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June 13, 2023

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### **Re: Agenda Item PH 1: Appeal to City Council Heliogen R&D Facility Conditional Use Permit No. 22-11, Resolution No. 23-05, SCH #2023020184**

Dear Mayor Parris, Vice Mayor Crist, Councilmembers: Mann, Malhi, Dorris, Ms. Swain, Mr. Hogan, and Ms. Stenback:

We are writing on behalf of **Citizens for Responsible Industry** (“Citizens” or “Appellants”) to provide supplemental comments ahead of the June 13, 2023 City Council hearing on Citizen’s Appeal of the Lancaster Planning Commission’s March 20, 2023 approval of Resolution No. 23-05 approving Conditional Use Permit No. 22-11 for the Heliogen R&D Facility Project (“Project”) <sup>1</sup> and approval of the Initial Study/Mitigated Negative Declaration (“MND”) (SCH #2023020184)<sup>2</sup> prepared for the Project pursuant to California Environmental Quality Act (“CEQA”) <sup>3</sup> (“Appeal”).

<sup>1</sup> City of Lancaster, CA, Planning Commission Regular Meeting, March 20, 2023 Agenda Packet, <https://cityoflancasterca.primegov.com/Public/CompiledDocument?meetingTemplateId=6210&compileOutputType=1> (“Staff Report”).

<sup>2</sup> City of Lancaster, Community Development, Initial Study/Mitigated Negative Declaration, Conditional Use Permit No. 22-11, Heliogen R&D Facility <https://www.cityoflancasterca.org/home/showpublisheddocument/45067/638115454600670000>.

<sup>3</sup> Pub. Resources Code §§ 21000 *et seq.*

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These comments respond to the following: 1) the Staff Report prepared for the June 13, 2023 City Council hearing (“Staff Report”)<sup>4</sup>; 2) the Responses to Comments prepared by the City (“Responses to Comments”)<sup>5</sup>; and 3) the Applicant’s Response letter submitted by Heliogen to the City Council on June 9, 2023 (“Applicant’s Letter”)<sup>6</sup>. The Responses to Comments incorrectly concludes that “[n]one of the issues raised in the appeal letter necessitates the revision and/or recirculation of the Initial Study nor is the preparation of an Environmental Impact Report (EIR) required.”<sup>7</sup> This is incorrect. Appellants submitted extensive comments supported by expert consultant reports which demonstrated that the MND failed to accurately disclose the extent of the Project’s potentially significant impacts on air quality, public health, hazards, biological resources, and noise, thus requiring preparation of an EIR. Appellants’ comments presented substantial evidence supporting a fair argument that the Project will result in significant, unmitigated environmental impacts in each of these resource areas.<sup>8</sup> The City Council should uphold this appeal and direct staff to prepare an Environmental Impact Report (“EIR”) that adequately analyzes the Project’s potentially significant impacts and incorporates all feasible mitigation measures to avoid or minimize these impacts.

The Applicant’s Letter similarly asserts that Appellants have “not identified any fair argument supported by substantial evidence that the Project would cause any significant environmental impacts.”<sup>9</sup> This is incorrect. Appellants presented substantial evidence, including expert opinion supported by fact, demonstrating that the Project may result in potentially significant impacts on air quality, public health, hazards, biological resources, and noise. Additionally, our comments to the

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<sup>4</sup> Staff Report from Larissa De La Cruz, Director - Community Development Jocelyn Swain, Senior Planner - Community Development to City of Lancaster Mayor Parris and City Council Members (June 13, 2023),

<https://cityoflanasterca.primegov.com/meeting/document/1306.pdf?name=Staff%20Report>.

<sup>5</sup> City of Lancaster, Responses to Comments, CUP 22-11,

<https://cityoflanasterca.primegov.com/meeting/attachment/3458.pdf?name=CUP%2022-11%20Responses%20to%20Comments> (“Responses to Comments”).

<sup>6</sup> Letter from Amy R. Higuera, Downey Brand, to City of Lancaster City Council, Heliogen, Inc.’s Response to Appeal of the City of Lancaster Planning Commission’s March 20, 2023 Approval of the Heliogen Research and Development Facility Conditional Use Permit No. 22-11 and Initial Study/Mitigated Negative Declaration (June 9, 2023),

[https://cityoflanasterca.primegov.com/meeting/attachment/3494.pdf?name=Letter%20to%20Council%20in%20Response%20to%20Appeal .pdf%20fv](https://cityoflanasterca.primegov.com/meeting/attachment/3494.pdf?name=Letter%20to%20Council%20in%20Response%20to%20Appeal.pdf%20fv) (“Applicant’s Letter”).

<sup>7</sup> Responses to Comments, p. 1.

<sup>8</sup> **Exhibit 1**, Letter from Adams Broadwell Joseph & Cardozo to Lancaster City Council, R. Rex Parris, Mayor, Marvin Crist, Vice Mayor, Ken Mann, Councilmembers: Raj Malhi, Darrell Dorris Jocelyn Swain, Senior Planner, Jeff Hogan, Development Services Director, Kathleen Stenback, City Clerk, Notice of Appeal to City Council Heliogen R&D Facility Conditional Use Permit No. 22-11, Resolution No. 23-05, SCH #2023020184 (March 31, 2023) (“ABJC Appeal Letter”).

<sup>9</sup> Applicant’s Letter, p. 1.

City presented substantial evidence that the Project is inconsistent with the General Plan and Specific Plan, resulting in land use inconsistencies that must be addressed before the Project can proceed.

