

## RESOLUTION NO. 2015-06

## MARIN CLEAN ENERGY

A RESOLUTION OF THE BOARD OF DIRECTORS OF MARIN CLEAN  
ENERGY CERTIFYING THE FINAL ENVIRONMENTAL IMPACT  
REPORT FOR THE MCE RICHMOND SOLAR PV PROJECT; MAKING  
ENVIRONMENTAL FINDINGS PURSUANT TO THE CALIFORNIA  
ENVIRONMENTAL QUALITY ACT; AND ADOPTING A MITIGATION  
MONITORING AND REPORTING PROGRAM

The Board of Directors of Marin Clean Energy hereby finds and resolves as follows:

Section 1. Marin Clean Energy (“MCE”) is a joint powers authority established on December 19, 2008, and organized under the Joint Exercise of Powers Act (Government Code Section 6500 *et seq.*) MCE members include the following communities: the County of Marin, the City of Belvedere, the City of Benicia, the Town of Corte Madera, the City of El Cerrito, the Town of Fairfax, the City of Larkspur, the City of Mill Valley, the County of Napa, the City of Novato, the Town of San Anselmo, the City of San Pablo, the City of San Rafael, the City of Sausalito, the City of Richmond, the Town of Ross, and the Town of Tiburon. The purpose of MCE is to address climate change by reducing energy related greenhouse gas emissions and securing energy supply, price stability, energy efficiencies and local economic and workforce benefits.

Section 2. In furtherance of this purpose, MCE undertook environmental review for a proposed project that would involve site preparation, installation and operation of a 10.5 megawatt (MW) solar photovoltaic (PV) system at a site located due west of the intersection of Castro Street and West Hensley Street in the City of Richmond, in the County of Contra Costa, California. The installation would include approximately 80,000 thin-film, non-reflective solar panels, which, in combination with 11 utility-scale inverters, would convert sunlight into electricity. This would be fed directly into the Pacific Gas & Electric (PG&E) utility grid from a point adjacent to the site (the “Project”).

Section 3. Specifically, MCE prepared an Initial Environmental Study (the “Initial Study”) for the Project. The Initial Study concluded that there was substantial evidence that the Project might have a significant environmental impact in the areas of biological resources; hazards and hazardous materials; and hydrology/water quality.

Section 4. A Draft Environmental Impact Report (the “Draft EIR”) dated August 2015 (State Clearinghouse No. 2015042040) was prepared for the Project. Section 2.0 of the Draft Environmental Impact Report provides a full description of the Project. In accordance with the California Environmental Quality Act (“CEQA”) (Cal. Pub. Res. Code § 21000 *et seq.*) and the State Guidelines (the “Guidelines”) (14 Cal. Code Regs. § 15000 *et seq.*) promulgated with respect thereto, MCE analyzed the Project’s potential impacts on the environment.

Section 5. MCE completed the Draft EIR, together with those certain technical appendices (the “Appendices”), in August 2015. MCE circulated the Draft EIR and the Appendices to the public and other interested parties between August 14, 2015 and

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September 29, 2015, for a 46-day comment period, in compliance with the public comment period required by Guidelines Sections 15087(c) and 15105(a). During the public comment period on the Draft EIR, MCE timely received written comment letters regarding the Draft EIR. In addition, verbal comments on the Draft EIR were recorded at a public meeting in the City of Richmond City Council Chambers on August 19, 2015.

Section 6. MCE prepared written responses to all written comments timely received on the Draft EIR, as well as those verbal comments that were received during the public meeting on August 19, 2015, and made revisions to the Draft EIR, as appropriate, in response to those comments. The responses to comments and revisions to the Draft EIR were incorporated into the Final Environmental Impact Report (the "Final EIR"). The responses to comments were distributed to all public agencies that submitted comments on the Draft EIR, at least 10 days prior to certification of the Final EIR.

Section 7. The Final EIR is comprised of the Draft EIR, including Appendices, dated August 2015; the Comments and Response to Comments on the Draft EIR, including revisions to the Draft EIR; and the Mitigation Monitoring and Reporting Program.

Section 8. The findings made in this Resolution are based upon the information and evidence set forth in the Final EIR and upon other substantial evidence which has been presented at the hearing and in the record of the proceedings. The documents, staff reports, technical studies, appendices, plans, specifications, and other materials that constitute the record of proceedings on which this Resolution is based are on file for public examination during normal business hours at the offices of MCE, located at 1125 Tamalpais Avenue, San Rafael, California 94901. Each of those documents is incorporated herein by reference.

