

APNs: 060723119 and 060736406
 Applicant: Joshua Tree Solar Farm, LLC
 Project #: P201400482/CUP
 March 2016

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Via EMAIL and OVERNIGHT MAIL

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Re: Comments on the Initial Study / Mitigated Negative Declaration for the Joshua Tree Solar Farm Project (Project No: P201400482/CUP; SCH No. 2016011021)

Dear Mr. Oquendo:

These comments are submitted on behalf of **Coalition for Responsible Solar** regarding the Initial Study / Mitigated Negative Declaration ("MND") prepared by the County of San Bernardino ("County") for the Joshua Tree Solar Farm Project (Project No: P201400482/CUP; SCH No. 2016011021) ("Project"). The Project, proposed by Joshua Tree Solar Farm, LLC ("Applicant"), is a proposed 20-megawatt ("MW") photovoltaic ("PV") solar energy generating facility to be located on approximately 115 acres of partially disturbed land located 3.5 miles east of the unincorporated community of Joshua Tree and 1.3 miles north of Twentynine Palms Highway (State Route 62) in unincorporated San Bernardino County.

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The Project Site is the location of the former Hi Desert (Roy Williams) Airport ("Airport"). The site was originally developed as an airport in 1952, redeveloped with new airport features and buildings in 1972, and was closed in 2011.¹ The repurposing

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¹ See Phase I Environmental Site Assessment Joshua Tree Solar Farm, Tetra Tech, Inc. (July 3, 2012) ("Phase I ESA"); <http://www.city-data.com/airports/Roy-Williams-Airport-Joshua-Tree-California.html>; <https://www.airnav.com/airport/L80>.

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of the Airport as a solar site is likely to have several potentially significant impacts that the MND failed to adequately analyze and mitigate.

17-2
Cont.

Based on the year of construction of the existing Site buildings (1972), the Phase I Environmental Site Assessment prepared for the Project ("Phase I ESA") concludes that asbestos-containing materials ("ACMs") and lead-containing materials ("LCMs") are likely to be present in the buildings, and Polychlorinated Biphenyls ("PCBs") are likely to be present in aging transformers and light fixtures at the Project site. The MND fails to include a hazardous materials cleanup plan or any mitigation measures to address these hazards. The Airport site has also undergone remediation for multiple underground fuel storage tanks ("USTs") over the years, including a recent 2015 UST removal that is reported in the MND but for which no closure documentation was provided.

The Airport site contains two runways and a few buildings and remaining structures. According to the MND, "the remainder of the Site [is] vacant undeveloped land."² The Project Site is surrounded by residential, recreational, and vacation rental uses. The nearest home is located just 250 feet southeast of the Project Site. There are two vintage trailer hotel rental sites within view of the proposed solar facility. The Project site is located just two miles from the entrance to Joshua Tree National Park.³ Local residents and business owners are concerned that the Project may adversely impact the local economy and the value of their properties.

17-3

Project construction will last approximately six months, and will generate significant amounts of fugitive dust and construction emissions that may adversely impact the health of local residents and visitors if not properly mitigated. The Coalition's air quality experts from Soil, Water, Air Protection Enterprise ("SWAPE") reviewed the Air Quality Report prepared for the Project, and performed an independent analysis of the Project's construction emissions. SWAPE found that the MND drastically underestimated construction emissions of nitrogen oxides ("NOx") and diesel particulate matter ("DPM"), a toxic air contaminant ("TAC"). SWAPE concluded that Project emissions will vastly exceed the applicable significance thresholds set forth in the Mojave Desert Air Quality Management District

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² Phase I ESA, p. 8.

³ MND, p. 20. The project is also 3 miles from the Desert View Conservation Area: <http://www.specialdistricts.org/index.aspx?page=145>.

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("MDAQMD") CEQA Guidelines,⁴ at levels requiring mitigation under CEQA. The MND failed to adequately quantify and mitigate these significant impacts.

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Finally, expert biologist Renee Owens concluded that the County failed to conduct adequate baseline surveys to ascertain the current use of the Project site by numerous federally and state-listed special status species, failed to disclose that the Project site is located in critical recovery habitat for the federally endangered desert tortoise, and failed to address the potentially significant impacts that will be caused by avian collisions with solar panels and other facility equipment during Project operation, among other impacts.

17-5

As discussed herein, there is substantial evidence supporting a fair argument that the Project is likely to have significant impacts from hazardous materials, the environmental consequences of economic and social changes caused by the Project, and on air quality and biological resources. The MND failed to adequately disclose and mitigate these impacts. The County must prepare an environmental impact report ("EIR") for the Project before the County may consider Project approval.

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We prepared these comments with the assistance of hazardous materials expert Matt Hagemann of SWAPE, P.G., C.Hg. former Senior Science Policy Advisor for U.S. EPA Region 9's hazardous materials program; air quality experts Jessie Jaeger and Paul Rosenfeld, PhD. of SWAPE; and expert conservation biologist and wildlife ecologist Renee Owens. SWAPE's technical comments and curriculum vitae are attached hereto as Exhibit A. Ms. Owens' technical comments and curriculum vitae are attached hereto as Exhibit B. Both comment letters and all attachments thereto are incorporated by reference as if fully set forth herein.⁵ The City must address and respond to the comments of these experts separately.⁶

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⁴ See MDAQMD CEQA Guidelines, available at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.

⁵ The Coalition reserves the right to supplement these comments, and to file further comments at any and all future proceedings and hearings related to the Project. See *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1117.

⁶ See 14 Cal. Code Regs. ("CCR") § 15088(a).

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I. STATEMENT OF INTEREST

Coalition for Responsible Solar is a coalition of individuals and labor organizations that may be affected by the potential health and safety hazards and environmental impacts of the Project. The coalition includes Yucca Valley residents John Sutton and Matt Rios, Apple Valley resident Perry Brown, and California Unions for Reliable Energy ("CURE"), its members, and their families (collectively, "Coalition"). The Coalition was formed to advocate for responsible and sustainable solar development in the Joshua Tree area and San Bernardino County in order to protect public health and safety and the environment where the Coalition members and their families live, work and recreate.

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CURE is a coalition of labor organizations that encourages sustainable development of California's energy and natural resources. Environmental degradation destroys cultural and wildlife areas, consumes limited fresh water resources, causes air and water pollution, and imposes other stresses on the environmental carrying capacity of the State. This in turn jeopardizes future development by causing construction moratoriums and otherwise reducing future employment opportunities for CURE's members. Additionally, union members live, recreate and work in the communities and regions that suffer the impacts of projects that are detrimental to human health and the environment. CURE therefore has a direct interest in enforcing environmental laws to minimize the adverse impacts of projects that would otherwise degrade the environment. Finally, CURE members are concerned about projects that risk serious environmental harm without providing countervailing economic benefits.

II. LEGAL STANDARD

CEQA is intended to provide the fullest possible protection to the environment. CEQA requires that a lead agency prepare and certify an EIR for any discretionary project that may have a significant adverse effect on the environment.⁷ CEQA requires analysis of the "whole of an action," including the "direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment."⁸

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⁷ PRC §§ 21002.1(a), 21100(a), 21151(a); 14 CCR §§ 15064(a)(1), (f)(1), 15367.

⁸ PRC § 21065; CEQA Guidelines § 15378(A).

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The EIR is the very heart of CEQA.⁹ A negative declaration is improper, and an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.¹⁰ “[S]ignificant effect on the environment” is defined as “a substantial, or potentially substantial, adverse change in the environment.”¹¹ 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.”¹² Substantial evidence, for purposes of the fair argument standard, includes “fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact.”¹³

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Whether a fair argument exists is a question of law that the court reviews de novo, with a preference for resolving doubts in favor of environmental review.¹⁴ In reviewing a decision to prepare a negative declaration rather than an EIR, courts “do not defer to the agency’s determination.”¹⁵

The standard creates a “low threshold” for requiring preparation of an EIR, and affords no deference to the agency’s determination. Where substantial evidence supporting a fair argument of significant impacts is presented, the lead agency must prepare an EIR “even though it may also be presented with other substantial evidence that the project will not have a significant effect.”¹⁶ A reviewing court must require an EIR if the record contains any “substantial evidence” suggesting that a project “may have an adverse environmental effect” -- even if contrary evidence exists to support the agency’s decision.¹⁷

⁹ *Pocket Protectors v. City of Sacramento* (2004) 124 Cal. App.4th 903, 926-27; *Sundstrom v. County of Mendocino* (1974) 202 Cal.App.3d 296, 304.

¹⁰ PRC § 21151; 14 CCR § 15064(f); *Citizens for Responsible Equitable Env’tl Dev. v. City of Chula Vista* (“*CREED*”) (2011) 197 Cal.App.4th 327, 330-31; *Communities for a Better Env’t v. South Coast Air Quality Mgmt. Dist.* (2010) 48 Cal.4th 310, 319 (“*CBE v. SCAQMD*”).

¹¹ PRC § 21068; 14 CCR § 15382; *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1581.

¹² *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83.

¹³ PRC § 21080(e)(1) (emphasis added); *CREED*, 197 Cal.App.4th at 331.

¹⁴ *Id.*; *Pocket Protectors*, 124 Cal.App. 4th at 927.

¹⁵ *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 332; *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1318.

¹⁶ PRC § 21151(a); 14 CCR § 15064(f)(1); *Pocket Protectors*, 124 Cal.App.4th at 927; *County Sanitation Dist. No. 2*, 127 Cal.App.4th at 1579 (“where the question is the sufficiency of the evidence to support a fair argument, deference to the agency’s determination is not appropriate.”) (quoting *Sierra Club*).

¹⁷ *Mejia*, 130 Cal.App.4th at 332-33.

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Where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the effects to be significant and prepare an EIR.¹⁸ In short, when “expert opinions clash, an EIR should be done.”¹⁹ “It 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.”²⁰ In the context of reviewing a mitigated 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.”²¹ Where such substantial evidence is presented, “evidence to the contrary is not sufficient to support a decision to dispense with preparation of an EIR and adopt a negative declaration, because it could be ‘fairly argued’ that the project might have a significant environmental impact.”²²

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The fair argument test requires the preparation of an EIR where “there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial ... ”²³

III. THE MND FAILS TO ADEQUATELY DESCRIBE THE PROJECT

The MND does not meet CEQA’s requirements because it fails to include a complete and accurate project description, rendering the entire impact analysis inherently unreliable. An accurate and complete project description is necessary to perform an evaluation of the potential environmental effects of a proposed project.²⁴ Without a complete project description, the environmental analysis will be impermissibly narrow, thus minimizing the project’s impacts and undercutting public review.²⁵ The courts have repeatedly held that “an accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient [CEQA

17-10

¹⁸ *Pocket Protectors*, 124 Cal.App.4th at 935; *Sierra Club*, supra, 6 Cal.App.4th at 1317-18; CEQA Guidelines § 15064(f)(5).

¹⁹ *Id.*, 124 Cal.App.4th at 928; *Sierra Club*, 6 Cal.App.4th at 1317-18.

²⁰ *Id.*, 124 Cal.App.4th at 935.

²¹ *Id.* at 935.

²² *Sundstrom*, 202 Cal.App.3d at 310 (citation omitted).

²³ 14 CCR § 15063(b)(1) (emphasis added).

²⁴ See, e.g., *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376.