We prepared these comments with the assistance of air quality and hazards expert Dr. Phyllis Fox, Ph.D.; expert conservation biologist and wildlife ecologist Scott Cashen, and noise and acoustical expert Ani Toncheva. Dr. Fox's technical comments and curriculum vitae are attached hereto as Exhibit 2.<sup>10</sup> Mr. Cashen's technical comments and curriculum vitae are attached hereto as Exhibit 3.<sup>11</sup> Ms. Toncheva's technical comments and curriculum vitae are attached hereto as Exhibit 4.<sup>12</sup> The comment letters and all attachments thereto are incorporated by reference as if fully set forth herein.

Citizens' experts reviewed the Staff Report, Responses to Comments, and Applicants' Letter prepared for the June 13, 2023 Lancaster City Council hearing on our Appeal, and determined that substantial evidence supports a fair argument that the Project may result in potentially significant environmental impacts requiring preparation of an EIR.

Dr. Fox explains in her comments that the Project will result in potentially significant air quality, Valley Fever, and health risk impacts, that the Project does not conform with the General Plan or Specific Plan, and that the City cannot make the necessary findings to approve the Conditional Use Permit.<sup>13</sup>

Citizens' biological resource expert Scott Cashen concludes that the MND failed to incorporate mitigation for potentially significant impacts to nesting birds and the MND failed to disclose, analyze, or provide mitigation for avian mortality associated with the Project.<sup>14</sup>

Citizens' noise and acoustical expert Ani Toncheva confirmed that the noise control measures proposed in the Project's proposed Conditions of Approval and Mitigation Monitoring and Reporting Program ("MMRP") are insufficient to reduce

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<sup>10</sup> See **Exhibit 2**, Phyllis Fox, Ph.D., P.E., Responses to Comments on the IS/MND for the Heliogen, Inc. Research & Development Facility (June 11, 2023) ("Fox Comments June 11, 2023").

<sup>11</sup> See **Exhibit 3**, Scott Cashen, M.S., Comments on Heliogen, Inc.'s Responses to the Appeal of the City of Lancaster Planning Commission's March 20, 2023, Approval of the Heliogen Research and Development Facility Conditional Use Permit No. 22-11 and Initial Study/Mitigated Negative Declaration ("Cashen Comments June 12, 2023").

<sup>12</sup> See **Exhibit 4**, Ani Toncheva, Heliogen R&D Facility Project City of Lancaster, California Review and Comment on Heliogen, Inc.'s Response to Appeal ("Toncheva Comments June 12, 2023").

<sup>13</sup> Fox Comments June 11, 2023.

<sup>14</sup> Cashen Comments June 12, 2023.

noise levels such that they would not cause significant impacts to noise sensitive receptors in the surrounding community.<sup>15</sup>

Pursuant to the Municipal Code, a public hearing on appeal to the City Council shall be held de novo (as if no hearing has been previously held) and therefore the Council's decision need not be limited to the points appealed and may cover all phases of the matter including the addition or deletion of any condition.<sup>16</sup> Following the public hearing, the City Council may take one of the following actions:

- A. Deny the appeal thereby affirming the action of the commission, board or city official;
- B. Grant the appeal in its entirety or any portion thereof; or
- C. Refer the matter back to the commission, board or city official for further proceedings with or without instruction.<sup>17</sup>

**Citizens urges the City Council to grant this Appeal and remand the Project to City Staff to prepare an EIR for the Project. Citizens reserves the right to submit supplemental comments and evidence at any later hearings and proceedings related to the Project, in accordance with State law.**<sup>18</sup>

## I. STATEMENT OF INTEREST

Appellants Citizens for Responsible Industry are an unincorporated association of individuals and labor organizations whose members encourage sustainable development of California's energy and natural resources. The association includes California Unions for Reliable Energy ("CURE") and its local affiliates, the affiliates' members and their families, as well as other individuals who live, recreate, work, and raise families in Los Angeles County and in communities near the Project site. Thus, Citizens, its participating organizations, and its individual members stand to be directly affected by the Project's impacts.

CURE supports the development of renewable energy and the critical role it plays in the effort to reduce greenhouse gas emissions. Since its founding in 1997,

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<sup>15</sup> Toncheva Comments June 12, 2023.

<sup>16</sup> Lancaster Muni Code § 2.44.060.

<sup>17</sup> Lancaster Muni Code § 2.44.060.

<sup>18</sup> Gov. Code § 65009(b); Pub. Resources Code § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* ("Bakersfield") (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.

CURE has been committed to building a strong economy and healthier environment and it works to construct, operate, and maintain renewable energy power plants and other facilities throughout California. CURE supports the development of clean, renewable energy technology, including solar power generation, where properly analyzed and carefully planned to minimize impacts on public health and the environment. Development of all projects subject to CEQA should take all feasible steps to ensure unavoidable impacts are mitigated to the maximum extent feasible. Only by maintaining the highest standards can energy produced from the development of new solar installations truly be sustainable.

The individual members of Citizens would be directly affected by the Project and may also work constructing the Project itself. They would therefore be first in line to be exposed to any health and safety hazards that may be present on the Project site. The coalition includes members who live, recreate, work, and raise families in Los Angeles County and in communities near the Project site. They each have a personal stake in protecting the Project area from unnecessary, adverse environmental and public health and safety impacts. Citizens, its participating organizations, and their members stand to be directly affected by the Project's impacts.

Finally, the organizational members of Citizens are concerned with projects that can result in serious environmental harm without providing countervailing economic benefits. CEQA provides a balancing process whereby economic benefits are weighed against significant impacts to the environment. It is in this spirit we offer these comments.

