

Letter 5

COMMENTER: Rachael Koss

DATE: September 29, 2015

RESPONSE:

Master Response to Letter 5

The comment letter submitted by Adams, Broadwell, Joseph and Cardoza (Letter 5) included comments regarding the sufficiency of biological studies, noting that full protocol-level surveys were not completed for a variety of species. Responses to comments on the specific details of some surveys have been provided directly for each comment; however, this general response addresses the adequacy of biological surveys in general, and why protocol-level surveys are not required under CEQA to evaluate the potential for impacts to special status plant and wildlife species.

The EIR Biological Resources chapter's environmental setting discussion is based on review by qualified biologists of data contained within a number of biological resource databases, available literature on species known to occur in the project vicinity, and an initial field survey designed specifically to evaluate the presence or absence of suitable habitat to support special status plant and wildlife species on the site and assess the potential for impacts to those species that are known to occur or may occur on the project site.

The project site is located on previously developed and highly disturbed land that will continue to serve as a closed landfill (Landfill 15 on the west parcel) and a former fertilizer pond (on the east parcel). As described in the Draft EIR, the site consists of roughly 60 acres of land within an existing, highly disturbed context of oil refinery development, and is surrounded by developed commercial, industrial and transportation uses. The direct impacts from project development would be strictly limited to the existing, previously disturbed approximately 40-acre area within the landfill and fertilizer (treatment) pond footprints. Indirect impacts to the 20 acres of potential habitat excluded from development would be limited to potential dust and construction runoff that would be controlled through construction SWPPP and BMP measures and potential limitation of wildlife movement between adjacent marsh and stream habitats and the project site, which would be controlled by exclusion fencing and biological monitoring during construction.

The physical and biological characteristics of the project site, identified during the biological site survey, combined with available information on the occurrence of special status species in the region discussed in Section 4.1 (Biological Resources) of the Draft EIR, provide a sufficient basis for a thorough evaluation of the limited number of vegetation communities and potential wildlife habitats within and immediately adjacent to the project site. Protocol species surveys were not warranted due to the small size and highly disturbed nature of the study area within an operating oil refinery context and a distinct lack of native habitats within the project footprint. Biologists, however, did walk the entire site and visually examined the entire 60-acre extent of the impact area to identify any features and habitat capabilities that could indicate the presence of special status species.



Because protocol surveys are not required or performed to determine the potential for the project site to support special status species under CEQA, specific details on the environmental conditions such as temperature, wind, cloud cover, etc., were not relevant to the analysis. Furthermore, according to MCE's biological expert, characterization of highly disturbed habitats on the project site with a full plant inventory is unwarranted and excessive.

The EIR biological analysis does, however, fully evaluate the potential for special status species to occur on the project site, based on a comprehensive literature review and identification of potentially suitable special status species habitat where it occurs within the project area (i.e. burrowing owl and nesting birds), even though field surveys revealed this habitat to be marginal at best for these species. Nonetheless, the Draft EIR evaluated potential project impacts on any special status species that could occur in habitats on the project site and proposed avoidance and mitigation measures for these species. These measures include pre-construction surveys to verify that special status species are not present on the project site during construction, and appropriate avoidance or mitigation measures that could be implemented if any such species are found.

Letter 5 states an opinion that the Draft EIR provided insufficient information to evaluate impacts to biological resources. Appropriate biological survey protocols are based in large part on the nature of a given project site, along with other factors. Highly disturbed and modified sites require less intensive analysis than pristine, natural lands. Full resource inventories and protocol-level surveys for all potentially occurring species are not required under CEQA. The California Court of Appeals in *Association of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383 specifically concluded that protocol-level surveys were not required to adequately determine the significance of impacts to special status species in an EIR and stated that "CEQA does not require a lead agency to conduct every recommended test and perform all recommended research to evaluate the impacts of a proposed project. The fact that additional studies might be helpful does not mean that they are required." Consequently, when there is sufficient information regarding biological resources to determine potential impacts to those resources, then additional studies are not required under CEQA. In the case of this EIR, sufficient information was available through site reconnaissance and habitat assessment surveys, review of CNDDDB data (as shows on figure 4.1-2) and other technical documents, including primary literature and USFWS/CDFW reports and technical documents. The Draft EIR identified the potential for special status species to occur on the project site, characterized the risks to those species based on the disturbance associated with the proposed project activity, and provided mitigation to address potential impacts. Mitigation includes pre-construction surveys (appropriately timed for proposed construction schedules to ensure avoidance of impacts to special status species) and/or require avoidance and mitigation for species that are assumed present because suitable habitat is present and protocol surveys were not conducted to document absence.

As outlined in the Draft EIR (see MM BIO-2b and BIO-2c), standard pre-construction surveys are proposed to determine if special status species are present on site at the time of construction. These surveys are required to be conducted by qualified biologists and follow standard protocol. Appropriate mitigation has been proposed to address potential impacts if species are determined to be present at the time of the pre-construction surveys.



Response 5.1

The commenter states an opinion that the Draft EIR is inadequate and should be re-circulated. This general comment introduces the specific comments that follow it in this letter, which are responded to individually below. The responses demonstrate that the Final EIR complies with CEQA and does not require recirculation. Refer also to the Master Response to Letter 5.

Response 5.2

The commenter describes two organizations that have concerns about the proposed project. This comment is noted, but does not pertain to the analysis or conclusions of the Draft EIR.

Response 5.3

The commenter discusses various aspects of CEQA and asserts that the Draft EIR fails to inform the decision makers and the public of the Project's potential environmental impacts and does not avoid or reduce environmental harms if feasible. These general comments precede the specific comments that follow it in the letter, which are responded to individually below. For the reasons below, and contrary to the commenter's assertions, the Final EIR fulfills CEQA's disclosure and mitigation policies.

Response 5.4

The commenter states an opinion that the Draft EIR's project description is incomplete because the proposed project's water demand during construction is not quantified. Water demand from construction and operation of the project would be very low compared to most other land uses (agriculture, parks, residential, commercial, industrial, etc.), and thus, as discussed in the Draft EIR in Section XVII, *Utilities and Service Systems*, of the Initial Study (Appendix A to the Draft EIR), impacts related to water supply would be less than significant. Nevertheless, the following language has been added to Page 2-15 of Section 2.0, *Project Description*:

Water demand for dust control, concrete mixing and soil compaction during construction is anticipated to total a maximum of three acre feet over the projected 11-month construction period. Water demand for project operation is anticipated to total a maximum of 0.6 acre feet per year for annual washing. Reclaimed water would be supplied by the East Bay Municipal Utilities District for these uses as available.

Reclaimed water for construction is provided by the East Bay Municipal Utilities District via its recycled water truck program. The District "provides recycled water at no charge to trucks for construction and other non-potable purposes." Recycled water from the District is available for construction, landscaping and other non-drinking uses (EBMUD, November 2015) (<http://www.ebmud.com/water-and-drought/recycled-water/recycled-water-quality/>).

Impacts related to water supply and demand are discussed in Section XVII, *Utilities and Service Systems*, of the Initial Study (Appendix A to the EIR). As discussed therein, impacts would be less than significant. The information above does not change the conclusions of the Initial Study



as to the evaluation or significance of these impacts; therefore no further changes to the EIR are warranted.

Response 5.5

The commenter states an opinion that the Draft EIR project description is incomplete because the proposed project's water demand during construction is not quantified. Please see Response 5.4.