²⁵ See *id.*

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document].”²⁶ Only through an accurate view of the project may affected outsiders and public decision makers balance the proposal’s benefit against its environmental costs.²⁷

A. The MND’s Project Description is Admittedly Incomplete

CEQA requires four components, at a minimum, to be included the description of a proposed project: (1) a detailed map with the precise location and boundaries of the proposed project, (2) a statement of project objectives, (3) a general description of the project’s technical, economic, and environmental characteristics, and (4) a statement briefly describing the intended uses of the CEQA document and listing the agencies involved with, and the approvals required for, implementation.²⁸ The MND’s project description fails to satisfy the third and fourth requirement because the MND admits that the Project design is incomplete, and fails to describe the agencies and permits required for the Project with any certainty.

The MND states that, while it provides a general “project overview,” the “preliminary design” of the Project is still “underway.”²⁹ The MND explains that “[a] final selection of solar modules, inverters, mounting system, and precise dimensions will be decided during detailed design and equipment procurement.”³⁰ Thus, basic facts, such as the size and number of solar PV modules to be installed at the Project site – arguably the most basic feature of the Project – are omitted from the MND’s project description. The dimensions, location, and positioning of the solar PV modules are key factors in evaluating Project impacts to air quality and biological resources, in particular to birds. As discussed below and in the comments of Ms. Owens, avian collision with solar panels is an increasingly significant impact at solar PV project sites. The size and positioning of solar panels may impact the degree to which birds are attracted to, and collide with, the panels. The MND’s failure to include this basic information in the Project description leaves the public guessing about the extent of this impact on sensitive bird species.

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²⁶ *County of Inyo v. County of Los Angeles* (1977) 71 Cal.App.3d 185, 193.

²⁷ *Id.* at 192-193.

²⁸ 14 CCR § 15124; *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 270, as modified (Oct. 1, 2010).

²⁹ MND, p. 16.

³⁰ *Id.*

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While CEQA does not require a project description to include “extensive detail” about every minor component of a project, it does require the agency to include the level of “detail needed for evaluation and review of the [project's] environmental impact.”³¹ A project description that omits integral components of a project is likely to result in a CEQA document that fails to disclose all of the impacts of the project.³² That is precisely what occurred here. Since the MND fails to describe the solar PV panels with any specificity, it is impossible for the County to accurately assess the extent of impacts the panels will have on bird species.

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The MND also fails to clearly list the permits required for the Project and to identify all permitting agencies. The MND identifies the County Conditional Use Permit (“CUP”) as the only permit required for the Project,³³ and fails to identify the other permits required for the Project in one location. This forces the public to dig through the Initial Study and numerous supporting technical appendices to ascertain the scope of permits required, and from which agencies.

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For example, the MND generally states that the Project would be required to comply with “applicable Mojave Desert Air Quality Management District rules and policies” but does not describe which rules apply and what permits are required from the Air District.³⁴ The reader must instead look to the middle of the Air Quality Report to find a description of the applicable rules and air permits that are required.³⁵ Similarly, the MND fails to discuss whether any incidental take permits would be required for take of any federally endangered or state-listed special status species, such as desert tortoise, kit fox, or Mojave fringe toed lizard. Instead, the reader must review the three biological resource appendices to determine whether, and to what extent, the Applicant and the County may be required to consult with U.S. Fish and Wildlife Service (“USFWS”) following Section 10 of the ESA to obtain federal incidental take permits, and the California Department of Fish and Wildlife (“CDFW”)

³¹ 14 CCR § 15124.

³² *Santiago County Water Dist v. County of Orange* (1981) 118 Cal. App. 3d 818, 829 (project description for sand and gravel mine omitted water pipelines serving project).

³³ MND, p. 1.

³⁴ MND, pp. 12-13.

³⁵ See e.g., Air Quality Report, p. 16 (compliance with Rule 403, Fugitive Dust), pp. 16-17 (“The proposed Project will be subject to MDAQMD’s Regulation II (Permits) and Regulation XIII (New Source Review).”).

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to obtain take permits pursuant to the California Fish and Game Code ("F&G Code").³⁶

The MND's failure to include these permits in the Project description is a violation of CEQA's informational requirements. The courts have held that an agency's analysis of impacts and permitting requirements must be discussed in the CEQA document in sufficient detail to enable meaningful participation and criticism by the public.³⁷ "Information scattered here and there in EIR appendices, or a report buried in an appendix, is not a substitute for a good faith reasoned analysis."³⁸ That is precisely what occurred with the MND's discussion of Project permits.

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Additionally, several Project components remain undefined, such as the Project water supply, which further complicates the MND's discussion of Project permits. The MND explains that the Applicant hopes to obtain water from the Joshua Basin Water District ("JBWD").³⁹ However, the MND explains that the Applicant is still in "ongoing discussions" with JBWD, and there is no guarantee that JBWD will issue a "will serve" letter or execute a water supply agreement for the Project.⁴⁰ In the event JBWD does not supply water, the MND states that the Applicant would have to seek a well permit from the County to establish a new groundwater well on the Project site. No detail is provided regarding that permitting process, or whether other permits would be required for the use and disposal of water at the Project site. The lack of specificity regarding these and other Project components results in a similar lack of specificity regarding the permits required for the Project. As the court stated in *San Joaquin Raptor / Wildlife Rescue Ctr. V. County of Stanislaus*,⁴¹ "an accurate project description is necessary for an intelligent evaluation of the potential environmental

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³⁶ See e.g., Spring 2015 General Biological Resources Assessment, pp. 5-7; Spring 2012 General Biological Resources Assessment, p.] 7 ("If a permit on private lands is required under the ESA, it would be conducted following Section 10 of the ESA to obtain an incidental take permit."), p. 8 (California incidental take permit), p. 28 (desert tortoise permits).

³⁷ *Laurel Heights*, 47 Cal. 3d at 405; see *EPIC v. CDF* (2008) 44 Cal. 4th 459, 494 ("The data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project.")

³⁸ *EPIC*, 44 Cal. 4th at 494, quoting *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 442.

³⁹ MND, p. 59.

⁴⁰ *Id.*

⁴¹ (1994) 27 Cal. App. 4th 713, 730.

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effects of a proposed activity.” An EIR must be prepared to remedy these defects in the MND’s project description.

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B. The MND Fails to Adequately Describe Project Decommissioning

CEQA mandates that lead agencies must include in a project description the “whole of an action” which is being approved, including *all* components and future activities that are reasonably anticipated to become part of the project.⁴² This includes, but is not limited to, “later phases of the project, and any secondary, support, or off-site features necessary for its implementation.”⁴³ The requirements of CEQA cannot be avoided by chopping a large project into many little ones or by excluding reasonably foreseeable future activities that may become part of the project.⁴⁴

17-13

The Project would be operational for 30-40 years and has three distinct phases: construction, operation, and decommissioning.⁴⁵ However, the MND fails to make even a reasonable attempt to describe Project decommissioning activities in any detail. The MND contains a single paragraph discussing the decommissioning phase.⁴⁶ It is unclear from that discussion whether the Project will be refurbished or removed at the end of its useful life.⁴⁷ The MND describes the basic concept to be followed in decommissioning the Project “if the system is to be removed,”⁴⁸ but does not describe the length of time involved in decommissioning, nor does it include any analysis of air quality or biological impacts of this phase of the Project.

Evidence in the MND suggests that decommissioning will have impacts similar to the construction phase of the Project, and will entail removal and disposal of both ground-level and underground components, thus involving soil disturbing activities.⁴⁹ Since Project construction will entail the use of diesel-emitting construction equipment and numerous haul truck trips to transport equipment and facility components to the Project site, clearly decommissioning (or deconstruction) of the

⁴² 14 CCR §15378 (emphasis added).

⁴³ *Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 283-84.

⁴⁴ Pub. Resources Code § 21159.27 (prohibiting piecemealing); *see also*, *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 370.

⁴⁵ MND, pp. 10-16.

⁴⁶ MND, p. 16, Section 4.3, Project Decommissioning.

⁴⁷ *Id.*

⁴⁸ *Id.* (“If the system is to be removed, most of the materials (steel, aluminum, copper, and glass) would be recycled at nearby facilities.”).

⁴⁹ MND, p. 16.

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Project will require similar equipment to remove those items from the Project site. There can be no reasonable question that, if construction activities will result in significant impacts to air quality and biological resources, then surely decommissioning activities will as well.⁵⁰ Nevertheless, the MND makes no attempt to quantify the number or types of construction equipment and haul trucks that will be required to remove the solar equipment from the Project site. Nor does the MND contain any mitigation measures or pre-construction survey requirements to address biological impacts that will occur during the decommissioning phase. Finally, the MND contains no discussion regarding the steps required to “refurbish” the Project, and fails to commit to any additional CEQA review at a later date to rectify the inadequate detail included in the decommissioning section.⁵¹

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As a result, the MND fails to describe the full scope of the Project being approved, and fails to disclose the full range and severity of the Project’s significant environmental impacts. This is a project-level CEQA document, not a program-level EIR. The County, as the lead agency, must analyze the whole of the Project in a single environmental review document and may not piecemeal or split the project into pieces for purposes of analysis. The steps and environmental impacts of the refurbishing and ultimate decommissioning phases of the Project must be described and analyzed in an EIR with the fullest degree of detail available in order to provide the public with sufficient information to permit “an intelligent evaluation of the potential environmental effects of [the] proposed activity.”⁵²

IV. THE MND FAILS TO ACCURATELY ESTABLISH THE EXISTING ENVIRONMENTAL SETTING

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CEQA requires that an Initial Study include a description of the project’s environmental setting or “baseline.”⁵³ The CEQA “baseline” is the set of environmental conditions against which to compare a project’s anticipated impacts.⁵⁴

⁵⁰ Recognizing the magnitude of potentially significant impacts from decommissioning a renewable energy project, other lead agencies, such as the California Energy Commission (“CEC”), regularly require extensive analyses of decommissioning in their EIRs for renewable energy projects. See Exhibit D.

⁵¹ See PRC § 21166; Guidelines, § 15385; *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 270 [115 Cal.Rptr.3d 631, 663], as modified (Oct. 1, 2010)

⁵² *San Joaquin Raptor*, 27 Cal. App. 4th at 730.

⁵³ 14 CCR § 15063(d)(2).

⁵⁴ *CBE v. SCAQMD* (2010) 48 Cal. 4th 310, 321.

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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.⁵⁵

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The MND is inadequate because it fails to establish an accurate environmental setting surrounding the Project.

A. The MND Relies on Inadequate and Incomplete Surveys to Establish the Environmental Setting for Biological Resources

1. The MND Fails to Accurately Describe the Environmental Setting Related to Desert Tortoise

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The 2015 Desert Tortoise Survey and Biological Resources Assessment ("2015 BRA") erroneously characterizes the majority of the site as "highly disturbed...poor or non-desert tortoise habitat."⁵⁶ This statement is inconsistent with readily available public information from relevant regulatory agencies which identify the Project site as "high value" tortoise habitat.

As explained by Ms. Owens, her review of relevant biological databases discloses that the Project site is located within a USFWS designated Recovery Unit for desert tortoise.⁵⁷ Additionally, the United States Geological Survey ("USGS") designates the entire Project site and immediate surrounding area as having "high value habitat potential," and the area within a half a mile of the Project site as having

⁵⁵ See *Save Our Peninsula Committee v. County of Monterey* (2001) 87 Cal.App.4th 99, 124-125.

