comments listed above.

Comment I-5

4. The IS/MND fails to adequately analyze the Project's cumulatively considerable impacts in connection with the other related past, present and foreseeable future projects in the Project's vicinity.

An EIR is required to analyze these and other impacts and to propose mitigation measures to reduce the impacts to the extent feasible.

Response to Comment I-5

The cumulative impacts of the proposed project were discussed as part of the Initial Study. The reader is referred to the following responses to comments which specifically address the cumulative impact analysis: I-20, I-21, and I-22.

Comment I-6

Project Description

The Project involves the construction and operation of a solar photovoltaic ("PV") power plant of approximately 13.3 megawatts ("MW") on 92.7 acres, "generally bounded by Avenue L, Avenue K-8, 20th Street East and 30th Street East." (IS/MND, p.1.) The Project will be undertaken by three separate solar developers: PsomasFMG, U.S. Topco, and Morgan Solar. Each of the developers would construct and operate their own respective solar facilities, which are collectively referred to as the Project.

The PsomasFMG facility consists of APNs 3170-008-090 and 3170-008-910 which are located between Avenue K-8 and Avenue K-12 west of 24th Street East. This portion of the Project involves the construction and operation of a 3.8 MW PV electric generating facility. The PsomasFMG facility will tie into the 12kV distribution line that runs along 20th Street East via a buried power cable along Avenue K-8. Access to the project site would be provided from 20th Street East via Avenue K-8.

The U.S. Topco facility consists of APNs 3170-008-907 and 3170-008-908 which are located between Avenue K-12 and Avenue L, west of 25th Street East. This portion of the proposed project consists of the construction and operation of an 8 MW PV electric generating facility. This facility would tie into the 12kV distribution line that runs along Avenue L via a buried power cable. Access to this facility would be provided via a paved driveway off of Avenue L.

The Morgan Solar facility consists of APN 3170-008-911 which is located on the east side of 25th Street East. This portion of the proposed project consists of the construction and operation of 1.5 MW PV solar electric generating facility. This facility would tie into the 12kV distribution line that runs along Avenue L via a buried power cable. Access to this facility would be provided via a paved driveway on Avenue L.

The Project requires approvals from at least two public agencies; (1) Antelope Valley Air Quality Management District ("AVAQMD") for the dust control plan and (2) Southern California Edison ("SCE") for interconnection.

Response to Comment I-6

This comment restates the project description that was provided in the Initial Study and summarized in the staff report. This project description is accurate and no further response is necessary.

Comment I-7

Standing

LIUNA Local Union No. 300 members enjoy the natural environment of Los Angeles County and the Lancaster Area. LIUNA Local No. 300 members regularly travel to the region where the Project is located to enjoy its peaceful repose and diversity and rarity of species of plants and animals. As members of the public, moreover, LIUNA members possess an ownership interest in

public resources in the regions of and surrounding the Project, including but not limited to special status species occurring there and nearby.

LIUNA represents construction workers and public service employees in many settings, including collective bargaining, seeking employment, training programs, legal rights, job safety and workplace fairness. LIUNA advocates for programs and policies that promote good jobs and a health natural and working environment for workers and their families. An important part of LIUNA's ongoing advocacy involves participating in and, where appropriate, challenging Projects that would result in harmful environmental effects, or the violation of environmental laws, to the detriment of the interests of LIUNA's members. The interests of LIUNA's members in this project are unique and will be directly impacted by the outcome of this proceeding.

LIUNA Local Union No. 300 strongly supports appropriate development of renewable energy. Renewable energy projects, however, must be carefully sited and designed so as to avoid unnecessary and damaging environmental impacts. They also must receive proper environmental review under CEQA. This is especially true given the recent "gold rush" of solar energy proposals in the southern California region. Finally, as the Court of Appeal stated, "in any event, unions have standing to litigate environmental claims." (*Bakersfield Citizens for Local Control v. Bakersfield* (2004) 123 Cal. App.4th 1184, 1198, citing, *International Longshoremen's & Warehousemen's Union v. Board of Supervisors* (1981) 116 Cal. App. 3d 265.)

Pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code ("PRC") Section 21000 *et. seq*, LIUNA Local No. 300 submits the following comments in accordance with the City's Notice of Availability/Intent to Adopt Mitigated Negative Declaration. We believe that under the circumstances presented here, CEQA clearly requires the preparation of an EIR. Accordingly, the City should decline to adopt the proposed IS/MND.

Response to Comment I-7

This comment states the union's standing to submit comments on the Initial Study and their overall position that union is in favor of carefully sited and designed solar facilities. It also states that they are opposed to this project and believe that the IS/MND should not be adopted. The position of the union has been forwarded to the Planning Commission for consideration. No further response is necessary.

Comment I-8

Legal Standard

As the California Supreme Court very recently held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 cal. 4th 310, 319-320 ["CBE v. SCAQMD"}, citing, *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal. App. 3d 491, 504-505.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the

environment within the reasonable scope of the statutory language." *(Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal.App. 4th 98, 109 ["*CBE v. CRA*"].)

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

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (Pub. Resources Code, §21080(d); also see *Pocket Protectors, supra,* 124 Cal.App.4th at 927.) In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs., §15371 ["CEQA Guidelines"]), only if there is not even a "fair argument" that the project will have a significant environmental effect. (Pub. Resources Code, §§21100, 21064.) Since "[t]he adoption of a negative declaration…has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all" (*Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect – even if contrary evidence exists to support the agency's decision (CEQA Guidelines, §15064(f)(1); *Pocket Protectors, supra,* 124 Cal.App. 4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15; *Quail Botanical Gardens Found, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA (*Pocket Protectors, supra*, 124 Cal.App. 4th at 928.)

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

> This 'fair argument' standard is very different from the standard normally followed by public agencies in making administrative determinations. Ordinarily public agencies weight the evidence in the record before them and reach a decision based on the preponderance of the evidence. [Citations]. The fair argument standard, by contrast, prevents the lead agency from weighing competing evidence to determine who has a better argument concerning the likelihood or extent of a potential environment impact. The lead agency's decision is thus largely legal rather than factual; it does not resolve

> conflicts in the evidence but determines only whether substantial evidence exists in the record to support the prescribed fair argument.

(Kostka & Zischke, *Practice Under CEQA,* §6.29, pp. 273-274.) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with **preference for resolving doubts in favor of environmental review**." (*Pocket Protectors, supra*, 124 Cal.App.4th at 928 [emphasis in original].)

As a matter of law, "substantial evidence includes…expert opinion." (Pub. Resources Code, §21080(e)(1); CEQA Guidelines, §15064(f)(5).) CEQA Guidelines demand that where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the environmental effects to be significant and prepare an EIR. (CEQA Guidelines §15064(f)(5); Pub. Res. Code §21080(e)(1); *Pocket Protectors, supra,* 124 Cal.App.4th at 935) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Resources Code, §21068; see also CEQA Guidelines, §15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial". (*No Oil, Inc., supra,* 13 Cal.3d at 83) In *Pocket Protectors,* the court explained how expert opinion is considered. The Court limited agencies and courts to weighing the admissibility of the evidence. (*Pocket Protectors, supra*, 124 Cal.App.4th at 935). In the context of reviewing a negative declaration, "neither the lead agency nor a court may 'weigh' conflicting substantial evidence to determine whether an EIR must be prepared in the first instance." (*Id.*) Where a disagreement arises regarding the validity of a negative declaration, the courts require an EIR. As the Court explained, "[i]t is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project." (*Id.*)

Response to Comment I-8

This comment explains the legal standard used in the review of Initial Studies/Negative Declarations. This standard is called the "fair argument" standard and requires the preparation of an EIR if a fair argument can be made based on substantial evidence that a significant impact would occur as a result of the proposed project.

The California Environmental Quality Act (CEQA) defines "substantial evidence" in Section 15384 of the CEQA Guidelines. The entirety of the section is provided below.

Section 15384. Substantial Evidence

> (a) "Substantial evidence" as used in these guidelines means enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached. Whether a fair argument can be made that the project may have a significant effect on the environment is to be determined by examining the whole record before the lead agency. Argument, speculation, unsubstantiated opinion or narrative, evidence which is clearly erroneous or inaccurate, or evidence of social of economic impacts which do not

contribute to or are not caused by physical impacts on the environment does not constitute substantial evidence.

(b) Substantial evidence shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts.

This comment does not address a particular resource area or provide a fair argument that significant impacts exist for a given resource area. Therefore, no additional response is necessary.

Comment I-9

Discussion

A. The IS/MND Omits an Accurate Project Description

The IS/MND does not meet CEQA's requirements because it fails to include a complete and accurate project description. An accurate and complete project description is essential to evaluate the potential environmental effects of a proposed project (*See, e.g., Laurel Heights, supra*, 47 Cal.3d 376.)

CEQA Guidelines require that a proposed negative declaration must include information on the Project's location, preferably shown on a map. (CEQA Guidelines, §15071(b).) However, the IS/MND fails to adequately describe the Project's location. First, no map is included in the IS/MND itself to reasonably apprise the readers of the Project's exact location. Next, the IS/MND provides only an approximately location of the Project's exact location. Next, the IS/MND provides only an approximate location of the project, describing it as "92.7± acres generally bounded by Avenue L, Avenue K-8, 20th Street East, and 30th Street East." (IS/MND, p. 1 [emphasis added].) Based on the imprecise description given, it is difficult to determine the exact delineation of the Project site.

Response to Comment I-9

The IS/MND does provide a complete and accurate description of the proposed project. While Section 15071(b) does require that the location of the proposed project be disclosed in the document, it does not require the inclusion of a project location map. The IS/MND describes the project location as generally bounded by Avenue K-8, Avenue L, 20th Street East, and 30th Street East because the boundaries of the site are irregular. However, the document also provides the specific APNs on which the proposed project would be developed, thereby complying with the requirements of CEQA.

Comment I-10

B. The IS/MND Fail to Accurately Establish the Project's Environmental Settings or "Baseline."

CEQA requires that an Initial Study include a description of the project's environmental setting or "baseline" (CEQA Guidelines, §15063(d)(2). The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. (*CBE v.*

SCAQMD, supra, 48 Cal.4th at 321.) CEQA Guidelines section 15125(a) states, in pertinent part, that a lead agency's environmental review under CEQA:

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

(See, *Save Our Peninsula Committee v. County of Monterey* (2001) 87 Cal.App.4th 99, 124-125 (*Save Our Peninsula"*).)

Here, the IS/MND is inadequate because it failed to establish accurate environmental settings for the Project.

1. **The IS/MND Fails to Establish Accurate Environmental Settings for Hazardous Materials**

Establishing an accurate baseline is the *sine qua non* to adequately analyzing and mitigating the potentially significant environmental impacts of the Project. (See CEQA Guidelines, §15125(a); *Save Our Peninsula, supra*, 87 Cal.App.4th at 121-123.) Unfortunately, the IS/MND's failure to investigate and identify the hazardous materials present at the Project site resulted in a skewed baseline. Such skewed baseline ultimately "mislead(s) the public" by engendering skewed and inaccurate analyses of environmental impacts, mitigation measures and cumulative impacts for biological resources. (See *San Joaquin Raptor Rescue Center, supra*, 149 Cal.App.4th at p. 656; *Woodward Park Homeowners*, 150 Cal.App.4th 683, 708-711.)

Response to Comment I-10

A Phase I Environmental Site Assessment was prepared for the proposed project that involved a pedestrian survey of the project site and a regulatory agency database search. The conditions identified in the Phase I were included in the Initial Study against which the impacts of the proposed project were analyzed. Additional information regarding hazardous materials and wastes on the project site can be found in the Response to Comments I-11, I-13, I-A2, I-A3, I-A4, and I-A5.

Comment I-11

a. **The IS/MND Fails to Disclose the Potential Presence of Asbestos, Heavy Metals and Hazardous Compounds on the Project Site.**

The 2013 Phase I ESA characterized the Project site as being vacant with trash and debris, including rubber tires, roofing shingles and aluminum cans strewn on the Project site. (Phase I ESA Part 1, pp. 4, 20, 21.) While acknowledging that those items pose a concern, the IS/MND quickly dismisses it without further analysis. As a result, according to Mr. Hagemann, the IS/MND ignores how at least 10 years of uncontrolled dumping and the presence of such trash and debris is indicator that much more serious hazardous materials to be present on the Project site. (Exhibit A. pg 3.)

According to Mr. Hagemann, the roofing shingles may contain asbestos, which are carcinogenic and pose a serious human health risk (Exhibit A, p. 3.) the asbestos fibers could become airborne and inhaled into the lungs. (*Id*) However, Mr. Hagemann states that the IS/MND fails to disclose the potential for the roofing shingles to contain asbestos and in fact, erroneously states that the Project would not expose individuals or the environment to asbestos containing materials. (*Id)*

Additionally, Mr Hagemann states that rubber tires contain significant quantities of zinc and other heavy metals, which contaminate the soil beneath and around the tires. Over 100 large tires have recently been observed at the Project site. (Exhibit A, p. 4; IS/MND, p. 27.) The IS/MND, however, ignores the potential impacts of the presence of heavy metals in the tires and the soils under and around the tires and fails to establish an accurate baseline for such materials. (*Id*)

Furthermore, Mr. Hagemann opines that trenching of soil and soil stockpiles are present on the Project site which are indicators for dumping of hazardous compounds, involving solvents like trichloroethylene, petroleum hydrocarbons, and other items such as car batteries. (Exhibit A, p. 4.) The IS/MND, however, overlooks the potential that such hazardous compounds are present on the Project site and did not conduct further analysis to establish an accurate baseline. (*Id)* Mr. Hagemann notes that the Phase I ESA also fails to conduct any soil sampling to determine the presence of any hazardous compounds in and on the soil trenches and stockpiles. (*Id)*

Without an accurate baseline, the Project's potential hazardous materials impacts cannot be correctly and fully ascertained. Especially in light of the large amount of soil that will be disturbed during construction, an EIR must be prepared to fully disclose the extent of hazards impacts the Project will pose. In that way, any potentially hazardous materials can be identified and avoided during construction in order to protect the health and safety of the construction workers on the Project and the sensitive receptors nearby.

Response to Comment I-11

The reader is referred to Response to Comments I-A3, I-A4, and I-A5.

Comment I-12

2. The IS/MND Fails to Establish an Accurate Environmental Setting for Biological Resources.

The IS/MDN's entire biological resources analysis is predicated on a single 4-hour walking survey which was performed on March 4, 2013 from the hours of 0730-1130. (Bio Report, p.7; Exhibit B, p.2). However, according to Dr. Smallwood, an expert biologist, a single visit to the site cannot possibly suffice to adequately characterize the use of the site by wildlife and plants. (Exhibit B, p.2) In particular, Dr. Smallwood states that the March 4th survey precedes the nesting season for burrowing owls and other birds and may explain why certain special status species that potentially occur on the Project site were not observed. (*Id).*

Based on the deficient survey, the IS/MDN established and relied on an inaccurate baseline for its analysis of all biological resources on the Project site. As a result, according to Dr. Smallwood, the IS/MND fails to account for at least 32 special status species which possibly, probably or certainly occur on the Project site. (Exhibit B, pp.2-3.) While the IS/MND

acknowledges that Mojave ground squirrel, Swainson's hawk and burrowing owl occur on the Project site, it discounts the probable to certain likelihood of occurrence of such wildlife. (*Id*) The IS/MND's use of an inaccurate baseline renders the biological resources impacts analysis inadequate.

Response to Comment I-12

A biological resources survey was conducted for the project site at the time the Conditional Use Permit was submitted to the City. The survey included a pedestrian of the project site on March 4, 2013. CEQA does not require that a biological report be prepared during the nesting season. The survey identifies all plant and animal species observed, and identifies those species which would be likely to occur based on the habitat present. The initial study does not state that Mojave ground squirrel, Swainson's hawk and burrowing are found on the project; however, it does state that they could occur and mitigation measures to ensure that impacts are less than significant were identified. No evidence was submitted that the other species listed are present or likely to occur on the project site. Additional information can be found in responses to comments I-B1 to I-B9.

Comment I-13

C. An EIR Is Required Because There Is A Fair Argument That The Project May Have Significant Adverse Environmental Impacts.

An EIR is required whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the environment. (*CBE v. SCAQMD, supra,* 48 Cal.4th at 319-230; Pub. Resources Code, §21080(d); see also *Pocket Protectors, supra*, 124 Cal.App.4th at 927.) As detailed in the following sections, there is a fair argument, supported by substantial evidence, that the Project may result in significant impacts related to hazardous materials, air quality, and biological resources. Therefore, the City is required to prepare an EIR to evaluate the Project's impacts and propose all mitigation measures that are necessary to reduce those impacts to a less than significant level.

1. **Substantial Evidence Supports a Fair Argument that the Project Will Have Significant, Unmitigated Hazardous Materials Impacts.**

As fully discussed in part B.1, *supra*, the IS/MND fails to establish an accurate baseline for hazardous materials present or potentially present on the Project site. As a result, the IS/MND fails to adequately analyze and mitigate the significant impacts of such hazards.

According to Mr. Hagemann, a fair argument can be made that the trash, debris and other materials contain compounds that would pose a risk to the health of construction workers through dermal contact and through dust inhalation. (Exhibit A, p. 4.) The asbestos in the roof shingles could cause lung diseases when inhaled by construction workers. (*Id.* at p.3.) The heavy metals including zinc in the tires can cause stomach cramps, nausea, and vomiting for construction workers who will clear the site for Project construction. (*Id.* at p.4.) The hazardous compounds present in soil trenches and stockpiles could pose a risk to the health of construction workers through dermal contact and dust inhalation. *(Id.)*

Not only could the presence of asbestos, heavy metals and hazardous compounds pose a serious health risk to construction workers such as LIUNA members during site preparation and construction, Mr. Hagemann states that the disturbance of such materials could also seriously impact numerous sensitive receptors near the Project site (Exhibit A, p.4.) The National Soccer Center and associated soccer fields are located immediately east of the Project site's eastern boundary. (IS/MND, pp. 2, 22.) A church has been approved on the property to the northeast, though not yet been constructed. (*Id.* at p. 29). Additionally, Mr. Hagemann notes that a subdivision of homes is located 1,600 feet to the northwest of the Project site. (Exhibit A, p.4.) As a result, Mr. Hagemann concludes that the Project poses a high risk to young children playing soccer at the Soccer Center, families attending church, and families which reside in the nearby subdivision who could be exposed by the hazardous materials at the Project site.

Mr. Hagemann recommends that the City must prepare a Draft EIR to include (1) a full assessment of the roofing shingles present at the Project site and their potential to represent a health risk, (2) sample the soils in the area of discarded tires to determine if any heavy metals are present in the soil that may pose a risk to construction workers during construction activities that disturb the ground surface, and (3) a full assessment of areas of dumping, disturbed soil, and soil trenches and stockpiles determine the types and amount of hazardous compounds present on the Project site. (Exhibit A, p.4.) Any conditions that are found to be hazardous should be mitigated in the DEIR, which include encapsulation of materials, real-time dust monitoring along the fenceline, and protective equipment of construction workers. (*Id.)*

Response to Comment I-13

The initial study identifies that tires, shingles, and debris are found on the project based on a review of the Phase I Environmental Site Assessment. Removal of tires and other debris is governed by State and Federal law. Conditions of approval have been added to ensure that the developers and contractors are aware of these requirements. Additionally, Planning staff along with a staff member who deals with illegal dump sites went to the project site on August 16 to examine the illegal dump. While tires and general debris were observed, no evidence of roofing shingles was observed. There were, however, lots of wooden pallets. In the event that staff missed roofing shingles on the project site, a condition of approval has been added to ensure that any roofing shingles found on the project site are dealt with appropriately. Additional information can be found in response to comments I-A2, I-A3, I-A4, and I-A5.

Comment I-14

2. Substantial Evidence Supports a Fair Argument that the Project Will Result in Significant, Unmitigated Construction Emissions

According to Mr. Hagemann, the IS/MND inadequately analyzes the Project's impacts on air quality, especially during construction. (Exhibit A, p.5) Construction workers such as LIUNA members would be exposed to such impacts. The IS/MND admits that the construction of the Project would generate air emissions associated with grading, use of heavy equipment, construction worker vehicles, etc. (IS/MND, p.21.) However, the IS/MND concludes without analysis that construction air emissions would not exceed the thresholds established by the AVAQMD due to the size and type of the Project. (IS/MND, p.21) The IS/MND also fails to

quantify particulate matter (PM10 and PM2.5) emissions from construction of the Project. (*Id*; IS/MND, p.5) The inadequate project-level air quality impacts analysis in the IS/MND also renders the cumulative air quality impacts analysis inadequate.

Especially where, as here, multiple sensitive receptors are present in the Project site's immediate vicinity, the IS/MND's inadequate analysis is perplexing and unjustified. Mr. Hagemann cites the AVAQMD CEQA Guidelines, which provide that any industrial project within 1,000 feet of a sensitive receptor must be evaluated if it exposes sensitive receptors to substantial pollutant concentrations. (Exhibit A, p. 6) The IS/MND acknowledges the presence of multiple sensitive receptors in the Project site's vicinity, which are located at less than 1,000 feet. (IS/MND, pp. 2, 22, 29) Construction emissions of particulate matter may impact the health of the children at the adjacent soccer facility, located on the Project's eastern border, and nearby residents. (Exhibit A, p.5) A church is slated to be constructed shortly immediately north of the Project site (IS/MND, p.2) There are also numerous residences in the Project's immediate vicinity. (Exhibit A, p.5)

According to Mr. Hagemann, exposure to particulate matter can lead to respiratory symptoms including irritation of airways, coughing, and difficulty breathing. (Exhibit A, p.5) Additional symptoms include irregular heartbeat, aggravated asthma, and decreased lung function. (*Id.*) Since many children and families frequent the soccer facility and church and children and older adults are most likely to be affected by exposure to particulate matter, Mr. Hagemann believes the IS/MND should have analyzed and mitigated impacts of particulate matter to such sensitive receptors.

However, Mr. Hagemann states that the IS/MND also improperly defers the formulation of a dust control plan to after the completion of the CEQA process and just before the commencement of construction. (Exhibit A, pp 5-6; IS/MND, p. 25.) According to Mr. Hagemann, in order to ensure that such plan will be protective of sensitive receptors near the Project site, the dust control plan must be formulated during the CEQA process, as part of the Draft EIR, which identifies all sensitive receptors and incorporate all feasible mitigation measures, pursuant to AVAQMD Rule 403, to reduce impacts to less than significant level. (Exhibit A, p.6.)