Response 5.6

The commenter states an opinion that the Draft EIR project description is incomplete because the proposed project's water source is not stated. The water source would be the East Bay Municipal Utilities District, which supplies water to the City of Richmond and would have sufficient supplies for the low construction and operational water demands of the project as discussed in Response 5.4.

Response 5.7

The commenter states an opinion that the Draft EIR does not include sufficient detail about future decommissioning of solar photovoltaic (PV) equipment on the site. Decommissioning activities are described in the Draft EIR in Section 4.2, *Hazards and Hazardous Materials*, which states that the impact analysis evaluates decommissioning based on current standard decommissioning practices, which include dismantling and repurposing, salvaging/recycling, or disposing of project components, and site restoration. The commenter does not specify what information or details are lacking; thus a specific response is not possible. Impacts related to decommissioning would be less than significant with implementation of Mitigation Measure HAZ-3, Disposal of PV Modules and Support Structures. No changes to the EIR are warranted.

Response 5.8

The commenter repeats the assertion that the EIR needs more information about decommissioning. Please see Response 5.7. The commenter also states an opinion that decommissioning could result in environmental impacts related to several issue areas. As noted in Section 4.2, *Hazards and Hazardous Materials*, of the Draft EIR, the EIR evaluates decommissioning based on current standard decommissioning practices, which include dismantling and repurposing, salvaging/recycling, or disposing of project components, and site restoration. As also noted therein, it would be speculative to assume whether, when and how decommissioning would be carried out after the estimated minimum equipment lifespan of 30 years. The types of equipment proposed for the project do not require special handling or disposal. Accordingly, the Draft EIR further states that MCE may conduct additional CEQA review to ensure compliance with requirements related to hazards and hazardous materials management (and other issue areas) during decommissioning, if and when it occurs. Therefore, contrary to the commenter's assertion, the public and those decision makers considering the future decommissioning, if and when it occurs, would have the opportunity to comment on any discretionary decisions related to the decommissioning, unless otherwise exempt from CEQA. Commenter's comments reinforce that the EIR reflects MCE's good faith effort at full disclosure, based on information available at this time. As discussed in the Draft EIR, impacts related to decommissioning would be less than



significant with implementation of Mitigation Measure HAZ-3, Disposal of PV Modules and Support Structures. No changes to the EIR are warranted.

Response 5.9

The commenter provides background for establishing the environmental setting, and states an opinion that the Draft EIR's description of the project's environmental setting related to biological resources was developed based on inadequate approach and seasonal timing. However, establishing a sound environmental baseline neither requires the completion of every possible study, nor does it specifically require the completion of protocol level surveys for special status species that may or may not occur in the area. The evaluation of the habitat, vegetation communities, signs of wildlife and potential to support special status plant and animal species undertaken for this project provides sufficient information to address the biological resources impacts of this project, especially when the site's relatively small size, highly disturbed nature, and infill character are considered.

Please also see Master Response to letter 5 for more information on the adequacy of the biological analyses.

Response 5.10

The commenter states that the Draft EIR does not provide information on special status plant and animal species outside of the project site. Please response 5.42 below.

Response 5.11

The commenter states that the Draft EIR includes inconsistent and unreliable information on raptor use of the site. Please see Response 5.43.

Response 5.12

The commenter states that burrowing owl surveys were insufficient. Because the information collected is sufficient to determine potential impacts, and feasible mitigation has been identified, impacts, if any, to burrowing owls would be less than significant. Please see Master Response to Letter 5 and Response 5.44 for additional details.

Response 5.13

The commenter states that botanical surveys were insufficient. Please see Master Response to Letter 5 and response 5.45.

Response 5.14

The commenter states that the evaluation of salt marsh harvest mouse and San Pablo vole were inadequate. Please see response 5.46.



Response 5.15

The commenter states that suitable habitat for salt-marsh harvest mouse and San Pablo vole is present on the site. For clarification, the salt marsh habitat present adjacent to the project site consist of a steep walled channel that is tidal influenced. This channel fills and empties with the tide, but does not expand into any mud flat or marsh areas. While typical salt marsh plant species are present, there are no areas of dense cattail and bulrush or other wet marsh type areas that would provide the required microhabitat conditions to support populations of listed species. Additionally, this salt marsh habitat occurs as a narrow strip, not exceeding more than about 50 feet in most areas adjacent to the project. As such this feature is best described as a narrow drainage with some typical salt marsh plants present along the edges of the channel, and would not be described as typical salt marsh that would be expected to support breeding populations of listed or fully-protected species. Additional detail relating salt marsh harvest mouse and other small mammals is presented in responses 5.42 and 5.46 respectively

Response 5.16

The commenter states that North Coast Salt Marsh, tidal channels and freshwater emergent marsh are within the immediate vicinity of the Project site and that there are five natural vegetation communities within the vicinity of the Project site and 35 special status animal species known to occur within the vicinity of the Project site. The commenter also notes that the Project site is located along the Pacific Flyway and is one mile from San Francisco Bay, which is recognized as a Western Hemisphere Shorebird Reserve Network Site of Hemispheric Importance for shorebirds, and states that the Draft EIR did not adequately disclose, evaluate or mitigate potential impacts to biological resources, noting specifically burrowing owl.

Please see responses 5.44 and 5.47 for responses to the issue of the adequacy of the evolution of potential impacts to burrowing owl.

Regarding the other issues the commenter made, the Draft EIR clearly identified and disclosed the presence of the vegetation communities and special status species noted by the commenter. While it is true that the project is in the vicinity of the Pacific Flyway and San Francisco Bay, the site itself lacks critical components that would make it important for migratory birds, nor would the proposed project directly impact the Pacific Flyway or San Francisco Bay, and as such the Draft EIR did not need to specifically address these issues.

Response 5.17

The commenter states that the mitigation for burrowing owl is insufficient. Details outlining why the pre-construction survey are sufficient is presented in responses 5.44 , 5.47, and 5.53.

Response 5.18

The commenter states that the avoidance buffers for burrowing owl are insufficient. Please see responses 5.44, 5.47 and 5.53.



Response 5.19

The commenter states that the Draft EIR lacks compensatory mitigation for burrowing owl. Compensatory mitigation is only required if owls are present and will be directly impacted by project activities. No owls or suitable nesting or wintering burrows were documented on the project site and as such, no direct impacts to burrowing owls have been identified. Should owls occur on site at the time of pre-construction surveys, avoidance and mitigation, which may include compensatory mitigation, would be required. Additional information on this issue is presented in responses 5.44 and 5.47.

Response 5.20

The commenter states that the Draft EIR did not adequately analyze and mitigate impacts to purple needlegrass habitat and that avoidance of this community could not be evaluated. Please see response 5.48.

Response 5.21

The commenter states that the Draft EIR did not adequately analyze and mitigate impacts to purple needlegrass habitat, and that indirect impacts could occur from several factors. Please see response 5.48.

Response 5.22

The commenter states that the Draft EIR conclusions on loss of foraging habitat for burrowing owl, northern harrier, white-tailed kite and short-eared owl are not supported. Please see response 5.49.

Response 5.23

The commenter states that the Draft EIR does not support the statement that the site consists of poor quality foraging habitat and is a non-significant percentage of the habitat in the region. Please see response 5.49.

Response 5.24

The commenter states that the conclusion in the Draft EIR that the loss of this habitat is not likely to adversely affect regional populations of raptors, specifically burrowing owls. Please see response 5.49.