⁵⁶ Teta Tech, Inc. and A. Karl. June 2015. 2015 Desert tortoise survey and general biological resources assessment for the Joshua Tree Solar Farm. Retrieved from: <http://www.sbcounty.gov/Uploads/LUS/Environmental/JoshuaTreeSolarFarm/2015%20Joshua%20Tree%20Solar%20Farm%20Bio%20Report%20061215.pdf>.

⁵⁷ Murphy, P., Strout, N. and Darst, C. March 2013. Solar Energy and the Mojave Desert Tortoise: Modeling Impacts and Mitigation. USFWS and University of Redlands Report to the CEC.

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“high value contiguous habitat.”⁵⁸ The California Natural Diversity Database (“CNDDB”) designates the Project site, and the area surrounding it in all directions for a minimum of 1.5 miles, as “positive” for desert tortoise.⁵⁹ Finally, USFWS-approved desert tortoise biologist Ed LaRue submitted a comment letter to the County regarding the Project on February 8, 2014.⁶⁰ Mr. LaRue explained that he has conducted over 270 desert tortoise surveys in the vicinity of the Project site since 1989, and found desert tortoise present at every site he surveyed.⁶¹ Ms. Owens concludes that “given the available data regarding the region’s use by desert tortoises and the high likelihood this site could be used as a migration corridor for federally protected tortoises, to characterize it as ‘poor or non-desert tortoise habitat’ as the BRA summary does is misleading at best.”⁶²

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Ms. Owens’ expert opinion and the evidence obtained from USFWS, USGS, the CNDDB, and Mr. LaRue constitute substantial evidence that the Project site, and the areas immediately surrounding it, are active desert tortoise habitat. The County must revise its baseline discussion regarding the presence and use of the Project site by desert tortoise to reflect current documented conditions.

2. *The MND Fails to Accurately Describe the Environmental Setting Related to Burrowing Owl*

The baseline data provided in the BRA for burrowing owl may not accurately reflect the current environmental setting for burrowing owl at the Project site, because the County biologists failed to follow the required protocols for conducting burrowing owl surveys. Two sets of burrowing owl surveys were conducted for the Project – Spring 2012 and Spring / Summer 2015.⁶³ The BRA states that the County biologists followed the 1993 *California Burrowing Owl Consortium Guidelines* (“CBOC Guidelines”) for the Spring 2012 surveys, and the CDFW 2012 *Staff Report on Burrowing Owl Mitigation* for the Spring/Summer 2015 surveys (“CDFW 2012

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⁵⁸ See Exhibit B, Owens Comments, p. 8, Attachment C and D; Desert Tortoise Data Explorer <http://www.spatial.redlands.edu/dtro/dataexplorer/>.

⁵⁹ See Exhibit B, Owens Comments, p. 8, Attachment C.

⁶⁰ *Id.* at p. 8, Attachment A; see also Exhibit E..

⁶¹ *Id.*

⁶² *Id.* at p. 3.

⁶³ See Burrowing Owl Survey Report for the Joshua Tree Solar Farm, Tetra Tech, Inc. (July 2015) (“Burrowing Owl Report”), p. ES-1.

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Guidelines”).⁶⁴ The Burrowing Owl Report goes on to explain that the 2012 and 2015 surveys did not detect any owls or signs of owls, and that these results were used “to determine whether and to what extent this species would be affected by Project development.”⁶⁵ The MND concluded that the Project will have a less than significant impact on burrowing owls with minimal mitigation.⁶⁶

17-16
Cont.

Ms. Owens reviewed the Burrowing Owl Report. Based on the description of protocols followed by the County biologists in conducting the surveys provided in the Report, Ms. Owens concludes that the County biologists failed to follow the survey protocol required by either the CBOC Guidelines or the CDFW 2012 Guidelines. As a result, the County’s burrowing owl surveys are flawed and unreliable. In particular, the County surveys failed to include a 150 meter buffer zone; failed to conduct surveys at the times required by the CBOC Guidelines and CDFW 2012 Guidelines (namely two hours before sunset and one after, or one hour before sunrise to two hours after); failed to conduct a Phase II survey following the detection of potential owl burrows; and conducted the surveys using a single biologist, rather than two biologists, as required by the Guidelines.⁶⁷ These errors in the County’s survey methods render the MND’s burrowing owl surveys unreliable. In order to accurately describe the environmental setting for burrowing owls, new surveys must be conducted at the Project site following the protocol required under the CDFW 2012 Guidelines.

3. *The MND Fails to Accurately Describe the Environmental Setting Related to Non-Native Plant Species*

17-17

The MND explains that non-native weedy species introduced and spread by Project activities would have the potential to “pose a major threat to biological resources.”⁶⁸ However, the MND fails to quantify the extent of non-native weeds already present at the Project site. As a result, the MND’s subsequent discussion of weed abatement fails to estimate the extent to which the Project will exacerbate weed proliferation, and is unable to define any clear criteria for weed abatement success throughout the life of the Project based on the extent of existing weed issues.⁶⁹ A threshold analysis of non-native plant species at the Project site must be performed in

⁶⁴ *Id.*

⁶⁵ *Id.*

⁶⁶ MND, pp. 33, 89.

⁶⁷ See Exhibit B, Owens Comments, pp. 9-10.

⁶⁸ MND, p. 56.

⁶⁹ See Exhibit B, Owens Comments, p. 23.

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order to allow the County, and the public, to determine what mitigation measures are necessary to reduce Project weed impacts to less than significant levels.

17-17
 Cont.

B. The MND Fails to Disclose that Project Site Soils May Contain *Coccidioides immitis* (Valley Fever) Spores

The MND does not even mention Valley Fever, which has become endemic in California, and reported in San Bernardino County in recent years.⁷⁰ It is well established that Valley Fever spores are stirred up during earthmoving and other construction activities like the Project, and may cause incidents of Valley Fever in construction workers, local residents, and other persons who come into contact with the airborne spores.⁷¹ The MND's omission of any discussion of this significant air quality and health impact is inexcusable.⁷²

17-18

In 2013, the California Department of Public Health recognized Valley Fever as a "serious concern in California" and recommended that specific on-site mitigation measures be adopted at construction sites to reduce the likelihood of exposure to Valley Fever.⁷³ SWAPE similarly concludes that, without adequate mitigation, Valley Fever is likely to be a significant impact of Project construction.⁷⁴ SWAPE explains that standard dust control measures designed to reduce particulate matter ("PM") pollution are insufficient to protect against Valley Fever.⁷⁵ Rather, specific mitigations focused on preventing exposure to Valley Fever spores, as recommended by the Department of Public Health, must be adopted in order to reduce impacts to less than significant. These mitigation measures include, at a minimum:

1. Determine if the worksite is in an area where Valley Fever is consistently present. Check with your local health department to determine whether cases have been known to occur in the proximity of your work area.
2. Encourage workers to report respiratory symptoms that last more than a week to a crew leader, foreman, or supervisor.

⁷⁰ See Exhibit J, https://www.vfce.arizona.edu/resources/pdf/The_Epidemiology_of_Coccidioidomycosis_%20Collaborative_County_Report.pdf, p. 46.

⁷¹ See Exhibit A, pp. 14-16.

⁷² *Berkeley Jets*, 91 Cal.App.4th at 1355.

⁷³ See Exhibit D (June 2013 CDH report).

⁷⁴ Exhibit A, SWAPE Comments, pp. 6-10.

⁷⁵ *Id.* at p. 8.

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3. Suspend work during heavy wind or dust storms and minimize amount of soil disturbed.
4. Make sure workers keep the windows closed in heavy construction equipment and equip with high efficiency particulate air (HEPA) filters. Two-way radios can be used for communication so that the windows can remain closed but allow communication with other workers.
5. When digging a trench or fire line or performing other soil-disturbing tasks, position workers upwind when possible.
6. Place sleeping quarters and dining halls, away from sources of dust such as roadways.
7. Provide NIOSH-approved respiratory protection with particulate filters rated as N95, N99, N100, P100, or HEPA. Household materials such as washcloths, bandanas, and handkerchiefs do not protect workers from breathing in dust and spores. Respirators for employees must be used within a Cal/OSHA compliant respiratory protection program that covers all respirator wearers and includes medical clearance to wear a respirator, fit testing, training, and procedures for cleaning and maintaining respirators. Different classes of respirators provide different levels of protection according to their Assigned Protection Factor (see table below). Powered air-purifying respirators have a battery-powered blower that pulls air in through filters to clean it before delivering it to the wearer's breathing zone. PAPRs will provide a high level of worker protection, with an APF of 25 or 1000 depending on the model. When PAPRs are not available, provide a well-fitted NIOSH-approved full-face or half-mask respirator with particulate filters.
8. Fit-tested half-mask or filtering face-piece respirators are expected to reduce exposure by 90% while still allowing about 10% face-seal leakage which can result in an unacceptable risk of infection when digging where Valley Fever spores are present.⁷⁶

17-18
Cont.

SWAPE concludes that these Valley Fever mitigation measures would be both feasible and effective to reduce human exposure and the likelihood of individuals

⁷⁶ Exhibit A, SWAPE Comments, pp. 8-9.

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contracting Valley Fever on or off the Project site during construction.⁷⁷ An EIR must be prepared to analyze Valley Fever and incorporate these, or other equally effective, mitigation measures.

17-18
 Cont.

C. The MND Fails to Accurately Describe the Environmental Setting for Hazardous Materials at the Project Site

The MND fails to adequately describe and document the reported 2015 closure of a UST at the Project site. The MND states that “[a]n empty 10,000-gallon underground storage tank previously used for airport fueling was removed from the project site in October 2015.”⁷⁸ The MND goes on to state that the tank removal and closure was overseen by the San Bernardino County Fire Department, and concludes that no hydrocarbon contamination exists at the project site.⁷⁹ The results of an October 22, 2015 San Bernardino County inspection report provided by the County explain that the tank had been removed, but no closure documentation has been provided. The County therefore lacks substantial evidence to support the MND’s conclusion that there is no existing hydrocarbon contamination at the Project site.

17-19

The reported UST closure occurred long after the Phase I ESA was prepared in 2012. The accuracy of the MND’s statements and conclusions regarding the UST removal are therefore not supported by any evidence in the MND. An EIR should be prepared to include documentation that the UST was removed, that no contamination was detected, and that the San Bernardino County Fire Department granted closure.⁸⁰

⁷⁷ Exhibit A, SWAPE Comments, p. 10.

⁷⁸ MND, p. 55.

⁷⁹ *Id.*; See Exhibit A, SWAPE Comments, p. 2.

⁸⁰ See Exhibit A, SWAPE Comments, p. 2.