Moreover, Mr. Hagemann states that the IS/MND also fails to discuss any toxic air contaminants, particularly diesel particulate matter (DPM) from any activities associated with the construction of the Project. (Exhibit A, pp.6-7) Mr. Hagemann states that DPM is a likely carcinogen which can cause irrigation to the eyes, nose, throat, and lungs, as well as neurological effects. (*Id.*) The California Air Resources Board recognizes that children are the most vulnerable to the health effects of DPM. However, the IS/MND fails to analyze the impacts of DPM and fails to mitigate such impacts to the extent feasible, as provided by Mr. Hagemann. (*Id.*) The City must prepare a Draft EIR and evaluate DPM emissions through a comprehensive emissions inventory in accordance with AVAQMD Rule 1402. (*Id.*)

Based on the foregoing, there is substantial evidence which supports a fair argument that the Project will result in significant, unmitigated construction emissions impacts, especially to sensitive receptors in the Project's vicinity. The City must prepare a Draft EIR to fully address these impacts and mitigate them to the extent feasible.

Response to Comment I-14

The proposed project will generate construction emissions. However, these emissions are not expected to exceed AVAQMD thresholds based on previous solar construction projects. The City has approved several solar generating facilities which are larger than the proposed project and had air quality studies prepared. These projects ranged in size from 158 acres to 216 acres which is over twice the size of the current project. These air quality reports determined that construction emissions would not be significant and would not exceed the thresholds established by the AVAQMD. Additionally, the entire 92.7 acres will not be under construction at one time. The portion of the project controlled by PsomasFMG is scheduled to start construction shortly after project approval. The remaining portions of the project site do not have power purchase agreements or interconnection agreements and construction start dates are unknown. Therefore, air quality impacts would be less than significant and no further response is necessary.

Comment I-15

3. The IS/MND Fails to Adequately Analyze the Project's GHG Emissions.

According to Mr. Hagemann, the IS/MND fails to quantify the Project's greenhouse (GHG) emissions and merely states that air emissions would be generated during construction, "some of which may be greenhouse gasses." (IS/MND, p. 26; Exhibit A, p. 6.) But without any quantification or analysis, it is incomprehensible how the IS/MND can proceed to conclude that such GHG emissions are "anticipated to be less than the thresholds established by the Antelope Valley Air Quality Management District." (*Id.*)

GHG emissions from the Project must be quantified and compared to the AVAQMD thresholds. Mr. Hagemann states that the results from such analysis must be included in the Draft EIR. (Exhibit A, p.7.)

Response to Comment I-15

The reader is referred to Response to Comment I-A11

Comment I-16

4. Substantial Evidence Supports a Fair Argument that the Project Will Have Significant, Unmitigated Impacts to Biological Resources.

a. The IS/MND Fails to Adequately Analyze the Project's Impacts to Riparian Vegetation.

The IS/MND acknowledges that a stream flows immediately east of the project site. (IS/MND, p. 23) At the same time, Dr. Smallwood provides that the IS/MND concludes, without explanation, that no impacts to riparian vegetation would occur because no construction will occur in the stream channel. (*Id.;* Exhibit B, p.2.)

According to Dr. Smallwood, without any analysis, the City cannot conclude that the Project will not have significant impacts on riparian vegetation. (*Id.*)

Response to Comment I-16

Page 23 of the Initial Study states "The project site does not contain any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service. However, a drainage channel runs immediately east of the project site between the project site and the soccer center. No work is proposed in this channel. Therefore, no impacts would occur." This is a drainage channel and not a stream. Portions of the channel are concrete and the channel is maintained by the Public Works Department. There is no vegetation in the channel. As no work would occur in the channel and no vegetation is located in the channel, no impacts to riparian vegetation would occur.

Comment I-17

b. The IS/MND Fails to Adequately Analyze the Project's Impacts to Wildlife Movement

The IS/MND fails to adequately analyze the Project's impacts to wildlife movement. The IS/MND concludes, without analysis, that the Project site is not part of an established migratory wildlife corridor and as such, no impacts would occur. (IS/MND, p.23) However, such conclusion is misleading because no agency or scientific program is responsible for establishing any movement corridors and the conclusion implies that there is some established map or list of movement corridors and the Project is outside of such established list or map. (Exhibit B, p.2) The issue that the IS/MND should have considered, but did not, is whether a proposed project will interfere with the movement of wildlife or fish, thereby disrupting a fundamental ecological requirement of wildlife species. *(Id.)*

As a result, Dr. Smallwood provides that the IS/MND fails to adequately analyze the Project's contribution to habitat fragmentation, which is recognized as the most serious threat to the continued existence of terrestrial wildlife. (Exhibit B, p.2) The City must prepare a draft EIR to analyze and mitigate the Project's contribution to habitat fragmentation.

Response to Comment I-17

The reader is referred to Response to Comment I-B4.

Comment I-18

c. The IS/MND Fails to analyze and Mitigate the Project's Impacts of Avian Collisions.

According to Dr. Smallwood, the IS/MND and the Bio Report fail to consider how the Project's PV panels and support structures pose some collision risk to birds. (Exhibit B, p.4) Based on established literature and complicated formula, Dr. Smallwood calculates and concludes, depending upon many variables, that the Project could result in 12 to 143 bird fatalities per year. (*Id.*, pp.4-6) Even at the lower end of the projected fatalities, there is no doubt that the Project will have significant impacts of avian collisions. And in light of the probable and certain occurrences of special status avian species in the Project area, there is substantial evidence which

supports a fair argument that the Project will have significant impacts on special status species. As such, the IS/MND's failure to analyze such impacts cannot be justified.

The City must prepare a Draft EIR to analyze the Project's impacts of avian collisions and mitigate such impacts to the extent feasible.

Response to Comment I-18

The reader is referred to Response to Comment I-B6.

Comment I-19

d. The IS/MND Improperly Defers Mitigation of and Fails to Adequately Mitigate the Project's Impacts to Biological Resources.

According to Dr. Smallwood, the IS/MND improperly defers preconstruction surveys for nesting birds, burrowing owls and Mojave ground squirrel until after the CEQA process and Project approval. CEQA prohibits such deferred mitigation. Specific mitigation measures must be set forth in the CEQA document. (*Sundstrom v. Mendocino,* 202 Cal.App. 3d 296.) Especially in light of the deficient 4-hour survey conducted for the IS/MND, proper preconstruction surveys must be conducted and included as part of the CEQA process to reasonably apprise the public of the impacts the Project will have on important biological resources. (Exhibit B, p.6.)

Additionally, the IS/MND fails to incorporate all feasible mitigation measures to minimize, reduce, rectify or offset the Project's significant impacts to biological resources. (Exhibit B, p.7) According to Dr. Smallwood, the City must adopt the following mitigation measures to address such impacts: (1) require preconstruction behavioral surveys to identify avian flight paths, (2) provide funds to local wildlife rehabilitation facilities to rehabilitate birds injured by collision with the Project's structures as well as electrocutions caused by electric distribution poles, (3) provide funds to offset impacts by conserving suitable wildlife habitat through purchase of conservation easements or fee title, and (4) fatality monitoring to estimate the impacts caused by collisions and electrocutions to ultimately reduce such Project-related wildlife fatalities on-site. (*Id*) Dr. Smallwood also provides specific ways in which the Project's impacts to biological resources can be monitored successfully. (*Id*)

Moreover, Dr. Smallwood recommends that the City require mitigation monitoring to ensure that the project proponent will achieve mitigation objectives and performance standards as set forth in the CEQA and permit documents. (Exhibit B, p.8) Without an adequate and concrete monitoring requirement, the proposed mitigation measures are uncertain to reduce the Project's potentially significant impacts to a less than significant level. (*Id.*) As such, a Draft EIR must be prepared to not only incorporate all feasible mitigation measures to address the Project's impacts on biological resources but also require mitigation monitoring to ensure such measures comply with all applicable objectives and performance standards.

Response to Comment I-19

The reader is referred to Response to Comment I-B8 and Response to Comment I-B9.

Comment I-20

D. The IS/MND Ignores the Project's Cumulatively Considerable Impacts.

The City fails to consider the cumulative impacts of the Project in connection with other related past, present, and future projects in the vicinity. An agency must make a "mandatory finding of significance" and may not issue a negative declaration if a proposed project will have "impacts that are individually limited, but cumulatively considerable." (Pub. Resources Code, §21083; CEQA Guidelines, §15355.) "Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines, Appendix G, Section XVII; CEQA Guidelines, section 15130(a).) "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." (CEQA Guidelines, §15355(a).) "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." (CEQA Guidelines, §15355(a).)

"The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (*CBE v. CRA, supra*, 103 Cal.App.4th at 117; see CEQA Guidelines, §15355(b).)

As the court stated in CBE v. CRA:

> Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact. (*CBE v. CRA, supra*, 103 Cal.App.4th at 114)

Response to Comment I-20

This comment provides an explanation of cumulative impacts but does not identify a specific issue with the Initial Study. Therefore, no further response is necessary.

Comment I-21

1. The IS/MND Fails to Analyze the Project's Cumulative Impacts in Sufficient Detail.

The IS/MND and its supporting documents fail to adequately analyze the potential cumulative impacts of the Project. Rather than considering and analyzing each past, present and probable future project in sufficient detail, the IS/MND merely lists two (2) "past, present and future projects" with scant information.

The IS/MND lists 2 solar electric generating facilities within 2 miles of the project site – 1.5 MW on 20 acres at the northwest corner of Avenue K-8 and 40th Street East and 1.5 MW on 20 acres

at the southwest corner of Lancaster Boulevard and 40th Street East (IS/MND, p.33) Construction of these 2 projects is expected to be completed in the next two months. (*Id.*)

However, the IS/MND fails to provide adequate information about these projects – the IS/MND does not provide the CUPs or APNs for these two projects, the exact location of these projects in relation to the Project site, and whether there is a potential that the construction timeline of these projects will coincide with the Project's. Without adequate information, it is impossible for the City to conclude that there is not substantial evidence to support a fair argument of significant cumulative impacts.

The IS/MND restricted its cumulative impacts analysis to 2 miles around the Project site. The IS/MND must "define the geographic scope of the area affected by the cumulative effect[s] and provide a reasonable explanation for the geographic limitation use" in violation of CEQA Guideline Section 15130(b)(1)(B)(3). The IS/MND fails to provide an reasonable explanation for why the 2 mile radius was chosen as the geographic scope for analyzing cumulative impacts.

Accordingly, the IS/MND should have analyzed whether the Project's incremental impacts, when added to other related past, present and reasonably foreseeable future projects, could result in cumulatively considerable impacts. Here, the IS/MND's cumulative analyses fail to comport with CEQA and miss the mark entirely.

Response to Comment I-21

A total of three related projects were identified based on a review of City of Lancaster projects, City of Palmdale projects, and unincorporated Los Angeles County solar projects within two miles of the project site. Two solar facilities were identified within two miles of the project site. CUP 10-23 (northwest corner of 40th Street East and Avenue K-8) has completed its construction since the release of the initial study and CUP 12-12 (southwest corner of 40th Street East and Lancaster Boulevard) is almost complete. A church was recently approved immediately to the east of the project site; however, based on a discussion with the applicant, no construction is expected to occur for at least a year to a year and a half. The project's impacts along with the impacts of these other three projects were analyzed and it was determined that while cumulative impacts would occur, the project's contribution to these impacts would not be cumulatively considerable.

Comment I-22

2. The IS/MND's List of Related Past, Present and Foreseeable Future Projects in the Project's Vicinity is Underinclusive

The IS/MND's list of related past, present and future projects is also underinclusive. First, it only includes one renewable energy project in the Project's vicinity. The number of past, present and foreseeable future renewable energy projects in and near Lancaster is quite extensive, especially given the "gold rush" of renewable energy projects in California. Therefore, related renewable energy projects in the Project's vicinity should have been considered in the cumulative impact analyses.

The IS/MND's failure to adequately analyze the Project's incremental impacts in combination with all related past, present and foreseeable future projects violates CEQA. The purpose of CEQA is to inform decision makers and the public about the potential, significant environmental effects of a project. (CEQA Guidelines, §15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.)

The IS/MND however omits analysis of other related past, present and future projects in the Project site's area which, in connection with the Project's incremental impacts, could result in considerable cumulative air impacts. The IS/MND merely lists 2 solar electric generating facilities within 2 miles of the project site – 1.5 MW on 20 acres at the northwest corner of Avenue K-8 and 40th Street East and 1.5 MW on 20 acres at the southwest corner of Lancaster Boulevard and 40th Street East. (IS/MND, p. 33.)

To be clear, according to Mr. Hagemann, there are at least 18,000 acres or 28 square miles of renewable energy projects in and near the Antelope Valley area, including the City of Lancaster, the City of Palmdale, and in the unincorporated areas of Los Angeles County, which will be constructed in and around the same time as the Project. (Exhibit A, p.5.)

APPROVED PROJECTS (5); GROSS ACRES: 4,218

R2009-02089 Alpine Solar
R2009-02089 Alpine Solar Addition
R2009-02239 AV Solar Ranch One
R2010-00808 Antelope Valley Solar – LACO
R2012-00849 Rutan

PENDING PROJECTS (18); GROSS ACRES: 13,442

R2010-00256 Wildflower Green Energy Farm
R2011-00377 Antelope Solar Farm
R2011-00408 Blue Sky Wind Energy
R2011-00798 West Antelope Blue Sky Ranch
R2011-00799 American Solar Greenworks
R2011-00801 Silver Sun Greenworks
R2011-00804 East Lancaster Ranch
R2011-00807 Antelope Solar Greenworks
R2011-00833 North Lancaster Ranch
R2011-01025 Theme
R2011-01027 Vandiver
R2011-01029 Beazel
R2011-01030 Owen
R2011-01033 Russell
R2012-00024 Quail Lake Photovoltaic Solar
R2012-01559 Chanin
R2012-01589 West Antelope Solar Project

City of Lancaster Projects
CUP10-03
CUP 10-22
CUP 11-02
CUP 11-03
CUP 11-05
CUP 11-07
CUP 12-08
CUP 12-09
CUP 13-03
CUP 13-06

The above list of renewable projects is not exhaustive. Even so, it illustrates how deficient and underinclusive the IS/MND's list of 3 cumulative projects is. Many of these projects have been approved and are pending approval. As such, Mr. Hagemann provides that may of these projects could be constructed simultaneously as the Project, which could have significant cumulative construction-related impacts which the IS/MND fails to consider. (Exhibit A, p.5.)

The IS/MND also improperly restricted its cumulative impacts analysis to include only to solar projects. (IS/MND, p.33.) Although the IS/MND mentions a church facility which has been approved but for which construction has not yet begun, the IS/MND fails to provide any other information about the church project, such as the size, exact location and permit numbers. More importantly, the IS/MND ignores any other projects which could result in related impacts as the Project in the Project's vicinity.

In conclusion, based on the lack of adequate detail and failing to include all related past, present and reasonably foreseeable future projects, the IS/MND fails to adequately analyze if the Project's incremental impacts, when added to other related past, present and reasonably foreseeable future projects, could be cumulatively considerable.

Response to Comment I-22

During the preparation of an initial study or an environmental impact report, the City typically looks at projects within a two mile radius of a project site in order to prepare the cumulative impacts analysis. For very large projects, or highly controversial projects, the radius is expanded to 5 miles. The proposed project is not very large nor is it highly controversial so a 2 mile radius was utilized.

Most alternative energy projects in the Antelope Valley occur on the west side due to the proximity to high-voltage transmission lines and substations with adequate capacity. Most of these projects are at least 12 to 15 miles west of the project site. The projects that were listed in Comment I-22 are located on the far west side of the Antelope Valley and were included as related projects for a City project located at 110th Street West and Avenue J. These projects are not located within two miles of the project site nor are they located within 5 miles of the project. The solar projects located within the unincorporated county on the east side are located 4 miles or more away from the project site and therefore were not included in the cumulative analysis. These projects have been in "initial review" since their submittal in 2011 according to the

County's renewable energy projects list. The commenter states that other projects in the vicinity of the project site were not included in the cumulative analysis; however, no evidence as to those projects was included in the comment. Development conditions on the east of the City are different than those on the west side of City and therefore, the number of projects included will differ.

Comment I-23

3. The IS/MND Fails to Adequately Analyze Cumulative Air Quality Impacts.

In addition to the IS/MND's inadequate analysis of the Project's air quality impacts during construction, the IS/MND's cumulative air quality impacts analysis is inadequate. According to Mr. Hagemann, there are at least 18,000 acres or 28 square miles of renewable energy projects in and near the Antelope Valley area, including the City of Lancaster, City of Palmdale, and in the unincorporated areas of Los Angeles County, which will be constructed in and around the same time as the Project. (Exhibit A, p.5) Mr. Hagemann provides the construction of all of these projects will require land disturbance for site preparation, including grading and excavation, which will release particulate matter in the form of dust from the construction activities. (*Id.*) Because these projects are located in Antelope Valley and the Mojave Desert Air Basins, both of which are designated non-attainment for PM10, Mr. Hagemann concludes that the cumulative construction impacts, especially if many of these projects are constructed simultaneously, could be significant. (*Id.*)

The IS/MND, however, fails to provide when each of these projects could be constructed in relation to the construction timeline for the Project. While acknowledging that simultaneous construction of nearby projects "could generate cumulative impacts," the IS/MND brushes off any analysis of such impacts with the general, unsubstantiated assumption that "[m]ost of the impacts generated by these projects are site specific and generally do not influence the impacts on another site." (IS/MND, p. 33) However, the influx of solar projects in particular, in conjunction with the Project's impacts, will contribute to further degradation of regional air quality. (Exhibit A, p.5.)

In all likelihood, the church facility located immediately north of the Project may be constructed at the same time as the Project, resulting in cumulatively considerable construction emissions. However, the IS/MND fails to provide sufficient detail on when the estimated construction timeline for the church facility is.

The IS/MND also fails to analyze any other non-renewable energy project that will be in construction at or around the same time as the Project. The IS/MND cursorily concludes, without any basis, that less than significant impact will result from a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment. (IS/MND, p.9; Exhibit A, p.5.)

The failure of the IS/MND to provide any analysis of a potential significant cumulative impacts "enlarges the scope of fair argument..." (*Sundtrom,* 202 Cal.App.3d at 311.) In sum, the IS/MND fails to adequately analyze how the incremental impacts of the Project could be

cumulatively considerable when analyzed in conjunction with all past, present and reasonably foreseeable future projects in and around the Project area.

Response to Comment I-23

The proposed project or at least a portion of the project will be constructed shortly after approval of the CUP. The referenced church will not start construction for at least a year and therefore, will not be constructed at the same time as the proposed project. The commenter also states that there is at least 28 square miles of solar projects that will be constructed around the same time as the proposed project. The four county solar projects located on the east side were all filed in 2011 and per the County's renewable energy list are currently in initial review. It is unlikely that these projects will be approved or start construction by the end of the year; therefore, any potential air quality impacts associated with those projects would not result in cumulative air quality impacts when combined with the proposed project.

As previously discussed, the projects listed in Comment I-22 are located on the west side of the Antelope Valley. The projects listed in the City have either been built or approved with the exception of CUP 13-03 which is technically on hold. These projects total approximately 1,300 acres. The remainder of the projects are county projects which are in various states of approval and are not likely to start construction in the near future. Dust generated on the west side of Lancaster is not likely to combine with dust generated on the project site during construction. Therefore, cumulative impacts would be less than significant.

Comment I-24

4. The IS/MND Fails to Adequately Analyze Cumulative Biological Impacts.

The IS/MND admits that the construction of the two 1.5 MW solar projects and the church facility near the Project site "would lead to a cumulative loss of habitat for a variety of plants and animals." (IS/MND, p.33.) The IS/MND also admits that the project site contains suitable habitat for burrowing owls, nesting birds, and Mohave ground squirrels. (*Id*) The IS/MND, however, concludes that the Project will not result in cumulatively considerable impacts to biological resources.

Dr. Smallwood states that the IS/MND fails to conduct any cumulative impacts analysis for biological resources. (IS/MND, p.6) First, the IS/MND fails to analyze the Project in the larger context of the influx of all solar projects in the City of Lancaster, City of Palmdale, and the unincorporated areas of Los Angeles County by inexplicably limiting the range of its cumulative impacts analysis to only 2 miles (IS/MND, p.33) Additionally, as discussed earlier, the IS/MND's biological survey was limited and failed to account for all other special status species which would potentially occur on the Project site. As such, the IS/MND's analysis of the Project's cumulative impacts on biological resources is inadequate.

The City must prepare a Draft EIR and revise its cumulative impacts analysis to include all related past, present, and future projects near the Project site. The City must also actually analyze with sufficient detail, how the incremental impacts from this Project, compounded with the related past, present and future projects, could be cumulatively considerable. Mr. Hagemann recommends that the City must identify the timing of construction of all the projects that are

approved or pending in the Antelope Valley and quantify the emissions of the projects in a cumulative context through modeling along with appropriate documentation to support these estimates. (Exhibit A, p.5.) And if such analysis leads to the conclusion that the construction emissions will exceed the AVAQMD thresholds, the Draft EIR must adequately mitigate such emissions. *(Id.)*

Response to Comment I-24

Each of the three related projects had environmental reviews conducted which included the preparation of biological surveys. These project sites did not contain suitable habitat for Mohave ground squirrel as they had been previously utilized for agricultural purposes and the native vegetation had been removed. Therefore, no cumulative impacts with respect to Mohave ground squirrel would occur.

All of the sites had suitable habitat for burrowing owls but did not necessarily contain suitable burrows. No burrowing owls or burrowing owl burrows were identified on any of the project sites. Mitigation measures were identified for each of the projects that would ensure that any potential impacts to burrowing owls remain less than significant. Therefore, the project's contribution to cumulative impacts with respect to burrowing owls was not cumulatively considerable.

Cumulative air quality impacts have been discussed in the Response to Comment I-23.

Comment I-A1

I have reviewed the June 10, 2013 Initial Study (IS) for the Soccer Center Solar Facility ("Project") in Lancaster, California. The Project would involve the completion of three photovoltaic (PV) solar facilities on 92.7 acres that would generate a total of 13 megawatts (MW) of power. Components of the Project include PV panels six to eight feet in height and buried cables to tie-in to the electrical distribution system.

I have reviewed the Project for issues associated with hazards and hazardous materials, air quality, cumulative impacts and greenhouse gases. I conclude that there are potential significant impacts to construction workers and offsite receptors from construction of the Project. The IS does not disclose these impacts and a fair argument can be made that impacts will be significant. A DEIR should be prepared that discusses these issues and provides mitigation to reduce impacts to a less-than-significant level where warranted.