Response 5.25

The commenter states that the Draft EIR does not adequately analyze and mitigate impacts on birds from collision. Please see response 5.50.



Response 5.26

The commenter notes measures to mitigate potential bird collisions and that these must be incorporated into the Draft EIR. The commenter also notes that it is Mr. Cashen's opinion that the project will result in incidental take of Ridgway's rail (= California clapper rail), because of proximity to populations of this species. This opinion is not based on any reason other than proximity to a species' population. The presence of a species in the vicinity of a project does not equate to incidental take. Furthermore, an issuance of, or application for a CDFW or USFWS incidental take permit is not a necessary process to be completed during the CEQA review period. If during the environmental review, it is determined that take is likely, a proponent may work with agencies to apply for, and potentially receive an ITP; but these processes are always conducted after the completion of environmental review, and in fact, CDFW ITPs require CEQA approval to be processed. For clarification, the salt marsh habitat present adjacent to the project site consist of a steep walled channel that is tidal influenced. This channel fills and empties with the tide, but does not expand into any mud flat or marsh areas. While typical salt marsh plant species are present, there are no areas of dense cattail and bulrush or other wet marsh type areas that would provide the required microhabitat conditions for rail breeding. Additionally, this salt marsh habitat occurs as a narrow strip, not exceeding more than about 50 feet in most areas adjacent to the project. As such this feature is best described as a narrow drainage with some typical salt marsh plants present along the edges of the channel, and would not be described as typical salt marsh that would be expected to support breeding populations of listed or fully-protected species. Because this narrow strip of marsh habitat adjacent to the site lacks suitable microhabitat conditions to support rail breeding (see also Response 5.42), it is unlikely to support abundant rail activity that could result in incidental take. Please see responses 5.50 and 5.54 for additional information relating to this comment.

Response 5.27

The commenter states that the Draft EIR does not adequately mitigate impacts on nesting birds, specifically as relates to pre-construction survey protocol. Please see response 5.52.

Response 5.28

The commenter states that the Draft EIR does not adequately analyze and mitigate impacts to special status mammals and concludes that MCE must consult with the USFWS and CDFW to determine measures needed to comply with the federal Endangered Species Act, the California Endangered Species Act and section 4 700 of the Fish and Game Code. Please see responses 5.15 and 5.46 for additional information on potential impacts to small mammals. The premise that the applicant must consult with CDFW and USFWS is incorrect. Agency consultation is one option for developing avoidance, minimization, and mitigation measures but this option is not required under CEQA. Consultation is optional, and would not necessarily or specifically provide pertinent information for environmental review.

Response 5.29

The commenter states that the Draft EIR does not adequately analyze and mitigate impacts from the spread of non-native plants. Please see response 5.56



Response 5.30

The commenter lists materials and chemicals that may be present on the site and states an opinion that the project could result in significant impacts associated with potential release of hazardous materials, without providing specifics on which to base a response. The commenter goes on to state an opinion that placement of solar PV equipment on the landfill portion of the site could result in settlement of landfill materials that would compromise the landfill cap and result in release of hazardous materials. The commenter also discusses previous landfill settlement and the kinds of impacts that could result if the cap is compromised.

As discussed in Section 4.2, *Hazards and Hazardous Materials* of the Draft EIR, impacts related to potential release of hazardous materials in the capped landfill area of the site would be less than significant with implementation of mitigation measures HAZ-1(a) and HAZ-1(b). This analysis is based on existing conditions on the site and the nature of the proposed solar PV equipment proposed to be installed, in particular the non-penetrating, ballasted units. The solar array on the capped portion would be constructed entirely at or above grade. In addition, the project design team retained the services of Wood Rodgers, Inc. to perform an onsite geotechnical investigation (March 2015) to specifically address the issues of bearing capacity and differential settlement. The report states that a baseline bearing capacity of 1,000 pounds per square foot (with a maximum of 1,333 pounds per square foot) can be used for the solar array design and that settlement overall is not expected to be more than six inches over the life of the system. The system would not exceed these loads. Most of the settlement has occurred due to the fact that the landfill cap is approaching 20 years of service. Furthermore, the differential settlement has a radius of curvature of 1 in 300 across the solar array. The low anticipated differential settlement is well within the settlement anticipated by the Chevron Closure Report that mitigates runoff or water quality issues, and would not compromise the landfill cap. The March 2015 geotechnical Investigation has also been included in the Final EIR as a new appendix, Appendix D, for additional clarifying information, and the following text has been added to Page 4.2-9 of Section 4.2, *Hazards and Hazardous Materials*:

In addition, a Geotechnical Investigation (Wood Rodgers, March 2015 – see Appendix D) has confirmed that “the site appears well suited for the planned improvements when considering potential geotechnical constraints” such as the potential for further landfill settlement, and that “foundation considerations were modeled for an allowable bearing pressure of 1,000 pounds per square foot.” The planned construction activity loading and direct loading of installed ballasted system would not exceed 330 pounds per square foot for the units and 750 pounds per square foot for construction equipment.

... Although installation of the tracking arrays on the FFPP portion of the project site would involve ground disturbance to a depth of six feet, nine inches – as this area contains clean, compacted fill to a depth of eight feet– the likelihood that construction workers or operational staff could be exposed to residual chemicals in on-site soils is minor. In addition, pole-mounting would involve pile-driving or a similar technique that would minimize the area of soil disturbance.



This additional information is meant to clarify the information in the EIR. As it does not involve the additional of “significant new information” as defined in the CEQA *Guidelines* in Section 15088.5 (such as a new impact or substantial increase in the severity of an impact), recirculation of the EIR is not required. The additional information simply further supports the conclusions and analysis in the EIR that the landfill cap and soils would not be compromised by the proposed construction and operation of the project. No further changes to the EIR are warranted.

Response 5.31

The commenter states an opinion that Mitigation Measure HAZ -1(a) of the Draft EIR, which requires that MCE “submit...sufficient information about construction and operation parameters as are determined by City and/or RWQCB to be needed to assure that the solar project would not reduce the effectiveness of the remediation measures currently implemented in the solar site area,” defers evaluation of potentially significant impacts. The commenter also suggests annual surveys as a better mitigation strategy for potential impacts regarding landfill settlement. However, the analysis regarding settlement potential and associated impacts is included in the EIR (see Response 5.30), and because impacts would be less than significant, additional mitigation is not required. In addition, regular inspections of the landfill cap and quarterly water quality monitoring are currently conducted as part of the existing regulatory oversight (RWQCB Order No. R2-2012-0015), as noted in Section 4.2, *Hazards and Hazardous Materials*, of the Draft EIR; as stated in Appendix B of the Draft EIR, “Alterations to the landfill and appurtenances must be in accordance with Order No. R2-2012-0015 and may not negatively impact the cap, GPS, landfill gas collection and vent system, and existing stormwater conveyance.” As also discussed in Section 4.2 of the Draft EIR, impacts related to potential release of hazardous materials in the capped landfill area of the site would be less than significant with implementation of mitigation measures HAZ-1(a) and HAZ-1(b). No changes to the EIR are necessary.