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V. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT IMPACTS THAT REQUIRE THE COUNTY TO PREPARE AN ENVIRONMENTAL IMPACT REPORT

17-20

Under CEQA, a lead agency must prepare an EIR 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.⁸¹ The fair argument standard creates a “low threshold” favoring environmental review through an EIR, rather than through issuance of a negative declaration or notices of exemption from CEQA.⁸² An agency’s decision not to require an EIR can be upheld only when there is no credible evidence to the contrary.⁸³ Substantial evidence can be provided by technical experts or members of the public.⁸⁴ “If a lead agency is presented with a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR even though it may also be presented with other substantial evidence that the project will not have a significant effect.”⁸⁵

As discussed below, there is a fair argument, supported by substantial evidence, that the Project may result in significant impacts from hazardous materials, on air quality and public health, on biological resources, and from urban decay. The County is required to prepare an EIR to evaluate the Project’s impacts and propose all

⁸¹ Pub. Resources Code § 21082.2; CEQA Guidelines § 15064(f), (h); *Laurel Heights Improvement Ass’n v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1123; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal. 3d 68, 75, 82; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-1602.

⁸² *Citizens Action to Serve All Students v. Thornley* (1990) 222 Cal.App.3d 748, 754.

⁸³ *Sierra Club v. County of Sonoma*, (1992) 6 Cal.App.4th, 1307, 1318; *see also Friends of “B” Street v. City of Hayward* (1980) 106 Cal.App.3d 988, 1002 [“If there was substantial evidence that the proposed project might have a significant environmental impact, evidence to the contrary is not sufficient to support a decision to dispense with preparation of an [environmental impact report] and adopt a negative declaration, because it could be ‘fairly argued’ that the project might have a significant environmental impact”].

⁸⁴ *See, e.g., Citizens for Responsible and Open Government v. City of Grand Terrace* (2008) 160 Cal.App.4th 1323, 1340 [substantial evidence regarding noise impacts included public comments at hearings that selected air conditioners are very noisy]; *see also Architectural Heritage Ass’n v. County of Monterey*, 122 Cal.App.4th 1095, 1117-1118 [substantial evidence regarding impacts to historic resource included fact-based testimony of qualified speakers at the public hearing]; *Gabric v. City of Rancho Palos Verdes* (1977) 73 Cal.App.3d 183, 199.

⁸⁵ CEQA Guidelines § 15062(f).

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mitigation measures that are necessary to reduce those impacts to a less-than-significant level.

17-20
Cont.

A. Substantial Evidence Supports a Fair Argument that the Project May Result in Potentially Significant, Unmitigated Impacts from Project Disturbance of Hazardous Materials

The MND states that the Project will not result in significant impacts from hazards or hazardous materials, and fails to include any hazardous materials mitigation measures.⁸⁶ This conclusion is unsupported, and is contradicted by evidence contained in both the Phase I ESA and Mr. Hagemann's comments.

17-21

1. Asbestos and Lead Containing Materials

The Phase I ESA identified potential hazards associated with building materials in the existing structures at the Project site based on the date of construction (1972), including asbestos and lead. Since these structures will be demolished as part of the Project, the Phase I ESA recommended further inspections and removal of asbestos- and lead-containing materials "prior to demolition, remodeling, and/or renovation activities."⁸⁷ The Initial Study fails to mention this potential asbestos or lead contamination, and fails to propose any mitigation measures to incorporate the Phase I ESA's recommendations.

Mr. Hagemann concludes that the disturbance of asbestos and lead containing materials during Project construction would pose potentially significant public health and safety risks if not properly mitigated. He explains:

Asbestos

The IS is mute on any plans to sample for ACMs. Because of the failure to provide for sampling, construction workers and nearby residents may be exposed during demolition of the existing Project buildings. Asbestos is made up of microscopic fibers that may become airborne when ACMs are disturbed if present in these buildings. When these fibers get into the air they may be inhaled into the lungs, where they can cause significant health problems, including:

⁸⁶ MND, pp. 53-56.

⁸⁷ Phase I ESA, pp. 4-5.

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- Asbestosis
- Mesothelioma
- Pleural plaques
- Lung cancer
- Other cancers such as esophageal, stomach, colorectal, kidney, nose, throat.

If found to be present in the buildings to be demolished for the Project, ACMs would require abatement prior to demolition or renovation. If not properly abated in advance of demolition or renovation, workers, nearby off-site residents and local visitors may be exposed to friable (easily crumbled) asbestos.⁸⁸

Lead

According to the US EPA, lead can affect almost every organ and system in the human body. Adults exposed to lead can suffer from:

- Cardiovascular effects, increased blood pressure and incidence of hypertension
- Decreased kidney function
- Reproductive problems (in both men and women).

The IS does not recognize potential lead hazards associated with the Project and no mitigation that would require a lead survey or a removal of lead materials is included as mitigation. If not properly surveyed in advance of demolition or renovation, workers and residents may be exposed to lead. If found to be present in the buildings to be demolished for the Project, ACMs would require abatement and proper disposal by a licensed contractor prior to demolition or renovation.⁸⁹

An EIR must be prepared to include effective mitigation to reduce the potentially significant hazards to construction workers and nearby residents, some as close as 250 feet, who may come into contact with these materials during the demolition phase of Project construction.

17-21
Cont.

⁸⁸ Exhibit A, SWAPE Comments, pp. 2-3.

⁸⁹ *Id.* at pp. 3-4.

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2. Polychlorinated biphenyls (PCBs)

The Phase I ESA identified the presence of a pad-mounted electrical transformer on the Project site and concluded it could contain “small quantities of PCBs.”⁹⁰ The Phase I ESA also identified the potential for PCBs to be present in florescent light ballasts at the site.⁹¹ However, the Initial Study fails to mention these findings and fails to include any proposed mitigation measures to ensure that potential PCB-containing materials, including the transformer and light ballasts, are properly removed and disposed in a way that protects the health of construction workers and others who may be exposed to the contaminants during Project construction. Instead, the MND mistakenly concludes that “the project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act.”⁹² To the contrary, given the presence of PCB-contaminated components at the Project site, the Project is certain to involve the transport of PCB-containing materials in order to facilitate their removal.

17-22

PCBs are highly toxic manufactured organic chemicals that are listed as a hazardous substance under the Hazardous Materials Transportation Uniform Safety Act.⁹³ PCBs are also considered a “restricted hazardous waste” under California law, and have been classified as carcinogenic to humans by the Environmental Protection Agency (“EPA”) and International Agency for Research on Cancer (“IARC”), respectively.⁹⁴ Mr. Hagemann concludes that, absent proper mitigation, the handling and disposal of PCBs removed from the Project site could pose significant health and safety risks to people and the environment.⁹⁵ He recommends that an EIR be prepared to provide for mitigation that would require testing of the transformer and light ballasts prior to demolition of the buildings, and mitigation that would require any PCB-containing materials that are detected through testing to be transported and disposed in accordance with state and federal regulations.⁹⁶

⁹⁰ See Phase I ESA, p. 12.

⁹¹ *Id.*

⁹² *Id.* at p. 53.

⁹³ See

http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/Hazmat/Alpha_Hazmat_Table.xls.

⁹⁴ See H&S Code section 25122.7(b)(4); <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=140&tid=26>.

⁹⁵ See Exhibit A, SWAPE Comments, p. 4.

⁹⁶ See Exhibit A, p. 4.

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The MND's failure to discuss the removal of PCB-containing materials from the Project site, and failure to incorporate appropriate hazardous materials mitigation measures to ensure that the Applicant will comply with proper handling and disposal of PCBs, is a violation of CEQA.

In *McQueen v. Bd. Of Directors*,⁹⁷ the court emphasized the need for timely CEQA review and remediation not only of soil contamination in general, but specifically for PCBs, a hazardous contaminant identified at this Project site. Recognizing that PCB is a "known carcinogen, dangerous to humans and animals," the *McQueen* court held that an agency cannot avoid mitigation of PCB contamination or defer it to a future time, even where no specific project is contemplated on the property.⁹⁸ The court stated:

We are aware of no exception allowing a governmental agency to avoid consideration of and compliance with PCB regulations until after purchase and pending a final decision on use of property containing PCB. At the very least the district itself began storing PCB when it acquired the property, whether or not it had any plan to use or remove it. The district could not knowingly acquire property containing PCB without simultaneously assuming the grave responsibility to store, use, or dispose of it legally.⁹⁹

Similarly here, when the Applicant acquired the Project property in 2011, it began "storing" existing PCB contamination at the site. If the County proposes to approve the Project, it must first ensure that the Project's CEQA document includes enforceable mitigation measures requiring the Applicant to dispose of PCB-containing equipment in a legally compliant and health-protective manner. By failing to mention PCBs in the Initial Study, the County has failed to comply with this mandatory duty. The County should require the Applicant to adopt a hazardous materials handling and cleanup plan to address this contamination, and must prepare an EIR to fully analyze and mitigate the potentially significant impacts from the disturbance of PCBs during Project construction.

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Cont.

⁹⁷ (1988) 202 Cal.App.3d 1136.

⁹⁸ 202 Cal.App.3d at 1145.

⁹⁹ *Id.* at 1146.

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B. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Air Quality and Public Health Impacts From Construction Emissions.

17-23

1. *There is Substantial Evidence Supporting a Fair Argument that Project Construction Will Result in Significant NO_x Emissions that the MND Fails to Identify and Mitigate*

The MND significantly underestimated the Project's construction NO_x emissions and, as a result, inaccurately concluded that "emissions during short-term construction and during long-term operation of the Project do not exceed the significance thresholds established by the MDAQMD."¹⁰⁰ As explained by SWAPE, the MND's conclusion is patently incorrect because the Air Quality Report relied on inaccurate data for construction equipment and incorrect values for vehicle and truck trips required for construction of the Project, and failed to account for fugitive dust generated by demolition of existing structures at the Project site.¹⁰¹

a. Errors and Omissions in the Air Quality Report

The MND's Air Quality Report relied on input values that were purported to relate to the Project, but which are either inaccurate when compared to the MND's description of Project components, or are simply unsupported by any evidence in the record. First, the equipment list used in the Air Quality Report's URBEMIS model is inconsistent with the equipment identified in the MND. As SWAPE explains, the Air Quality Report assumed that a total of 13 pieces of off-road equipment would be needed to complete construction of the entire 115-acre Project site.¹⁰² However, Table 3 of the MND's Initial Study indicates that Project construction will require a total of 51 pieces of equipment.¹⁰³ There is no logical basis for the Air Quality Report's assumption that only 13 pieces of equipment would be used.

17-24

¹⁰⁰ See Air Quality Report, pp. 25-26.

¹⁰¹ See Exhibit A, SWAPE Comments, pp. 4-11. As explained by SWAPE, the Air Quality Report also utilized an outdated planning level emissions estimating software, URBEMIS, to calculate Project emissions. The modeling software currently recommended for use by state regulatory agencies, including Cal EPA, to model project emissions, is the California Emissions Estimator Model Version CalEEMod.2013.2.2 ("CalEEMod"). <http://www.caleemod.com/>.

¹⁰² See Air Quality Report, p. 14; See Exhibit A, SWAPE Comments, p. 5.

¹⁰³ *Id.*

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Second, the trip lengths and number of trips used in the Air Quality Report's URBEMIS model for each phase of construction are inconsistent with the trip lengths and number of trips provided in the Initial Study section of the MND and the MND's Trip Generation Analysis. The "Phase Assumptions" provided in the URBEMIS output files¹⁰⁴ suggest that a total of 150 vehicle miles traveled ("VMT") will occur during the "Demolition" phase, and that a total of approximately 2,343 miles will occur during the "Mass Grading" phase.¹⁰⁵ The Air Quality Report fails to provide any explanation as to how these values were derived. The origin of these values is therefore unclear and unsupported.