## **II. APPELLANTS PRESENTED SUBSTANTIAL EVIDENCE SUPPORTING A FAIR ARGUMENT THAT THE PROJECT MAY RESULT IN SIGNIFICANT ENVIRONMENTAL IMPACTS REQUIRING THE PREPARATION OF AN EIR**

Citizens presented substantial evidence supporting a fair argument in their comments on the MND, and in this Appeal, demonstrating that the Project has several significant, unmitigated impacts that are not addressed by the MND. The City must therefore prepare a legally adequate EIR which adequately analyzes and mitigates the Project's potentially significant impacts, as required by CEQA. An EIR is required if "there is substantial evidence, in light of the whole record before the lead agency, that the project may have a significant effect on the

environment.”<sup>19</sup> The EIR aids an agency in identifying, analyzing, disclosing, and, to the extent possible, avoiding a project’s significant environmental effects through implementing feasible mitigation measures.<sup>20</sup> In very limited circumstances, an agency may avoid preparing an EIR by issuing a negative declaration, a written statement briefly indicating that a project will have no significant impact. Because “[t]he adoption of a negative declaration . . . has a terminal effect on the environmental review process” by allowing the agency to dispense with the duty to prepare an EIR, negative declarations are allowed only in cases where there is not even a “fair argument” that the project will have a significant environmental effect.<sup>21</sup>

Under the fair argument standard, a lead agency “shall” 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.<sup>22</sup> The phrase “significant effect on the environment” is defined as “a substantial, or potentially substantial, adverse change in the environment.”<sup>23</sup> In certain circumstances, a project with potentially significant impacts can be modified by the adoption of mitigation measures to reduce the impacts to a level of insignificance. In such cases, an agency may satisfy its CEQA obligation by preparing a mitigated negative declaration.<sup>24</sup> A mitigated negative declaration, however, is subject to the fair argument standard. Thus, an MND is inadequate, and an EIR is required, whenever substantial evidence in the record supports a “fair argument” that significant impacts may occur, even with the imposition of mitigation measures.

The “fair argument” standard is an exceptionally “low threshold” favoring environmental review in an EIR rather than a negative declaration.<sup>25</sup> The “fair argument” standard requires the preparation of an EIR if any substantial evidence

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<sup>19</sup> Pub. Resources Code, § 21080, subd. (d) (emphasis added); CEQA Guidelines, § 15064; see also *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 927; *Mejia v. City of Richmond* (2005) 13 Cal.App.4th 322.

<sup>20</sup> Pub. Resources Code, § 21002.1, subd. (a); CEQA Guidelines, § 15002, subd. (a) & (f).

<sup>21</sup> *Citizens of Lake Murray v. San Diego* (1989) 129 Cal.App.3d 436, 440; Pub. Resources Code, §§ 21100, 21064.

<sup>22</sup> Pub. Resources Code §§21080(d), 21082.2(d); CEQA Guidelines, §§ 15002(k)(3), 15064(f)(1), (h)(1); *Laurel Heights Improvement Assn. v. Regents of the Univ. of Cal.* (1993) 6 Cal.4th 1112, 1123; *No Oil, Inc. v. City of Richmond* (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 Found., Inc. v. City of Encinitas* (1994) 29 Cal.App.4th 1597, 1601-1602.

<sup>23</sup> Pub. Resources Code, § 21068.

<sup>24</sup> Pub. Resources Code, § 21064.5; CEQA Guidelines, § 15064, subd. (f)(2).

<sup>25</sup> *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 928.

in the record indicates that a project may have an adverse environmental effect.<sup>26</sup> As a matter of law, substantial evidence includes both expert and lay opinion.<sup>27</sup> Even if other substantial evidence supports the opposite conclusion, the agency nevertheless must prepare an EIR.<sup>28</sup> Under the “fair argument” test, CEQA always resolves the benefit of the doubt in favor of the public and the environment.

Substantial evidence includes “facts, reasonable assumptions predicated upon facts, and *expert opinion supported by facts.*”<sup>29</sup> 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.<sup>30</sup> “If such substantial evidence exists ... preparation of an EIR is mandatory. Consideration is not to be given contrary evidence supporting the preparation of a negative declaration.”<sup>31</sup> Here, Appellants presented substantial evidence in our comments and in the expert consultant reports supported by facts, which demonstrate the Project will result in potentially significant environmental impacts, thus requiring preparation of an EIR.

The MND failed to adequately disclose, investigate, and analyze the Project’s potentially significant impacts, and failed to provide substantial evidence to conclude that impacts will be mitigated to a less than significant level. Because the MND lacks basic information regarding the Project’s potentially significant impacts, the MND’s conclusion that the Project will have a less than significant impact on the environment is unsupported.<sup>32</sup> Moreover, substantial evidence shows that the Project may result in potentially significant impacts. Therefore, a fair argument can be made that the Project may cause significant impacts requiring the preparation of an EIR.

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<sup>26</sup> CEQA Guidelines, § 15064, subd. (f)(1); *Pocket Protectors v. City of Sacramento*, *supra*, 124 Cal.App.4th at 931.

<sup>27</sup> Pub. Resources Code, § 21080, subd. (e)(1); CEQA Guidelines, § 15064, subd. (f)(5).

<sup>28</sup> *Arviv Enterprises v. South Valley Area Planning Comm.* (2002) 101 Cal.App.4th 1333, 1346; *Stanislaus Audubon v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 150-151; *Quail Botanical Gardens v. City of Encinitas* (1994) 29 Cal.App.4th 1597.

<sup>29</sup> CEQA Guidelines § 21082.2(c) (emphasis added).

<sup>30</sup> CEQA Guidelines § 15064; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68.

<sup>31</sup> *Georgetown Preservation Society v. County of El Dorado* (2018) 30 Cal.App.5th 358, 374; *Citizen’s Com. to Save Our Village v. City of Claremont* (1995) 37 Cal.App.4th 1157, 1168.

<sup>32</sup> Pub. Resources Code § 21064.5.