Response 5.32

The commenter states an opinion that the Draft EIR’s conclusions that impacts to water quality would be less than significant with mitigation are unsupported due to project construction, operations, and the increase in impervious surfaces, but does not provide specifics of how or why. Impacts related to water quality are discussed in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR; the analysis there supports the conclusions that impacts to water quality would be less than significant with implementation of Mitigation Measure HYD-2. The commenter also quotes a 2012 report by ARCADIS stating that “New relatively impervious surfaces will cause an increased rate of runoff discharge during storm events.” The ARCADIS report was not written with the benefit of the specific proposed project design, so did not address specific project impacts. As discussed in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR, the ground under the PV modules on the former landfill site is currently impervious due to the landfill cap. The PV modules would not change the drainage patterns currently on that portion of the site. For the pond site, the PV modules would themselves be considered a discontinuous impervious surface but the area underneath the modules would continue to be pervious.

The commenter inserted, parenthetically, “such as solar panels” into the quote; it should be noted that this phrase is not part of the ARCADIS document and was added by the commenter. As discussed under Impact HYD-3 in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR, the



project would incrementally increase impervious surfaces on the site, and impacts would be less than significant.

Response 5.33

The commenter states an opinion that more specific information about the porosity and permeability of the soils on top of the landfill cap must be in the EIR to support “[the Draft EIR’s] conclusion.” However, the commenter does not state what conclusion requires this support or how this information would support a conclusion; therefore, a specific response is not possible. As discussed in Response 5.30 and 5.57, the cap and fill are able to support the construction equipment and project equipment without compromising the landfill cap or integrity, or resulting in release of hazardous materials or impacts to water quality. Impacts related to stormwater runoff and drainage patterns are discussed in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR; the analysis there supports the conclusions that impacts would be less than significant.

Response 5.34

The commenter states an opinion that stormwater or other precipitation may drip off of the proposed solar PV modules and cause localized/concentrated erosion that could lead to a breach in the landfill cap. As discussed in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR, “The topography where the modules would be located is generally flat. Areas temporarily disturbed during construction-related activities would be revegetated (either naturally or re-planted) consistent with a project-specific revegetation plan to avoid changes to peak flows and runoff volume. Impacts would be less than significant.” Excessive runoff is not anticipated beyond a 1,000 year storm, which the site is designed for (Wood Rodgers, March 2015) with an existing system of concrete drains that meander throughout the site. Existing vegetation would remain and be enhanced where disturbed to maintain drainage function. Localized “drip line” effects would be further avoided by a one-inch gap between solar modules to facilitate runoff.

As discussed in detail in Section 4.3, *Hydrology and Water Quality*, the solar array would not significantly change drainage at the site or increase runoff. Existing drainage facilities would not be compromised and would continue to operate as designed. No changes to the EIR are warranted.

Response 5.35

The commenter states an opinion that installation of piles for the proposed solar arrays on the filled fertilizer pond could mobilize contaminants. This could occur if the piles would extend through and below contaminated areas into clean soil or groundwater. Imported engineered fill was used to bring the pond area to the existing grade, and, as discussed in the Draft EIR in Section 4.2, is composed of approximately eight-foot deep compacted fill where the proposed piles would be located. The pile driving process would not disturb the underlying fertilizer pond bed because maximum pile depth would not exceed approximately six to seven feet, as shown on Figure 2-8 of the Draft EIR. Therefore, impacts would be less than significant and no changes to the EIR are warranted.



Response 5.36

The commenter states an opinion that the depth of clean fill at the fertilizer pond site is unknown, and reiterates the opinion that pile driving could result in impacts related to hazardous materials. Please see Response 5.35. As the piles would not extend below the fill material or penetrate the pond liner, no mobilization of materials, chemicals or runoff between the areas above and below the liner would occur.

Response 5.37

The commenter states an opinion that an engineering evaluation of the fill on the fertilizer pond site is needed to complete the EIR. The commenter also restates an opinion that hazardous materials impacts related to pile driving on this portion of the site should be further studied and potential health and safety impacts to construction workers evaluated. These comments are noted; however, the commenter does not provide specific reasons such study would be required, other than those addressed in responses 5.35 and 5.36. As discussed in Section 4.2, *Hazards and Hazardous Materials* of the Draft EIR, impacts related to potential release of hazardous materials in the filled fertilizer pond area of the site would be less than significant with implementation of mitigation measures HAZ-1(a) and HAZ-1(b). No changes to the EIR are necessary.

Response 5.38

The commenter provides general information on General Plans and related California planning law and practice. This information is noted. The commenter goes on to state an opinion that the proposed project is inconsistent with City of Richmond General Plan Goal CN3 and Policy CN3.2 related to water quality protection. As noted in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR, Policy CN3.2 requires the City to work with public and private property owners to reduce stormwater runoff in urban areas to protect water quality in creeks, marshlands and water bodies and the bays. As further discussed in Section 4.3, the project's impacts in this regard would be less than significant with mitigation incorporated and adherence to existing regulations. The project would be consistent with this goal and policy. Please see also Response 5.51.

Response 5.39

The commenter states an opinion that the proposed project is inconsistent with City of Richmond General Plan Policy CN1.1 related to habitat and biological resources protection and restoration. This policy is quoted, among a number of others, in Section 4.1, *Biological Resources*, of the Draft EIR. As discussed in detail in Section 4.1, and in responses 5.10 through 5.29 above, the project's impacts related to habitat and biological resources would be less than significant with implementation of the mitigation measures identified. The project would be consistent with this goal and policy, and City staff has indicated they agree with this interpretation (Lina Velasco, Senior Planner, email correspondence November 4, 2015). Please see also Response 5.51.



Response 5.40 (First Comment on Attachment A to Letter 5)

The commenter presents his qualifications as a biologist, including his educational background and past experience with CEQA and NEPA environmental review. This comment does not pertain to the analysis or conclusions of the Draft EIR but is noted.

Response 5.41

The commenter states an opinion that the surveys conducted on site were insufficient to evaluate direct and indirect impacts to biological resources and lists several specific issues. See Master Response to Letter 5 and Response 5.9, above.

Response 5.42

The commenter states that the Draft EIR did not indicate if there was suitable habitat for special status species outside of the project site. Please see Master Response to Letter 5 above. Additionally, the vegetation communities and habitats present adjacent to and outside of the project site are discussed in the Draft EIR on pages 4.1-2 and 4.1-24 to provide an appropriate contextual analysis of the potential for indirect impacts to species that may occur in those habitats. Fresh water and salt marsh habitat does generally provide potential breeding habitat for California black and California clapper rail. However, these species have very specific nesting habitat requirements that require specific water depths, heavy and extensive vegetative cover, and isolation. The salt marsh habitat present adjacent to the project site consists of a steep-walled canal that is tidal influenced. This channel fills and empties with the tide, but does not expand into any mud flat or marsh areas. While typical salt marsh plant species are present, there are no areas of dense cattail and bulrush or other wet marsh type areas that would provide the required microhabitat conditions for rail breeding. Additionally, this salt marsh habitat occurs as a narrow strip, not exceeding more than about 50 feet in most areas adjacent to the project, and as such does not provide the isolation necessary to support rail breeding. Therefore, the Draft EIR determined that California black rail and California clapper rail may forage in the adjacent salt and freshwater marsh, but there was no suitable nesting habitat for these species. Also, as the rails prefer isolation and avoid areas of human activity, it is unlikely these species would venture anywhere near the project area during construction, effectively self-excluding to avoid potential impacts. Given the required implementation of construction SWPPP and BMPs, such indirect impacts on biological resources would be limited to construction noise, which could potentially indirectly impact nesting birds; however, this potential impact would be reduced to a less than significant level with pre-construction nesting bird surveys and implementation of suitable avoidance buffers if necessary.