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Cont.

By contrast, SWAPE compared the trip assumptions in the Air Quality Report with the trips discussion in the Project description and Initial Study sections of the MND. According to the MND, "there will be an average of 125 workers on site during the construction period..."¹⁰⁶ Furthermore, according to the Project's Trip Generation Analysis "approximately 5 deliveries per day will be required for material and equipment during the 6-month construction period..."¹⁰⁷ Therefore, SWAPE concludes that, "at the very least, an average of 125 worker trips per day and an average of 5 vendor trips per day should have been utilized within the air model."¹⁰⁸

Finally, the Air Quality Report estimated, without citing any reference for the assumption, that the existing structures to be demolished would be equal to approximately 5,000 cubic feet.¹⁰⁹ Demolition of existing structures is a factor which contributes to the Project's fugitive dust emissions, which are regulated under MDAQMD Rule 403. SWAPE measured the total square footage of the existing on-site structures at the Project site using Google Earth mapping and the building size information provided in the Phase I ESA.¹¹⁰ SWAPE's measurements indicated a total building area of approximately 31,585 square feet.¹¹¹ The volume calculated by SWAPE is substantially larger than the 5,000 cubic feet volume used in the Air Quality Report's URBEMIS model.¹¹² SWAPE concludes that demolition of these

¹⁰⁴ Appendix A of the Air Quality Report.

¹⁰⁵ See Air Quality Report, p. 37.

¹⁰⁶ MND, p. 13.

¹⁰⁷ *Id.* at p. 2.

¹⁰⁸ See Exhibit A, SWAPE Comments, p. 7.

¹⁰⁹ Air Quality Report, pp. 37-38.

¹¹⁰ See Exhibit A, SWAPE Comments, pp. 9-10.

¹¹¹ *Id.* at p. 10.

¹¹² Unlike the data in the URBEMIS model, SWAPE's calculations are based on substantial evidence.

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structures is therefore likely to result in substantially higher fugitive dust emissions than estimated in the Air Quality Report.¹¹³

b. SWAPE Model

SWAPE recalculated the Project's construction emissions using CalEEmod software and corrected input values for the factors described above.¹¹⁴ When the correct input values were used, SWAPE found that the Project's NO_x emissions during construction are 361 lbs/day, which greatly exceeds the MDAQMD threshold of 137 lbs/day, and is therefore a significant impact.¹¹⁵

Maximum Mitigated Daily Construction Emissions ¹¹⁶						
	ROG	NO _x	CO	SO	PM ₁₀	PM _{2.5}
<i>Construction Emissions in Pounds Per Day</i>						
IS Model	9	92	46	0	38	11
Threshold	137	137	548	137	82	82
Exceed?	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
SWAPE Model Summer Emissions	34	361	216	0	39	26
SWAPE Model Winter Emissions	34	361	210	0	39	26
Threshold	137	137	548	137	82	82
Exceed?	<i>No</i>	<i>Yes</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

The County must disclose this significant impact in an EIR and identify mitigation measures to reduce these emissions to less than significant levels.

2. *There is Substantial Evidence Supporting a Fair Argument that the Project Will Cause a Significant Cancer Risk from Construction Emissions*

SWAPE reviewed the HRA included in the Air Quality Report, and performed its own independent HRA for the Project. SWAPE concluded that excess emissions of

17-24
Cont.

17-25

¹¹³ *Id.*

¹¹⁴ *Id.* at pp. 11-14.

¹¹⁵ *Id.* at p. 13.

¹¹⁶ *Id.*

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DPM during Project construction are likely to cause a significant cancer risk to children and infant sensitive receptors that the MND failed to disclose and mitigate.

The Project site is located directly adjacent to several sensitive receptors, including a single-family dwelling located just 250 feet from the Project site. There are also vacation rental properties located adjacent to the Project site, which rent trailers and motel rooms for visitors to Joshua Tree National Park.¹¹⁷

17-25
 Cont.

Exhaust from heavy-duty construction equipment releases DPM. DPM is a toxic air contaminant (“TAC”) that is recognized by state and federal agencies, and atmospheric scientists, as causing severe respiratory disease, lung damage, cancer, and premature death. Air districts have recently recognized that “TACs present an even greater health risk than previously thought.”¹¹⁸ By contrast, “particulate matter,” including both PM₁₀ and PM_{2.5}, are defined under both federal and state laws as “criteria pollutants.”¹¹⁹ PM alone does not contain toxic chemicals. PM is simply defined as “very small solid or liquid particles that can be suspended in the atmosphere.”¹²⁰ TACs, by contrast, are defined as “air pollutant[s] which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.”¹²¹ Unlike particulate matter, DPM contains toxic chemicals, making it a TAC.

The Air Quality Report acknowledges that Project construction could pose a significant risk to these nearby receptors due to “toxic emissions...generated mainly from fuel combustion in the construction equipment.”¹²² The County performed an HRA to analyze these emissions, and concluded that the health and cancer risk posed by the Project’s construction emissions would be less than significant.¹²³ As explained by SWAPE, the County’s conclusion is unsupported because the County’s HRA was

¹¹⁷ See Exhibit C.

¹¹⁸ *California Bldg. Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 379.

¹¹⁹ The seven criteria air pollutants are: ozone (O₃); carbon monoxide (CO); nitrogen dioxide (NO₂); sulfur dioxide (SO₂); PM₁₀; PM_{2.5}; and lead (Pb).

¹²⁰ *CURE v. Mojave Desert Air Qual. Mgm’t Dist.* (2009) 178 Cal. App. 4th 1225, 1231-32; see 40 C.F.R. § 50.6(c).

¹²¹ H&S Code § 39655(a).

¹²² Air Quality Report, p. 17.

¹²³ *Id.* at p. 33.

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based on the same flawed emissions analysis that resulted in underreported construction emissions in the URBEMIS model.¹²⁴

SWAPE prepared an independent HRA using the construction emission estimates from SWAPE's re-modeling of Project emissions using the assumptions provided in the MND. To account for the variability in construction equipment usage over the phases of Project construction, SWAPE calculated an average DPM emission rate over the anticipated construction duration by the following equation:

$$\text{Emission Rate} \left(\frac{\text{grams}}{\text{second}} \right) = \frac{1,982.4 \text{ lbs}}{184 \text{ days}} \times \frac{453.6 \text{ grams}}{\text{lb}} \times \frac{1 \text{ day}}{24 \text{ hours}} \times \frac{1 \text{ hour}}{3,600 \text{ seconds}} \approx 0.0566 \text{ g/s}$$

Using this equation, SWAPE calculated the excess cancer risks for the sensitive receptor locations identified in the Air Quality Report for adults, children, and infant receptors using applicable HRA methodologies prescribed by the Office of Environmental Health and Hazard Assessment ("OEHHA").¹²⁶ OEHHA recommends the use of Age Sensitivity Factors ("ASFs") to account for the heightened susceptibility of young children to the carcinogenic toxicity of air pollution.¹²⁷ According to the OEHHA guidance, quantified cancer risk should be multiplied by a factor of ten during the first two years of life (infant), and by a factor of three for the subsequent fourteen years of life (child aged two until sixteen). The results of SWAPE's calculations found an excess cancer risk to adults, children, and infants during Project construction for sensitive receptors located 75 meters away are 6.71, 38.7, and 129 in one million, respectively. The results are shown below.¹²⁸

17-25
Cont.

¹²⁴ Exhibit A, SWAPE Comments, p. 20. SWAPE notes that the HRA prepared by the County also relied on an outdated emissions model, the CARB Hotspots Analysis Reporting Program (HARP) model. The SWAPE HRA used the current AERSCREEN model. As of 2011, the United States Environmental Protection Agency (USEPA) recommends AERSCREEN as the leading air dispersion model, due to improvements in simulating local meteorological conditions based on simple input parameters

¹²⁵ *Id.* at p. 21.

¹²⁶ *Id.*

¹²⁷ "Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments." OEHHA, February 2015, available at: http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf.

¹²⁸ Exhibit A, SWAPE Comments, p. 22.

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Parameter	Description	Units	Adult	Child	Infant
C _{air}	Concentration	µg/m ³	2.948	2.948	2.948
DBR	Daily breathing rate	L/kg-day	302	581	581
EF	Exposure Frequency	days/year	350	350	350
ED	Exposure Duration	years	0.5	0.5	0.5
AT	Averaging Time	days	25550	25550	25550
	Inhaled Dose	(mg/kg-day)	6.1E-06	1.2E-05	1.2E-05
CPF	Cancer Potency Factor	1/(mg/kg-day)	1.1	1.1	1.1
ASF	Age Sensitivity Factor	-	1	3	10
Cancer Risk			6.71E-06	3.87E-05	1.29E-04

17-25
Cont.

The infantile and child exposures for the Project substantially exceed the MDAQMD threshold of 10 in one million for cancer risk. This is a significant impact, and a significant health risk, that the MND and Air Quality Report failed to disclose and mitigate. An EIR must be prepared for the Project that includes a refined HRA to further examine air quality impacts generated by Project construction. Once the risks have been further quantified, the County must implement all feasible mitigation measures to reduce the Project's significant cancer risk to less than significant levels.

C. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Impacts to Biological Resources

1. Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Birds from Collisions with Solar Panels

17-26

Substantial evidence supports a fair argument that the Project may result in significant impacts associated with birds colliding with the Project's PV panels. The MND fails to disclose, analyze or mitigate these impacts. While the reasons that solar pose a threat to birds and the extent of the threat continue to be evaluated, the presence of dead and injured birds (including numerous water birds) at solar facilities under construction in California shows that solar arrays present a collision hazard to

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birds.¹²⁹ It is reasonably believed that migrating birds mistake the broad reflective surfaces of solar arrays for water.¹³⁰

Ms. Owens has personally witnessed bird kills resulting from direct collision with solar PV panels at Southern California solar sites, and concludes that the presence of large arrays of solar PV panels, particularly in the desert environment like the Project site, is likely to attract and kill migrating or foraging birds absent robust mitigation.¹³¹ The Project site is located in the Pacific flyway, and is on a direct flight path for migrating birds stopping over at the Salton Sea.¹³² Ms. Owens concludes that the Project site is therefore particularly susceptible to avian collisions.¹³³ She further observes that the MND's assertion that avian collision will be reduced by the use of "[panel] material [that] is designed to enhance light absorption and reduce light reflection (glare)" is untested and unsupported. Indeed, Ms. Owens notes that some of the bird kills she has personally witnessed were at facilities using similar glare-reduction coating on their PV panels, such as those set forth below.¹³⁴

17-26
 Cont.

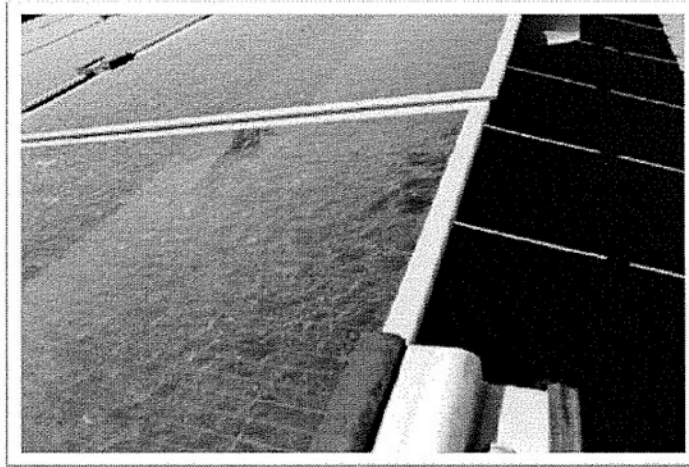


Figure 9. Strike imprint of Virginia rail that was killed by a collision with solar panels in the Sonoran desert. Collision occurred despite the “low reflectivity” caused by an accumulation of dust, and presence of panels with “low reflection coating”.