**A. There is Substantial Evidence Supporting a Fair Argument that the Project May Result in Significant Air Quality Impacts Requiring an EIR**

*i. Valley Fever*

The Project site is in an area endemic for Valley Fever.<sup>33</sup> Yet, the MND failed to adequately analyze impacts to construction workers and nearby sensitive receptors from exposure to Valley Fever. Further, the MND erroneously concluded that “the risk of exposure to Valley Fever would be minimized to a less than significant level” through implementation of Mitigation Measures 1 and 2.<sup>34</sup> The Staff Report’s Responses to Comments reiterates this incorrect conclusion by simply stating “With implementation of the identified mitigation measures, impacts would be less than significant and no further response is necessary.”<sup>35</sup>

First, Dr. Phyllis Fox confirmed that the MND’s Valley Fever mitigation measures are inadequate because there is no requirement that the Project be constructed using only equipment with enclosed cabs equipped with HEPA filters.<sup>36</sup> Therefore, heavy equipment that is not equipped with factory enclosed cabs capable of accepting them would not use HEPA filters.<sup>37</sup> These enclosed cabs would allow the inhalation of dangerous levels of valley fever containing dust particles. Valley Fever is caused by microscopic fungus known as *Coccidioides immitis* (“CI”), which lives in the top 2 to 12 inches of soil in many parts of the state of California.<sup>38</sup> When soil is disturbed by activities such as digging, grading, or driving, or is disturbed by environmental conditions such as high winds, fungal spores can become airborne and can potentially be inhaled. The infectious dose is very low, typically less than 10 spores.<sup>39</sup> The Centers for Disease Control determined that “as little as one spore may transmit disease.”<sup>40</sup> As such, without the requirement to provide factory enclosed caps with HEPA filters, Valley Fever impacts remain significant and unmitigated.

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<sup>33</sup> County of Los Angeles Public Health, Acute Communicable Disease Control, *Coccidioidomycosis*, <http://publichealth.lacounty.gov/acd/diseases/cocci.htm#:~:text=Southern%20California%20is%20a%20known,many%20parts%20of%20the%20body..>

<sup>34</sup> MND, p. 19.

<sup>35</sup> Responses to Comments, p. 6.

<sup>36</sup> Fox Comments June 11, 2023, p. 1.

<sup>37</sup> *Id.*

<sup>38</sup> Cal. Lab. Code § 6709(a).

<sup>39</sup> Jennifer McNary and Mary Deems, Preventing Valley Fever in Construction Workers, March 4, 2020, pdf 10; <https://www.safetybayarea.com/media/2020-3A.pdf>.

<sup>40</sup> Centers for Disease Control and Prevention



Second, Dr. Fox confirmed that, while the MND states that “[c]onstruction fugitive dust emissions would be controlled by an AVAQMD-approved site-specific Dust Control Plan,” control of fugitive dust does not guarantee control of Valley Fever spores because the spores are much smaller than the PM<sub>2.5</sub> and PM<sub>10</sub> particles conventional dust control plans are designed to control.<sup>41</sup> Smaller particles, such as Valley Fever spores, are not controlled by standard dust control measures found in conventional dust control plans, such as those required by AVAQMD Rule 403.<sup>42</sup> Thus, the MND’s dust control mitigation will not reduce the risk of Valley Fever exposure to less than significant levels.

The City must circulate an EIR which adequately analyzes the Project’s impacts from Valley Fever and mitigates such impacts to the greatest extent feasible before the Project can lawfully be approved.

*ii. Operational Emissions*

Dr. Fox concluded that the MND and Responses to Comments fail to include any of the information required to accurately estimate operational emissions from the Project.<sup>43</sup> Dr. Fox concluded that the estimation of operational emissions through a CalEEMod model calculation is not accurate, because CalEEMod does not estimate operational emissions from the Fischer Tropsch process that will be used to generate hydrogen.<sup>44</sup> Absent the inclusion of a process flow diagram that identifies all process units and their inputs and outputs, the public cannot check the City’s work to determine whether operational emissions were accurately calculated. Thus, the MND fails as an informational document under CEQA for failing to include a process flow diagram and failing to disclose the composition and amount of emissions from the gasifier and other process equipment.

Moreover, operational emissions may remain significant and unmitigated. Absent mitigation measures in the MND, enforced by routine monitoring, there is no guarantee that operational emissions would be “negligible,” as asserted in the Responses to Comment.<sup>45</sup> The feedstock, waste paper, varies widely in composition and thus, emissions from the process will vary widely and will include not only criteria pollutants from combustion processes but also toxic air contaminants

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<sup>41</sup> Fox Comments June 11, 2023, p. 2.

<sup>42</sup> *Id.*

<sup>43</sup> *Id.* at 4.

<sup>44</sup> Fox Comments June 11, 2023, p. 4.

<sup>45</sup> *Id.*; Responses to Comment, p. 5.

(TACs).<sup>46</sup> Continuous emission monitoring should be required to assure that emissions remain below significant levels.<sup>47</sup>

Further, Dr. Fox found that gasifiers produce residues, such as ash and tarry condensates.<sup>48</sup> Tar, for example, is a major unwanted byproduct of biomass gasification, which can cause issues such as equipment blockages, lower system efficiency, poor quality gas output, and increased maintenance. The MND and Staff Report are silent on these issues. Further, the high temperatures used in the gasifier leaves metals in the vapor state, which can be emitted to atmosphere, resulting in undisclosed public health impacts due to the proximity of sensitive receptors.<sup>49</sup> The City must circulate an EIR which adequately analyzes and mitigates the Project's potentially significant operational emissions and mitigates such impacts to the greatest extent feasible before the Project can be approved.