Response 5.43

The commenter states an opinion that the Draft EIR presents unreliable information on raptor use. The Draft EIR evaluated the project site for its ability to support raptors. The EIR identified a lack of any suitable nesting habitat or structures, and identified only marginally suitable foraging habitat within the project area based on known occurrence of raptors in the immediate vicinity and region. Information contained within databases, even “positive sighting” databases, provide



useful information on determining the potential for given species to occur within a region. Once those species have been identified as present regionally, an evaluation of the potential impacts to those species can be made. This is a reasonable and standard approach for evaluating potential impacts to raptors and other special status species. The Draft EIR was not contradictory, as the statements had completely different contexts as follows:

From Draft EIR Section 4.4.4 *Setting*:

“The eBird database reports only a single white-tailed kite observation within the project area during the last five years, but contains numerous white-tailed kite and northern harrier observation records within two miles of the project site – particularly in the Wildcat Marsh/West County Wastewater District vicinity, where they were reported year round, but substantially less in the winter.”

And From the Draft EIR Section 4.1.2 *Impacts Analysis, BIO Impact 2*:

“Furthermore, based on the limited observations of burrowing owl, northern harrier, short-eared owl and white-tailed kite within the vicinity of the project site over the last five years...”

While the numerous observations from eBird are not limited to only five years, there are apparently only a limited number of observations of these species in the immediate vicinity of the project over the last five years. These statements have different contexts and as such are not mutually exclusive. Adjacent habitat areas were noted in the Draft EIR to provide context for the surrounding area; however, detailed analysis of these areas was not presented as the proposed project activity will not directly affect these off-site areas. Because the project is using existing roads, will be conducting development activity consistent with and similar to the historical development that has occurred on this site and has incorporated standard construction BMPs and stormwater protection, indirect impacts are limited to temporary construction noise. Potential indirect impacts to species in the adjacent habitats are limited to disruption of nesting behavior, and were addressed in the analysis of potential impacts to nesting birds. The above Master Response to Letter 5 outlines why more detailed surveys and analyses are not required to reach CEQA impact conclusions.

Response 5.44

The commenter states that surveys to establish burrowing owl use of the project site were not conducted. As clarified in the Master Response to Letter 5 above, the reconnaissance survey included a field survey of the entire project site and identified no suitable burrows or features that a burrowing owl could use for breeding or cover on the site. Given the lack of suitable cover for nesting or breeding activities, a significantly-reduced number of burrowing owls currently occupying this region, and low quality habitat suitable only for foraging, the need for further protocol surveys was not deemed necessary to evaluate potential impacts to this species. However, because it is conceivable that even this marginally suitable burrowing owl habitat (i.e. open grassland) could attract the species before project construction were to commence, appropriate mitigation was included in the Draft EIR in BIO-2(c) to ensure impacts to the species are reduced in the event that suitable burrows become established (e.g. by occupation of California ground squirrel or black-tailed jackrabbit burrows on site) in advance of project



construction. These measures include development of a Burrowing Owl Exclusion Plan in accordance with the CDFW 2012 Staff Report on burrowing owl. Refinements to Mitigation Measure BIO-2(c) are incorporated into the Final EIR.

Response 5.45

The commenter states an opinion that protocol level botanical surveys must be conducted because the site has natural (or naturalized) vegetation and because a natural community is present, and that species such as the Santa Cruz tarplant have been found in disturbed habitat. The project site consists of a highly disturbed, isolated patch of non-native annual grassland on a landfill cap and within a water treatment basin. This vegetative community is not a natural, or even naturalized community because it consists of exclusively non-native species that have colonized an area of previous and heavy industrial use. The project site is isolated from broader areas of grassland communities that may provide sources of colonization, and includes no features or specific habitat conditions that indicate special status species may be present. Although purple needlegrass grassland was identified on the site, the location and distribution of this community on the project site is indicative of a restoration effort that included a native seed mix that included this species. As such, this would not be considered a sensitive natural community, but would, nonetheless, be avoided by project design. Please also see Master Response to Letter 5 for more information on the adequacy of surveys. Based on the foregoing, the EIR contains sufficient evidence to support the MCE expert's conclusions that impacts to special status plants would be less than significant.

Response 5.46

The commenter notes the protected status of the Salt-marsh harvest mouse and San Pablo vole, notes that the Draft EIR did not disclose that the Salt-marsh harvest mouse is a state fully-protected species, and states an opinion that suitable habitat is present on the site for these species, and that CDFW and USFWS must be consulted. Please refer to Response 5.28 For additional information regarding CDFW and USFWS consultation. The Draft EIR has been revised to note the fully-protected status of the species under CDFW. The impact footprint of the project, however, does not support suitable habitat for these species, which are therefore not expected to occur on site. Although impacts would be less than significant with the mitigation measures already identified, because the site is unlikely to support these special status small mammals, additional information and augmented mitigation has been added under Impact BIO-2 in the Final EIR. The following text will be added to the Final EIR on pages 4.1-23 and 4.1-24:

Additionally, although Herman's Slough contains only marginally suitable habitat for special status mammal species like the salt marsh harvest mouse, Suisun ornate shrew, saltmarsh wandering shrew, and San Pablo vole, appropriate small-mammal exclusion fencing would be installed around those portions of the construction area abutting this coastal brackish marsh habitat and additional avoidance measures have been included as recommended mitigation, even though potential impacts are less than significant without the additional measures.

The following text will be added to Mitigation Measure BIO-2 on Page 4.1-26:



The following, additional mitigation measures are *recommended* to further ensure no adverse effects on local wildlife by project construction.

BIO-2(d) Small Mammal Avoidance . A biologist shall conduct a pre-construction survey of the disturbance area within 100' of Herman's Slough to confirm the absence of special-status small mammals, installation of small mammal exclusionary fencing , and monitor of the exclusion fence installation (and later repair if necessary) prior to construction, and re-visit this area weekly during site grading and/or solar panel installation in these areas to ensure the fence's effectiveness. Exclusionary fencing shall consist of 48-inch silt fencing with wire-mesh backing shall be installed by hand along the eastern and northern margins of the west parcel (landfill) and along the western margin of the east parcel (water treatment basin) to prevent salt marsh harvest mice from entering the active work area.

BIO-2(e) Worker Environmental Awareness Program Training. Prior to initiation of construction activities construction personnel shall attend a (tailgate) Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist onsite to aid workers in recognizing special status resources that may occur in the project area and advising specific communication and mitigation measures should any of these species be encountered during construction. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, a careful review of the limits of construction and mitigation measures to reduce impacts to sensitive biological resources within the work area, and clear communication protocol should these sensitive resources be encountered during construction. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All construction personnel shall sign a form documenting that they have attended the WEAP training and understand the information presented to them. The form shall be submitted to the City of Richmond and MCE to document compliance.

BIO-2(f) Construction and maintenance vehicles shall observe a maximum speed limit of 15 mph in the construction zone in the vicinity of Herman's Slough to further prevent potential wildlife mortality.