Response to Comment I-A1

This comment summarizes the project description and the overall position of the commenter. No further response is necessary.

Comment I-A2

Hazards and Hazardous Materials

The area of the Project site, east of 25th Street East (Parcel D), has been used for dumping. A 2013 Phase I Environmental Site Assessment describes the Project area as "vacant land with debris, including rubber tires" and "trash and debris, including rubber tires, roofing shingles and discarded aluminum cans, was observed throughout the Property."

The trash and debris piles are clearly visible in aerial images on Google Earth. The images below show areas of disturbed soil, discarded tires, and debris.

From the examination of the Google Earth images, the disposal appears to be uncontrolled dumping, conducted over a period of at least 10 years. During this period, dumping may have involved materials, including petroleum compounds (such as oil, diesel, and other fuels and fluids) and volatile organic compounds, such as those found in degreasers (e.g., trichloroethylene).

Response to Comment I-A2

The area east of 25th Street East is devoid of vegetation and debris. The area that the commenter refers to as containing rubber tires, shingles, trash and debris is located west of 25th Street East, close to the western property line. Staff agrees that the aerial images clearly show areas of discarded tires and that this area needs to be cleaned up in accordance with all existing rules and regulations. However, no evidence has been submitted that the dumping has been going on for over 10 years or that petroleum compounds have been dumped. The Phase I Report found no evidence of soil staining or discarded petroleum compound containers.

Comment I-A3

The only materials that were identified in the Phase I – tires and roofing shingles – may themselves require disclosure and mitigation in a Draft Environmental Impact Report (DEIR).

- Asbestos is found in roofing shingles, according to the US EPA. Asbestos represents a human health risk when asbestos fibers become airborne and are inhaled into the lungs. Asbestos exposure can cause lung diseases and asbestos is recognized by the U.S. EPA as a human carcinogen.

  The IS does not disclosure the potential for the roofing shingles to contain asbestos and provides no mitigation for the protection of public health when the roofing materials are removed during site preparation. In fact, the IS states that the Project would not expose individuals or the environment to asbestos containing materials, a conclusion that disregards the potential for the roofing shingles to contain asbestos. The 2013 Phase I ESA only vaguely states that "trash and debris piles are an environmental concern" and recommends only that "the tires and roofing shingles be disposed of appropriately."

  A soccer field complex is located less than a half-mile to the east of the discarded materials and a home is located less than a thousand feet to the west. A subdivision of

homes is located about 1,600 feet to the northwest. There is a fair argument that disturbance of the roofing shingles during Project construction will cause public exposure to asbestos materials. The IS fails to identify this potential health hazard and does not provide for any mitigation.

A DEIR should be prepared for the Project to include a full assessment of the roofing materials and their potential to represent a health risk. Any necessary mitigation, including encapsulation of the materials, real-time dust monitoring along the fenceline for asbestos fibers, and procedures for protection of construction workers, including proper protective equipment should be included in the DEIR.

Response to Comment I-A3

The commenter states that roofing shingles are present on the project site and may contain asbestos. Asbestos is a concern when it is in a friable state. Any shingles and other debris on the project site shall be removed in accordance with applicable laws and regulations. Based on a site visit conducted by staff on August 16, no shingles were observed on the project site. However, a condition of approval has been added to ensure that any shingles found during construction are handled appropriately.

Comment I-A4

- Google Earth images show that well over 100 large tires have been disposed at the Project site. Tires contain significant quantities of zinc and soil may be contaminated with zinc and other heavy metals in areas of tire dumping. Construction workers involved in clearing the site for Project construction may be exposed to zinc in the tires and the soil, resulting in stomach cramps, nausea, and vomiting.

  A DEIR should be prepared to disclose what likely constitutes the illegal dumping of tires. Soil sampling in the area of the discarded tires should be conducted to determine if any heavy metals are present in the soil that may pose a risk to construction workers during construction activities that disturb the ground surface.

Response to Comment I-A4

The tires located on the project site are a result of illegal dumping and as such shall be cleaned up in accordance with all applicable rules and regulations. Soil sampling shall be conducted under the tires to ensure that the soil is not contaminated with any heavy metals. Any contaminated soil shall be disposed of properly in accordance with all existing laws. These requirements have been added as a condition of approval to ensure that the developer and/or contractors are aware of the legal requirements.

Comment I-A5

- Trenching of the soil and soil stockpiles are visible in the Google Earth images. Materials disposed in the trenches may contain hazardous compounds, including solvents (e.g., trichloroethylene), petroleum hydrocarbons (oils, greases, and fuels, including gasoline and diesel) and other items, including car batteries. A full assessment of the areas of

dumping and disturbed soil, to include soil sampling, should be conducted for inclusion in a DEIR. A fair argument can be made that the debris contains compounds that would pose a risk to the health of construction workers through dermal contact and through dust inhalation. Any conditions that are found to be hazardous should be mitigated in a DEIR to be prepared for the Project.

Response to Comment I-A5

The Phase I ESA included a pedestrian survey of the project site and no areas of stained soil were identified which would be expecting if dumping of petroleum products had occurred. Additionally, no evidence has been submitted that hazardous materials were dumped in these trenches. The trenches appear to be approximately 2 feet wide and about one foot deep and contain scattered pieces of debris similar to the rest of the illegal dump site.

Comment I-A6

Air Quality

The Project is just one of many solar and wind projects that are being considered for the area. According to a list prepared by Los Angeles County, over 4,200 acres of projects have been approved and project approval is pending for another 13,442 acres of solar and wind projects. Combined, these projects represent nearly 18,000 acres, or almost 28 square miles of development.

The development of these projects will require land disturbance for site preparation, including grading and excavation, which will release particulate matter in the form of dust from the construction activities. All projects are located in the Antelope Valley and the Mojave Desert Air Basin, both of which are designated non-attainment for PM10. Fugitive dust is primarily responsible for particulate matter in both the Antelope Valley and the Mojave Desert Air Basin. The IS does not acknowledge the non-attainment status for the Mojave Desert Air Basin and the Antelope Valley for particulate matter and does not quantify particulate matter (PM10 and PM2.5) emissions from construction of the Projects. The IS states only that a less than significant impact will result from a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (p.9).

Response to Comment I-A6

The reader is referred to a discussion of the cumulative impacts associated with the proposed project in Response to Comments I-20, I-21, and I-22.

Comment I-A7

The IS fails to examine those projects that will be constructed simultaneously in the air basins which would have a cumulative impact on air quality, other than to evaluate a church construction project (p.34). Construction emissions from the Project, in conjunction with construction of the other projects, will contribute to further degradation of regional air quality.

A DEIR should be prepared to identify the timing of the construction of all the projects that are approved or pending in the Antelope Valley and quantify the emissions of the projects in a cumulative context. If emissions of particulate matter of the Project, in combination with other projects, exceed Antelope Valley Air Quality Management District (AVAQMD) thresholds, mitigation should be identified in the DEIR. In applying these thresholds, the AVAQMD requires project emissions to be estimated through modeling along with documentation to support these estimates including all emission factors, emission factor sources, assumptions, sample calculations and model inputs.

Response to Comment I-A7

CEQA does not require the analysis of a worst case scenario. It is not feasible or practical to identify the timing of construction for every project in the Antelope Valley that is approved or pending. A cumulative analysis was conducted for the proposed project, and related projects within two miles were identified. All projects are required to comply with the regulations of the AVAQMD. Based on the City's previous experience with other solar projects and the size of this project, the projects air quality impacts would be less than significant. The identified related projects are either already under construction or construction would occur after construction of the proposed project. These related projects air emissions would be less than or equal to the emissions generated by the proposed project. Therefore, the project's contribution to cumulative impacts would not be cumulatively considerable.

Comment I-A8

Construction emissions of particulate matter may also impact the health of the children at the adjacent soccer facility, located on the Project's eastern border, and nearby residents. Exposure to particulate matter can lead to respiratory symptoms such as irrigation of airways, coughing, and difficulty breathing, an irregular heartbeat, aggravated asthma, and decreased lung function. According to the Environmental Protection Agency, children and older adults are the most likely to be affected by particulate matter exposure.

The IS acknowledges the adjacent National Soccer Center as a sensitive receptor (IS, p.22), but does not analyzed impacts of construction of the Project on children's health and does not offer adequate mitigation. AVAQMD CEQA guidelines state that any industrial project within 1000 feet of a sensitive receptor must be evaluated if it exposes sensitive receptors to substantial pollutant concentrations.

Response to Comment I-A8

The reader is referred to Response to Comment I-14.

Comment I-A9

The IS states that a dust control plan will be submitted to the AVAQMD prior to any grading activities (IS, p.25). Instead, a dust control plan should be submitted along with a DEIR to identify all sensitive receptors (such as children at the National Soccer Center adjacent to the Project site) and include all feasible mitigation measures, pursuant to AVAQMD Rule 403, to reduce impacts to a less than significant.

The IS also provides for limited mitigation, including watering three or four times per day, posting signs and stabilizing road surfaces (p.25). Instead, all feasible mitigation should be considered for the Project, because of the poor basin-wide air quality and because of the proximity of the children at the Soccer Center, including:

- Curtailing all clearing, grading, earth moving, and excavation activities when winds exceed 15 miles per hour, and identify measures for determining wind speed and for notification of work stoppages;
- Planning to minimize areas disturbed by clearing, earth moving, or excavation activities;
- Covering stockpiles (with tarps) or use water to reduce dust generation;
- Use of seeding or stabilizers on all disturbed soil surfaces;
- Limit construction vehicle speeds to 15 miles per hour, and identify measures to enforce speeds;
- Provide grizzlies or other devices to shake loose soil off of equipment when exiting the Project; and
- Sweep streets of adjacent roadways with a regenerative street sweeper to reduce track-out of dust.

These measures are necessary because exposure to particulate matter can lead to respiratory impairment such as irrigation of airways, coughing, and difficulty breathing, an irregular heartbeat, aggravated asthma, and decreased lung function. According to the Environmental Protection Agency, children and older adults are the most likely to be affected by particulate matter exposure.

Response to Comment I-A9

Dust control plans are prepared prior to the start of construction not during the preparation of the environmental document. These dust control plans include all requirements that are in place at the time construction takes place. The measures identified in the Initial Study were specifically called out at the request of the air district. However, these are not the only requirements of Rule 403 and the developers are required to comply with Rule 403 in its entirety. The bulleted items identified in Comment I-A9 are already requirements of the proposed project. Specifically,

- Rule 403 requires that construction cease when winds exceed 25 miles an hour. 15 miles an hour as suggested by the commenter is a normal condition for the Antelope Valley. Additionally, the project is phased in nature which will minimize the amount of dirt exposed at any one time.
- The proposed project would not involve grading of the entire site and the project contains a standard condition of approval that limits grading to roadways, pads for inverters/transformers, trenching necessary for the installation of cables and areas for collector substations.
- Watering is required to control dust on the project site whether it is from an active construction area or a stockpile of dirt.
- Standard construction practices include devices such as rumble strips to remove dirt from the wheels of vehicles to prevent dirt and dust from tracking onto the roadways.

Comment I-A10

The IS also fails to discuss any toxic air contaminants, particularly diesel particulate matter (DPM), from any activities associated with construction of the Project. Exposure to DPM may cause irrigation to the eyes, nose, throat, and lungs, as well as neurological effects. DPM is classified as a "likely carcinogen." According to the California Air Resources Board, children are the most vulnerable to the health effects of DPM. Despite the potential for significant impacts on sensitive receptors, the IS does not address this issue.

A DEIR should be prepared to evaluate DPM emissions, in particular to evaluate DPM impacts to children at the Soccer Center, to include a comprehensive emissions inventory in accordance with AVAQMD's Rule 1402. If emissions are harmful to human health, as determined by a risk assessment, mitigation needs to be provided to reduce diesel exhaust emissions, to include:

- Regular preventive maintenance to reduce emissions;
- Strictly limiting vehicle idle times to less than 5 minutes and turn off vehicles when not in use; and
- Full compliance with the latest California emissions standards for off-road compression-ignition engines.

Response to Comment I-A10

The proposed project is not an industrial project but involves the generation of electricity through PV panels. During construction equipment may be utilized that generates DPM and delivery trucks may be diesel. However, the trucks will not be driving past the soccer as the most direct route to the project site is along Avenue L heading east from the freeway. All deliveries and use of equipment will comply with all AVAQMD rules. Therefore, a DPM analysis is not necessary.

Comment I-A11

Greenhouse Gas Emissions

The IS does not quantify greenhouse gas (GHG) emissions for the Project but simply states that air emissions would be generated during construction, "some of which may be greenhouse gases" (IS, p.26). It goes on to say that these emissions are "anticipated to be less than the thresholds established by the Antelope Valley Air Quality Management District" (IS, p.26).

Without quantifying GHG emissions from the Project, it is impossible to determine whether emissions would be below the AVAQMD threshold. GHG emissions from the Project need to be quantified and compared to the AVAQMD thresholds and the results of this analysis need to be included in a DEIR.

Response to Comment I-A11

The proposed project would generate some GHG emissions as a result of construction. However, no GHG emissions would be generated during operation and the project would contribute to an overall reduction in GHG emissions from the production electricity.

Comment I-B1

I would like to comment on the Initial Study prepared for the Soccer Center Solar Project. As I understand it, the Soccer Center Solar Project would consist of 13.3 MW of photovoltaic panels on 92.7 acres. The City of Lancaster Planning Department has recommended approval of a Mitigated Negative Declaration.

My qualifications for preparing expert comments are the following. I earned a Ph.D. degree in Ecology from the University of California at Davis in 1990, where I subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, habitat restoration, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I have authored numerous papers on special-status species issues, including "Using the best scientific data for endangered species conservation," published in Environmental Management (Smallwood et al. 1999), and "Suggested standards for science applied to conservation issues" published in the Transactions of the Western Section of The Wildlife Society (Smallwood et al. 2001). I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer at California State University, Sacramento. I was also 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 avian surveys in California for twenty-three years (Smallwood et. al 1996, and Smallwood and Nakamoto 2009). Over these years, I have studied the impacts of human activities and human infrastructure on birds and other animals, including Swainson's hawks (Smallwood 1995), burrowing owls (Smallwood et al. 2007), and other species (Smallwood and Nakamoto 2009). I studied fossorial animals (i.e., animals that burrow into soil, where they live much of their lives), including pocket gophers (Smallwood and Geng 1997), ground squirrels, kangaroo rats, voles, harvester ants, and many other functionally similar groups. I performed focused studies of how wildlife interact with agricultural fields and associated cultural practices, especially with alfalfa production (Smallwood 1993, Erichsen et al. 1996, Smallwood et al. 1996, 2001). I have also performed wildlife surveys at many proposed project sites, including at a proposed large solar farm in the Mojave Desert.

Response to Comment I-B1

This comment states the commenter's educational and professional experience. It does not address an issue within the Initial Study and therefore, no response is necessary.

Comment I-B2

Biological Survey

A 4-hour walking survey was performed on 4 March 2013. A single visit to the site cannot possibly suffice to characterize the use of the site by wildlife and plants. March 4th also precedes the nesting season of burrowing owls and other birds. The date was too early, and represented one season of the year.

Response to Comment I-B2

A biological resources assessment of the project site was conducted in accordance with City requirements. All applications for new development are required to submit a general biological resources survey which documents the biological conditions on the project site at the time the application is submitted. The biological resources report identified all plant and animal species that were observed and those species that could be expected to be found on the project site based on the type of habitat present and other species known to occur in the immediately surrounding area. If a species was likely to occur, even though it might not have been observed at the time of the survey, mitigation measures were identified to ensure that any potential impacts would be less than significant. It is unrealistic to assume that the only time of year that surveys can be conducted is during nesting season.

Comment I-B3

Riparian vegetation

According to the Initial Study (page 23), no impacts to riparian vegetation would occur because no construction will occur in the stream channel. However, the Initial Study explained that a stream flows immediately adjacent to the project site. A CEQA review needs to be more completely conducted on the potential for the project to cause adverse effects on riparian vegetation occurring so close by.

Response to Comment I-B3

Page 23 of the Initial Study states "The project site does not contain any riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or the United States Fish and Wildlife Service. However, a drainage channel runs immediately east of the project site between the project site and the soccer center. No work is proposed in this channel. Therefore, no impacts would occur." This is a drainage channel and not a stream. Portions of the channel are concrete and the channel is maintained by the Public Works Department. There is no vegetation in the channel. As no work would occur in the channel and no vegetation is located in the channel, no impacts to riparian vegetation would occur.

Comment I-B4

Wildlife Movement

According to the Initial Study (page 23), "*The project site is not part of an established wildlife movement corridor.*" This conclusion, however, was misleading because no agency or scientific program has been responsible for *establishing* movement corridors, so it was misleading to imply that there is some established list or map of movement corridors and that the proposed project is outside the established map. Furthermore, the CEQA issue is not restricted to established wildlife movement corridors. The real issue is whether a proposed project will interfere with the movement of wildlife or fish, thereby disrupting a fundamental ecological requirement of wildlife species. The Initial Study did not address the real question of whether the project will interfere with the movement of any species of wildlife in the area. The Initial Study fails to

analyze the project's contribution to habitat fragmentation, which is recognized as the most serious threat to the continued existence of terrestrial wildlife (Wilcox and Murphy 1985).

Response to Comment I-B4

A wildlife corridor is a feature that connects two or more isolated patches of habitat. The project site does not serve this function. The site is bounded on the south by Avenue L (major paved roadway), the soccer center to the east, and other development towards the west and north. South of Avenue L is Air Force Plant 42. The further north (north of Ave K) and west (west of 20th Street East), property is more densely developed with a variety of uses. No undeveloped habitat exists in this area for the project site to connect to. Therefore, it does not function as a wildlife corridor.

Comment I-B5

Special-status species

The likely use of the project site by multiple special-status species warrants the preparation of an Environmental Impact Report. According to Randel (no date) and the Initial Study, Mojave ground squirrel, Swainson's hawk, and burrowing owl likely use the site. I would add multiple additional special-status species (Table 1). This list of potentially occurring special status-species clearly warrants the preparation of an EIR.

Response to Comment I-B5

The biological resources survey identified those species which either occur on the project site or are likely to occur based on the presence of suitable habitat. Mitigation measures were identified to ensure that any potential impacts to these species (nesting birds, burrowing owls, Mohave ground squirrel, etc.) remain less than significant. Staff agrees that the project site contains suitable habitat for burrowing owls, Mohave ground squirrel, Swainson's hawk, and nesting birds and that these species may be found on or utilize the project site. However, staff also believes that the mitigation measures identified would ensure that the potential impacts to these species remain less than significant. The commenter provides a list of species that he believes should be found on the project site. However, no evidence was provided that these species (except for the ones previously discussed) are present or likely to be present. The commenter has not been to the project site, did not provide any evidence that the habitat located on the project site is suitable for any or all of the species that were listed, nor did the commenter provide evidence that any of these species have been found in the surrounding area. Therefore, no further response is necessary.

Table 1. Special-status species of wildlife that could potentially occur at, or travel through, the proposed Soccer Center Solar Project site.

Common Name	Scientific Name	Status	Occurrence Likelihood	
			Initial Study	Smallwood
Pallid bat	*Antrozous pallidus*	CSC	No mention	Probable
Townsend's western big-eared bat	*Plecotus t. townsendii*	CSC	No mention	Probable
Western Mastiff bat	*Eumops perotis*	CSC	No mention	Probable
Long-eared myotis	*Myotis evotis*	WBWG	No mention	Probable
Fringed myotis	*Myotis thysanodes*	WBWG	No mention	Probable
Long-legged myotis	*Myotis volans*	WBWG	No mention	Probable
Yuma myotis	*Myotis yumanensis*	CSC	No mention	Probable
American badger	*Taxidea taxus*	CFP	No mention	Probable
Mojave ground squirrel	*Xenospermophilus mojavensis*	CT	Low	Probable
Mountain plover	*Charadrius montanus*	BCC, BSSC2	None	Probable
Turkey vulture	*Cathartes aura*	CDFG 3503.5	No mention	Probable
Golden eagle	*Aquila chrysaetos*	CFP, BGEPA	No mention	Probable
Northern harrier	*Circus cyaneus*	SSC3	No mention	Probable
White-tailed kite	*Elanus leucurus*	CFP	No mention	Probable
Cooper's hawk	*Accipiter cooperi*	CDFG 3503.5	No mention	Probable
Sharp-shinned hawk	*Accipiter striatus*	CDFG 3503.5	No mention	Probable
Ferruginous hawk	*Buteo regalis*	SSC	No mention	Probable
Red-tailed hawk	*Buteo jamaicensis*	CDFG 3503.5	No mention	Certain
Red-shouldered hawk	*Buteo lineatus*	CDFG 3503.5	No mention	Probable
Swainson's hawk	*Buteo swainsoni*	CT	No mention	Certain
American kestrel	*Falco sparverius*	CDFG 3503.5	No mention	Probable
Merlin	*Falco columbarius*	CDFG 3503.5	No mention	Probable
Prairie falcon	*Falco mexicanus*	CDFG 3503.5	No mention	Probable
Peregrine falcon	*Falco peregrines*	CE, CFP	No mention	Possible
Barn owl	*Tyto alba*	CDFG 3503.5	No mention	Probable
Great-horned owl	*Bubo virginianus*	CDFG 3503.5	No mention	Probable
Short-earned owl	*Asio flammeus*	SSC3	No mention	Possible
Western burrowing owl	*Athene cunicularia*	SSC2, FCC	Low	Probable
California horned lark	*Eremophila alpestris actia*	CBRL	No mention	Probable
Loggerhead shrike	*Lanius ludovicianus*	SSC2 (breeding)	No mention	Probable
Silvery legless lizard	*Anniella pulchra pulchra*	SSC	Possible	Possible
Coast horned lizard	*Phrynosoma blainvillii*	SSC	Possible	Possible

Listed as FE = federal endangered, FT = threatened, FCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, BGEPA – Bald and Golden Eagle Protection Act, CE = California Endangered, CT = California threatened, CSC = 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), CFP = California Fully Protected (CDFG Code 4700), CDFG 3503.5 = California Department of Fish and Game Code 3503.5 (Birds of prey), and SSC2 and SSC3 – California Bird Species of Special Concern priorities 2 and 3, respectively (Shuford and Gardali 2008), CBRL = California Bird Responsibility List, WBWG – Western Bat Working Group listing as moderate or high priority.