*iii. Health Risk*

The Responses to Comments provides that “[a] health risk assessment was not prepared for the project due to the very small amount of project construction and operation emissions as documented in the Initial Study.”<sup>50</sup> Dr. Fox concludes that diesel particulate matter emissions are not minimal and will result in significant acute and cancer health impacts.<sup>51</sup> Dr. Fox’s comments demonstrate that (1) cancer health risks of diesel particulate matter emitted during construction are significant<sup>52</sup> and (2) acute health risks of diesel particulate matter emitted during construction are significant.<sup>53</sup>

Dr. Fox concludes that the Responses to Comments is incorrect when it asserts that “[t]he limited duration and quantities of construction emissions ensure that no individual receptor would be exposed to substantial pollutant concentrations.”<sup>54</sup> Limited duration and limited emissions do not guarantee insignificant health impacts.<sup>55</sup> Dr. Fox estimates the health impacts of the “limited

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<sup>46</sup> Fox Comments June 11, 2023, p. 4.

<sup>47</sup> *Id.*

<sup>48</sup> *Id.*

<sup>49</sup> *Id.*

<sup>50</sup> Responses to Comments, p. 5.

<sup>51</sup> Fox Comments June 11, 2023, p. 5; Fox Comments Attachment A, p. 4.

<sup>52</sup> Fox Comments June 11, 2023, p. 5.

<sup>53</sup> *Id.*

<sup>54</sup> Response to Comments, p. 10.

<sup>55</sup> Fox Comments June 11, 2023, p. 5.

duration/limited emission construction scenario and documented significant acute and cancer health risks.<sup>56</sup>

Dr. Fox modelled the “limited duration and limited quantities of construction emissions” reported in the MND and found that acute and cancer impacts would be significant.<sup>57</sup> The Responses to Comment argue that construction emissions would be “short-term” and “located at different locations within the project site” such that “no individual receptor would be exposed to substantial pollutant concentrations.”<sup>58</sup> However, without quantifying toxic air contaminant emissions and comparing them to health-based thresholds, the City lacks substantial evidence to support this assertion. This response is also inconsistent with OEHHA guidance used to perform health risk assessments, which takes these factors into account.<sup>59</sup> OEHHA, for example, recommends a 30-year exposure duration “...as the basis for estimating cancer risk at the maximum exposed individual resident (MEIR)...This exposure duration represents the time of residency for 90 to 95% of Californians at a single location and should provide adequate public health protection against individual risk.”<sup>60</sup>

Further, Dr. Fox evaluated “acute” impacts, which are based on a 1-hour exposure. Off-site residents and on-site workers can reasonably be expected to stay in the significant acute impact area for at least 1-hour.<sup>61</sup> Similarly, the cancer risk is based on a 2-year exposure. Dr. Fox reasonably assumed that occupants of homes to the west of the Project site fronting on 5<sup>th</sup> Street East would be present in their homes for at least a 2-year period. This constitutes a potentially significant health risk impact which the MND failed to adequately analyze or mitigate. Further, MND is silent as to operational health impacts, which Dr. Fox determined based on substantial evidence remain significant and unmitigated.<sup>62</sup>

The City must circulate an EIR which adequately analyzes the Project’s potentially significant health risk impacts in an HRA and mitigates such impacts to the greatest extent feasible before the Project can be approved.

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<sup>56</sup> Fox Comments June 11, 2023, p. 5.

<sup>57</sup> *Id.*

<sup>58</sup> Response to Comments, p. 10.

<sup>59</sup> OEHHA, Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2012, Section 8.2.3, p. 8-6, pdf 185;  
<https://oehha.ca.gov/media/downloads/crnrr/2015guidancemanual.pdf>.

<sup>60</sup> Fox Comments June 11, 2023, p. 5.

<sup>61</sup> *Id.* at 4.

<sup>62</sup> *Id.*

*iv. Mirror Washing*

The Responses to Comments provides that “During project operations, emissions would result from the occasional use of on-site off-road equipment and routine cleaning of the mirrors that would not expose sensitive receptors to substantial concentrations of air pollutants.”<sup>63</sup> Dr. Fox concluded that the record before the City Council provides no evidence that heliostat cleaning would not expose sensitive receptors to substantial concentrations of PM2.5 and PM10 emissions.<sup>64</sup> Dr. Fox concluded, on the contrary, that “[a]s the heliostats are adjacent to residential neighborhoods, the act of spraying water onto the heliostats to remove deposited dust will suspend the dust, resulting in PM2.5 and PM10 emissions that could impact adjacent workers and residents.”<sup>65</sup> The MND fails as an informational document under CEQA for failing to estimate mirror cleaning PM2.5 and PM10 emissions and their health impacts which may remain significant and unmitigated.

The City must circulate an EIR which adequately analyzes the Project’s PM2.5 and PM10 emissions associated with mirror washing and mitigates such impacts to the greatest extent feasible before the Project can be approved.

*v. Decommissioning*

The City has not adequately analyzed the environmental impacts of Project decommissioning. The City’s rationale for its failure to analyze impacts from decommissioning is that “[w]hile decommissioning emissions may be the same or slightly higher than construction emissions, there is no way of knowing if, when or how those activities will occur. CEQA does not require an analysis of speculative information.”<sup>66</sup>

The City’s failure to analyze impacts of decommissioning based on the argument that it is too speculative is misplaced. First, CEQA requires a thorough investigation of potential impacts before a determination that a particular impact is too speculative for evaluation. The record does not contain a thorough investigation of potential impacts of decommissioning because the City did not conduct any investigation. “Analyzing whether a project may have a significant environmental effect necessarily involves some degree of forecasting, but perfect prescience is not

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<sup>63</sup> Responses to Comments, p. 5.

<sup>64</sup> Fox Comments June 11, 2023, p. 5.