¹²⁹ *Id.* at pp. 4-5.

¹³⁰ *Id.* at p. 5.

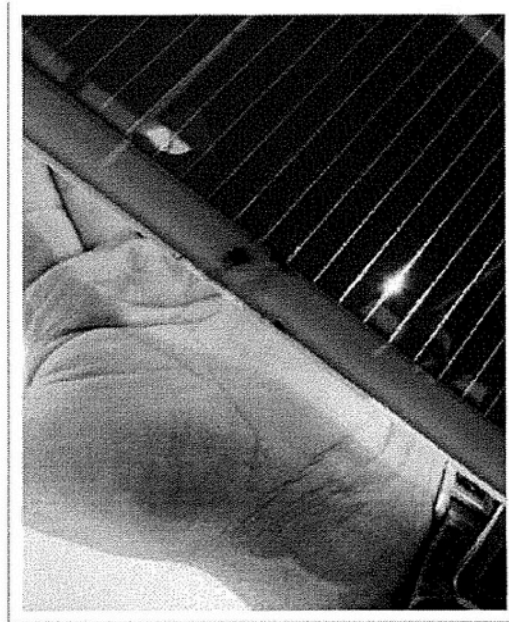
¹³¹ See Exhibit B, Owens Comments, pp. 12-15.

¹³² *Id.* at p. 12.

¹³³ *Id.*

¹³⁴ *Id.* at p. 13.

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17-26
Cont.

Figure 10. Forensic (blood) evidence at site of panel collision by a sora.

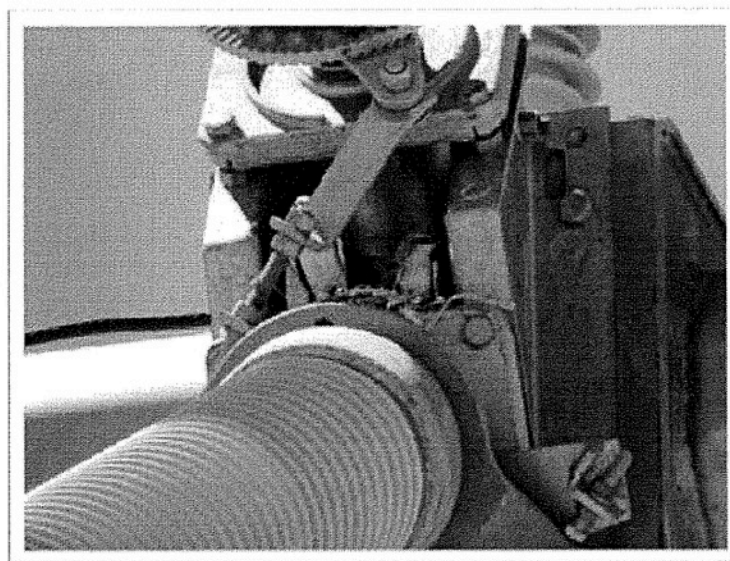


Figure 11. Kingbirds nesting on industrial solar facility in the Mojave desert.¹³⁵

¹³⁵ *Id.* at pp. 36-37, Figures 9-11.

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Because solar projects pose potentially significant impacts to birds from collisions, the USFWS developed monitoring methods to examine migratory bird take at solar power facilities.¹³⁶ In addition, the CEC has required all recently licensed solar projects to monitor the death and injury of birds from collisions with solar facility features.¹³⁷ Also, scientific research has identified several techniques that enable birds to avoid collisions with glass and other reflective surfaces.¹³⁸ Ms. Owens recommends that the County adopt these techniques, along with the monitoring program recommended by the USFWS and CEC, in an EIR for the Project as feasible mitigation measures to reduce the Project's potentially significant impacts on birds from collisions.

17-26
Cont.

Substantial evidence supports a fair argument that the Project may result in significant impacts associated with birds colliding with the Project's PV panels. The City must prepare an EIR that adequately discloses, analyzes and mitigates the Project's potentially significant impacts associated with bird collisions. Furthermore, Ms. Owens recommends that the County require a project-specific Bird and Bat Conservation Strategy be developed for the Project that requires a detailed monitoring plan and an adaptive management program to assist in mitigation efforts.¹³⁹

2. *Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Desert Tortoise*

The MND fails to adequately disclose, analyze or mitigate the Project's significant impacts to desert tortoise. As discussed above the MND erroneously concludes that the Project site is not desert tortoise habitat. As a result, the MND concluded that Project impacts on desert tortoise would be mitigated to a less-than-significant level with the implementation of a single mitigation measure, Measure BIO-2, which contains minimal protective measures.¹⁴⁰ However, because the MND's threshold determination regarding the absence of desert tortoise from the Project site is in error, the MND's significance conclusion is not supported by substantial evidence.

17-27

By contrast, substantial evidence supports a fair argument that the Project will result in significant impacts to desert tortoise that are inadequately mitigated. Five

¹³⁶ *Id.* at pp. 12-13.

¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ See Exhibit B, Owens Comments, p. 16.

¹⁴⁰ MND, p. 89.

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highly qualified desert tortoise experts have concluded that the Project site contains high value habitat for desert tortoise – USFWS, USGC, CNDDDB, biologist Ed LaRue, and Ms. Owens.¹⁴¹ Mr. LaRue has observed tortoises in the immediate vicinity of the Project site.¹⁴² Thus, there is substantial evidence supporting a fair argument that desert tortoise are, and will be, present at the Project site during construction and operation of the Project.

17-27
Cont.

The BRA admits that, if tortoises were present at the Project site, Project operation would pose a potentially significant risk of injury or death to tortoises.¹⁴³ Mitigation Measure BIO-2 fails to account for active use of the Project site by desert tortoises, and is admittedly designed to mitigate impacts that are “expected to be negligible and encounters limited to transient tortoises.”¹⁴⁴ Thus, the MND admittedly fails to include adequate mitigation measures to ensure that the Project will not result in injury and death (i.e., take) of desert tortoise. An EIR must be prepared to analyze and mitigate these potentially significant impacts. Since the Project is likely to result in take of tortoise individuals or habitat, the applicant must also initiate consultation with USFWS regarding potential take of desert tortoise at the Project site, and the EIR must disclose the status of that consultation.

3. *Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Desert Kit Fox*

The BRA explains that, in 2012, biologists detected an active kit fox den on site, with several inactive dens, thus indicating the likelihood of kit fox use of the Project site is high.¹⁴⁵ Ms. Owens explains that the likelihood of kit fox presence at the site is especially given that the species has demonstrated a high natal site fidelity, and have been observed denning within active solar facility sites.¹⁴⁶ The MND requires pre-construction surveys for the desert kit fox “within” 30 days prior to initiation of construction activities.¹⁴⁷ However, Ms. Owens concludes that the such surveys are

17-28

¹⁴¹ See Exhibit B, Owens Comments, pp. 8-9.

¹⁴² *Id.*, Attachment A.

¹⁴³ BRA, p. 27 (“If tortoises walk onto the Project, they could be injured or killed (e.g., collision with vehicles or equipment).”).

¹⁴⁴ BRA, p. 27; MND, p. 89.

¹⁴⁵ See Exhibit B, Owens Comments, pp. 23-24, citing Ironwood Consulting. 2012. Third Quarterly Report For Biological Resources Monitoring First Solar Desert Sunlight Solar Project, Riverside County BLM CASE FILE NUMBER CACA48649.

¹⁴⁶ *Id.*

¹⁴⁷ MND, p. 40.

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insufficient because kit foxes are likely to construct new burrows or immigrate onto the Project site immediately before construction activities.^{148,149} As a result, surveys conducted several days or a weeks before ground disturbance are insufficient to avoid take of kit foxes.¹⁵⁰

17-28
Cont.

Desert kit fox are threatened species in California, and there is a pending petition with CDFW to list the kit fox as endangered. If listed, any take of kit fox or kit fox habitat caused by future Project activities would therefore require a take permit from CDFW. Whether or not the endangerment petition is granted, the Project's potential to adversely impact desert kit fox is a potentially significant impact that the MND fails to acknowledge. In order to reduce this impact to less than significant levels, Ms. Owens recommends that County require pre-construction surveys for kit foxes immediately before all ground disturbance activities at the Project site.

4. *Substantial Evidence Supports a Fair Argument that the Project May Result in Significant Impacts to Mojave Fringe-Toed Lizard and other Reptiles*

17-29

Ms. Owens concludes that the Project is likely to result in significant impacts to Mojave Fringe-Toed Lizard and other desert reptiles from injury or death due to collision with Project construction equipment, vehicles, and water trucks at the Project site.

Ms. Owens explains that she and other biologists working on renewable energy projects (wind and industrial solar) have recently observed that lizards are "directly and immediately attracted to roads on and around construction sites where trucks spraying water and other erosion control liquids are used to reduce airborne dust."¹⁵¹ She explains that she and other biologists have determined that this practice "serves to attract lizards of a variety of species to the higher moisture levels on the roads, resulting in increased lizard mortality and injury due to being hit by construction site

¹⁴⁸ Girard, I. A. 1998. *The physiological ecology of a small canid, the kit fox (vulpes macrotis), in the mojave desert* (Order No. 9905548).

¹⁴⁹ Arjo, W. M., Bennett, T. J., & Kozlowski, A. J. 2003. Characteristics of current and historical kit fox (*vulpes macrotis*) dens in the great basin desert. *Canadian Journal of Zoology*, 81(1), 96-102.

¹⁵⁰ *Id.*

¹⁵¹ See Exhibit B, Owens Comments, p. 20.

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traffic that use the roads subsequent to the water trucks passing.”¹⁵²

Ms. Owens opines that lizard collisions are becoming a common phenomenon at solar projects, and identifies several reported incidents of recent lizard collisions with moisture-generating equipment at other desert solar sites. For example, within the course of one summer month in 2014, over 20 flat-tailed horned lizards (*Phrynosoma mcallii*) (a Candidate State Endangered species) were killed on one solar construction site in the southern Sonoran desert. An additional 100 flat-tailed horned lizards were relocated to avoid injury or mortality from vehicle impacts during several weeks of the construction phase of that project.¹⁵³ During the construction of the Sunrise Powerlink gen-tie line in the Yuha Desert, from April to November, 103 flat-tailed horned lizards were relocated and 25 mortalities were recorded.¹⁵⁴

17-29
Cont.

This evidence, and the expert opinion of Ms. Owens, indicate that lizards of varying species and sizes are attracted to the added moisture on the roads at solar project sites. This is a potentially significant impact that the MND fails to acknowledge or mitigate. In order to reduce these potentially significant risks to lizards with high potential to occur on site (such as the Mojave Fringe Toed Lizard), Ms. Owens recommends that the County incorporate mitigation measures for the Project which include the on-site presence of additional biologists, enhanced traffic restrictions, and a reptile relocation Plan and Monitoring Strategy during the construction phase of the Project.¹⁵⁵

¹⁵² *Id.*

¹⁵³ See Exhibit B, Owens Comments, pp. 18-21; citing Wilton, Ben. Tenaska (Personal communication, March 19, 2015).