The addition of these measures does not constitute significant new information under CEQA nor require recirculation of the EIR. The Draft EIR already concluded that the impact to the mammal species was less than significant, and although the conclusion remains the same, in an abundance of caution additional mitigation measures have been proposed, and accepted, by MCE to further ensure that impacts would remain less than significant. The CEQA *Guidelines* in Section 15088.5 discuss when recirculation of an EIR is required, as follows:

A lead agency is required to recirculate an EIR when significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under



Section 15087 but before certification. As used in this section, the term “information” can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponents have declined to implement. “Significant new information” requiring recirculation include, for example, a disclosure showing that:

- a) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.*
- b) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.*
- c) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project’s proponents decline to adopt it.*
- d) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (Mountain Lion Coalition v. Fish and Game Com. (1989) 214 Cal.App.3d 1043)*

Because the addition of this mitigation measure would not result in significant new information being added to the EIR per the *Guidelines* as quoted above, recirculation of the EIR is not required.

Response 5.47

The commenter states an opinion that the Draft EIR failed to disclose all potential impacts to burrowing owls. The project site did not support any suitable burrows or other cover for burrowing owl, and as such passive relocation is not considered a likely outcome of project development. However, to address the highly unlikely event that burrowing owls are nesting or wintering in burrows on the site at the time of construction, all potential mitigation options were presented. Passive relocation is a standard measure for mitigating potential impacts to burrowing owls, and requires the development of a Burrowing Owl Exclusion Plan to address potential impacts resulting from passive relocation, and which must be approved by CDFW. Refer to response 5.44 for a further discussion of burrowing owl impacts and passive relocation.

Response 5.48

The commenter states an opinion that the avoidance of purple needlegrass grassland community cannot be evaluated without a specific site plan of the solar PV array locations and that indirect impacts to this community could be significant. Purple needlegrass occurs adjacent to the project site in an isolated strip, due to the inclusion of this species in a seed mix used to revegetate the berm on which it is found. This is not a natural occurrence of this community and the project layout avoids any direct impacts to this community by avoiding any development of the berm on which the species occurs. Loss of this patch of purple needlegrass will therefore not occur with project development and would not constitute a loss of a naturally occurring (which this is not) sensitive vegetation community, and as such would not be considered significant.



Response 5.49

The commenter states an opinion that the Draft EIR does not support the evaluation that loss of the potential foraging habitat on the site for raptors is not significant, and concludes that the loss of any “grassland”, irrespective of context, should be considered significant. Based on approximate areas reviewed in Google Earth, the project site represents roughly 0.1% of lands that do not show paving or structures (i.e. potential foraging habitat) around San Pablo Bay. If the area of study is expanded to include open lands east of Richmond, the project site represents only 0.05% of the open lands in the immediate region. Unlike much of the lands surrounding San Pablo Bay, the project site is previously disturbed, regularly impacted (mowing and other maintenance), and surrounded by existing industrial, commercial and transportation development. Development of the project would not significantly affect the amount of available habitat for raptor foraging in the region.

Response 5.50

The commenter states that the Draft EIR does not address avian collision risk posed by the project’s solar arrays. See Master Response to Letter 5 regarding the general adequacy of biological surveys. The Draft EIR assessed the potential for impacts to listed and special status avian species, raptors, and other nesting birds protected under the MBTA. These analyses were based on standard methodology for establishing existing environmental conditions and assessing potential impacts to these species in the context of specific project conditions. The Draft EIR includes mitigation measures designed to reduce and avoid impacts to migratory birds including pre-construction surveys, avoidance buffers and biological monitoring.

Regarding the potential for PV solar facilities to attract birds that will then collide with and be killed as a result of collision with those panels, little evidence is available to indicate that PV solar panels actually attract birds, no standard for analysis of this issue has been established, and no regulatory agency guidance has been published on this issue. Limited information on bird strikes at solar facilities is available, with the primary study (McCrary, et al, 1986) having been conducted at California’s Solar One facility, which used highly reflective mirrors (heliostats) to concentrate sunlight at a centrally located boiler. That study concluded that the mortality effect on local bird populations at the approximate 80-acre site was minimal. It has been suggested that highly reflective panels create the illusion of a body of water that migrating birds may be attracted to, and inadvertently collide with; however, the McCrary study opined that it was the presence of large, man-made ponds and irrigated agricultural fields adjacent the facility that attracted birds to that location. Approximately 27 percent of the recorded bird fatalities at Solar One were water-related species. West Inc. (2014) reviewed impacts at three California solar PV facilities, and concluded that preliminary data indicated that fatality rates for solar arrays are not high in relation to other anthropogenic mortality (e.g., wind projects) and that measurable proportion of the fatalities found at the project may be background and unrelated to the project.

The recent Kagan et al. (2014) study evaluated three solar facilities in southern California, only one of which (Desert Sunlight) consisted of the photovoltaic technology. A total of 61 avian deaths were recorded at the Desert Sunlight facility, and none of these species were state or federally listed. Deaths of birds protected under the MBTA are a misdemeanor offense and do not necessarily equate to a significant impact under CEQA. Impacts to birds protected under the



MBTA and/or considered to be special status by CDFW, but which are not federally or state listed, would only be considered significant if those impacts were at the population-level. Loss of small numbers of non-listed birds would not in and of themselves be considered a significant impact under CEQA.

The deaths of birds reported at the Desert Sunlight Solar Farm (Kagan et al. 2014) identified the cause of death for 39 of the 61 recorded deaths, and impact trauma was the cause of death in 19 of the deaths. Approximately 33 percent of the recorded bird fatalities at Desert Sunlight were water-related species and approximately 60 percent were migrant species. It is noted that Desert Sunlight Solar Farm is located directly in the path between two major desert water bodies (the Salton Sea and Lake Havasu), which presents specific environmental conditions different from those present at the proposed project where the site is not located between two isolated migration stop-over points. Furthermore, the number of reported bird mortalities at the Desert Sunlight facility is minor in relation to the numbers of birds that are present at these two lakes (numbering in the millions), and are likely to move between the lakes.

Spain and Germany have the largest amount of installed solar energy facilities in the world, yet no literature is available to indicate that excessive numbers of bird mortalities are occurring at these facilities. Furthermore, the Kobern-Gondorf PV facility (300 MW) in Germany is used as a nature reserve for endangered species of plants and animals (RSPB 2011). Because of the lack of scientific information regarding this issue and the minimal number of bird mortalities that have been contained in anecdotal reports as compared to bird populations, the impact to migratory birds from collisions with PV panels (particularly reduced-reflectivity panels, as proposed) was considered speculative, and was not further analyzed.

With regards to Ridgway's (California clapper) and California black rails, the commenter refers to the USFWS comments on the Blythe Mesa Solar Project, where USFWS discussed impacts to rails and other similar birds at several large-scale solar facilities and associated infrastructure including gen-tie lines, facility fencing and other structures. The risk of potential impacts to rails at this project site cannot be evaluated in the context of impacts from massive scale solar development in desert regions, as the projects differ significantly in scale and location, and the species differ significantly in behavior and habits. Impacts from massive solar development of 3,000 acres and larger in desert habitat where water is rare and isolated present the most extreme potential for impacts. To use the presumed impacts outlined in the USFWS comments on the Blythe project as an example of potential impacts to this 60-acre solar site, located in an area with comparatively abundant high quality water and marsh habitats is incongruent. Additionally, the Ridgway's and California black rails are non-migratory species that maintain very small ranges compared to Yuma rail and sora rail. Because of limited daily movement by these species, the lack of critical microhabitat features adjacent to the site that are preferred by these species, and the lack of migratory dispersal by these species, impacts to these species from the proposed project are not expected.