<sup>65</sup> *Id.*

<sup>66</sup> Responses to Comments, p. 2.

required.”<sup>67</sup> Further, “an agency is required to forecast only to the extent that an activity could be reasonably expected under the circumstances.”<sup>68</sup> Here, the record demonstrates that decommissioning is a reasonably foreseeable component of the Project. The Applicant stated that the Project would be required to be decommissioned at the end of its useful life.<sup>69</sup> The Planner also stated that the Applicant “would be required to return it to the city under the terms of their lease and the condition in which they found it.”<sup>70</sup> The Rental Agreement for the property between Heliogen and the City provides that the lease shall end “no later than May 31, 2024.”<sup>71</sup> Moreover, the “Tenant shall further be solely responsible, and shall reimburse City, for all costs and expenses incurred by City arising out of or connected with the removal, clean-up and/or restoration work and materials necessary to return the City Parcel and any property adjacent to the City Parcel affected by Hazardous Materials emanating from the City Parcel ***to their condition existing at the time of the commencement of the Term.***”<sup>72</sup> Based on this description of decommissioning, the City could have, and should have, feasibly analyzed the required elements of decommissioning and forecasted the potentially significant environmental impacts for the decommissioning of the Project anticipated in 2024.

There is also inconsistency in the record about the terms for decommissioning which must be clarified in the CEQA document. The Applicant’s Letter to the City Council provided that “under the terms of Heliogen’s lease agreement with the City, at the end of the Project’s life, Heliogen is required to leave all equipment on site for the City’s use unless the City requests that the equipment be removed and disposed of in accordance with all applicable laws.”<sup>73</sup> This is contrary to Staff’s statement at the March 20, 2023 Planning Commission hearing, that the site would be required to be returned to “the condition in which they found it.”<sup>74</sup> These statements demonstrate that decommissioning is a reasonably foreseeable phase of the Project which both the City and the Applicant have considered. Under CEQA, this phase must be described and analyzed in an EIR.

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<sup>67</sup> *Marin Mun. Water Dist. v. KG Land California Corp.* (1991) 235 Cal.App.3d 1652, 1662.

<sup>68</sup> *Cadiz Land Co. v. Rail Cycle* (2000) 83 Cal.App.4th 74, 107–108.

<sup>69</sup> City of Lancaster Planning Commission Meeting, March 20, 2023, <https://www.youtube.com/watch?v=O68eP8Jtg-Y>.

<sup>70</sup> *Id.*

<sup>71</sup> Rental Agreement By and Between the City of Lancaster and Edisun Microgrids, Inc. (May 14, 2019, <https://www.dropbox.com/s/0lz3ggtjknpi7js/10%20Edisun%20Rental%20Agreement%20050719.pdf?dl=0>).

<sup>72</sup> *Id.*

<sup>73</sup> Applicant’s Letter, p. 2.

<sup>74</sup> City of Lancaster Planning Commission Meeting, March 20, 2023, <https://www.youtube.com/watch?v=O68eP8Jtg-Y>.

Air quality and health risk expert Dr. Phyllis Fox determined that Project decommissioning will result in even more significant environmental impacts than construction the Project.<sup>75</sup> Dr. Fox found that the air quality (PM2.5, PM10, NOx), public health (diesel particulate matter), and Valley Fever impacts of decommissioning would be substantially greater than the impacts of constructing the Project as documented in her March 8, 2023 comments for several reasons. First, the entire site would have to be graded and revegetated, rather than the portion disturbed by the proposed Project. Second, Project facilities, which contain hazardous materials, would have to be disassembled on-site and transported to distant disposal or reuse facilities.<sup>76</sup>

Decommissioning would require the removal and disposal of all hydrogen production facilities, heliostats, solar panels, underground infrastructure, fencing, roads, and foundations including the following tasks:

1. Remove rack wiring
2. Dismantle racks
3. Remove panels and racks
4. Remove electrical equipment
5. Remove pipelines
6. Breakup and remove concrete pads or ballasts
7. Remove racks
8. Remove cable
9. Remove ground screws and power poles
10. Remove fencing
11. Grading
12. Seed/replant disturbed area
13. Truck wiring, panels, racks, equipment, concrete, and other removed materials to recycling or disposal facilities.

The removal, disposal, and repurposing of these materials would generate emissions from the disassembly process and from transporting the removed materials to disposal and/or recycling facilities.<sup>77</sup> Dr. Fox concluded that solar panels and heliostats contain metals in the semiconductors and solder, including lead and cadmium, which could classify them as hazardous waste.<sup>78</sup> The MND does not contain any of the information required to evaluate the impacts of removing and disposing of these materials.

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<sup>75</sup> Attachment A, Fox Comments, p. 2.

<sup>76</sup> *Id.*

<sup>77</sup> Attachment A, Fox Comments, p. 1.

<sup>78</sup> *Id.*

Dr. Fox found that impacts from decommissioning would be more significant than disclosed in the MND because the Project evaluated in the MND relied on existing facilities, the heliostats and fencing and a graded site.<sup>79</sup> Decommissioning would require removal of Project facilities plus facilities currently present at the site, such as the heliostats. The MND therefore does not contain substantial evidence showing that impacts from decommissioning are less than significant. In fact, there is substantial evidence in the record supporting a fair argument that impacts from decommissioning are significant, unmitigated, and require preparation of an EIR.

The City must prepare an EIR which includes a decommissioning plan that defines the obligations of the Project developer to remove all Project facilities and restore the land to its original condition when the Project is completed. Absent adequate mitigation to reduce impacts of decommissioning to less than significant levels, the City cannot lawfully approve the Project. The City must prepare an EIR which adequately analyzes and mitigates impacts of decommissioning before the Project can be approved.