Comment I-B6

Collision risk

The Initial Study did not consider that the PV panels will pose some collision risk to birds. The collision risk of PV panels remains unknown in an industrial setting, and it remains unknown to what degree collision rates might differ from those measures at Solar One (McCrary et al. 1986), which was a concentrating thermal power plant. In the face of high uncertainty when assessing impacts to rare environmental resources, the accepted standard is to err on the side of caution (National Research Council 1986, Shrader-Frechette and McCoy 1992, O'Brien 2000). Therefore, it should not be assumed that due to less reflectivity in PV panels, the collision rates will necessarily be different. And all this said, the Initial Study did not even consider the potential avian collisions with PV panels or support structures.

McCray et a. (1986) remains the only study of direct impacts to birds caused by a solar power plant (SolarOne). McCray et al. (1986) searched for dead birds amongst the heliostat mirrors and around the power tower, and they estimated a bird fatality rate caused by bird collisions with heliostat mirrors and the power tower, and by heat encountered when birds flew through the concentrated sunlight reflected toward the power tower. However, McCray et al. (1986) appeared to have under-appreciated the magnitude of the impacts caused by Solar One, likely because McCray et al. (1986) did not know as much as scientists know today about scavenger removal rates and searcher detection error.

McCray et al. (1986) searched for dead birds during 40 visits to the 10 MW Solar One Project. Their search pattern was not fixed, so it was not as rigorous as modern searches at wind energy projects and other energy generation and transmission facilities. McCray et al. (1986) placed 19 bird carcasses to estimate the proportion remaining over the average time span between their visits to the project site, though they provided few details about their scavenger removal trial. We know today that the results of removal trials can vary substantially for many reasons, including the species used, time since death, and the number of carcasses placed in one place at one time, and etc. (Smallwood 2007). McCray et al. (1986) also performed no searcher detection trials, because they concluded that the ground was sufficiently exposed that all available bird carcasses would have been found. This conclusion would not be accepted today, based on modern fatality search protocols.

Because, scientists have performed many more scavenger removal trials and searcher detection trials, as well as many more bird carcass searches since the study of McCray et al. (1986), I recalculated the fatality rate estimated from that first study, but this time using national averages to represent scavenger removal rates and searcher detection rates (see Smallwood 2007, 2013). Based on the methods in Smallwood (2007), I have since reviewed more than 400 searcher detection trials and more than 400 scavenger removal trials across North America (Smallwood 2013). From these reviews, I estimated the average proportion of carcasses remaining after 9 days since the last carcass search. I used 9 days for the average search interval, because that was the average search interval in the McCray et al. (1986) study.

The estimator I used was derived from the Horvitz and Thompson (1952):

$$F_A = \frac{F_u}{R_C \times p'}$$

where F_U was the unadjusted number of fatalities/MW/year (found carcasses), and F_A was the fatality rate adjusted for the proportion of carcasses found amongst those that were available to be found, p, and by the average proportion of carcasses remaining since the last fatality search, R_C. The adjustments for p and R_C were estimated from searcher detection trials and scavenger removal trials. I assumed carcasses were deposited at a steady rate from heliostat mirrors and power towers, so I took the average proportion of carcasses remaining each sequential day between searches:

$$R_C = \frac{\sum R_i}{I},$$

where R_i was proportion of carcasses remaining by the ith day following the initiation of a scavenger removal trial. Thus, the expected proportion of carcasses remaining by the next fatality search should be R_C corresponding with the fatality search interval, I, which was 9 days in the McCray et al. (1986) study. Note that McCray et al. (1986) use R_i instead of R_C, which means their fatality rate estimate would have been inflated for this factor alone (their estimate was biased low, however, by assuming they experienced no searcher detection error).

McCray et al. (1986) reported the mean and standard deviation (SD) of bird carcasses found per visit, but estimating rates for the purpose of extrapolation should include a standard error (SE), which can be approximated as:

$$SE = \frac{SD}{\sqrt{n}},$$

Which, in the case of McCray et al. (1986), with a SD = 1.8 and n = 40 visits, was 0.28 (the calculated mean was 1.75).

Using SE also facilitates carrying the error terms through the calculation of the fatality rate estimate. For this purpose, I estimated standard error of the adjusted fatality rate, $SE[F_A]$, using the delta method (Goodman 1960):

[THIS FORMULA CAN BE FOUND IN THE ORIGINAL COMMENT LETTER]

Using data reported by McCray et al. (1986), and adopting their assumptions, their estimated fatality rate was 1.75 fatalities/visit divided by 70% to 90% of placed trial carcasses remaining between visits, of 1.75 / 0.90 = 1.94 and 1.75 / 0.70 = 2.5. Assuming a point estimate of 80% of placed carcasses remaining, then the estimated bird carcasses per visit would be 1.75 / 0.80 = 2.19. Given that there were 40 visits in the year, then 2.19 x 40 = 87.6 bird fatalities per year, or on a per-MW basis, there were 87.6/10 MW = 8.76 bird fatalities per MW per year. Because McCray et al. (1986) did not report the SE of the proportion of placed trials carcasses remaining, and because they assumed p = 1, I could not carry the error terms, so the estimate from their

study was 8.76 bird fatalities/MW/year with an 80% confidence interval (CI) of 6.96 to 10.55. The only real challenge remaining is to extrapolate this estimate to the 13.3 MW Soccer Center Solar Project consisting of PV panels instead of power towers and heliostat mirrors.

Assuming PV panels will result in only 10% of the fatalities compared to the rate observed at SolarOne, then I would predict that Soccer Center Solar Project will kill 12 birds per year (80% CI: 9 to 14). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 13.3 MW Soccer Center Solar Project, I would predict 58 bird fatalities per year (80% CI: 46 to 70). However, these rates need to be adjusted for the proportion of fatalities not found by searchers.

The results of my adjustment trials yielded national averages of $R_C = 0.48$ (SE = 0.12) for birds over a mean search interval of 9 days and $p = 0.676$ (SE = 0.029) when ground visibility was characterized as high or very high. Using these values, estimated fatality rate at McCray et al.'s project site was 21.57 fatalities/MW/year (80% CI: 7.15 to 36.00). Relying on these adjustments and assuming PV panels will result in only 10% of the fatalities compared to the rate observed at Solar One, then I would predict that Soccer Center Solar Project will kill 29 birds per year (80% CI = 10 to 48). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 13.3 MW Soccer Center Solar Project, I would predict 143 bird fatalities per year (80% CI: 48 to 239). Clearly, the McCray et al. (1986) fatality monitoring study resulted in a highly uncertain fatality rate estimate, which was revealed to be even more uncertain when considering national averages of adjustment factors and when carrying the error terms through the calculations. The direct impact of the Soccer Center Solar Project can be said to be highly uncertain at this point. If this project goes forward, it would be very impact to require sound fatality monitoring. It would be helpful to perform avian behavior surveys in advance of construction, in order to characterize avian flight paths and the types of behaviors of endemic species that could contribute to collision risk (Smallwood et al. 2009, 2010).

Response to Comment I-B6

The commenter provides an in depth discussion about the rate of bird fatalities at a solar thermal facility using a study from 1986. He utilizes this study to "calculate" the number of bird fatalities at the project site as a result of the proposed project. However, the proposed project is substantially different than the project on which the study was based. The 1986 study was based on a solar thermal facility which utilizes mirrors and has a tall tower. The mirrors concentrate and reflect the sunlight to the top of the tower to generate steam which turns the turbine. The proposed project is a photovoltaic (PV) solar facility in which the height of the panels or any structures would be between 6 and 8 feet. The PV panels collect the sunlight (they do not reflect sunlight) and turn the sunlight into electricity. The fatalities in the original study were caused by birds hitting the tower or getting caught in the concentrated sunlight. No evidence has been submitted which shows that the PV panels would cause similar impacts. The commenter "assumes" that the project would generate avian fatalities at a rate of 50% of that identified in the original study. An assumption with no evidence or facts is not a "fair argument" that the proposed project would cause a significant number of avian fatalities. Therefore, no further response is necessary.

Comment I-B7

The Initial Study included no cumulative effects analysis. Given the proliferation and expanse of the proposed and permitted solar projects in the Antelope Valley, a cumulative effects analysis is needed.

Response to Comment I-B7

The above comment is incorrect as the Initial Study did contain a cumulative analysis. Most alternative energy projects are occurring on the west side of the Antelope due to the proximity to transmission lines and substation with adequate capacity. The projects on the west side are between 10 and 15 miles west of the project site. The habitat and species located on those project sites are different than the habitat/species on the proposed project site. For example, Mohave ground squirrel is not found on the west side of the Antelope Valley. The initial study looked at active projects located within a two mile radius of the project site and determined that the project's contribution to cumulative biological impacts would not be cumulatively considerable. Therefore, no further response is necessary.

Comment I-B8

Preconstruction surveys for nesting birds, burrowing owls and Mojave ground squirrel will come too late to assess project impacts. Proper surveys are needed prior to project approval, and need to be shared with the public as part of the CEQA review process.

Other than preconstruction surveys, the Initial Study promised no mitigation measures to minimize, reduce, rectify or offset project impacts. The following measures should be implemented:

1) Preconstruction behavior surveys to identify avian flight paths that could be avoided by construction of the PV arrays;
2) Funds should be provided to local wildlife rehabilitation facilities to rehabilitate birds injured by collision with the PV arrays, utility lines, and autos, as was as electrocutions caused by electric distribution poles;
3) Funds to offset impacts by conserving suitable wildlife habitat through purchase of conservation easements or fee title (see measure 4, below);
4) Fatality monitoring (see below for more detail) to estimate the impacts cause by collisions and electrocution so that a nexus can be found between project impacts and conservation benefits to be achieved through mitigation. Fatality monitoring can also lead to fatality reduction measures on-site, such as improving visibility of structures associated with disproportionate numbers of injuries or fatalities.

These measures and others should be given more consideration after appropriate biological surveys have been performed on the site, and they should be presented with more detail in an EIR.

Response to Comment I-B8

By definition, preconstruction surveys occur after project approval and prior to the start of any construction activities. Mitigation measures are only required in the event that a potentially significant impact would occur. The initial study identifies the following mitigation measures for biological resources:

1. A nesting bird survey shall be conducted within 30 days prior to the start of construction/ground disturbing activities. If nesting birds are encountered, all work in the area shall cease until either the young birds have fledged or the appropriate permits are obtained from the California Department of Fish and Wildlife.

2. A pre-construction burrowing owl survey shall be conducted within 30 days prior to the start of construction/ground disturbing activities. If burrowing owls or sign thereof are discovered during the survey, the applicant shall contact the California Department of Fish and Wildlife to determine the appropriate mitigation/management requirements for the species.

3. Focused trapping surveys for Mohave ground squirrel shall be conducted to determine the presence/absence of this species on the project site. These surveys shall be conducted in accordance with standard protocol established by the California Department of Fish and Wildlife (CDFW). If Mohave ground squirrels are determined to be present on the project site, consultation with the CDFW shall be required in order to obtain an Incidental Take Permit under §2081 of the Fish and Game Code. If the timing of the project does not allow for the focused trapping surveys to be conducted, the applicant shall assume that Mohave ground squirrels are present on the project site and consult with CDFW to obtain an Incidental Take Permit.

These mitigation measures would ensure that any potential impacts are less than significant. The City already requires, for all projects regardless of impacts to biological resources, the payment of a biological impact fee based on acres. This money is utilized to purchase conservation property in the Antelope Valley to compensate for the overall loss of habitat.

Comment I-B9

Impact Monitoring

Very little is known of the types of magnitudes of impacts on wildlife caused by industrial solar projects. It would be irresponsible of permitting agencies to allow industrial solar projects to go forward without scientific monitoring of project impacts. Qualified biologists should be funded to search the ground between solar panel arrays on a monthly basis for at least one year to determine whether collision fatalities are an issue. Searches should be done on foot. I suggest searching randomly or systematically selected arrays of solar panels to the extent that equals 20 person-days per month. If collision fatalities are deemed to be an issue, then I suggest extending the fatality monitoring for another two years and adding searcher detection trials to facilitate the accurate estimation of fatality rates. Furthermore, I would suggest performing an analysis of the pattern of fatalities to identify spatial or other trends that can inform mitigation measures to reduce fatality rates. Basic methods for fatality monitoring at a solar energy plant can be found in

McCray et al. (1986) and updated methodology can be found in Smallwood (2007, 2009, 2013), Smallwood and Karas (2009), Smallwood et al. (2013). Finally, it is essential that the results of this fatality monitoring be made available to the public, and that none are hidden from view through nondisclosure agreements or any other method. The results of fatality monitoring would be useless without scientists being able to compare the results.

Mitigation Monitoring

It has long been known that mitigation pursuant to CEQA has often either failed or has not been implemented, but with no consequences to the take-permit holder (Silva 1990). There should be consequences for not achieving mitigation objectives or performance standards. The project proponents should be required to provide a performance bond in an amount that is sufficient for an independent party to achieve the mitigation objectives originally promised, and in this case, the promises should be much more substantial. A fund is needed to support named individuals or an organization to track the implementation of mitigation measures. Report deadlines should be listed, and who will be the recipients of the reports. In my professional opinion, the MND's lack of specific mitigation monitoring details renders it inadequate and uncertain, and makes it impossible to gauge whether or to what extent any mitigation measures will lessen potentially significant impacts on species. If these measures are not clearly laid out in an EIR, then there will be no basis to determine what impacts will be less than significant once implemented. Furthermore, without adequate funding allocated in advance, there is no certainty that any proposed mitigation will actually take place.

Response to Comment I-B9

The City is not funding a scientific research project. CEQA does not require the analysis of speculative impacts or the analysis of a worst case scenario. If unforeseen issues arise during the operation of this project or any other project approved by the City, the issue will be dealt with at that time. The mitigation measures in the initial study address the potential impacts of the proposed project. Additionally, conditions of approval attached to all projects in the City of Lancaster also address potential impacts to biological resources. A mitigation monitoring program will be adopted at the time of project approval and the initial study certification. The biological mitigation measures are required prior to the issuance of any type of permit and the start of construction. Without proof of compliance with these measures, the permits to start work will not be issued. The referenced study (Silva 1990) seems to address "take-permits" which are the responsibility of the entity who issues them. With respect to the Mohave ground squirrel, if trapping is done to determine presence, then a copy of the trapping study and a letter from the California Department of Fish and Wildlife (CDFW) stating that they concur with the results and a take permit is not required is necessary prior to the issuance of any permits. If a take-permit is issued, then a copy of the take-permit is required to be submitted to the City. If the permit requires the purchase of conservation habitat or other measures, the City will enforce those measures it has control over. However, the purchase of habitat for CDFW is the agency's responsibility to enforce.

Comment Letter A

Antelope Valley Air Quality Management District
43301 Division St., Suite 206
Lancaster, CA 93535-4649

661.723.8070
Fax 661.723.3450

Eldon Heaston, Executive Director

In reply, please refer to AV0713/055

July 9, 2013

Jocelyn Swain
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

RE: Notice of Intent to Adopt a Mitigated Negative Declaration Conditional Use Permit No. 13-05, General Plan Amendment 13-01, and Zone Change 13-01.

Ms. Swain:

The Antelope Valley Air Quality Management District (District) has received Notice of Intent for the proposed 92.7 acres generally bounded by Avenue K-8, Avenue L, 20th Street East and 30th Street East in Lancaster, California.

A-1 Prior to grading District Rule 403, *Fugitive Dust*, requires the submittal and approval of a Dust Control Plan. In addition to the Dust Control Plan the District recommends the City of Lancaster require phased construction and preserving vegetation as fugitive dust control measures. Compliance with the provisions of District Rule 403 must be implemented in the grading and construction phases of the project, and all unpaved roads and array areas must meet definition of stabilized surface upon completion of project. Also the proper signage must be posted at the Project site pursuant to the Rule (Rule 403 Appendix A).

A-2 Successful fugitive dust control and site stabilization would result in maintaining vegetation to the highest extent possible. Re-vegetation in desert environments is extremely difficult with 80 percent failure rates seen as typical, even with supplemental irrigation. Project areas which retain vegetative ground cover may achieve stabilization without implementing reseeding efforts.

A-3

Pre-Activity for Earth-Moving Operations requires phased work to reduce the amount of Disturbed Surface Area at any one time AVAQMD Rule 403(C)(4)(a)(i)b. Phasing construction limits the Disturbed Surface Area requiring mitigation measures in High Wind Conditions (instantaneous wind speeds (gusts) which exceed 25 miles per hour). High Wind Conditions are a regular, almost daily, occurrence in the Antelope Valley. Daily PM_{10} thresholds may be exceeded in just one hour in winds of 25 mile per hour with 200 acres of unstabilized Disturbed Surface.

A-4

When water is used as fugitive dust control, watering is required three times a day and increased to a minimum of four times a day if there is evidence of visible Wind-Driven Fugitive Dust AVAQMD Rule 403-Fugitive Dust (11)(d). The Dust Control Plan shall demonstrate adequate water application equipment to mitigate all disturbed areas and provide contact information of the site dust control supervisor.

Thank you for the opportunity to review and comment on this planning document. If you have any questions regarding this letter, please contact me at (661) 723-8070 x2.

Sincerely,

Bret Banks
Operations Manager

BB/bsb

Comment Letter B

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
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Planning

June 18, 2013

Ms. Jocelyn Swain
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

IGR/CEQA No. 130627AL-MND
Soccer Center Solar Facility
(CUP 13-05, GPA 13-01, ZC 13-01)
Vic. LA-14 / PM R65.68
SCH #: 2013061022

Dear Ms. Swain:

B-1 Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project consists of the construction and operation of a 13.3 megawatts (MW) of photovoltaic (PV) solar energy farm on a 92.7 acres.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan.

B-2 Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods.

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 130627AL.

Sincerely,

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

Comment Letter C

CALIFORNIA Water Boards

Edmund G. Brown Jr.
Governor

Matthew Rodriquez
Secretary for
Environmental Protection

Lahontan Regional Water Quality Control Board

July 9, 2013

File: Environmental File Review
Los Angeles County

Jocelyn Swain
City of Lancaster Planning Department
44933 Fern Avenue
Lancaster, CA 93534

COMMENTS ON THE MITIGATED NEGATIVE DECLARATION REPORT FOR THE SOCCER CENTER SOLAR FACILITY, LANCASTER, STATE CLEARINGHOUSE NO. 2013062011

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Mitigated Negative Declaration (MND) for the above-referenced project (Project) on June 14, 2013. The City of Lancaster (City), acting as lead agency, prepared and submitted the MND in compliance with provisions of CEQA. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the MND, best management practices (BMPs) that effectively treat post-construction stormwater runoff should be included as part of the Project. We encourage the City to consider our comments and value our mission to protect waters of the State and maintain water quality in the Lahontan Region.

C-1

Project Description

The proposed Project involves the construction of a photovoltaic (PV) solar collection field and electricity generating station on 92.7 acres of undeveloped land in eastern Lancaster. The Project site is bounded by Avenue L, Avenue K-8, 20th Street East, and 30th Street East. The field will be capable of generating up to 13.3 megawatts (MW) of solar electricity. The City will lease the property to three developers: PsomasFMG, U.S. Topco, and Morgan Solar. Each developer will construct and operate their own facilities, which will be separated from one another by fencing and a landscaped buffer to screen the PV panels from view. The facility owned by PsomasFMG will have enough PV panels to generate 3.8 MW of the total output; the facility owned by U.S. Topco will have enough PV panels to generate 8 MW of electricity; the facility owned by Morgan Solar will have enough PV panels to generate 1.5 MW. Electricity generated by the solar field will tie into an existing 12 kilovolt (kV) distribution line that runs along Avenue L via a buried cable.

Authority

All groundwater and surface waters are considered waters of the State. Surface waters include streams, ponds, lakes, and wetlands, and may be ephemeral, intermittent, or perennial. All waters of the State are protected under California law. State law assigns responsibility for protection of water quality in the Lahontan Region to the Lahontan Water Board. Some waters of the State are also waters of the U.S. The Federal Clean Water Act (CWA) provides additional protection for those waters of the State that are also waters of the U.S.

C-1

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) contains policies that the Water Board uses with other laws and regulations to protect the quality of waters of the State within the Lahontan Region. The Basin Plan sets forth water quality standards for surface water and groundwater of the Region, which include designated beneficial uses as well as narrative and numerical objectives which must be maintained or attained to protect those uses. The Basin Plan can be accessed via the Water Board's web site at http://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/references.shtml.

Specific Comments

- Land disturbing activities such as trenching, grading, and excavation have the potential to degrade water quality through increased soil erosion or sedimentation. In addition, the compaction of soils in both construction and equipment staging areas can result in loss of infiltration and absorption capacity of soils. The environmental document should discuss mitigation measures to capture site run-on to promote groundwater re-charge, and minimize erosion.

C-2

- An operations plan should be prepared that includes a post-construction monitoring and reporting schedule that specifically describes criteria to be used to evaluate whether or not the restoration of vegetation was successful. The plan should also include thresholds and contingencies should monitoring indicate that success criteria are not being met. None of the included technical documents adequately addresses permanent, post-construction erosion control. All temporary impacts should be restored (re-contoured and re-vegetated) to match pre-Project conditions. Water Board staff recommend that monitoring and maintenance of these revegetated areas be conducted for a period of no less than three years to ensure the success of the restored areas.

C-3

- The MND should include a detailed Hydrology Study of the Project site that examines surface flow direction, flow rates, soil types, and the potential for erosion for a range of potential storm events.

C-4

- Water Board staff request that the MND include a discussion of the beneficial water uses for the Project Hydrologic Area, Basin No. 626.50 (within the greater Antelope Hydrologic Unit) of the Lahontan Region. The surface waters on the

C-5

C-5

Project site are considered "minor surface waters" and "minor wetlands" and assigned the following beneficial uses: municipal supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); freshwater replenishment (FRSH); contact and non-contact recreational uses (REC-1, REC-2); commercial and sportfishing (COMM) warm freshwater habitat (WARM); cold freshwater habitat (COLD) wildlife habitat (WILD); water quality enhancement (WQE); and flood peak attenuation and storage (FLD). Water quality objectives and standards, both numerical and narrative, for these surface waters, are outlined in Chapter 3 of the Basin Plan. Implementation of the proposed Project must comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.

C-6

- We request that construction staging areas be sited in upland areas outside stream channels and away from any minor surface waters or vernal pools on or around the Project site. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment should use existing roadways to the maximum extent feasible.

C-7

- Obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. The environmental document must specifically describe the BMPs and other measures used to mitigate Project impacts.