Response 5.51

The commenter states an opinion that the Draft EIR is not consistent with Richmond's General Plan because there is no evidence that MCE coordinated with USFWS or CDFW. Coordination with pertinent regulatory agencies is not required to fulfill CEQA environmental review, though



these agencies were provided the Draft EIR for review and comment. Because the site does not provide suitable habitat for any state or federally listed species requiring coordination with resource agencies, no coordination was undertaken. However, mitigation included in the Draft EIR does require coordination with resource agencies if special status species are determined to have established a presence on the project site at the time of pre-construction surveys.

Response 5.52

The commenter states an opinion that the Draft EIR must specify the exact protocol for conducting nesting bird surveys because these are difficult surveys. General pre-construction avian nest surveys do not have published resource agency protocol or standards; however, these surveys are one of the most common surveys conducted, and qualified biologist are well versed in conducting these surveys as appropriate. For clarification Measure BIO-2(b) on Page 4.1-24 has been revised as follows:

BIO-2(b) Pre-Construction Nesting Bird Surveys. If direct disturbance (clearing/grading/vegetation removal) to nesting habitat is unavoidable during the bird breeding season (February 15 to September 15), a qualified biologist shall conduct pre-construction surveys for nesting birds and general avian activity following standard resource agency (e.g. USFWS, CDFW) protocol, in all areas within 500 feet of proposed disturbance areas, prior to any site disturbance (i.e., mobilization, staging, grading, or construction).

Response 5.53

The commenter states an opinion that the mitigation measures for burrowing owl, including details of the pre-construction survey, buffer sizes and compensatory mitigation, are inadequate, and reiterates that protocol surveys should be required prior to impact analysis. CDFW provides recommended guidelines for protocol surveys for burrowing owl to establish where and how specific mitigation may be required; however these are not required surveys and as discussed in Master Response to Letter 5 for a discussion of why protocol surveys are not required under CEQA to evaluate the potential for special status species to occur on a project site. Mitigation Measure B-2(c) requires pre-construction surveys following the guidelines within the CDFW Staff Report (CDFW 2012) to identify active burrowing owl burrows present at the time of construction, and the development of a Burrowing Owl Exclusion Plan should active burrows be encountered during such surveys. For clarification, we have revised measure BIO-2(c) on Page 4.1-25 as shown below. Regarding avoidance buffers, the CDFW 2012 Staff Report provided revised avoidance buffers as an example of standardized buffers; however these buffers are based on studies conducted for oil and gas development in western Canada, and may not be applicable to California populations of burrowing owl exposed to the much lower degrees of disturbance from solar development as compared to oil and gas development. Thus, the example buffers included in the staff report are not necessarily appropriate for all projects and all locations. Earlier CDFW recommended buffers have and continue to provide effective and complete protection of active burrowing owl burrows, and as such, avoidance buffers should be applicable to the specifics of any given project. If present, owls on the project site would be adapted to activity that is currently occurring on and near the site at distances much less than the example buffers provided in the CDFE 2012 staff report. Regarding habitat compensation, the project does not at



this time require compensation for burrowing owl habitat, because the habitat was found generally inadequate for use by the species, and because no impacts to this species have been identified. Should active burrowing owl burrows that cannot be avoided be identified on the project site during pre-construction surveys, then a Burrowing Owl Exclusion and Mitigation Plan would be developed in consultation with CDFW, which may include provision of replacement habitat.

BIO-2(c) Pre-Construction Burrowing Owl Surveys. A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct pre-construction clearance surveys prior to ground disturbance activities (e.g., vegetation clearance, grading, tilling) within all suitable habitat to confirm the presence/absence of burrowing owls (maybe conducted concurrently with BIO-1(b)). The survey methodology shall be consistent with the recommended methods outlined in the 2012 CDFW Staff Report on Burrowing Owl Mitigation. Clearance surveys shall be conducted within 14 days prior to construction and ground disturbance activities and again within 24 hours of construction activity. If no burrowing owls are observed, no further actions are required. The CDFW will be consulted if owl burrows are discovered within the project during these surveys and appropriate measures will be taken to mitigate any adverse impacts on the species. Appropriate measure may include avoidance with minimum avoidance buffers, development of a burrowing owl mitigation and monitoring plan in consultation with CDFW, and compensatory mitigation for loss of breeding and foraging habitat.

Response 5.54

The commenter makes several unrelated statements regarding Avian collisions, including that there could be impacts from polarized light, that the project requires a long-term mitigation monitoring and adaptive management plan for impacts to birds, and that the project requires an incidental take permit from USFWS for the Ridgeway rail. The commenter provided no support for the conclusions regarding polarized light or impacts to Ridgeway rail. Please refer to response 5.50 for a discussion of impacts related to avian collisions.

Response 5.55

The commenters states that the Draft EIR did not include measures to mitigate impacts to special status mammals. Please see Response 5.46.

Response 5.56

The commenter states that the Draft EIR did not address potential impacts of invasive weeds. The project site already supports non-native, non-naturally occurring, post-disturbance non-native grassland and weeds within an existing water treatment basin (i.e. fertilizer pond), and on the artificially seeded cap of an existing landfill. As such, the project site consists almost exclusively of non-native plant species, and does not include any natural vegetation communities or habitats apart from purple needlegrass (*Stipa pulchra*), which is the result of re-seeding of a berm with a



seed mixture that contained this species. Because the site does not contain any native plant or animal communities and is comprised almost exclusively of non-native plant species resulting from the prior highly disturbed nature of the project site, no analysis for the impact of introduced weed species was necessary.

Attachment A to Letter 5 includes a number of attachments. These provide background and technical information on the topics covered in Attachment A Letter 5, but do not directly address the proposed project specifically or address the adequacy, analysis or conclusions of the Draft EIR; therefore, additional responses to these technical and informational attachments are not required.

Response 5.57 (First Comment on Attachment B to Letter 5)

The commenter summarizes the project description and introduces the comments that follow with a summary, also stating an opinion that a revised Draft EIR is required. This general comment introduces the specific comments that follow it in this letter, which are responded to individually below. The responses demonstrate that the Final EIR complies with CEQA and does not require recirculation.

The commenter goes on to provide information on the landfill and landfill cap and states an opinion that settlement of the landfill could compromise the cap, leading to impacts to water quality from infiltration of water through the cap, and that additional mitigation is necessary to address this potential impact.

As discussed in Section 4.2, *Hazards and Hazardous Materials* of the Draft EIR, impacts related to potential release of hazardous materials in the capped landfill area of the site would be less than significant with implementation of mitigation measures HAZ-1(a) and HAZ-1(b). This analysis is based on existing conditions on the site and the nature of the proposed solar PV equipment proposed to be installed, in particular the non-penetrating, ballasted units. The solar array on the capped portion would be constructed entirely at or above grade. In addition, the project design team retained the Services of Wood Rodgers, Inc. to perform an onsite geotechnical investigation (March 2015) to specifically address the issues of bearing capacity and differential settlement. The report states that a baseline bearing capacity of 1,000 pounds per square foot (with a maximum of 1,333 pounds per square foot) can be used for the solar array design and that settlement overall is not expected to be more than six inches over the life of the system. As discussed above, the system would not exceed these loads. Most of the settlement has occurred due to the fact that the landfill is approaching 20 years of service. Furthermore, the differential settlement has a radius of curvature of 1 in 300 across the solar array. The low anticipated differential settlement is well within the settlement anticipated by the Chevron Closure Report that mitigates runoff or water quality issues, and would not compromise the landfill cap. The March 2015 geotechnical Investigation has also been included in the Final EIR as a new appendix, Appendix D, for additional clarifying information, and the following text has been added to Page 4.2-9 of Section 4.2, *Hazards and Hazardous Materials*:

In addition, a Geotechnical Investigation (Wood Rodgers, March 2015 – see Appendix D) has confirmed that “the site appears well suited for the planned improvements when considering potential geotechnical constraints” such as the potential for further landfill



settlement, and that “foundation considerations were modeled for an allowable bearing pressure of 1,000 pounds per square foot.” The planned construction activity loading and direct loading of installed ballasted system would not exceed 330 pounds per square foot for the units and 750 pounds per square foot for construction equipment.