### **B. The Project's Air Emissions Result in Nonconformance with the City's General Plan**

The City of Lancaster General Plan 2030 requires that, in order to protect the air quality in Lancaster, the General Plan presents an Air Quality Program for achieving the following objectives:

- Minimizing air pollution emissions generated by stationary sources through the implementation of energy conservation programs outlined in the Plan for the Natural Environment and mitigation of impacts to air resources resulting from new development.
- Protection of sensitive uses from the impacts of air pollution by ensuring that potential air pollution sources are located away from residential areas and other sensitive receptors.
- Mitigating construction activities to minimize fugitive dust by implementing the dust abatement procedures described in the Land Resources section of the Plan for the Natural Environment.<sup>80</sup>

The Project does not comport with the General Plan because it will expose sensitive uses to significant, unmitigated levels of air pollution. The Project also

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<sup>79</sup> *Id.*

<sup>80</sup> Lancaster General Plan 2030, p. 1-31,  
<https://www.cityoflanasterca.org/home/showpublisheddocument/9323/635775792210230000>.

directly contravenes the General Plan by siting a polluting industrial site immediately adjacent to sensitive receptors. This Project is likely to result in significant and unmitigated construction and operation air pollution and health risks to nearby sensitive receptors, namely residents in the Sienna Heights Apartments.

The City must circulate an EIR which adequately analyzes the Project's air pollution emissions, and resultant nonconformance with the City's General Plan, in accordance with CEQA.

### **C. Appellants Presented Substantial Evidence Supporting a Fair Argument that the Project May Result in Significant Impacts to Biological Resources, Requiring an EIR**

As shown in Citizen's prior comments and expert consultant reports, substantial evidence supports a fair argument that the significant risk to avian mortality posed by the Project's solar PV facilities, combined with the Project's location, size, and technology, is significant and insufficiently mitigated.<sup>81</sup>

Mr. Cashen's comments provided substantial evidence demonstrating an increased risk to biological resources as a result of the Project's location near the intersection of two major avian migration routes, its relatively large size, and the use of PV technology, which is especially hazardous to birds.<sup>82</sup> The Applicant's Letter incorrectly asserts that Appellants "argue that the reflective panels pose some risk of mortality for birds. However, they do not provide any evidence to support their conclusory statements that such impacts would occur."<sup>83</sup> This is incorrect. Mr. Cashen's comments provided substantial evidence which explained why reflective panels pose a risk to birds.<sup>84</sup> Mr. Cashen's letter contained citations to several scientific publications that address the issue.<sup>85</sup> Mr. Cashen's comments supported by reputable scientific studies provide substantial evidence that birds collide with solar panels in similar projects.<sup>86</sup> In fact, Mr. Cashen's comments provide substantial evidence demonstrating that bird fatalities have been detected at *all* solar facilities that have monitored for avian fatalities.<sup>87</sup>

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<sup>81</sup> Cashen Comments, p. 3.

<sup>82</sup> *Id.*; Walston LJ Jr, KE Rollins, KE LaGory, KP Smith, SA Meyers. 2016. A preliminary assessment of avian mortality at utility-scale solar energy facilities in the United States. *Renewable Energy* 92:404-414.

<sup>83</sup> Applicant's Letter, p. 11.

<sup>84</sup> Cashen Comments June 12, 2023, p. 1.

<sup>85</sup> *Id.*

<sup>86</sup> *Id.*

<sup>87</sup> *Id.*



As noted in Mr. Cashen’s comment letter, the Project is located near the intersection of two major migration routes: one used by landbirds, and one used by waterbirds.<sup>88</sup> The fact that the Project is located in an urban setting does not eliminate the avian collision hazard: there is no environmental setting that enables birds to elude the lethal hazard of reflective PV panels.<sup>89</sup> Indeed, there is scientific evidence that birds may in fact be attracted to urban environments during migration.<sup>90</sup> Thus, solar facilities in urban settings not only pose a threat to birds (and other volant wildlife), but they also may function as ecological traps.<sup>91</sup>

The USFWS and their own forensics specialists documented numerous reports of collisions and mortalities at solar power facilities, including facilities with PV panel design like the Project.<sup>92</sup> The USFWS reports explain that “[s]ome species of birds, such as waterbirds, may perceive the solar field as a water body (commonly referred to as the “Lake effect”). Many avian species are attracted to permanent and ephemeral water sources, especially in arid environments. **Based on information collected at existing solar facilities, solar panels and other project components are likely to present a collision hazard to migratory birds.**”<sup>93</sup>

Substantial evidence also supports a fair argument that the Project would have significant, unmitigated cumulative impacts on biological resources. As Mr. Cashen explained in his comments, the Project may result in a significant and cumulatively significant impact to biological resources, through mortality associated with bird strikes on the PV and heliostats on the Project site.<sup>94</sup> Mr. Cashen wrote that “[b]ecause the IS/MND does not incorporate mitigation, the Project’s contribution to cumulatively significant impacts on bird populations remain considerable.”<sup>95</sup> The City must prepare an EIR which adequately analyzes and mitigates potentially significant impacts to avian mortality from Project components.

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<sup>88</sup> *Id.* at 2.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> An “ecological trap” occurs when an organism is lured into habitat where it either dies or has reduced reproductive output. *See* Robertson BA, Rehage JS, Sih A. 2013. Ecological novelty and the emergence of evolutionary traps. *Trends in Ecology & Evolution* 28:552-560.

<sup>92</sup> Kagan RA, TC Viner, PW Trail, EO Espinoza. 2014. Avian Mortality at Solar Energy Facilities in Southern California: A Preliminary Analysis. National Fish and Wildlife Forensics Laboratory. 28 pp. Retrieved from: <https://www.ourenergypolicy.org/wp-content/uploads/2014/04/avian-mortality.pdf>.

<sup>93</sup> *Ibid.* (emphasis added).

<sup>94</sup> Cashen Comments, p. 4.