Permitting Requirements

A number of activities associated with the proposed Project appear to have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include:

C-8

- Land disturbances of more than 1 acre may require a Clean Water Act (CWA), section 402 (p) stormwater permit, including a National Pollution Discharge Elimination System (NPDES) General Construction Stormwater Permit, Order 2009-0009-DWQ (as amended), obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board;

- Depending on the Standard Industrial Classification (SIC) code for industrial-type activities at the site, the Project may require an NPDES General Industrial Stormwater Permit, Order 97-03-DWQ, obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board; and

- Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board.

C-8

Please be advised of the permits that may be required for the proposed Project, as outlined above. We request that specific Project activities that may trigger these permitting actions be identified in the appropriate sections of the MND. Should Project implementation result in activities that will trigger these permitting actions, the Project proponent must consult with Water Board staff. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

Thank you for the opportunity to comment on the MND. If you have any questions regarding this letter, please contact me at (760) 241-7391 (tbrowne@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (pcopeland@waterboards.ca.gov).

Tom Browne, PhD, PE
Water Resources Control Engineer

cc: Sarah Rains, California Department of Fish and Wildlife
(via email, (Sarah.rains@wildlife.ca.gov)

State Clearinghouse

TB\rc\U:\CEQA Reviews\Soccer Center Solar\draft Soccer Center Solar Lancaster MND.docx

Comment Letter D

STATE OF CALIFORNIA Edmund G. Brown, Jr.,, *Govemor*

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard
West Sacramento, CA 95691
(916) 373-3715
(916) 373-5471 – FAX
e-mail: ds_nahc@pacbell.net

July 2, 2013

Ms. Jocelyn Swain, City Planner
City of Lancaster Planning Department
44933 Fern Avenue
Lancaster, CA 93534

RE: SCH# 2013061022 CEQA Notice of Completion; proposed Mitigated Negative Declaration for the "**Soccer Center Solar Facility Project;; CUP 13-05; GPA 13-01; Zone Change 13-01 "** located in the City of Lancaster; Los Angeles County, California

Dear Ms. Swain:

The Native American Heritage Commission (NAHC) has reviewed the CEQA Notice regarding the above referenced project. In the 1985 Appellate Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites. This project is also subject ot California Government Code Sections 65352.3m *et seq.*

D-1

The California Environmental Quality Act (CEQA) states that any project that causes a substantial adverse change in the significance of an historical resource, which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b)). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR).

D-2

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to

the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.

D-2 Contact has been made to the Native American Heritage Commission for :a Sacred Lands File Check. A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence.

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.

D-3 Also, CEQA Guidelines Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

Sincerely,

Dave Singleton
Program Analyst
(916) 653-6251

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Los Angeles County
July 2, 2013

Beverly Salazar Folkes
1931 Shadybrook Drive
Thousand Oaks, CA 91362
805 492-7255
(805) 558-1154 - cell
folkes9@msn.com
Chumash
Tataviam
Ferrnandeño

Kitanemuk & Yowlumne Tejon Indians
Delia Dominguez, Chairperson
115 Radio Street
Bakersfield , CA 93305
deedominguez@juno.com
(626) 339-6785
Yowlumne
Kitanemuk

San Manuel Band of Mission Indians
Carla Rodriguez, Chairwoman
26569 Community Center Drive
Highland , CA 92346
(909) 864-8933
(909) 864-3724 - FAX
(909) 864-3370 Fax
Serrano

San Fernando Band of Mission Indians
John Valenzuela, Chairperson
P.O. Box 221838
Newhall , CA 91322
tsen2u@hotmail.com
(661) 753-9833 Office
(760) 885-0955 Cell
(760) 949-1604 Fax
Fernandeño
Tataviam
Serrano
Vanyume
Kitanemuk

Fernandeno Tataviam Band of Mission Indians
Ronnie Salas, Cultural Preservation Department
1019 - 2nd Street, Suite #1
San Fernando CA 91340
rortega@tataviam-nsn.gov
(818) 837-0794 Office

(818) 837-0796 Fax
Fernandeno
Tataviam

Randy Guzman - Folkes
6471 Cornell Circle
Moorpark , CA 93021
ndnRandy@yahoo.com
(805) 905-1675 - cell
Chumash
Fernandeño
Tataviam
Shoshone Paiute
Yaqui

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

San Manuel Band of Mission Indians
Daniel McCarthy, M.S.., Director-CRM Dept.
26569 Community Center. Drive
Highland , CA 92346
(909) 864-8933, Ext 3248
dmccarthy@sanmanuel-nsn.gov
(909) 862-5152 Fax
Serrano

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013061022; CEQA Notice of Completion; proposed Mitigated Negative Declaration for the Soccer Center Solar Facility, CUP 13-05; GPA 13-01; Zone Chanage 13-01; located in the City of Lancaster; Los Angeles County, California.

Native American Contacts
Los Angeles County
July 2, 2013

Kern Valley Indian Council
Robert Robinson, Co-Chairperson
P.O. Box 401
Weldon , CA 93283
brobinson@iwvisp.com
(760) 378-4575 (Home)
(760) 549-2131 (Work)

Tubatulabal
Kawaiisu
Koso
Yokuts

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

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Comment Letter E

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

RECEIVED
JUL 15 2013
City of Lancaster
PLANNING

July 12, 2013

Jocelyn Swain
City of Lancaster
44933 N. Fern Avenue
Lancaster, CA 93534

Subject: Soccer Center Solar Facility (CUP 13-05, GPA 13-01, ZC 13-01)
SCH#: 2013061022

Dear Jocelyn Swain:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on July 11, 2013, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

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

E-1

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

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

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

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

Document Details Report
State Clearinghouse Data Base

SCH# 2013061022
Project Title Soccer Center Solar Facility (CUP 13-05, GPA 13-01, ZC 13-01)
Lead Agency Lancaster, City of

Type **MND** Mitigated Negative Declaration

Description The proposed project involves the construction of approximately 13.3 megawatts of photovoltaic solar electricity generating facilities on 92.7 acres. The City of Lancaster has leased this property to three separate solar developers: PsomasFMG, U.S. Topco, and Morgan Solar. Each of the developers would construct and operate their own respective solar facilities. Each of the facilities will be fenced and the perimeter of each facility will be landscaped with a 10-foot landscaped buffer to screen the project site from view. Water tanks for fire department use will be provided for each facility. Each of the facilities may include a storage shed and on-site parking for maintenance workers.

Lead Agency Contact

Name Jocelyn Swain
Agency City of Lancaster
Phone 661 723 6249 **Fax**
email
Address 44933 N. Fern Avenue
City Lancaster **State** CA **Zip** 93534

Project Location

County Los Angeles
City Lancaster
Region
Lat / Long
Cross Streets Avenue L. and 25th Street East
Parcel No. 3170-008-907, 908, 909, 910, 911
Township 7N **Range** 11W **Section** 30 **Base** SBB&M

Proximity to:

Highways
Airports Air Force Plant 42
Railways
Waterways
Schools Tierra Bonita ES
Land Use GPD: Non-Urban Residential and Open Space
Z: RR-1 and PK

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Noise; Recreation/Parks; Traffic/Circulation; Landuse

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Caltrans, Division of Aeronautics; Caltrans, District 7; Air Resources Board, Airport/Energy Projects; Regional Water Quality Control Bd., Region 6 (Victorville); California Energy Commission; Native American Heritage Commission; Public Utilities Commission

Date Received 06/12/2013 **Start of Review** 06/12/2013 **End of Review** 07/11/2013

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

CEQR
7/11/13
C

June 18, 2013

Ms. Jocelyn Swain
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

IGR/CEQA No. 130627AL-MND
Soccer Center Solar Facility
(CUP 13-05, GPA 13-01, ZC 13-01)
Vic. LA-14 / PM R65.68
SCH #: 2013061022

Dear Ms. Swain:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project consists of the construction and operation of a 13.3 megawatts (MW) of photovoltaic (PV) solar energy farm on a 92.7 acres.

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects should be designed to discharge clean run-off water. Additionally, discharge of storm water run-off is not permitted onto State highway facilities without any storm water management plan.

Transportation of heavy construction equipment and/or materials, which requires the use of oversized-transport vehicles on State highways, will require a transportation permit from Caltrans. It is recommended that large size truck trips be limited to off-peak commute periods.

If you have any questions, please feel free to contact Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 130627AL.

Sincerely,

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

STATE OF CALIFORNIA Edmund G. Brown, Jr., *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard
West Sacramento, CA 95691
(916) 373-3715
(916) 373-5471 – FAX
e-mail: ds_nahc@pacbell.net

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7/11/13
C

July 2, 2013

RECEIVED
JUL -5 2013
STATE CLEARING HOUSE

Ms. Jocelyn Swain, City Planner
City of Lancaster Planning Department
44933 Fern Avenue
Lancaster, CA 93534

RE: SCH# 2013061022 CEQA Notice of Completion; proposed Mitigated Negative Declaration for the "**Soccer Center Solar Facility Project;; CUP 13-05; GPA 13-01; Zone Change 13-01**" located in the City of Lancaster; Los Angeles County, California

Dear Ms. Swain:

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the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10.
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Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
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Sincerely,

Dave Singleton
Program Analyst
(916) 653-6251

CC: State Clearinghouse

Attachment: Native American Contacts list

Comment Letter F

STATE OF CALIFORNIA

GOVERNOR'S OFFICE *of* PLANNING AND RESEARCH

STATE CLEARINGHOUSE AND PLANNING UNIT

EDMUND G. BROWN JR.
GOVERNOR

KEN ALEX
DIRECTOR

July 12, 2013

RECEIVED
JUL 15 2013
City of LANCASTER
PLANNING

Jocelyn Swain
City of Lancaster
44933 N. Fern Avenue
Lancaster, CA 93534

Subject: Soccer Center Solar Facility (CUP 13-05, GPA 13-01, ZC 13-01)
SCH#: 2013061022

Dear Jocelyn Swain:

F-1

The enclosed comment (s) on your Mitigated Negative Declaration was (were) received by the State Clearinghouse after the end of the state review period, which closed on July 11, 2013. We are forwarding these comments to you because they provide information or raise issues that should be addressed in your final environmental document.

The California Environmental Quality Act does not require Lead Agencies to respond to late comments. However, we encourage you to incorporate these additional comments into your final environmental document and to consider them prior to taking final action on the proposed project.

Please contact the State Clearinghouse at (916) 445-0613 if you have any questions concerning the environmental review process. If you have a question regarding the above-named project, please refer to the ten-digit State Clearinghouse number (2013061022) when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

CALIFORNIA
Water Boards

Lahontan Regional Water Quality Control Board

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7/11/13
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RECEIVED
JUL 12 2013
STATE CLEARING HOUSE

July 9, 2013

File: Environmental File Review
Los Angeles County

Jocelyn Swain
City of Lancaster Planning Department
44933 Fern Avenue
Lancaster, CA 93534

COMMENTS ON THE MITIGATED NEGATIVE DECLARATION REPORT FOR THE SOCCER CENTER SOLAR FACILITY, LANCASTER, STATE CLEARINGHOUSE NO. 201306~~1041~~
1022

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff received the Mitigated Negative Declaration (MND) for the above-referenced project (Project) on June 14, 2013. The City of Lancaster (City), acting as lead agency, prepared and submitted the MND in compliance with provisions of CEQA. Water Board staff, acting as a responsible agency, is providing these comments to specify the scope and content of the environmental information germane to our statutory responsibilities pursuant to CEQA Guidelines, California Code of Regulations, title 14, section 15096. Based on our review of the MND, best management practices (BMPs) that effectively treat post-construction stormwater runoff should be included as part of the Project. We encourage the City to consider our comments and value our mission to protect waters of the State and maintain water quality in the Lahontan Region.

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- Land disturbing activities such as trenching, grading, and excavation have the potential to degrade water quality through increased soil erosion or sedimentation. In addition, the compaction of soils in both construction and equipment staging areas can result in loss of infiltration and absorption capacity of soils. The environmental document should discuss mitigation measures to capture site run-on to promote groundwater re-charge, and minimize erosion.

- An operations plan should be prepared that includes a post-construction monitoring and reporting schedule that specifically describes criteria to be used to evaluate whether or not the restoration of vegetation was successful. The plan should also include thresholds and contingencies should monitoring indicate that success criteria are not being met. None of the included technical documents adequately addresses permanent, post-construction erosion control. All temporary impacts should be restored (re-contoured and re-vegetated) to match pre-Project conditions. Water Board staff recommend that monitoring and maintenance of these revegetated areas be conducted for a period of no less than three years to ensure the success of the restored areas.

- The MND should include a detailed Hydrology Study of the Project site that examines surface flow direction, flow rates, soil types, and the potential for erosion for a range of potential storm events.

- Water Board staff request that the MND include a discussion of the beneficial water uses for the Project Hydrologic Area, Basin No. 626.50 (within the greater Antelope Hydrologic Unit) of the Lahontan Region. The surface waters on the

Project site are considered "minor surface waters" and "minor wetlands" and assigned the following beneficial uses: municipal supply (MUN); agricultural supply (AGR); groundwater recharge (GWR); freshwater replenishment (FRSH); contact and non-contact recreational uses (REC-1, REC-2); commercial and sportfishing (COMM) warm freshwater habitat (WARM); cold freshwater habitat (COLD) wildlife habitat (WILD); water quality enhancement (WQE); and flood peak attenuation and storage (FLD). Water quality objectives and standards, both numerical and narrative, for these surface waters, are outlined in Chapter 3 of the Basin Plan. Implementation of the proposed Project must comply with all applicable water quality standards and prohibitions, including provisions of the Basin Plan.

- We request that construction staging areas be sited in upland areas outside stream channels and away from any minor surface waters or vernal pools on or around the Project site. Buffer areas should be identified and exclusion fencing used to protect the water resource and prevent unauthorized vehicles or equipment from entering or otherwise disturbing stream channels. Construction equipment should use existing roadways to the maximum extent feasible.

- Obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required. The environmental document must specifically describe the BMPs and other measures used to mitigate Project impacts.

Permitting Requirements

A number of activities associated with the proposed Project appear to have the potential to impact waters of the State and, therefore, may require permits issued by either the State Water Resources Control Board (State Water Board) or Lahontan Water Board. The required permits may include:

- Land disturbances of more than 1 acre may require a Clean Water Act (CWA), section 402 (p) stormwater permit, including a National Pollution Discharge Elimination System (NPDES) General Construction Stormwater Permit, Order 2009-0009-DWQ (as amended), obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board;

- Depending on the Standard Industrial Classification (SIC) code for industrial-type activities at the site, the Project may require an NPDES General Industrial Stormwater Permit, Order 97-03-DWQ, obtained from the State Water Board, or an individual stormwater permit obtained from the Lahontan Water Board; and

- Streambed alteration and/or discharge of fill material to a surface water may require a CWA, section 401 water quality certification for impacts to federal waters (waters of the U.S.), or dredge and fill waste discharge requirements for impacts to non-federal waters, both issued by the Lahontan Water Board.

Please be advised of the permits that may be required for the proposed Project, as outlined above. We request that specific Project activities that may trigger these permitting actions be identified in the appropriate sections of the MND. Should Project implementation result in activities that will trigger these permitting actions, the Project proponent must consult with Water Board staff. Information regarding these permits, including application forms, can be downloaded from our web site at http://www.waterboards.ca.gov/lahontan/.

Thank you for the opportunity to comment on the MND. If you have any questions regarding this letter, please contact me at (760) 241-7391 (tbrowne@waterboards.ca.gov) or Patrice Copeland, Senior Engineering Geologist, at (760) 241-7404 (pcopeland@waterboards.ca.gov).

Tom Browne, PhD, PE
Water Resources Control Engineer

cc: Sarah Rains, California Department of Fish and Wildlife
(via email, (Sarah.rains@wildlife.ca.gov)

State Clearinghouse

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Comment Letter G

PALMDALE

a place to call home

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July 11, 2013

Ms. Jocelyn Swain
Planning Department
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534

RE: Notice of Availability/Notice of Intent for the Soccer Center Solar Facility; 13.3 MW of Solar Photovoltaic Generating Facilities on 92.7 Acres Bounded by Avenue L, Avenue K-8, 20th Street East and 30th Street East (Conditional Use Permit 13-05, General Plan Amendment 13-01 and Zone Change 13-01)

Dear Ms. Swain:

G-1

Thank you for the opportunity to review and reply to your Notice of Availability/Notice of Intent to adopt a Mitigated Negative Declaration for the above referenced project. The Planning Department staff has reviewed the documents and at this time the City of Palmdale has no comment on the proposed project.

If you have any questions regarding this matter, please contact Susan Koleda, AICP, Senior Planner or me at (661) 276-5200.

Sincerely,

Richard Kite
Planning Manager

Auxiliary aids provided for communication accessibility upon 72 hours notice and request.

Comment Letter H

From: Kovacs, Eva
APN # 3170019021-72

July 15, 2013

To: Planning Department
44933 Fern Avenue
Lancaster, CA 93534

Esteemed Members of the Planning Department,

H-1 Pursuant to California Government Code Section 65009, I am notifying you with my concern regarding Proposed Action: General Plan Amendment No. 13-01 / Zone Change No. 13-01 / Conditional Use Permit No. 13-05 whose project proponent is Psomas FMG, US Topco, & Morgan Solar c/o Psomas at 28480 Avenue Stanford, Santa Clarita, CA 91355.

H-2 I am protesting this project because of its potential to adversely effect the value of my property due to reasons such as, but not limited to:

1) Deterrent to investors and developers

H-3 2) Hindering airport plans

H-4 3) Aesthetic blemish on the land

H-5 4) Impact on the environment

H-6 5) Any unforseen hazards

Thank You For Your Attention,
Eva Kovacs
Eva Kovacs

Comment Letter I

LOZEAU DRURY LLP
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Oakland, Ca 94607
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christina@lozeaudrury.com

Via Email and Courtesy Copy via Overnight Mail

July 10, 2013

Jocelyn Swain
City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534
jswain@cityoflancasterca.org

Re: Comments on the Proposed Initial Study/Mitigated Negative Declaration for the Soccer Center Solar Facility, CUP 13-05 (SCH # 2013061022)

Dear Ms. Swain:

This letter is submitted on behalf of the Laborers International Union of North America, Local Union 300 and its members living in Los Angeles County ("LiUNA") regarding the Soccer Center Solar Facility (SCH # 2013061022), Conditional Use Permit ("CUP") 13-05 ("Project") and the Initial Study/Mitigated Negative Declaration ("IS/MND") proposed for the Project.

I-1

We have prepared these comments with the assistance of Matt Hagemann, P.G., C.Hg., QSD, QSP, an expert hydrogeologist. His comments and curriculum vitae are attached as Exhibit A hereto and are incorporated by reference in its entirety. In addition, we have obtained the consultation of Shawn Smallwood, Ph.D., an expert wildlife biologist who has expertise in the areas relevant to the IS/MND. His comments and curriculum vitae are attached as Exhibit B hereto and are incorporated herein by reference in their entirety. The City should respond to the expert comments separately.

We ask the City to prepare an environmental impact report ("EIR") for the Project because:

I-2

1. The IS/MND omits an accurate project description.

    a. The IS/MND fails to describe the exact location of the Project site.

I-3

2. The IS/MND fails to accurately establish the Project's environmental settings or "baseline" for hazardous materials and biological resources.

I-4

3. There is a fair argument that the Project may have significant unmitigated impacts, both individually and cumulatively, including:

   a. Significant and unmitigated hazardous materials impacts.
   b. Significant and unmitigated construction emissions.
   c. Failure to adequately analyze the Project's GHG emissions.
   d. Significant and unmitigated impacts to important biological resources.

I-5

4. The IS/MND fails to adequately analyze the Project's cumulatively considerable impacts in connection with other related past, present and foreseeable future projects in the Project's vicinity.

An EIR is required to analyze these and other impacts and to propose mitigation measures to reduce the impacts to the extent feasible.

PROJECT DESCRIPTION

The Project involves the construction and operation of a solar photovoltaic ("PV") power plant of approximately 13.3 megawatts ("MW") on 92.7 acres, "generally bounded by Avenue L, Avenue K-8, 20th Street East and 30th Street East." (IS/MND, p. 1.) The Project will be undertaken by three separate solar developers: PsomasFMG, U.S. Topco, and Morgan Solar. Each of the developers would construct and operate their own respective solar facilities, which are collectively referred to as the Project.

I-6

The PsomasFMG facility consists of APNs 3170-008-090 and 3170-008-910 which are located between Avenue K-8 and Avenue K-12 west of 24th Street East. This portion of the Project involves the construction and operation of a 3.8 MW PV electric generating facility. The PsomasFMG facility will tie into the 12kV distribution line that runs along 20th Street East via a buried power cable along Avenue K-8. Access to the project site would be provided from 20th Street East via Avenue K-8.

The U.S. Topco facility consists of APNs 3170-008-907 and 3170-008-908 which are located between Avenue K-12 and Avenue L, west of 25th Street East. This portion of the proposed project consists of the construction and operation of an 8 MW PV electric generating facility. This facility would tie into the 12kV distribution line that runs along Avenue L via a buried power cable. Access to this facility would be provided via a paved driveway off of Avenue L.

The Morgan Solar facility consists of APN 3170-008-911 which is located on the east side of 25th Street East. This portion of the proposed project consists of the construction and operation of 1.5 MW PV solar electric generating facility. This facility

I-6

would tie into the 12kV distribution line that runs along Avenue L via a buried power cable. Access to this facility would be provided via a paved driveway on Avenue L.

The Project requires approvals from at least two public agencies: (1) Antelope Valley Air Quality Management District ("AVAQMD") for the dust control plan and (2) Southern California Edison ("SCE") for interconnection.

STANDING

LIUNA Local Union No. 300 members enjoy the natural environment of Los Angeles County and the Lancaster area. LIUNA Local Union No. 300 members regularly travel to the region where the Project is located to enjoy its peaceful repose and diversity and rarity of species of plants and animals. As members of the public, moreover, LIUNA members possess an ownership interest in public resources present in the regions of and surrounding the Project, including but not limited to special status species occurring there and nearby.

I-7

LIUNA represents construction workers and public service employees in many settings, including collective bargaining, seeking employment, training programs, legal rights, job safety, and workplace fairness. LIUNA advocates for programs and policies that promote good jobs and a healthy natural and working environment for workers and their families. An important part of LIUNA's ongoing advocacy involves participating in and, where appropriate, challenging Projects that would result in harmful environmental effects, or the violation of environmental laws, to the detriment of the interests of LIUNA's members. The interests of LIUNA's members in this project are unique and will be directly impacted by the outcome of this proceeding.