¹⁵⁴ [FTHLIC] Flat-tailed Horned Lizard Interagency Coordinating Committee. (2011). Annual Progress Report: Implementation of the Flat-tailed Horned Lizard Rangeland Management Strategy, January 1, 2010 to December 31, 2010. Report prepared by the Flat-tailed Horned Lizard Interagency Coordinating Committee. Retrieved from: <https://webcache.googleusercontent.com/search?q=cache:swX3uX5D8OsJ:https://www.fws.gov/southwest/es/arizona/Documents/SpeciesDocs/FTHL/FTHL+Annual+report+2010+Final.pdf+&cd=1&hl=en&ct=clnk&gl=us>.

¹⁵⁵ See Exhibit B, Owens Comments, p. 21.

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D. Substantial Evidence Supports a Fair Argument That the Project May Result in Significant Impacts From the Environmental Consequences of Economic and Social Changes Caused by the Project

17-30

CEQA requires that the environmental consequences of economic and social changes caused by a project must be considered by the lead agency as part of its analysis in a negative declaration or EIR.¹⁵⁶ The courts of appeal have held that, when there is substantial evidence that a project may result in urban decay, the CEQA document must analyze this impact and propose feasible mitigation measures and alternatives.¹⁵⁷

Local Joshua Tree residents and business owners have raised concerns that the Project may result in deterioration of local structures from lost tourism and the likelihood of local residents moving away from the Joshua Tree area to escape the increased industrial development around rural Joshua Tree.¹⁵⁸ For example, local businessman Buck Buckley, who owns a vacation trailer rental site adjacent to the Project site, has expressed concerns that installation of the Project could be a boon to the town's economy, which relies largely on out-of-town visitors drawn to Joshua Tree National Park. However, Buckley explained to the local Desert Sun newspaper that his guests come to see "unspoiled, unchanged, open space, which they don't have in large cities, and don't even have in Yucca Valley right across the way."¹⁵⁹ Those guests, Buckley said, would be disappointed by the sight of a solar power plant.¹⁶⁰

Local Joshua Tree resident David Fick, who has lived in the town for 28 years and can see Roy Williams Airport from his living-room window, similarly reported to the Desert Sun that he has already experienced "a litany of grievances" with the nearby Cascade solar project, a 24-megawatt plant that SunEdison brought online in

¹⁵⁶ 14 CCR 15064(e); see *American Canyon Community United for Responsible Growth v. City of American Canyon* (2006) 145 Cal. App. 4th 1062, 1081-1083 (city must consider physical deterioration of commercial areas, e.g., urban decay, even outside of jurisdiction of Lead Agency that could occur from project).

¹⁵⁷ *Bakersfield Citizens for Local Control*, 124 Cal.App.4th 1184; *Citizens Association for Sensible Development of Bishop Area v. County of Inyo* (1985) 172 Cal. App. 3d 151, 169-171.

¹⁵⁸ See Exhibit C, available at <http://www.desertsun.com/story/news/2015/01/01/joshua-tree-nextera-airport-solar/21166567/>.

¹⁵⁹ *Id.*

¹⁶⁰ *Id.*

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late 2013, including lowered property value.¹⁶¹ Joshua Tree residents have worried that more solar projects could lower their property values. As Fick explained to the Desert Sun, the Project would also kill any possibility of reviving the Airport. He stated "[t]hey're taking away our potential airport, when Joshua Tree is trying to promote itself as a tourist resort."¹⁶²

17-30
Cont.

The courts have held that eyewitness testimony from local residents such as these Joshua Tree residents constitute substantial evidence of the potentially significant environmental consequences of economic and social changes.¹⁶³ These residents' comments constitute substantial evidence that the Project may result in significant impacts from economic and social changes caused by the Project. The MND completely fails to address this issue, in violation of CEQA. An EIR must be prepared to analyze this potentially significant impact.

VI. THE MND'S CUMULATIVE IMPACTS ANALYSIS IS INADEQUATE

17-31

A CEQA document is required to discuss the cumulative impacts of a project "when the project's incremental effect is cumulatively considerable,"¹⁶⁴ and to discuss significant impacts that the proposed project will cause in the area that is affected by the project.¹⁶⁵ "This area cannot be so narrowly defined that it necessarily eliminates a portion of the affected environmental setting."¹⁶⁶

A. Air Quality

17-32

The MND fails to adequately discuss or analyze the Project's cumulative air quality impacts in three key ways.

1. Failure to Conduct a Geographical Analysis of Cumulative Impacts

The MND failed to conduct a geographical analysis of cumulative impacts. CEQA requires the agency to consider "past, present, and probable future projects

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Pocket Protectors v. City Of Sacramento* (2004) 124 Cal.App.4th 903, 929.

¹⁶⁴ 14 CCR § 15130(a).

¹⁶⁵ *Bakersfield Citizens*, 124 Cal.App.4th at 1216 (emphasis added); see 14 CCR § 15126.2(a).

¹⁶⁶ *Id.*, 124 Cal.App.4th at 1216.

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producing related or cumulative impacts.”¹⁶⁷ The CEQA Guidelines specifically require the Lead agencies to define the “geographic scope of the area affected by the cumulative effect.”¹⁶⁸ The MND does not provide a list of cumulative solar projects, or any type other development projects, in the vicinity of the Project site. The MND similarly failed to compare the Project emissions, combined with emissions from other projects, to the MDAQMD thresholds of significance for those pollutant emissions. The Air Quality Report briefly concludes that, because the County concluded that the Project will have de minimus operational emissions, the Project’s cumulative air quality impacts will also be less than significant.¹⁶⁹ However, the MND failed to perform any quantitative analysis of other geographically related projects, in violation of CEQA. The MND therefore failed to “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), and its conclusion that cumulative impacts are insignificant is unsupported. Without a quantitative assessment of cumulative impacts within the geographical vicinity of the Project, the County has no evidence, let alone substantial evidence, to support its conclusion that the Project will not have significant cumulative impacts. An EIR is required where, as here, an Initial Study fails to adequately explain why cumulative effects would not occur.¹⁷⁰

17-32
Cont.

2. *The MND Incorrectly Concludes that the Project’s Air Quality Impacts Do Not Have a Significant Cumulative Impact Because They are Incrementally Minor*

17-33

The MND concludes that, because it found the Project’s construction and operational emissions would be incrementally minor, that its cumulative impacts are therefore equally insignificant.¹⁷¹ The result is a complete dismissal of the Project’s cumulative air quality impacts by claiming that they are a “drop in a bucket” compared with other existing regional impacts. This approach has been rejected by

¹⁶⁷ PRC § 21083; 14 CCR § 15130(b)(1)(A); *CBE v. CRA*, 103 Cal.App.4th at 117.

¹⁶⁸ 14 CCR 15130(b)(1)(B)(3).

¹⁶⁹ Air Quality Report, pp. 20-21; MND, p. 26.

¹⁷⁰ See *San Bernardino Valley Audubon Soc’y v. Metropolitan Water Dist.* (1999) 71 Cal. App. 4th 382.

¹⁷¹ Air Quality Report, pp. 20-21; 26 (“Although the Project site is located in a region that is in non-attainment for O₃, PM₁₀, and PM_{2.5}, the cumulative emissions associated with the Project would not be considerable as the emissions would fall below MDAQMD thresholds.”).

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the Courts, and fails to comply with CEQA's requirement that a project mitigate impacts that are "cumulatively considerable."¹⁷²

In *Friends of Oroville*, the City of Oroville prepared an EIR for a retail center project. The EIR failed to analyze the project's cumulative contribution to significant GHG impacts by concluding, without analysis, that the project's "miniscule" GHG emissions were insignificant in light of the state's cumulative, state-wide GHG emissions problem. The EIR had concluded that a further analysis of the project's GHG impacts would result in "applying a meaningless, relative number to determine an insignificant impact."¹⁷³ The court of appeal rejected what amounted to an outright dismissal of the City's obligation to analyze the retail center's cumulative GHG impacts.¹⁷⁴

17-33
Cont.

Similarly, in *Kings County Farm Bureau v. City of Hanford*,¹⁷⁵ the city prepared an EIR for a 26.4-megawatt coal-fired cogeneration plant. Notwithstanding the fact that the EIR found that the project region was out of attainment for PM10 and ozone, the City failed to incorporate mitigations for the project's cumulative air quality impacts from project emissions because it concluded that the Project would contribute "less than one percent of area emissions for all criteria pollutants."¹⁷⁶ The city reasoned that, because the project's air emissions were small in ratio to existing air quality problems, that this necessarily rendered the project's "incremental contribution" minimal under CEQA. The court rejected this approach, finding it "contrary to the intent of CEQA."

By contrast, a lead agency must find that a project may have a significant effect on the environment and must therefore require an EIR if the project's potential environmental impacts, although individually limited, are cumulatively considerable.¹⁷⁷ The term "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable

¹⁷² PRC § 21083(b)(2); 14 CCR § 15130; *Friends of Oroville v. City of Oroville* (2013) 219 Cal. App. 4th 832, 841-42; *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 721.

¹⁷³ 219 Cal. App. 4th at 841-42.

¹⁷⁴ *Id.*

¹⁷⁵ (1990) 221 Cal. App. 3d 692, 721.

¹⁷⁶ *Id.* at 719.

¹⁷⁷ PRC § 21083(b); 14 CCR §§ 15064(h)(1), 15065(a)(3).

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future projects.”¹⁷⁸ The MDAQMD CEQA Guidelines similarly require a finding that a project has significant cumulative impacts where its own impacts in a particular area are individually significant when combined with those of other similar projects for each type of impact.¹⁷⁹

17-33
Cont.

Therefore, the County cannot end its cumulative impacts analysis at the same point at which it ended its direct impacts analysis – i.e., when it determines whether or not the project will individually cause significant air emissions. That is not the intent of the cumulative impacts analysis. Rather, the County must attempt to determine whether the Project’s emissions, when combined with other similar emissions from other projects, may be significant. Under CEQA, if an adjacent project has significant air emissions, but the proposed project does not, the proposed project may still be considered to have significant cumulative impacts if its own emissions contribute to a cumulative exceedence of a particular pollutant.¹⁸⁰ The same is true for projects which may have individually insignificant impacts, but which, when combined, result in a significant impact.¹⁸¹ The MND failed to undertake that analysis at all.

Indeed, as discussed above, there is substantial evidence supporting a fair argument that the Project will have individually significant impacts from construction NOx and TACs that greatly exceed Air District thresholds. Because the Project has significant individual impacts for these pollutants, the County must make a related finding that the Project has significant cumulative impacts for these same pollutants. An EIR must be prepared to remedy these deficiencies.

3. *The MND Improperly Claims “Offset” Credits for Cumulative Impacts Based on Projected GHG Emissions*

17-34

The MND asserts, by virtue of the fact that the Project is a solar PV project and not a “traditional” energy generating project such as burning coal, fuel oil, or natural gas, that the Project gets a cumulative impact “offset” credit based on its net operational CO2 reductions.¹⁸² This analysis is contrary to law because it contradicts

¹⁷⁸ PRC § 21083(b)(2).