<sup>95</sup> *Id.*

The Staff Report and the Applicant's Letter emphasize the Project's small scale and urban context to diminish the potentially significant impacts to avian species.<sup>96</sup> Mr. Cashen concludes that, even though the Project contains 400 solar panels on a .55 acre portion of the site, the Project is still hazardous to birds. Mr. Cashen's comment letter explained that noise and human activity associated with construction of the Project has the potential to cause "take" of birds that use the trees for nesting.<sup>97</sup> Mr. Cashen's comment was substantiated by a citation to the U.S. Fish and Wildlife guidelines for avoiding and minimizing incidental take of migratory birds. The guidelines state:

"One approach to identifying if your activity may affect migratory birds is to look at common stressors. Stressors are any alteration of or addition to the environment that have an adverse impact. For migratory birds, stressors include vegetation alteration, vegetation removal, ground disturbance, structures, noise, light, chemicals, and human presence."<sup>98</sup>

As such, the Project may result in potentially significant impacts to avian species. These impacts must be analyzed in an EIR in accordance with CEQA before the Project can be approved.

#### **D. Appellants Presented Substantial Evidence Supporting a Fair Argument that the Project May Result in Significant Noise Impacts Requiring an EIR for the Project**

Substantial evidence supports a fair argument that noise impacts from construction and operation of the Project remain significant and unmitigated. Mr. Derek Watry and Ani Toncheva's expert comments confirmed that 400 heliostats will be installed by driven piles, yet the MND's construction noise analysis did not include an analysis of the noise which will result from pile driving nor the significant vibration impacts that will result from pile driving on nearby residents and the nearby radio station studio.<sup>99</sup> Mr. Watry's and Ms. Toncheva's comments provided substantial evidence that both pile driving noise and non-pile driving noise exceed the established threshold of significance and that noise from project construction will significantly impact the nearest residents.<sup>100</sup> The record before

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<sup>96</sup> Applicant's Letter, p. 12.

<sup>97</sup> Cashen Comments June 12, 2023, p. 2.

<sup>98</sup> See U.S. Fish and Wildlife Service. 2023. Avoiding and Minimizing Incidental Take of Migratory Birds [web page]. Available at: <<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>>. (Accessed 3 Mar 2023).

<sup>99</sup> Watry Comments March 2023, p. 2.

<sup>100</sup> *Id.*

the Council fails to address these issues, and the City failed to prepare an EIR before presenting the Project to decision makers for approval, in violation of CEQA.

The Responses to Comments incorrectly asserts that noise analysis of pile driving activities was excluded from the City's analysis because "[p]ile driving is a temporary and intermittent construction activity."<sup>101</sup> But, CEQA requires analysis for temporary and permanent increases in noise.<sup>102</sup> Thus, these impacts require analysis in an EIR circulated for public review and comment.

The MND also failed to analyze the noise from cleaning the solar panels, nor does it appear to account for the noise from all 500 heliostats operating simultaneously.<sup>103</sup> Mr. Watry's MND comments confirmed that the MND failed as an informational document under CEQA for failing to establish an adequately baseline to accurately analyze noise impacts.<sup>104</sup> This resulted in a failure to analyze potentially significant noise impacts from Project construction and operation which the Staff Report and Responses to Comments fail to resolve.

The Responses to Comments asserts that the radio stations within the vicinity of the Project are not noise sensitive receptors. This assertion is not supported by substantial evidence, and is contradicted by substantial evidence from relevant agencies. For example, the County of Los Angeles provides that sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment.<sup>105</sup> The radio stations within the Project vicinity are likely to contain vibration-sensitive equipment. Ms. Toncheva also confirmed that "[b]roadcast and recording studios are some of the quietest indoor environments. As stated in our letter, construction activity would likely exceed annoyance threshold criteria at the KTPI radio station unless the recording studios are isolated from the structure, which could interfere with studio operations."<sup>106</sup> As such, these impacts were required to be analyzed in the MND, but the City failed to do so.

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<sup>101</sup> Responses to Comments, p. 10.

<sup>102</sup> CEQA Guidelines Appendix G Section XIII Noise ["Would the project result in: a) Generation of a substantial *temporary* or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?"] (emphasis added).

<sup>103</sup> Watry Comments March 2023, p. 2.

<sup>104</sup> *Id.*

<sup>105</sup> LA County Flood Control District, Enhanced Watershed Management Programs Draft Program Environmental Impact Report (January 2015), <https://pw.lacounty.gov/lacfd/ewmppeir/docs/3.10%20Noise.pdf>.

<sup>106</sup> Toncheva Comments June 12, 2023.

The City must prepare an EIR which adequately analyzes and mitigates the Project's potentially significant noise and vibration impacts before the Project can be approved.

### III. CONCLUSION

CEQA requires that an EIR be prepared if there is substantial evidence demonstrating that any aspect of a project, either individually or cumulatively, may cause a significant effect on the environment.<sup>107</sup> As discussed herein, there is substantial evidence supporting a fair argument that the Project would result in significant adverse impacts that were not identified in the MND, and that are not adequately analyzed or mitigated. The MND also fails to contain the basic information and analysis required by CEQA, deficiencies which "cannot be dismissed as harmless or insignificant defects."<sup>108</sup> The City's findings regarding Project impacts either do not comply with the law or are not supported by substantial evidence. The City cannot approve the Project until it prepares an EIR that resolves these issues and complies with CEQA's requirements.

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

Sincerely,



Kelilah D. Federman

Attachments  
KDF:acp

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<sup>107</sup> Pub. Resources Code § 21151; CEQA Guidelines §15063(b)(1).

<sup>108</sup> *Bakersfield Citizens for Local Control v. Bakersfield* ("Bakersfield") (2004) 124 Cal. App. 4th 1184, 1220.