LIUNA Local Union No. 300 strongly supports appropriate development of renewable energy. Renewable energy projects, however, must be carefully sited and designed so as to avoid unnecessary and damaging environmental impacts. They also must receive proper environmental review under CEQA. This is especially true given the recent "gold rush" of solar energy proposals in the southern California region. Finally, as the Court of Appeal stated, "in any event, unions have standing to litigate environmental claims." (*Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1198, citing, *International Longshoremen's & Warehousemen's Union v. Board of Supervisors* (1981) 116 Cal.App.3d 265.)

Pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code ("PRC") Section 21000 *et. seq.*, LIUNA Local No. 300 submits the following comments in accordance with the City's Notice of Availability/Intent to Adopt Mitigated Negative Declaration. We believe that under the circumstances presented here, CEQA clearly requires the preparation of an EIR. Accordingly, the City should decline to adopt the proposed IS/MND.

LEGAL STANDARD

As the California Supreme Court very recently held, "[i]f no EIR has been prepared for a nonexempt project, but substantial evidence in the record supports a fair argument that the project may result in significant adverse impacts, the proper remedy is to order preparation of an EIR." (*Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 319-320 ["*CBE v. SCAQMD*"], citing, *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75, 88; *Brentwood Assn. for No Drilling, Inc. v. City of Los Angeles* (1982) 134 Cal.App.3d 491, 504–505.) "The 'foremost principle' in interpreting CEQA is that the Legislature intended the act to be read so as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." (*Communities for a Better Environment v. Calif. Resources Agency* (2002) 103 Cal.App.4th 98, 109 ["*CBE v. CRA*"].)

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

I-8

An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the environment." (Pub. Resources Code, § 21080(d); see also *Pocket Protectors*, *supra,* 124 Cal.App.4th at 927.) In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact thus requiring no EIR (14 Cal. Code Regs., § 15371 ["CEQA Guidelines"]), only if there is not even a "fair argument" that the project will have a significant environmental effect. (Pub. Resources Code, §§ 21100, 21064.) Since "[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process," by allowing the agency "to dispense with the duty [to prepare an EIR]," negative declarations are allowed only in cases where "the proposed project will not affect the environment at all." (*Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440.)

Under the "fair argument" standard, an EIR is required if any substantial evidence in the record indicates that a project may have an adverse environmental effect – even if contrary evidence exists to support the agency's decision. (CEQA Guidelines, §

15064(f)(1); *Pocket Protectors*, *supra*,124 Cal.App.4th at 931; *Stanislaus Audubon Society v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-15; *Quail Botanical Gardens Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1602.) The "fair argument" standard creates a "low threshold" favoring environmental review through an EIR rather than through issuance of negative declarations or notices of exemption from CEQA. (*Pocket Protectors*, *supra*, 124 Cal.App.4th at 928.)

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

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

I-8

(Kostka & Zischke, *Practice Under CEQA*, §6.29, pp. 273-274.) The Courts have explained that "it is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, with a ***preference for resolving doubts in favor of environmental review***." (*Pocket Protectors*, *supra*, 124 Cal.App.4th at 928 [emphasis in original].)

As a matter of law, "substantial evidence includes . . . expert opinion." (Pub. Resources Code, § 21080(e)(1); CEQA Guidelines, § 15064(f)(5).) CEQA Guidelines demand that where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the environmental effects to be significant and prepare an EIR. (CEQA Guidelines § 15064(f)(5); Pub. Res. Code § 21080(e)(1); *Pocket Protectors*, *supra*,124 Cal.App.4th at 935.) "Significant environmental effect" is defined very broadly as "a substantial or potentially substantial adverse change in the environment." (Pub. Resources Code, § 21068; see also CEQA Guidelines, § 15382.) An effect on the environment need not be "momentous" to meet the CEQA test for significance; it is enough that the impacts are "not trivial." (*No Oil, Inc., supra,* 13 Cal.3d at 83.) In *Pocket Protectors*, the court explained how expert opinion is considered. The Court limited agencies and courts to weighing the admissibility of the evidence. (*Pocket Protectors*, *supra,* 124 Cal.App.4th at 935.) In the context of reviewing a negative declaration, "neither the lead agency nor a court may 'weigh' conflicting substantial evidence to determine whether an EIR must be prepared in the first instance." (*Id.*) Where a disagreement arises regarding the validity of a negative declaration, the courts require an EIR. As the Court explained, "[i]t is the

I-8

function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project." (*Id.*)

DISCUSSION

A. THE IS/MND OMITS AN ACCURATE PROJECT DESCRIPTION.

The IS/MND does not meet CEQA's requirements because it fails to include a complete and accurate project description. An accurate and complete project description is essential to evaluate the potential environmental effects of a proposed project. (*See, e.g. Laurel Heights*, *supra*, 47 Cal.3d 376.)

I-9

CEQA Guidelines require that a proposed negative declaration must include information on the Project's location, preferably shown on a map. (CEQA Guidelines, § 15071(b).) However, the IS/MND fails to adequately describe the Project's location. First, no map is included in the IS/MND itself to reasonably apprise its readers of the Project's exact location. Next, the IS/MND provides only an *approximate* location of the project, describing it as "92.7± acres *generally* bounded by Avenue L, Avenue K-8, 20th Street East and 30th Street East." (IS/MND, p. 1 [emphasis added].) Based on the imprecise description given, it is difficult to determine the exact delineation of the Project site.

B. THE IS/MND FAIL TO ACCURATELY ESTABLISH THE PROJECT'S ENVIRONMENTAL SETTINGS OR "BASELINE."

CEQA requires that an Initial Study include a description of the project's environmental setting or "baseline." (CEQA Guidelines, § 15063(d)(2).) The CEQA "baseline" is the set of environmental conditions against which to compare a project's anticipated impacts. (*CBE v. SCAQMD*, *supra*, 48 Cal.4th at 321.) CEQA Guidelines section 15125(a) states, in pertinent part, that a lead agency's environmental review under CEQA:

I-10

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

(*See*, *Save Our Peninsula Committee v. County of Monterey* (2001) 87 Cal.App.4th 99, 124-125 ("*Save Our Peninsula*").)

Here, the IS/MND is inadequate because it failed to establish accurate environmental settings for the Project.

1. The IS/MND Fails to Establish Accurate Environmental Settings for Hazardous Materials.

I-10 Establishing an accurate baseline is the *sine qua non* to adequately analyzing and mitigating the potentially significant environmental impacts of the Project. (See CEQA Guidelines, § 15125(a); *Save Our Peninsula*, *supra,* 87 Cal.App.4th at 121-123.) Unfortunately, the IS/MND's failure to investigate and identify the hazardous materials present at the Project site resulted in a skewed baseline. Such skewed baseline ultimately "mislead(s) the public" by engendering skewed and inaccurate analyses of environmental impacts, mitigation measures and cumulative impacts for biological resources. (See *San Joaquin Raptor Rescue Center, supra,* 149 Cal.App.4th at p. 656; *Woodward Park Homeowners,* 150 Cal.App.4th 683, 708-711.)

a. The IS/MND Fails to Disclose the Potential Presence of Asbestos, Heavy Metals and Hazardous Compounds on the Project Site.

The 2013 Phase I ESA characterized the Project site as being vacant with trash and debris, including rubber tires, roofing shingles and aluminum cans strewn on the Project site. (Phase I ESA Part I, pp. 4, 20, 21.) While acknowledging that those items pose a concern, the IS/MND quickly dismisses it without further analysis. As a result, according to Mr. Hagemann, the IS/MND ignores how at least 10 years of uncontrolled dumping and the presence of such trash and debris is indicator that much more serious hazardous materials to be present on the Project site. (Exhibit A, p. 3.)

I-11 According to Mr. Hagemann, the roofing shingles may contain asbestos, which are carcinogenic and pose a serious human health risk. (Exhibit A, p. 3.) The asbestos fibers could become airborne and inhaled into the lungs. (*Id.*) However, Mr. Hagemann states that the IS/MND fails to disclose the potential for the roofing shingles to contain asbestos and in fact, erroneously states that the Project would not expose individuals or the environment to asbestos containing materials. (*Id.*)

Additionally, Mr. Hagemann states that rubber tires contain significant quantities of zinc and other heavy metals, which contaminate the soil beneath and around the tires. Over 100 large tires have recently been observed at the Project site. (Exhibit A, p. 4; IS/MND, p. 27.) The IS/MND, however, ignores the potential impacts of the presence of heavy metals in the tires and the soils under and around the tires and fails to establish an accurate baseline for such materials. (*Id.*)

Furthermore, Mr. Hagemann opines that trenching of soil and soil stockpiles are present on the Project site which are indicators for dumping of hazardous compounds, including solvents like trichloroethylene, petroleum hydrocarbons, and other items such as car batteries. (Exhibit A, p. 4.) The IS/MND, however, overlooks the potential that such hazardous compounds are present on the Project site and did not conduct further analysis to establish an accurate baseline. (*Id.*) Mr. Hagemann notes that the Phase I

ESA also fails to conduct any soil sampling to determine the presence of any hazardous compounds in and on the soil trenches and stockpiles. (*Id.*)

I-11 Without an accurate baseline, the Project's potential hazardous materials impacts cannot be correctly and fully ascertained. Especially in light of the large amount of soil that will be disturbed during construction, an EIR must be prepared to fully disclose the extent of hazards impacts the Project will pose. In that way, any potentially hazardous materials can be identified and avoided during construction in order to protect the health and safety of the construction workers on the Project and the sensitive receptors nearby.

2. The IS/MND Fails to Establish An Accurate Environmental Setting for Biological Resources.

The IS/MND's entire biological resources analysis is predicated on a single 4-hour walking survey which was performed on March 4, 2013 from hours of 0730-1130. (Bio Report, p. 7; Exhibit B, p. 2.) However, according to Dr. Smallwood, an expert biologist, a single visit to the site cannot possibly suffice to adequately characterize the use of the site by wildlife and plants. (Exhibit B, p. 2.) In particular, Dr. Smallwood

I-12 states that the March 4th survey precedes the nesting season for burrowing owls and other birds and may explain why certain special status species that potentially occur on the Project site were not observed. (*Id.*)

Based on the deficient survey, the IS/MND established and relied on an inaccurate baseline for its analysis of all biological resources on the Project site. As a result, according to Dr. Smallwood, the IS/MND fails to account for at least 32 special-status species which possibly, probably or certainly occur on the Project site. (Exhibit B, pp. 2-3.) While the IS/MND acknowledges that Mojave ground squirrel, Swainson's hawk, and burrowing owl occur on the Project site, it discounts the <u>probable to certain</u> likelihood of occurrence of such wildlife. (*Id.*) The IS/MND's use of an inaccurate baseline renders the biological resources impacts analysis inadequate.

C. AN EIR IS REQUIRED BECAUSE THERE IS A FAIR ARGUMENT THAT THE PROJECT MAY HAVE SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS.

An EIR is required whenever substantial evidence in the whole record before the agency supports a fair argument that a project may have a significant effect on the

I-13 environment. (*CBE v. SCAQMD*, *supra*, 48 Cal.4th at 319-320; Pub. Resources Code, § 21080(d); see also *Pocket Protectors*, *supra*, 124 Cal.App.4th at 927.) As detailed in the following sections, there is a fair argument, supported by substantial evidence, that the Project may result in significant impacts related to hazardous materials, air quality, and biological resources. Therefore, the City is required to prepare an EIR to evaluate

the Project's impacts and propose all mitigation measures that are necessary to reduce those impacts to a less than significant level.

1. Substantial Evidence Supports a Fair Argument that the Project Will Have Significant, Unmitigated Hazardous Materials Impacts.

As fully discussed in Part B.1, *supra*, the IS/MND fails to establish an accurate baseline for hazardous materials present or potentially present on the Project site. As a result, the IS/MND fails to adequately analyze and mitigate the significant impacts of such hazards.

According to Mr. Hagemann, a fair argument can be made that the trash, debris and other materials contain compounds that would pose a risk to the health of construction workers through dermal contact and through dust inhalation. (Exhibit A, p. 4.) The asbestos in the roof shingles could cause lung diseases when inhaled by construction workers. (*Id.* at p. 3.) The heavy metals including zinc in the tires can cause stomach cramps, nausea, and vomiting for construction workers who will clear the site for Project construction. (*Id.* at p. 4.) The hazardous compounds present in soil trenches and stockpiles could pose a risk to the health of construction workers through dermal contact and dust inhalation. (*Id.*)

I-13

Not only could the presence of asbestos, heavy metals and hazardous compounds pose a serious health risk to construction workers such as LIUNA members during site preparation and construction, Mr. Hagemann states that the disturbance of such materials could also seriously impact numerous sensitive receptors near the Project site. (Exhibit A, p. 4.) The National Soccer Center and associated soccer fields are located immediately east of the Project site's eastern boundary. (IS/MND, pp. 2, 22.) A church has been approved on the property to the northeast, though not yet been constructed. (*Id.* at p. 29). Additionally, Mr. Hagemann notes that a subdivision of homes is located 1,600 ft to the northwest of the Project site. (Exhibit A, p. 4.) As a result, Mr. Hagemann concludes that the Project poses a high risk to young children playing soccer at the Soccer Center, families attending church, and families which reside in the nearby subdivision who could be exposed by the hazardous materials at the Project site.

Mr. Hagemann recommends that the City must prepare a Draft EIR to include (1) a full assessment of the roofing shingles present at the Project site and their potential to represent a health risk, (2) sample the soils in the area of discarded tires to determine if any heavy metals are present in the soil that may pose a risk to construction workers during construction activities that disturb the ground surface, and (3) a full assessment of areas of dumping, disturbed soil, and soil trenches and stockpiles determine the types and amount of hazardous compounds present on the Project site. (Exhibit A, p. 4.) Any conditions that are found to be hazardous should be mitigated in the DEIR, which include encapsulation of materials, real-time dust monitoring along the fenceline,

I-13

and protective equipment of construction workers. (*Id.*)

2. Substantial Evidence Supports a Fair Argument that the Project Will Result in Significant, Unmitigated Construction Emissions.

According to Mr. Hagemann, the IS/MND inadequately analyzes the Project's impacts on air quality, especially during construction. (Exhibit A, p. 5.) Construction workers such as LIUNA members would be exposed to such impacts. The IS/MND admits that the construction of the Project would generate air emissions associated with grading, use of heavy equipment, construction worker vehicles, etc. (IS/MND, p. 21.) However, the IS/MND concludes without analysis that construction air emissions would not exceed the thresholds established by the AVAQMD due to the size and type of the Project. (IS/MND, p. 21.) The IS/MND also fails to quantify particulate matter (PM10 and PM2.5) emissions from construction of the Project. (*Id.*; IS/MND, p. 5.) The inadequate project-level air quality impacts analysis in the IS/MND also renders the cumulative air quality impacts analysis inadequate.

Especially where, as here, multiple sensitive receptors are present in the Project site's immediate vicinity, the IS/MND's inadequate analysis is perplexing and unjustified. Mr. Hagemann cites to the AVAQMD CEQA Guidelines, which provide that any industrial project within 1,000 feet of a sensitive receptor must be evaluated if it exposes sensitive receptors to substantial pollutant concentrations. (Exhibit A, p. 6.) The IS/MND acknowledges the presence of multiple sensitive receptors in the Project site's vicinity, which are located at less than 1,000 feet. (IS/MND, pp. 2, 22, 29.) Construction emissions of particulate matter may impact the health of the children at the adjacent soccer facility, located on the Project's eastern border, and nearby residents. (Exhibit A, p. 5.) A church is slated to be constructed shortly immediately north of the Project site. (IS/MND, p. 2.) There are also numerous residences in the Project's immediate vicinity. (Exhibit A, p. 5.)

I-14

According to Mr. Hagemann, exposure to particulate matter can lead to respiratory symptoms including irritation of airways, coughing, and difficulty breathing. (Exhibit A, p. 5.) Additional symptoms include irregular heartbeat, aggravated asthma, and decreased lung function. (*Id.*) Since many children and families frequent the soccer facility and church and children and older adults are most likely to be affected by exposure to particulate matter, Mr. Hagemann believes the IS/MND should have analyzed and mitigated impacts of particulate matter to such sensitive receptors. (*Id.*)

However, Mr. Hagemann states that the IS/MND also improperly defers the formulation of a dust control plan to after the completion of the CEQA process and just before the commencement of construction. (Exhibit A, pp. 5-6; IS/MND, p. 25.) According to Mr. Hagemann, in order to ensure that such plan will be protective of sensitive receptors near the Project site, the dust control plan must be formulated during the CEQA process, as part of a Draft EIR, which identifies all sensitive receptors and

incorporate all feasible mitigation measures, pursuant to AVAQMD Rule 403, to reduce impacts to less than significant level. (Exhibit A, p. 6.)

Moreover, Mr. Hagemann states that the IS/MND also fails to discuss any toxic air contaminants, particularly diesel particulate matter (DPM) from any activities associated with the construction of the Project. (Exhibit A, pp. 6-7.) Mr. Hagemann states that DPM is a likely carcinogen which can cause irritation to the eyes, nose, throat, and lungs, as well as neurological effects. (*Id.*) The California Air Resources Board recognizes that children are the most vulnerable to the health effects of DPM. However, the IS/MND fails to analyze the impacts of DPM and fails to mitigate such impacts to the extent feasible, as provided by Mr. Hagemann. (*Id.*) The City must prepare a Draft EIR and evaluate DPM emissions through a comprehensive emissions inventory in accordance with AVAQMD's Rule 1402. (*Id.*)

I-14

Based on the foregoing, there is substantial evidence which supports a fair argument that the Project will result in significant, unmitigated construction emissions impacts, especially to sensitive receptors in the Project's vicinity. The City must prepare a Draft EIR to fully address these impacts and mitigate them to the extent feasible.

3. The IS/MND Fails to Adequately Analyze the Project's GHG Emissions.

According to Mr. Hagemann, the IS/MND fails to quantify the Project's greenhouse (GHG) emissions and merely states that air emissions would be generated during construction, "some of which may be greenhouse gasses." (IS/MND, p. 26; Exhibit A, p. 6.) But without any quantification or analysis, it is incomprehensible how the IS/MND can proceed to conclude that such GHG emissions are "anticipated to be less than the thresholds established by the Antelope Valley Air Quality Management District." (*Id.*)

I-15

GHG emissions from the Project must be quantified and compared to the AVAQMD thresholds. Mr. Hagemann states that the results from such analysis must be included in a Draft EIR. (Exhibit A, p. 7.)

4. Substantial Evidence Supports a Fair Argument that the Project Will Have Significant, Unmitigated Impacts to Biological Resources.

a. The IS/MND Fails to Adequately Analyze the Project's Impacts to Riparian Vegetation.

I-16

The IS/MND acknowledges that a stream flows immediately east to the project site. (IS/MND, p. 23.) At the same time, Dr. Smallwood provides that the IS/MND concludes, without explanation, that no impacts to riparian vegetation would occur because no construction will occur in the stream channel. (*Id.*; Exhibit B, p. 2.)

I-16 According to Dr. Smallwood, without any analysis, the City cannot conclude that the Project will not have significant impacts on riparian vegetation. (*Id.*)

b. The IS/MND Fails to Adequately Analyze the Project's Impacts to Wildlife Movement.

The IS/MND fails to adequately analyze the Project's impacts to wildlife movement. The IS/MND concludes, without analysis, that the Project site is not part of an established migratory wildlife corridor and as such, no impacts would occur. (IS/MND, p. 23.) However, such conclusion is misleading because no agency or scientific program is responsible for *establishing* any movement corridors and the
I-17 conclusion implies that there is some established map or list of movement corridors and the Project is outside of such established list or map. (Exhibit B, p. 2.) The issue that the IS/MND should have considered, but did not, is whether a proposed project will interfere with the movement of wildlife or fish, thereby disrupting a fundamental ecological requirement of wildlife species. (*Id.*)

As a result, Dr. Smallwood provides that the IS/MND fails to adequately analyze the Project's contribution to habitat fragmentation, which is recognized as the most serious threat to the continued existence of terrestrial wildlife. (Exhibit B, p. 2.) The City must prepare a draft EIR to analyze and mitigate the Project's contribution to habitat fragmentation.

c. The IS/MND Fails to analyze and Mitigate the Project's Impacts of Avian Collisions.

According to Dr. Smallwood, the IS/MND and the Bio Report fail to consider how the Project's PV panels and support structures pose some collision risk to birds. (Exhibit B, p. 4.) Based on established literature and complicated formula, Dr. Smallwood calculates and concludes, depending on many variables, that the Project could result in
I-18 12 to 143 bird fatalities per year. (*Id.*, pp. 4-6.) Even at the lower end of the projected fatalities, there is no doubt that the Project will have significant impacts of avian collisions. And in light of the probable and certain occurrences of special status avian species in the Project area, there is substantial evidence which supports a fair argument that the Project will have significant impacts on special status species. As such, the IS/MND's failure to analyze such impacts cannot be justified.

The City must prepare a Draft EIR to analyze the Project's impacts of avian collisions and mitigate such impacts to the extent feasible.

d. The IS/MND Improperly Defers Mitigation of and Fails to Adequately Mitigate the Project's Impacts to Biological Resources.

I-19 According to Dr. Smallwood, the IS/MND improperly defers preconstruction

surveys for nesting birds, burrowing owls and Mojave ground squirrel until after the CEQA process and Project approval. CEQA prohibits such deferred mitigation. Specific mitigation measures must be set forth in the CEQA document. (*Sundstrom v. Mendocino*, 202 Cal.App. 3d 296.) Especially in light of the deficient 4-hour survey conducted for the IS/MND, proper preconstruction surveys must be conducted and included as part of the CEQA process to reasonably apprise the public of the impacts the Project will have on important biological resources. (Exhibit B, p. 6.)

Additionally, the IS/MND fails to incorporate all feasible mitigation measures to minimize, reduce, rectify or offset the Project's significant impacts to biological resources. (Exhibit B, p. 7.) According to Dr. Smallwood, the City must adopt the following mitigation measures to address such impacts: (1) require preconstruction behavioral surveys to identify avian flight paths, (2) provide funds to local wildlife rehabilitation facilities to rehabilitate birds injured by collision with the Project's structures as well as electrocutions caused by electric distribution poles, (3) provide funds to offset impacts by conserving suitable wildlife habitat through purchase of conservation easements or fee title, and (4) fatality monitoring to estimate the impacts caused by collisions and electrocutions to ultimately reduce such Project-related wildlife fatalities on-site. (*Id.*) Dr. Smallwood also provides specific ways in which the Project's impacts to biological resources can be monitored successfully. (*Id.*)

I-19

Moreover, Dr. Smallwood recommends that the City require mitigation monitoring to ensure that the project proponent will achieve mitigation objectives and performance standards as set forth in the CEQA and permit documents. (Exhibit B, p. 8.) Without an adequate and concrete monitoring requirement, the proposed mitigation measures are uncertain to reduce the Project's potentially significant impacts to a less than significant level. (*Id.*) As such, a Draft EIR must be prepared to not only incorporate all feasible mitigation measures to address the Project's impacts on biological resources but also require mitigation monitoring to ensure such measures comply with all applicable objectives and performance standards.