¹⁷⁹ See MDAQMD CEQA Guidelines pp. 8-9, available at <http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.

¹⁸⁰ PRC § 21083(b); 14 CCR §§ 15064(h)(1), 15065(a)(3), 15130(a).

¹⁸¹ Id.

¹⁸² See Air Quality Report, p. 21.

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CEQA's basic requirements for a cumulative impact analysis, and also contradicts the clear directives of the MDAQMD CEQA Guidelines.

The State CEQA Guidelines do not contain an offset allowance for making the threshold determination of whether a cumulative impact is significant. Rather, CEQA requires that a lead agency must find that a project may have a significant effect on the environment and must therefore require an EIR if the project's potential environmental impacts, even if individually limited, are cumulatively considerable.¹⁸³

17-34
Cont.

To determine whether a project's impacts are "cumulatively considerable," the lead agency must evaluate "*the change in the existing environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.*"¹⁸⁴ The agency must then find that a cumulative impact is significant if the combined impact of the project and other projects result in a significant change in the exiting environment with regard to that impact.¹⁸⁵ In other words, even if a project's individual impact is insignificant, if the project contributes to a significant change in the environment caused by *other* projects with regard to that impact, the project will still have a significant cumulative impact. The MDAQMD CEQA Guidelines similarly require a finding that a project has significant cumulative impacts where its own impacts in a particular area are individually significant when combined with those of other similar projects for each type of impact.¹⁸⁶ As discussed above, this requires a quantitative, comparative analysis of the impacts of other regional projects.

The MND does not dispute that the Project will create new GHG emissions and other air emissions, even if minor.¹⁸⁷ Therefore, in order to determine whether or not the Project has significant cumulative air emissions, the County must combine the Project's emissions with those of other past, present, and other reasonably foreseeable projects, and determine – based on the combined emissions – whether there is an exceedance of applicable air quality standards or thresholds for each pollutant emitted

¹⁸³ PRC § 21083(b); 14 CCR §§ 15064(h)(1), 15065(a)(3), 15130(a)(1).

¹⁸⁴ 14 CCR § 25355(b) (emphasis added).

¹⁸⁵ 14 CCR §§ 15064(d)(1), 15065(a)(3), 15130(a)(1).

¹⁸⁶ See MDAQMD CEQA Guidelines pp. 8-9, available at

<http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>.

¹⁸⁷ See MND, p. 25 (project will have annual operational emissions of 17.39 tons of CO₂e); Air Quality Report, p. 25 ("the Project would contribute to local and regional air pollutant emissions")

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by the Project.¹⁸⁸ The County did not do that. Instead, the County argues that the Project does not have significant cumulative air quality impacts of any kind simply because it is a solar project rather than a refinery or other fossil fuel burning energy project. In order to reach this conclusion, the County would have to assume that the hypothetical “baseline” from which its cumulative impacts are assessed is that of an existing fossil fuel-burning facility, which, if taken offline, would reduce regional emissions of each pollutant emitted by the Project to levels that are below applicable thresholds, or which cause the air basin to reach attainment for a pollutant for which it was out of attainment at the time the Project was proposed. CEQA does not allow an agency to rely on such a hypothetical, or imaginary, baseline.¹⁸⁹

17-34
Cont.

Furthermore, while CEQA allows agencies to use “offsets” as offsite mitigation measures, including to mitigate a project’s significant GHG emissions,¹⁹⁰ the purpose of such “offsets” is to mitigate a project’s significant direct impacts, not to assess whether those impacts are significant in the first place. Indeed, the courts have disallowed this approach.¹⁹¹ Rather, the determination of whether a project’s individual or cumulative impacts are significant may only be made by assessing the direct physical change in the environment caused by the project, no matter what kind of project it is.¹⁹² CEQA does not distinguish between projects which have a “beneficial” effect in the environment or an “adverse” effect.¹⁹³ Instead, the fair

¹⁸⁸ 14 CCR §§ 15130(a), 15355; See Practice Under the California Environmental Quality Act, Kostka and Zischke (March 2-15 Update), § 13.39 (An agency may “conclude that the cumulative impact is significant even though the project-specific impact is not where...a new project will emit a relatively small quantity of an air pollutant, but overall emissions of that pollutant in the area have created a significant air quality problem in the area.”).

¹⁸⁹ *CBE v. SCAQMD*, 48 Cal.4th at 319.

¹⁹⁰ 14 CCR §15126.4(c)(3).

¹⁹¹ *Lotus*, 223 Cal.App.4th at 650 (Court found that because EIR had “compress[ed] the analysis of impacts and mitigation measures into a single issue, the EIR disregard[ed] the requirements of CEQA...Absent a determination regarding the significance of the impacts... it is impossible to determine whether mitigation measures are required or to evaluate whether other more effective measures than those proposed should be considered.”).

¹⁹² 14 CCR § 15064(d); 15064.4(b) (in determining the significance of GHG emissions, the agency must address whether the project increases GHG emissions as compared to the existing environment).

¹⁹³ *California Farm Bureau Federation v. California Wildlife Conservation Bd.* (2006) 143 Cal.App.4th 173, 196 (“it cannot be assumed that activities intended to protect or preserve the environment are immune from environmental review. There may be environmental costs to an environmentally beneficial project, which must be considered and assessed. The State Agencies have not adequately shown there is “no possibility” this project, considered as a whole (Guidelines, § 15378, subd. (a)), may cause significant environmental impacts.”), citing *Davidon Homes*, 54 Cal.App.4th at p. 119, 62 Cal.Rptr.2d 612; *Dunn-Edwards Corp. v. Bay Area Air Quality Management Dist.* (1992) 9 Cal.App.4th

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argument test requires the preparation of an EIR whenever “there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial.”¹⁹⁴ The MND ignores this legal standard by asserting that the Project’s cumulative air quality impacts are insignificant because the Project will cause less pollution than a fossil fuel energy project.

17-34
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Furthermore, even if the County were entitled to a cumulative impact “credit” for cumulative GHG emissions (which it is not), there could be no offsetting of the Project’s non-GHG construction emissions based on GHG reductions. The Air Quality Report attempts to claim cumulative “offset” credits for both GHGs and all other air emissions.¹⁹⁵ In addition to being legally inadequate, this conclusion is factually inaccurate. GHGs consist of a discrete set of air pollutants, including CO₂ and other discrete pollutants such as O₃ (ozone) and methane.¹⁹⁶ Construction emissions consist of numerous air pollutants, some of which are GHGs, and some of which are not. For example, TACs from DPM emissions are not GHGs. Therefore, the County cannot dismiss its duty to analyze and mitigate the Project’s cumulative TAC emissions by relying on a reduction in GHGs.

An EIR must be prepared to conduct a legally adequate and factually accurate cumulative impacts analysis of the Project’s air emissions.

VII. THE MND FAILS TO INCLUDED LEGALLY BINDING MITIGATION MEASURES TO REDUCE SIGNIFICANT PROJECT IMPACTS

17-35

CEQA requires the lead agency to adopt feasible mitigation measures that will substantially lessen or avoid a project’s potentially significant environmental impacts.¹⁹⁷ Failure to include enforceable mitigation measures is considered a failure

644, 11 Cal.Rptr.2d 850, disapproved on other grounds in *Western States Petroleum Assn. v. Superior Court*, 9 Cal.4th 559, 570.

¹⁹⁴ 14 CCR § 15063(b)(1) (emphasis added).

¹⁹⁵ See Air Quality Report, p. 21 (emphasis added) (“The energy produced by the proposed 20 MW Project is estimated to displace approximately 34,050 tons of CO₂e that would otherwise be emitted by fossil fuel fired power plants. This is more than enough to offset the Project’s air and GHG emissions.”).

¹⁹⁶ See MDAQMD CEQA Guidelines p. 12, available at

<http://www.mdaqmd.ca.gov/Modules/ShowDocument.aspx?documentid=1806>

¹⁹⁷ CEQA §§ 21002, 21081(a) and describe those mitigation measures in the EIR. (CEQA § 21100(b)(3); CEQA Guidelines § 15126.4.

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to proceed in the manner required by CEQA that is evaluated de novo by the courts.¹⁹⁸ The court of appeal recently clarified that, to meet this requirement, mitigation measures must be incorporated directly into the MMRP to be enforceable.¹⁹⁹

The MND is inadequate because it fails to incorporate admittedly necessary mitigations as binding, enforceable mitigation measures in its Mitigation Plan. For example, the MND states that a “Construction and Demolition Waste Management Plan will be put into place prior to any demolition.”²⁰⁰ However, the MND does not include any hazardous materials mitigation measures. There is therefore no binding requirement that the Applicant develop or implement the Waste Management plan prior to Project approval, or at any time thereafter. And as discussed above, the Phase I ESA also recommended specific measures to detect and remove asbestos and lead-contaminated materials, and PCBs, from Project site.²⁰¹ The MND fails to mention any of these materials, and fails to include the recommended mitigation measures in its Mitigation Plan.

The MND similarly fails to require enforceable mitigation measures to reduce the Project’s impacts to biological resources to less than significant levels. Ms. Owens observes that the MND fails to include a Bird and Bat Monitoring Program to monitor and mitigate the potentially significant impacts from avian and bat collisions with solar panels and other above-ground equipment, including in particular, birds protected by the Migratory Bird Treaty Act.²⁰² She recommends that a Plan be required as a mandatory component of the Project, and mitigation measures adopted to directly reduce these significant impacts.

These measures must be incorporated into the Project’s Mitigation Plan as binding mitigation measures, and an EIR must be prepared to analyze the full scope of the risks posed by hazardous contamination and biological resource impacts at the Project site.

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Cont.

¹⁹⁸ *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 672.

¹⁹⁹ *Lotus v. Dept of Forestry* (2014) 223 Cal. App. 4th 645, 651-52.

²⁰⁰ MND, p. 11.

²⁰¹ See Phase I ESA, p. 4.

²⁰² See Exhibit B, Owens Comments, pp. 17-18, 21.

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VIII. CONCLUSION

The MND is inadequate because it fails to accurately describe the existing environmental setting, and fails to identify and mitigate the Project's numerous potentially significant impacts from hazardous materials and environmental consequences of economic and social changes caused by the Project, and on air quality, public health, and biological resources. Due to these significant deficiencies, the County cannot conclude that the Project's potentially significant impacts have been mitigated to a less than significant level.

17-36

The CEQA Guidelines require that an EIR be prepared if there is substantial evidence supporting a fair argument that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial.²⁰³ As discussed in detail above, there is substantial evidence that the Project may result in significant adverse and unmitigated impacts that were not identified in the MND.

17-37

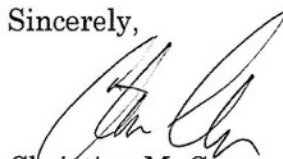
We urge the County to fulfill its responsibilities under CEQA by withdrawing the MND and preparing a legally adequate EIR to address the potentially significant impacts described in this comment letter and the attached letters. Only by complying with all applicable State and Federal laws will the County and the public be able to ensure that the Project's significant environmental impacts are mitigated to less than significant levels.

17-38

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

17-39

Sincerely,



Christina M. Caro

CMC:ric

²⁰³ CEQA Guidelines § 15063(b)(1).