... Although installation of the tracking arrays on the FFPP portion of the project site would involve ground disturbance to a depth of six feet, nine inches – as this area contains clean, compacted fill to a depth of eight feet– the likelihood that construction workers or operational staff could be exposed to residual chemicals in on-site soils is minor. In addition, pole-mounting would involve pile-driving or a similar technique that would minimize the area of soil disturbance.

This additional information is meant to clarify the information in the EIR. As it does not involve the additional of “significant new information” as defined in the CEQA *Guidelines* in Section 15088.5 (such as a new impact or substantial increase in the severity of an impact), recirculation of the EIR is not required. The additional information simply further supports the conclusions and analysis in the EIR that the landfill cap and soils would not be compromised by the proposed construction and operation of the project. No additional mitigation or further changes to the EIR are warranted.

The commenter also states an opinion that Mitigation Measure HAZ -1(a) of the Draft EIR, which requires that MCE “submit...sufficient information about construction and operation parameters as are determined by City and/or RWQCB to be needed to assure that the solar project would not reduce the effectiveness of the remediation measures currently implemented in the solar site area,” defers evaluation of potentially significant impacts. The commenter also suggests annual surveys as a better mitigation strategy for potential impacts regarding landfill settlement. However, the analysis regarding settlement potential and associated impacts is included in the Final EIR (see Response 5.30), and because impacts would be less than significant, additional mitigation is not required. The additional information referred to in the measure would be required in any case to comply with the RWQCB Order, and the order’s intent to ensure appropriate safety thresholds are met. In addition, regular inspections of the landfill cap are currently conducted as part of the existing regulatory oversight (RWQCB Order No. R2-2012-0015); as stated in Appendix B of the Draft EIR, “Alterations to the landfill and appurtenances must be in accordance with Order No. R2-2012-0015 and may not negatively impact the cap, GPS, landfill gas collection and vent system, and existing stormwater conveyance.” As discussed in Section 4.2, *Hazards and Hazardous Materials* of the Draft EIR, impacts related to potential release of hazardous materials in the capped landfill area of the site would be less than significant with implementation of mitigation measures HAZ-1(a) and HAZ-1(b). No changes to the EIR are necessary. It should also be noted that the MCE sent both the Notice of Preparation of an EIR and Notice of Availability of a Draft EIR to the RWQCB, and the RWQCB had no comments on the scope, project or Draft EIR.

Response 5.58

The commenter states an opinion that the Draft EIR’s conclusions that impacts to water quality, specifically in regards to potentially increased runoff and its erosion potential on the landfill site, would be less than significant with mitigation are unsupported, because specific information about soil porosity and permeability is not included in the Draft EIR. Impacts related to water



quality are discussed in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR; the analysis there supports the conclusions that impacts to water quality would be less than significant with implementation of Mitigation Measure HYD-2. The commenter also quotes a report by ARCADIS from 2012, stating “New relatively impervious surfaces will cause an increased rate of runoff discharge during storm events.” This statement is acknowledged and does not conflict with the analysis of conclusions of the EIR. The commenter inserted, parenthetically, “such as solar panels” into the quote; it should be noted that this phrase is not part of the ARCADIS document and was added by the commenter.

The commenter also states an opinion that stormwater or other precipitation may drip off of the proposed solar PV modules and impact the covering soils or the stability of the landfill cap. The commenter also states an opinion that additional study is needed to evaluate erosion potential to the soils above the landfill cap. As discussed in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR, “The topography where the modules would be located is generally flat. Areas temporarily disturbed during construction-related activities would be revegetated (either naturally or re-planted) consistent with a project-specific revegetation plan to avoid changes to peak flows and runoff volume. Impacts would be less than significant.” Excessive runoff is not anticipated beyond a 1,000 year storm, which the site is designed for (Wood Rodgers, March 2015) with an existing system of concrete drains that meander throughout the site. Existing vegetation would remain and be enhanced where disturbed to maintain drainage function. Localized “drip line” effects would be further avoided through close module spacing.

As discussed in detail in Section 4.3, *Hydrology and Water Quality*, the solar array would not significantly change drainage at the site or increase runoff. Existing drainage facilities would not be compromised and would continue to operate as designed. No changes to the EIR are warranted. As discussed under Impact HYD-3 in Section 4.3, *Hydrology and Water Quality*, of the Draft EIR, the project would incrementally increase impervious surfaces on the site, but because similar drainage patterns would result, impacts would be less than significant.

Response 5.59

The commenter lists chemicals that may be present on the former fertilizer pond portion of the site and states an opinion that installation of piles for the proposed solar arrays on the filled fertilizer pond could mobilize contaminants. The commenter also states an opinion that the depth of clean fill at the fertilizer pond site is unknown, and reiterates the opinion that pile driving could result in impacts related to hazardous materials.

Mobilization of contaminants could occur if the piles would extend through the clean fill and into contaminated areas or groundwater. Imported engineered fill was used to bring the pond area to the existing grade, and, as discussed in the Draft EIR in Section 4.2, is composed of approximately eight-foot deep compacted fill where the proposed piles would be located. The pile driving process would not disturb the underlying fertilizer pond bed because maximum pile depth would not exceed approximately seven feet, as shown on Figure 2-8 of the Draft EIR. Therefore, impacts would be less than significant and no changes to the EIR are warranted.

The commenter also opines that an engineering evaluation of the fill on the fertilizer pond site is needed to complete the EIR. This comment is noted; however, based on the information above,



such a study is not required to assess potential environmental impacts of pile driving on the pond site to the depths proposed. As discussed in Section 4.2, *Hazards and Hazardous Materials* of the Draft EIR, impacts related to potential release of hazardous materials in the filled fertilizer pond area of the site would be less than significant with implementation of mitigation measures HAZ-1(a) and HAZ-1(b). No changes to the EIR are necessary.

Response Regarding Attachments to this Letter:

Letter 5 includes a number of attachments. Responses to two of these – letters from the commenter’s consulting biologist and the commenter’s consulting geologist – are included above. The remaining attachments, including attachments to the consulting biologist’s and geologist’s letters, provide background and technical information on the project site and on topics covered in Letter 5, but do not directly address the adequacy, analysis or conclusions of the Draft EIR; therefore, additional responses to these technical and informational attachments are not required.

Regarding one specific attachment, it should be noted that the Chevron Powerpoint presentation attached to Mr. Hagemann’s letter references a conceptual solar project for the site that would require 55,000 cubic yards of import and various other design assumptions. The associated information is not relevant to the proposed project, which was designed with far less grading and site modification, as discussed in detail in Section 2.0, *Project Description*, of the EIR, or the EIR’s analysis and conclusions.