D. THE IS/MND IGNORES THE PROJECT'S CUMULATIVELY CONSIDERABLE IMPACTS.

The City fails to consider the cumulative impacts of the Project in connection with other related past, present and future projects in the vicinity. An agency must make a "mandatory finding of significance" and may not issue a negative declaration if a proposed project will have "impacts that are individually limited, but cumulatively considerable." (Pub. Resources Code, § 21083; CEQA Guidelines, § 15355.) "Cumulatively considerable means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." (CEQA Guidelines, Appendix G, Section XVII; CEQA Guidelines, section 15130(a).) "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are

I-20

considerable or which compound or increase other environmental impacts." (CEQA Guidelines, § 15355(a).) "[I]ndividual effects may be changes resulting from a single project or a number of separate projects." (CEQA Guidelines, § 15355(a).)

"The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time." (*CBE v. CRA*, *supra*, 103 Cal.App.4th at 117; see CEQA Guidelines, § 15355(b).)

I-20

As the court stated in *CBE v. CRA*:

> Cumulative impact analysis is necessary because the full environmental impact of a proposed project cannot be gauged in a vacuum. One of the most important environmental lessons that has been learned is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact.

(*CBE v. CRA, supra*, 103 Cal.App.4th at 114.)

1. The IS/MND Fails to Analyze the Project's Cumulative Impacts in Sufficient Detail.

The IS/MND and its supporting documents fail to adequately analyze the potential cumulative impacts of the Project. Rather than considering and analyzing each past, present and probable future project in sufficient detail, the IS/MND merely lists two (2) "past, present and future projects" with scant information.

The IS/MND lists 2 solar electric generating facilities within 2 miles of the project site – 1.5 MW on 20 acres at the northwest corner of Avenue K-8 and 40th Street East and 1.5 MW on 20 acres at the southwest corner of Lancaster Boulevard and 40th Street East. (IS/MND, p. 33.) Construction for these 2 projects is expected to be completed in the next 2 months. (*Id.*)

I-21

However, the IS/MND fails to provide adequate information about these projects – the IS/MND does not provide the CUPs or APNs for these two projects, the exact location of these projects in relation to the Project site, and whether there is a potential that the construction timeline of these projects will coincide with the Project's. Without adequate information, it is impossible for the City to conclude that there is no substantial evidence to support a fair argument of significant cumulative impacts.

The IS/MND restricted its cumulative impacts analysis to 2 miles around the Project site. The IS/MND must "define the geographic scope of the area affected by the cumulative effect[s] and provide a reasonable explanation for the geographic limitation used" in violation of CEQA Guideline Section 15130(b)(1)(B)(3). The IS/MND fails to provide an reasonable explanation for why the 2 mile radius was chosen as the geographic scope for analyzing cumulative impacts. I-21

Accordingly, the IS/MND should have analyzed whether the Project's incremental impacts, when added to other related past, present and reasonably foreseeable future projects, could result in cumulatively considerable impacts. Here, the IS/MND's cumulative impacts analyses fail to comport with CEQA and miss the mark entirely.

2. The IS/MND's List of Related Past, Present and Foreseeable Future Projects in the Project's Vicinity is Underinclusive.

The IS/MND's list of related past, present and future projects is also underinclusive. First, it only includes one renewable energy project in the Project's vicinity. The number of past, present and foreseeable future renewable energy projects in and near Lancaster is quite extensive, especially given the "gold rush" of renewable energy projects in California. Therefore, related renewable energy projects in the Project's vicinity should have been considered in the cumulative impacts analyses.

The IS/MND's failure to adequately analyze the Project's incremental impacts in combination with all related past, present and foreseeable future projects violates CEQA. The purpose of CEQA is to inform decision makers and the public about the potential, significant environmental effects of a project. (CEQA Guidelines, § 15002(a)(1).) "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made." (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564.) I-22

The IS/MND however omits analysis of other related past, present and future projects in the Project site's area which, in connection with the Project's incremental impacts, could result in considerable cumulative air impacts. The IS/MND merely lists 2 solar electric generating facilities within 2 miles of the project site – 1.5 MW on 20 acres at the northwest corner of Avenue K-8 and 40th Street East and 1.5 MW on 20 acres at the southwest corner of Lancaster Boulevard and 40th Street East. (IS/MND, p. 33.)

To be clear, according to Mr. Hagemann, there are at least 18,000 acres or 28 square miles of renewable energy projects in and near the Antelope Valley area, including the City of Lancaster, City of Palmdale, and in the unincorporated areas of Los Angeles County, which will be constructed in and around the same time as the Project. (Exhibit A, p. 5.)

APPROVED PROJECTS (5); GROSS ACRES: 4,218 *
R2009-02089 ALPINE SOLAR
R2009-02089 ALPINE SOLAR ADDITION
R2009-02239 AV SOLAR RANCH ONE
R2010-00808 ANTELOPE VALLEY SOLAR - LACO
R2012-00849 RUTAN

PENDING PROJECTS (18); GROSS ACRES: 13,442
R2010-00256 WILDFLOWER GREEN ENERGY FARM
R2011-00377 ANTELOPE SOLAR FARM
R2011-00408 BLUE SKY WIND ENERGY
R2011-00798 WESTERN ANTELOPE BLUE SKY RANCH
R2011-00799 AMERICAN SOLAR GREENWORKS
R2011-00801 SILVER SUN GREENWORKS
R2011-00804 EAST LANCASTER RANCH
R2011-00805 LANCASTER WAD
R2011-00807 ANTELOPE SOLAR GREENWORKS
R2011-00833 NORTH LANCASTER RANCH
I-22
R2011-01025 THEME
R2011-01027 VANDIVER
R2011-01029 BEAZEL
R2011-01030 OWEN
R2011-01033 RUSSELL
R2012-00024 QUAIL LAKE PHOTOVOLTAIC SOLAR
R2012-01559 CHAHIN
R2012-01589 WEST ANTELOPE SOLAR PROJECT

City of Lancaster Projects
CUP 10-03
CUP 10-22
CUP 11-02
CUP 11-03
CUP 11-05
CUP 11-07
CUP 12-08
CUP 12-09
CUP 13-03
CUP 13-06

(Exhibit C[1]; See Exhibit A, p. 5, fn 6; IS/MND for CUP 13-06, p. 39.)

The above list of renewable projects is not exhaustive. Even so, it illustrates how deficient and underinclusive the IS/MND's list of 3 cumulative projects is. Many of these

[1] http://planning.lacounty.gov/assets/upl/project/energy_list-map.pdf

projects have been approved and are pending approval. As such, Mr. Hagemann provides that many of these projects could be constructed simultaneously as the Project, which could have significant cumulative construction-related impacts which the IS/MND fails to consider. (Exhibit A, p.5.)

The IS/MND also improperly restricted its cumulative impacts analysis to include only to solar projects. (IS/MND, p. 33.) Although the IS/MND mentions a church facility which has been approved but for which construction has not yet begun, the IS/MND fails to provide any other information about the church project, such as the size, exact location, and permit numbers. More importantly, the IS/MND ignores any other projects which could result in related impacts as the Project in the Project's vicinity.

I-22

In conclusion, based on the lack of adequate detail and failing to include all related past, present and reasonably foreseeable future projects, the IS/MND fails to adequately analyze if the Project's incremental impacts, when added to other related past, present and reasonably foreseeable future projects, could be cumulatively considerable.

3. The IS/MND Fails to Adequately Analyze Cumulative Air Quality Impacts.

In addition to the IS/MND's inadequate analysis of the Project's air quality impacts during construction, the IS/MND's cumulative air quality impacts analysis is inadequate. According to Mr. Hagemann, there are at least 18,000 acres or 28 square miles of renewable energy projects in and near the Antelope Valley area, including the City of Lancaster, City of Palmdale, and in the unincorporated areas of Los Angeles County, which will be constructed in and around the same time as the Project. (Exhibit A, p. 5.) Mr. Hagemann provides that construction of all of these projects will require land disturbance for site preparation, including grading and excavation, which will release particulate matter in the form of dust from the construction activities. (*Id.*) Because these projects are located in Antelope Valley and the Mojave Desert Air Basins, both of which are designated non-attainment for PM10, Mr. Hagemann concludes that the cumulative construction impacts, especially if many of these projects are constructed simultaneously, could be significant. (*Id.*)

I-23

The IS/MND, however, fails to provide when each of these projects could be constructed in relation to the construction timeline for the Project. While acknowledging that simultaneous construction of nearby projects "could generate cumulative impacts," the IS/MND brushes off any analysis of such impacts with the general, unsubstantiated assumption that "[m]ost of the impacts generated by these projects are site specific and generally do not influence the impacts on another site." (IS/MND, p. 33.) However, the influx of solar projects in particular, in conjunction with the Project's impacts, will contribute to further degradation of regional air quality. (Exhibit A, p. 5.)

In all likelihood, the church facility located immediately north of the Project may be constructed at the same time as the Project, resulting in cumulatively considerable construction emissions. However, the IS/MND fails to provide sufficient detail on when the estimated construction timeline for the church facility is.

The IS/MND also fails to analyze any other non-renewable energy project that will be in construction at or around the same time as the Project. The IS/MND cursorily concludes, without any basis, that less than significant impact will result from a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment. (IS/MND, p. 9; Exhibit A, p. 5.)

I-23

The failure of the IS/MND to provide any analysis of a potential significant cumulative impacts "enlarges the scope of fair argument...." (*Sundtrom*, 202 Cal.App.3d at 311.) In sum, the IS/MND fails to adequately analyze how the incremental impacts of the Project could be cumulatively considerable when analyzed in conjunction with all past, present and reasonably foreseeable future projects in and around the Project area.

4. The IS/MND Fails to Adequately Analyze Cumulative Biological Impacts.

The IS/MND admits that the construction of the two 1.5 MW solar projects and the church facility near the Project site "would lead to a cumulative loss of habitat for a variety of plants and animals." (IS/MND, p. 33.) The IS/MND also admits that the Project site contains suitable habitat for burrowing owls, nesting birds and Mohave ground squirrels. (*Id.*) The IS/MND, however, concludes that the Project will not result in cumulatively considerable impacts to biological resources.

Dr. Smallwood states that the IS/MND fails to conduct any cumulative impacts analysis for biological resources. (IS/MND, p. 6.) First, the IS/MND fails to analyze the Project in the larger context of the influx of all solar projects in the City of Lancaster, City of Palmdale, and the unincorporated areas of Los Angeles County by inexplicably limiting the range of its cumulative impacts analysis to only 2 miles (IS/MND, p. 33.) Additionally, as discussed earlier, the IS/MND's biological survey was limited and failed to account for all other special status species which could potentially occur on the Project site. As such, the IS/MND's analysis of the Project's cumulative impacts on biological resources is inadequate.

I-24

The City must prepare a Draft EIR and revise its cumulative impacts analysis to include all related past, present and future projects near the Project site. The City must also actually analyze, with sufficient detail, how the incremental impacts from this Project, compounded with the related past, present and future projects, could be cumulatively considerable. Mr. Hagemann recommends that the City must identify the timing of the construction of all the projects that are approved or pending in the Antelope Valley and quantify the emissions of the projects in a cumulative context,

I-24

through modeling along with appropriate documentation to support these estimates. (Exhibit A, p. 5.) And if such analysis leads to the conclusion that the construction emissions will exceed the AVAQMD thresholds, the Draft EIR must adequately mitigate such emissions. (*Id.*)

CONCLUSION

For the foregoing reasons, the proposed IS/MND for the Project should be withdrawn, an EIR should be prepared, and the draft EIR should be circulated for public review and comment in accordance with the requirement of CEQA. Thank you for considering our comments.

Sincerely,

Richard Drury
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July 10, 2013

Cathy Lee
Lozeau | Drury LLP
410 12th Street, Suite 250
Oakland, CA 94607

Subject: Comments on the Soccer Center Solar Facility Project, Lancaster, California

Dear Ms. Lee:

I have reviewed the June 10, 2013 Initial Study (IS) for the Soccer Center Solar Facility ("Project") in Lancaster, California. The Project would involve the completion of three photovoltaic (PV) solar facilities on 92.7 acres that would generate a total of 13 megawatts (MW) of power. Components of the Project include PV panels six to eight feet in height and buried cables to tie-in to the electrical distribution system.

I-A1

I have reviewed the Project for issues associated with hazards and hazardous materials, air quality, cumulative impacts and greenhouse gases. I conclude that there are potential significant impacts to construction workers and offsite receptors from construction of the Project. The IS does not disclose these impacts and a fair argument can be made that impacts will be significant. A DEIR should be prepared that discusses these issues and provides mitigation to reduce impacts to a less-than-significant level where warranted.

Hazards and Hazardous Materials

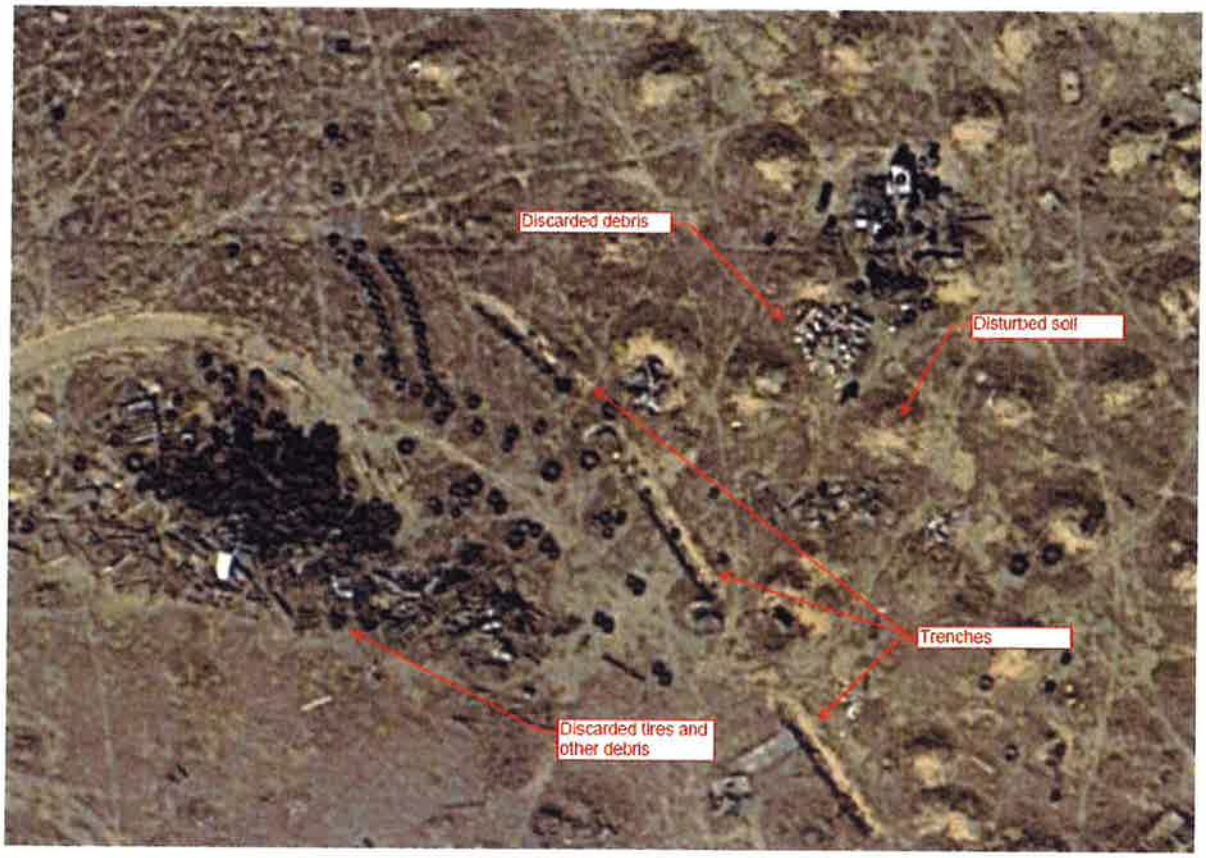
The area of the Project site, east of 25th Street East (Parcel D), has been used for dumping. A 2013 Phase I Environmental Site Assessment describes the Project area as "vacant land with debris, including rubber tires" and "Trash and debris, including rubber tires, roofing shingles and discarded aluminum cans, was observed throughout the Property."[1]

I-A2

The trash and debris piles are clearly visible in aerial images on Google Earth. The images below show areas of disturbed soil, discarded tires, and debris

[1] Phase I Environmental Site Assessment Report, Assessor Parcel Numbers 3170-008-907, -908, -909, -910 and -911, Lancaster, California, April 19, 2013, pp. 4 and 17

Google Earth Image, August 25, 2012



Google Earth Image, December 3, 2011

I-A2

From the examination of the Google Earth images, the disposal appears to be uncontrolled dumping, conducted over a period of at least 10 years. During this period, dumping may have involved materials, including petroleum compounds (such as oil, diesel, and other fuels and fluids) and volatile organic compounds, such as those found in degreasers (e.g., trichloroethylene).

The only materials that were identified in the Phase I – tires and roofing shingles – may themselves require disclosure and mitigation in a Draft Environmental Impact Report (DEIR).

I-A3

- Asbestos is found in roofing shingles, according to the US EPA.[2] Asbestos represents a human health risk when asbestos fibers become airborne and are inhaled into the lungs. Asbestos exposure can cause lung diseases and asbestos is recognized by the U.S. EPA as a human carcinogen.

  The IS does not disclose the potential for the roofing shingles to contain asbestos and provides no mitigation for the protection of public health when the roofing materials are removed during site preparation. In fact, the IS states that the Project would not expose individuals or the environment to asbestos containing materials, a conclusion that disregards the potential for the roofing shingles to contain asbestos. The 2013 Phase I ESA only vaguely states that "trash and

[2] http://www2.epa.gov/asbestos/learn-about-asbestos#find

debris piles are an environmental concern" and recommends only that "the tires and roofing shingles be disposed of appropriately."[3]

A soccer field complex is located less than a half-mile to the east of the discarded materials and a home is located less than a thousand feet to the west. A subdivision of homes is located about 1,600 feet to the northwest. There is a fair argument that disturbance of the roofing shingles during Project construction will cause public exposure to asbestos materials. The IS fails to identify this potential health hazard and does not provide for any mitigation.

I-A3

A DEIR should be prepared for the Project to include a full assessment of the roofing materials and their potential to represent a health risk. Any necessary mitigation, including encapsulation of the materials, real-time dust monitoring along the fenceline for asbestos fibers, and procedures for protection of construction workers, including proper protective equipment, should be included in the DEIR.

- Google Earth images show that well over 100 large tires have been disposed at the Project site. Tires contain significant quantities of zinc[4] and soil may be contaminated with zinc and other heavy metals in areas of tire dumping. Construction workers involved in clearing the site for Project construction may be exposed to zinc in the tires and the soil, resulting in stomach cramps, nausea, and vomiting.[5]

I-A4

A DEIR should be prepared to disclose what likely constitutes the illegal dumping of tires. Soil sampling in the area of the discarded tires should be conducted to determine if any heavy metals are present in soil that may pose a risk to construction workers during construction activities that disturb the ground surface.

- Trenching of the soil and soil stockpiles are visible in the Google Earth images. Materials disposed in the trenches may contain hazardous compounds, including solvents (e.g., trichloroethylene), petroleum hydrocarbons (oils, greases, and fuels, including gasoline and diesel) and other items, including car batteries. A full assessment of the areas of dumping and disturbed soil, to include soil sampling, should be conducted for inclusion in a DEIR. A fair argument can be made that the debris contains compounds that would pose a risk to the health of construction workers through dermal contact and through dust inhalation. Any conditions that are found to be hazardous should be mitigated in a DEIR to be prepared for the Project.

I-A5

Air Quality

I-A6

The Project is just one of many solar and wind projects that are being considered for the area. According to a list prepared by Los Angeles County, over 4,200 acres of projects have been approved

[3] Phase I Environmental Site Assessment Report, Assessor Parcel Numbers 3170-008-907, -908, -909, -910 and -911, Lancaster, California, April 19, 2013, p, 31

[4] http://www.atsdr.cdc.gov/toxprofiles/tp60-c6.pdf, p. 151

[5] http://www.atsdr.cdc.gov/toxfaqs/TF.asp?id=301&tid=54

and project approval is pending for another 13,442 acres of solar and wind projects.[6] Combined, these projects represent nearly 18,000 acres, or almost 28 square miles of development.

I-A6

The development of these projects will require land disturbance for site preparation, including grading and excavation, which will release particulate matter in the form of dust from the construction activities. All projects are located in Antelope Valley and the Mojave Desert Air basin, both of which are designated non-attainment for PM10.[7] Fugitive dust is primarily responsible for particulate matter in both the Antelope Valley and the Mojave Desert Air Basin.[8] The IS does not acknowledge the non-attainment status for the Mojave Desert Air Basin and the Antelope Valley for particulate matter and does not quantify particulate matter (PM10 and PM2.5) emissions from construction of the Projects. The IS states only that a less than significant impact will result from a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (p. 9).

This IS fails to examine those projects that will be constructed simultaneously in the air basins which would have a cumulative impact on air quality, other than to evaluate a church construction project (p. 34). Construction emissions from the Project, in conjunction with construction of the other projects, will contribute to further degradation of regional air quality.