Section 9. The MCE Board of Directors finds that agencies and interested members of the public have been afforded ample notice and opportunity to comment on the EIR and the Project.

Section 10. Environmental impacts identified in the Initial Study and Final EIR that are found to be less than significant and do not require mitigation are described in Sections III and IV, respectively of Exhibit A, attached hereto and incorporated herein by reference.

Section 11. Environmental impacts identified in the Final EIR as potentially significant, but that can be reduced to less than significant levels with mitigation, are described in Exhibit A, Section V, attached hereto and incorporated herein by reference.

Section 12. Alternatives to the Project that might eliminate or reduce significant environmental impacts are described in Exhibit A, Section VI, attached hereto and incorporated herein by reference.

Section 13. Public Resources Code section 21081.6 requires MCE to prepare and adopt a mitigation monitoring and reporting program for any project for which mitigation measures have been imposed to assure compliance with the adopted mitigation measures. The

Mitigation Monitoring and Reporting Program is attached hereto as Exhibit B, and is hereby incorporated herein by reference.

Section 14. Prior to taking action, the MCE Board of Directors has reviewed, considered, and has exercised its independent judgment on the Final EIR and all of the information and data in the administrative record, and all oral and written testimony presented to it during meetings and hearings. The MCE Board of Directors, pursuant to Guidelines Section 15090, hereby finds and certifies that the Final EIR is adequate and was prepared in full compliance with CEQA.

Section 15. The MCE Board of Directors further finds that the information provided in comments on the Draft EIR, the responses to comments on the Draft EIR, and the evidence presented in written and oral testimony at the hearing before the MCE Board of Directors does not constitute new information requiring recirculation of the EIR under CEQA. None of the information presented to the MCE Board of Directors has deprived the public of a meaningful opportunity to comment upon a potential environmental impact of the Project or a feasible mitigation measure or alternative that MCE has declined to implement.

Section 16. The Board of Directors of Marin Clean Energy hereby certifies the Final EIR; adopts findings pursuant to the California Environmental Quality Act, as set forth in Exhibit A attached hereto and incorporated herein by reference; and adopts the Mitigation Monitoring and Reporting Program attached hereto as Exhibit B and incorporated herein by reference, and imposes each mitigation measure as a condition of Project approval. MCE staff shall implement and monitor the mitigation measures as described in Exhibit B.

**PASSED AND ADOPTED** at a regular meeting of the Marin Clean Energy Board of Directors on this 19<sup>th</sup> day of November 2015, by the following vote:

	AYES	NOES	ABSTAIN	ABSENT
City of Belvedere	✓			
City of Benicia	✓			
Town of Corte Madera	✓			
City of El Cerrito	✓			
Town of Fairfax	✓			
City of Larkspur	✓			
County of Marin	✓			
City of Mill Valley	✓			
County of Napa	✓			
City of Novato				✓
City of Richmond	✓			

Town of Ross	✓			
Town of San Anselmo				✓
City of San Pablo	✓			
City of San Rafael	✓			
City of Sausalito	✓			
Town of Tiburon	✓			



CHAIR, MARIN CLEAN ENERGY BOARD

Attest:



SECRETARY, MARIN CLEAN ENERGY BOARD

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## **EXHIBIT A**

### **Findings and Facts in Support of Findings**

#### **I. Introduction**

The California Environmental Quality Act (“CEQA”) and the State CEQA Guidelines (the “Guidelines”) provide that no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that will occur if a project is approved or carried out unless the public agency makes one or more of the following findings:

- A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects identified in the EIR.**
- B. Such changes or alterations are within the responsibility of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.**
- C. Specific economic, social, or other considerations make infeasible the mitigation measures or project alternatives identified in the EIR.<sup>1</sup>**

Pursuant to the requirements of CEQA, the Board of Directors of Marin Clean Energy hereby makes the following environmental findings in connection with the proposed MCE Richmond Solar PV Project (the “Project”), as more fully described in the Draft EIR (“Draft EIR”). These findings are based upon evidence presented in the record of these proceedings, both written and oral, including the Final EIR, which is comprised of the Draft EIR and all of its contents and revisions, the Comments and Responses to Comments on the Draft EIR, and staff and consultants’ reports presented through the hearing process.

#### **II. Project Objectives**

As set forth in the EIR, the proposed Project is intended to achieve a number of objectives (the “Project Objectives”) as follows:

1. Increase the amount of local distributed renewable energy produced in and provided to MCE’s participating jurisdictions and their energy customers.