I-A7

A DEIR should be prepared to identify the timing of the construction of all the projects that are approved or pending in the Antelope Valley and quantify the emissions of the projects in a cumulative context. If emissions of particulate matter of the Project, in combination with other projects, exceed Antelope Valley Air Quality Management District (AVAQMD) thresholds[9], mitigation should be identified in the DEIR. In applying these thresholds, the AVAQMD requires project emissions to be estimated through modeling along with documentation to support these estimates including all emission factors, emission factor sources, assumptions, sample calculations and model inputs.[10]

Construction emissions of particulate matter may also impact the health of the children at the adjacent soccer facility, located on the Project's eastern border, and nearby residents. Exposure to particulate matter can lead to respiratory symptoms such as irritation of airways, coughing, and difficulty breathing, an irregular heartbeat, aggravated asthma, and decreased lung function.[11] According to the Environmental Protection Agency, children and older adults are the most likely to be affected by particulate matter exposure.[12]

I-A8

The IS acknowledges the adjacent National Soccer Center as a sensitive receptor (IS, p. 22), but does not analyze air impacts of construction of the Project on children's health and does not offer adequate

[6] http://planning.lacounty.gov/assets/upl/project/energy_list-map.pdf
[7] http://www.mdaqmd. ca.gov/Modules/ShowDocument.aspx?documentid=2910, p. 3
[8] http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=919, p. 2
[9] http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=2911
[10] http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=2911 *See* p. 6 of 8
[11] http://www.epa.gov/pm/health.html
[12] http://www.epa.gov/pm/health.html

I-A8

mitigation. AVAQMD CEQA guidelines state that any industrial project within 1000 feet of a sensitive receptor must be evaluated if it exposes sensitive receptors to substantial pollutant concentrations.[13]

The IS states that a dust control plan will be submitted to the AVAQMD prior to any grading activities (IS, p. 25). Instead, a dust control plan should be submitted along with a DEIR to identify all sensitive receptors (such as children at the National Soccer Center adjacent to the Project site) and include all feasible mitigation measures, pursuant to AVAQMD Rule 403, to reduce impacts to a less than significant level.[14]

The IS also provides for limited mitigation, including watering three or four times per day, posting signs and stabilizing road surfaces (p. 25). Instead, all feasible mitigation should be considered for the Project, because of the poor basin-wide air quality and because of the proximity of the children at the Soccer Center, including:

I-A9

- Curtailing all clearing, grading, earth moving, and excavation activities when winds exceed 15 miles per hour, and identify measures for determining wind speed and for notification of work stoppages;
- Planning to minimize areas disturbed by clearing, earth moving, or excavation activities;
- Covering stockpiles (with tarps) or use water to reduce dust generation;
- Use of seeding or stabilizers on all disturbed soil surfaces;
- Limit construction vehicle speeds to 15 miles per hour, and identify measures to enforce speeds;
- Provide grizzlies or other devices to shake loose soil off of equipment when exiting the Project; and
- Sweep streets of adjacent roadways with a regenerative street sweeper to reduce track-out of dust.

These measures are necessary because exposure to particulate matter can lead to respiratory impairment such as irritation of airways, coughing, and difficulty breathing, an irregular heartbeat, aggravated asthma, and decreased lung function.[15] According to the Environmental Protection Agency, children and older adults are the most likely to be affected by particulate matter exposure.[16]

I-A10

The IS also fails to discuss any toxic air contaminants, particularly diesel particulate matter (DPM), from any activities associated with construction of the Project. Exposure to DPM may cause irritation to the eyes, nose, throat, and lungs, as well as neurological effects. DPM is classified as a "likely carcinogen."[17] According to the California Air Resources Board, children are the most vulnerable to the health effects of

[13] http://www.avaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=2911, p. 6
[14] http://www.arb.ca.gov/DRDB/AV/CURHTML/R403.PDF
[15] http://www.epa.gov/pm/health.html
[16] http://www.epa.gov/pm/health.html
[17] http://www.epa.gov/region1/eco/airtox/diesel.html

DPM.[18] Despite the potential for significant impacts on sensitive receptors, the IS does not address this issue.

A DEIR should be prepared to evaluate DPM emissions, in particular to evaluate DPM impacts to children at the Soccer Center, to include a comprehensive emissions inventory in accordance with AVAQMD's Rule 1402.[19] If emissions are harmful to human health, as determined by a risk assessment, mitigation needs to be provided to reduce diesel exhaust emissions, to include:

I-A10

- Regular preventive maintenance to reduce emissions;
- Strictly limiting vehicle idle times to less than 5 minutes and turn off vehicles when not in use; and
- Full compliance with the latest California emission standards for off-road compression-ignition engines.

Greenhouse Gas Emissions

The IS does not quantify greenhouse gas (GHG) emissions for the Project but simply states that air emissions would be generated during construction, "some of which may be greenhouse gases" (IS, p. 26). It goes on to say that these emissions are "anticipated to be less than the thresholds established by the Antelope Valley Air Quality Management District" (IS, p. 26).

I-A11

Without quantifying GHG emissions from the Project, it is impossible to determine whether emissions would be below the AVAQMD threshold. GHG emissions from the Project need to be quantified and compared to the AVAQMD thresholds and the results of this analysis need to be included in a DEIR.

Sincerely,

M Hagemann

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

[18] http://www.arb.ca.gov/research/diesel/diesel-health.htm
[19] http://www.arb.ca.gov/DRDB/AV/CURHTML/R1402.PDF

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6 July 2013

RE: Comments on the proposed Soccer Center Solar Project

Dear Ms. Swain,

I-81

I would like to comment on the Initial Study prepared for the Soccer Center Solar Project. As I understand it, the Soccer Center Solar Project would consist of13.3 MW of photovoltaic panels on 92.7 acres. The City of Lancaster Planning Department has recommended the approval of a Mitigated Negative Declaration.

My qualifications for preparing expert comments are the following. I earned a Ph.D. degree in Ecology from the University of California at Davis in 1990, where I subsequently worked for four years as a post-graduate researcher in the Department of Agronomy and Range Sciences. My research has been on animal density and distribution, habitat selection, habitat restoration, interactions between wildlife and human infrastructure and activities, conservation of rare and endangered species, and on the ecology of invading species. I have authored numerous papers on special-status species issues, including "Using the best scientific data for endangered species conservation," published in Environmental Management (Smallwood et al. 1999), and "Suggested standards for science applied to conservation issues" published in the Transactions of the Western Section of The Wildlife Society (Smallwood et al. 2001). I served as Chair of the Conservation Affairs Committee for The Wildlife Society – Western Section. I am a member of The Wildlife Society and the Raptor Research Foundation, and I've been a part-time lecturer at California State University, Sacramento. I was also 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 avian surveys in California for twenty-three years (Smallwood et al. 1996, Smallwood and Nakamoto 2009). Over these years, I studied the impacts of human activities and human infrastructure on birds and other animals, including on Swainson's hawks (Smallwood 1995), burrowing owls (Smallwood et al. 2007), and other species (Smallwood and Nakamoto 2009). I studied fossorial animals (i.e., animals that burrow into soil, where they live much of their lives), including pocket gophers (Smallwood and Geng 1997), ground squirrels, kangaroo rats, voles, harvester ants, and many other functionally similar groups. I performed focused studies of how wildlife interact with agricultural fields and associated cultural practices, especially with alfalfa production (Smallwood 1993, Erichsen et al. 1996, Smallwood et al. 1996, 2001). I have also performed wildlife surveys at many proposed project sites, including at a proposed large solar farm in the Mojave Desert.

SUFFICIENCY OF IMPACT REVIEW

Biological Survey

I-B2 A 4-hour walking survey was performed on 4 March 2013. A single visit to the site cannot possibly suffice to characterize the use of the site by wildlife and plants. March 4th also precedes the nesting season of burrowing owls and other birds. The date was too early, and represented one season of the year.

Riparian vegetation

I-B3 According to the Initial Study (page 23), no impacts to riparian vegetation would occur because no construction will occur in the stream channel. However, the Initial Study explained that a stream flows immediately adjacent to the project site. A CEQA review needs to be more completely conducted on the potential for the project to cause adverse effects on riparian vegetation occurring so close by.

Wildlife Movement

I-B4 According to the Initial Study (page 23), "*The project site is not part of an established wildlife movement corridor.*" This conclusion, however, was misleading because no agency or scientific program has been responsible for *establishing* movement corridors, so it was misleading to imply that there is some established list or map of movement corridors, and that the proposed project site is outside the established map. Furthermore, the CEQA issue is not restricted to established wildlife movement corridors. The real issue is whether a proposed project will interfere with the movement of wildlife or fish, thereby disrupting a fundamental ecological requirement of wildlife species. The Initial Study did not address the real question of whether the project will interfere with the movement of any species of wildlife in the area. The Initial Study failed to analyze the project's contribution to habitat fragmentation, which is recognized as the most serious threat to the continued existence of terrestrial wildlife (Wilcox and Murphy 1985).

Special-status Species

I-B5 The likely use of the project site by multiple special-status species warrants the preparation of an Environmental Impact Report. According to Randel (undated) and the Initial Study, Mojave ground squirrel, Swainson's hawk, and burrowing owl likely use the site. I would add multiple additional special-status species (Table 1). This list of potentially occurring special-status species clearly warrants the preparation of an EIR.

Table 1. Special-status species of wildlife that could potentially occur at, or travel through, the proposed Soccer Center Solar Project site.

Common name	Scientific name	Status[1]	Occurrence likelihood	
			Initial Study	Smallwood
Pallid bat	*Antrozous pallidus*	CSC	No mention	Probable
Townsend's western big-eared bat	*Plecotus t. townsendii*	CSC	No mention	Probable
Western mastiff bat	*Eumops perotis*	CSC	No mention	Probable
Long-eared myotis	*Myotis evotis*	WBWG	No mention	Probable
Fringed myotis	*Myotis thysanodes*	WBWG	No mention	Probable
Long-legged myotis	*Myotis volans*	WBWG	No mention	Probable
Yuma myotis	*Myotis yumanensis*	CSC	No mention	Probable
American badger	*Taxidea taxus*	CFP	No mention	Probable
Mojave ground squirrel	*Xenospermophilus mojavensis*	CT	Low	Probable
Mountain plover	*Charadrius montanus*	BCC, BSSC2	None	Probable
Turkey vulture	*Cathartes aura*	CDFG 3503.5	No mention	Probable
Golden eagle	*Aquila chrysaetos*	CFP, BGEPA	No mention	Probable
Northern harrier	*Circus cyaneus*	SSC3	No mention	Probable
White-tailed kite	*Elanus leucurus*	CFP	No mention	Probable
Cooper's hawk	*Accipiter cooperi*	CDFG 3503.5	No mention	Probable
Sharp-shinned hawk	*Accipiter striatus*	CDFG 3503.5	No mention	Probable
Ferruginous hawk	*Buteo regalis*	SSC	No mention	Probable
Red-tailed hawk	*Buteo jamaicensis*	CDFG 3503.5	No mention	Certain
Red-shouldered hawk	*Buteo lineatus*	CDFG 3503.5	No mention	Probable
Swainson's hawk	*Buteo swainsoni*	CT	Moderate	Certain
American kestrel	*Falco sparverius*	CDFG 3503.5	No mention	Probable
Merlin	*Falco columbarius*	CDFG 3503.5	No mention	Possible
Prairie falcon	*Falco mexicanus*	CDFG 3503.5	No mention	Probable
Peregrine falcon	*Falco peregrinus*	CE, CFP	No mention	Possible
Barn owl	*Tyto alba*	CDFG 3503.5	No mention	Probable
Great-horned owl	*Bubo virginianus*	CDFG 3503.5	No mention	Probable
Short-eared owl	*Asio flammeus*	SSC3	No mention	Possible
Western burrowing owl	*Athene cunicularia*	SSC2, FCC	Low	Probable
California horned lark	*Eremophila alpestris actia*	CBRL	No mention	Probable
Loggerhead shrike	*Lanius ludovicianus*	SSC2 (breeding)	No mention	Probable
Silvery legless lizard	*Anniella pulchra pulchra*	SSC	Possible	Possible
Coast horned lizard	*Phrynosoma blainvillii*	SSC	Possible	Possible

[1] *Listed as FE = federal endangered, FT = threatened, FCC = U.S. Fish and Wildlife Service Bird of Conservation Concern, BGEPA = Bald and Golden Eagle Protection Act, CE = California endangered, CT = California threatened, CSC = 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), CFP = California Fully Protected (CDFG Code 4700), CDFG 3503.5 = California Department of Fish and Game Code 3503.5 (Birds of prey), and SSC2 and SSC3 = California Bird Species of*

I-85

Special Concern priorities 2 and 3, respectively (Shuford and Gardali 2008), CBRL = California Bird Responsibility List, WBWG = Western Bat Working Group listing as moderate or high priority.

Collision risk

The Initial Study did not consider that the PV panels will pose some collision risk to birds. The collision risk of PV panels remains unknown in an industrial setting, and it remains unknown to what degree collision rates might differ from those measured at Solar One (McCrary et al. 1986), which was a concentrating thermal power plant. In the face of high uncertainty when assessing impacts to rare environmental resources, the accepted standard is to err on the side of caution (National Research Council 1986, Shrader-Frechette and McCoy 1992, O'Brien 2000). Therefore, it should not be assumed that due to less reflectivity in PV panels, the collision rates will necessarily be different. And all this said, the Initial Study did not even consider the potential for avian collisions with PV panels or support structures.

McCrary et al. (1986) remains the only study of direct impacts to birds caused by a solar power plant (Solar One). McCrary et al. (1986) searched for dead birds amongst the heliostat mirrors and around the power tower, and they estimated a bird fatality rate caused by bird collisions with heliostat mirrors and the power tower, and by heat encountered when birds flew through the concentrated sunlight reflected toward the power tower. However, McCrary et al. (1986) appeared to have under-appreciated the magnitude of the impacts caused by Solar One, likely because McCrary et al. (1986) did not know as much as scientists know today about scavenger removal rates and searcher detection error.

I-B6

McCrary et al. (1986) searched for dead birds during 40 visits to the 10 MW Solar One Project. Their search pattern was not fixed, so it was not as rigorous as modern searches at wind energy projects and other energy generation and transmission facilities. McCrary et al. (1986) placed 19 bird carcasses to estimate the proportion remaining over the average time span between their visits to the project site, though they provided few details about their scavenger removal trial. We know today that the results of removal trials can vary substantially for many reasons, including the species used, time since death, and the number of carcasses placed in one place at one time, and etc. (Smallwood 2007). McCrary et al. (1986) also performed no searcher detection trials, because they concluded that the ground was sufficiently exposed that all available bird carcasses would have been found. This conclusion would not be accepted today, based on modern fatality search protocols.

Because, scientists have performed many more scavenger removal trials and searcher detection trials, as well as many more bird carcass searches since the study of McCrary et al. (1986), I re-calculated the fatality rate estimate from that first study, but this time using national averages to represent scavenger removal rates and searcher detection rates (see Smallwood 2007, 2013). Based on the methods in Smallwood (2007), I have since reviewed more than 400 searcher detection trials and more than 400 scavenger removal trials across North America (Smallwood 2013). From these reviews, I estimated the average proportion of carcasses remaining after 9 days since the last carcass search. I used 9 days for the average search interval, because that was the average search interval in the McCrary et al. (1986) study.

The estimator I used was derived from the Horvitz and Thompson (1952):

$$F_A = \frac{F_U}{R_C \times p},$$

where F_U was the unadjusted number of fatalities/MW/year (the found carcasses), and F_A was the fatality rate adjusted for the proportion of carcasses found amongst those that were available to be found, p, and by the average proportion of carcasses remaining since the last fatality search, R_C. The adjustments for p and R_C were estimated from searcher detection trials and scavenger removal trials. I assumed carcasses were deposited at a steady rate from heliostat mirrors and power towers, so I took the average proportion of carcasses remaining each sequential day between searches:

$$R_C = \frac{\sum_{i=1}^{I} R_i}{I},$$

I-B6

where R_i was proportion of carcasses remaining by the ith day following the initiation of a scavenger removal trial. Thus, the expected proportion of carcasses remaining by the next fatality search should be R_C corresponding with the fatality search interval, I, which was 9 days in the McCrary et al. (1986) study. Note that McCrary et al. (1986) used R_i instead of R_C, which means their fatality rate estimate would have been inflated for this factor alone (their estimate was biased low, however, by assuming they experienced no searcher detection error).

McCrary et al. (1986) reported the mean and standard deviation (SD) of bird carcasses found per visit, but estimating rates for the purpose of extrapolation should include a standard error (SE), which can be approximated as:

$$SE = \frac{SD}{\sqrt{n}},$$

which, in the case of McCrary et al. (1986), with a SD = 1.8 and n = 40 visits, was 0.28 (the calculated mean was 1.75).

Using SE also facilitates carrying of the error terms through the calculation of the fatality rate estimate. For this purpose, I estimated standard error of the adjusted fatality rate, $SE[F_A]$, using the delta method (Goodman 1960):

$$SE[F_A] = \sqrt{\left(\frac{1}{p \times R_C} \times SE[F_U]\right)^2 \times \left(\frac{F_U}{p} \times \frac{-1}{R_C^2} \times SE[R_C]\right)^2 \times \left(\frac{F_U}{R_C} \times \frac{-1}{p^2} \times SE[p]\right)^2}.$$

Using data reported by McCrary et al. (1986), and adopting their assumptions, their estimated fatality rate was 1.75 fatalities/visit divided by 70% to 90% of placed trial carcasses remaining between visits, or 1.75 ÷ 0.90 = 1.94 and 1.75 ÷ 0.70 = 2.5. Assuming a point estimate of 80%

of placed carcasses remaining, then the estimated bird carcasses per visit would be 1.75 ÷ 0.80 = 2.19. Given that there were 40 visits in the year, then 2.19 × 40 = 87.6 bird fatalities per year, or on a per-MW basis, there were 87.6/10 MW = 8.76 bird fatalities per MW per year. Because McCrary et al. (1986) did not report the SE of their proportion of placed trials carcasses remaining, and because they assumed $p = 1$, I could not carry the error terms, so the estimate from their study was 8.76 bird fatalities/MW/year with an 80% confidence interval (CI) of 6.96 to 10.55. The only real challenge remaining is to extrapolate this estimate to the 13.3 MW Soccer Center Solar Project consisting of PV panels instead of power towers and heliostat mirrors.

Assuming PV panels will result in only 10% of the fatalities compared to the rate observed at Solar One, then I would predict that Soccer Center Solar Project will kill 12 birds per year (80% CI: 9 to 14). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 13.3 MW Soccer Center Solar Project, I would predict 58 bird fatalities per year (80% CI: 46 to 70). However, these rates need to be adjusted for the proportion of fatalities not found by searchers.

I-86

The results of my adjustment trials yielded national averages of $R_C = 0.48$ (SE = 0.12) for birds over a mean search interval of 9 days and $p = 0.676$ (SE = 0.029) when ground visibility was characterized as high or very high. Using these values, my estimated fatality rate at McCrary et al.'s project site was 21.57 fatalities/MW/year (80% CI: 7.15 to 36.00). Relying on these adjustments and assuming PV panels will result in only 10% of the fatalities compared to the rate observed at Solar One, then I would predict that Soccer Center Solar Project will kill 29 birds per year (80% CI: 10 to 48). Assuming PV panels will result in half the fatalities per MW as occurred at Solar One, and extrapolating this rate to the 13.3 MW Soccer Center Solar Project, I would predict 143 bird fatalities per year (80% CI: 48 to 239). Clearly, the McCrary et al. (1986) fatality monitoring study resulted in a highly uncertain fatality rate estimate, which was revealed to be even more uncertain when considering national averages of the adjustment factors and when carrying the error terms through the calculations . The direct impact of the Soccer Center Solar Project can be said to be highly uncertain at this point. If this project goes forward, it would be very important to require sound fatality monitoring. It would be helpful to perform avian behavior surveys in advance of construction, in order to characterize avian flight paths and the types of behaviors of endemic species that could contribute to collision risk (Smallwood et al. 2009, 2010).

Cumulative Impacts

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The Initial Study included no cumulative effects analysis. Given the proliferation and expanse of the proposed and permitted solar projects in the Antelope Valley, a cumulative effects analysis is needed.

MITIGATION MEASURES

I-88

Preconstruction surveys for nesting birds, burrowing owls and Mojave ground squirrel will come too late to assess project impacts. Proper surveys are needed prior to project approval, and need to be shared with the public as part of the CEQA review process.

Other than preconstruction surveys, the Initial Study promised no mitigation measures to minimize, reduce, rectify, or offset project impacts. The following measures should be implemented:

1) Preconstruction behavior surveys to identify avian flight paths that could be avoided by construction of the PV arrays;

2) Funds should be provided to local wildlife rehabilitation facilities to rehabilitate birds injured by collision with the PV arrays, utility lines, and autos, as well as electrocutions caused by electric distribution poles;

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3) Funds to offset impacts by conserving suitable wildlife habitat through purchase of conservation easements or fee title (see measure 4, below);

4) Fatality monitoring (see below for more detail) to estimate the impacts cause by collisions and electrocution so that a nexus can be found between project impacts and conservation benefits to be achieved through mitigation. Fatality monitoring can also lead to fatality reduction measures on-site, such as improving visibility of structures associated with disproportionate numbers of injuries or fatalities.

These measures and others should be given more consideration after appropriate biological surveys have been performed on the site, and they should be presented with more detail in an EIR.

Impact Monitoring

Very little is known of the types or magnitudes of impacts on wildlife caused by industrial solar projects. It would be irresponsible of permitting agencies to allow industrial solar projects to go forward without scientific monitoring of project impacts. Qualified biologists should be funded to search the ground between solar panel arrays on a monthly basis for at least one year to determine whether collision fatalities are an issue. Searches should be done on foot. I suggest searching randomly or systematically selected arrays of solar panels to the extent that equals 20

I-89

person-days per month. If collision fatalities are deemed to be an issue, then I suggest extending the fatality monitoring for another two years and adding searcher detection trials to facilitate the accurate estimation of fatality rates. Furthermore, I would suggest performing an analysis of the pattern of fatalities to identify spatial or other trends that can inform mitigation measures to reduce fatality rates. Basic methods for fatality monitoring at a solar energy plant can be found in McCrary et al. (1986), and updated methodology can be found in Smallwood (2007, 2009, 2013), Smallwood and Karas (2009), Smallwood et al. (2013). Finally, it is essential that the results of this fatality monitoring be made available to the public, and that none are hidden from view through nondisclosure agreements or any other method. The results of fatality monitoring would be useless without scientists being able to compare the results.

MITIGATION MONITORING

It has long been known that mitigation pursuant to CEQA has often either failed or has not been implemented, but with no consequences to the take-permit holder (Silva 1990). There should be consequences for not achieving mitigation objectives or performance standards. The project proponents should be required to provide a performance bond in an amount that is sufficient for an independent party to achieve the mitigation objectives originally promised, and in this case, the promises should be much more substantial. A fund is needed to support named individuals or an organization to track the implementation of mitigation measures. Report deadlines should be listed, and who will be the recipients of the reports. In my professional opinion, the MND's lack of specific mitigation monitoring details renders it inadequate and uncertain, and makes it impossible to gauge whether or to what extent any mitigation measures will lessen potentially significant impacts on species. If these measures are not clearly laid out in an EIR, then there will be no basis to determine that impacts will be less than significant once implemented. Furthermore, without adequate funding allocated in advance, there is no certainty that any proposed mitigation monitoring will actually take place.

L-89

Shawn Smallwood, Ph.D.

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