<sup>1</sup> Cal. Pub. Res. Code § 21081; 14 Cal. Code Regs. § 15091.

2. Provide a quality, diversified renewable energy system that conserves and enhances significant environmental resources and features.

3. Incorporate features and amenities into the project that fit the local context, contribute to environmental sustainability, and are safe and easy to maintain for the long term.

### **III. Effects Determined to be Less Than Significant/No Impact in the Initial Study/Notice of Preparation**

MCE prepared an Initial Study and a Notice of Preparation (NOP) to determine the potential environmental effects of the Project. In the course of this evaluation, the Project was found to have no impact in certain impact categories because a project of this type and scope would not create such impacts or because of the absence of project characteristics producing effects of this type. The following effects were determined not to be significant or to be less than significant for the reasons set forth in the Initial Study (Final EIR, Appendix A), and were not analyzed in the EIR because they require no additional analysis to determine whether the effects could be significant.

#### **A. AESTHETICS**

1. The Project will not have a substantial adverse effect on a scenic vista because the Project site is located in an industrial zone on a property that was previously used as a landfill and fertilizer evaporation pond, and is not located near any scenic routes, nor are there any public views of scenic resources available from or through the site.

2. The Project will not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway because the Project site is located in an industrial zone on a property that was previously used as a landfill and fertilizer evaporation pond, and is a vacant, generally flat property with no scenic resources such as trees, rock outcroppings or historic buildings.

3. The Project will not substantially degrade the existing visual character or quality of the site and its surroundings because the Project site is located in an industrial zone on a property that was previously used as a landfill and fertilizer evaporation pond, and is a vacant, generally flat property, and the Project will be consistent with the industrial use and designation of this area in the City and because the site lacks visibility from any public viewpoints.

4. The Project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area because the Project does not include any exterior lights other than low, downward-focused security lighting where necessary, and the solar panels that are part of the Project will have relatively low reflectivity and because the site is not generally visible from roadways.

## **B. AGRICULTURAL AND FOREST RESOURCES**

1. The Project will not convert prime farmland, unique farmland, or farmland of statewide importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use because there are no agricultural resources on this site that is within an urban area and is zoned for industrial use.

2. The Project will not conflict with existing zoning for agricultural use or a Williamson Act contract because the property is not zoned for agricultural use and is not subject to a Williamson Act contract.

3. The Project will not conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined in Government Code Section 51104(g)) because the property is not zoned as forest land or timberland and instead is zoned for industrial use.

4. The Project will not result in the loss of forest land or conversion of forest land to non-forest use because the site is not zoned as forest land and instead is zoned for industrial use.

5. The Project does not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use because there are no agricultural resources on the site or in the vicinity.

## **C. AIR QUALITY**

1. The Project will not conflict with or obstruct implementation of the applicable air quality plan because the Project is consistent with the 2010 Clean Air Plan adopted by the Bay Area Air Quality Management District ("BAAQMD"), construction and operational emissions from the Project will not exceed any BAAQMD thresholds of significance, and all construction activities will be required to comply with BAAQMD control measures, thereby having a less than significant impact.

2. The Project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation because construction and operational emissions from the Project will not exceed any BAAQMD thresholds of significance, and all construction activities will be required to comply with BAAQMD control measures, thereby having a less than significant impact.

3. The Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors) because the Project does not increase the population in the region and is consistent with the 2010 Clean Air Plan adopted by the Bay Area Air Quality Management District ("BAAQMD"), construction and operational emissions from the Project

will not exceed any BAAQMD thresholds of significance, and all construction activities will be required to comply with BAAQMD control measures, thereby having a less than significant impact.

4. The Project will not expose sensitive receptors to substantial pollutant concentrations because construction and operational emissions from the Project will not exceed any BAAQMD thresholds of significance, and all construction activities will be required to comply with BAAQMD control measures, thereby having a less than significant impact.

5. The Project will not create objectionable odors affecting a substantial number of people because the type of use created by the Project (installation of photovoltaic cells for solar generation facility) does not generate objectionable odors.

As discussed in items 1-4, the Project does not have the possibility to create adverse air quality impacts, either during construction or operation. Furthermore, compliance with BAAQMD control measures during construction is required, thereby further ensuring that impacts are less than significant. Nevertheless, MCE has added to the Project's Mitigation Monitoring and Reporting Program a recommended measure to memorialize the regulatory standard that applies and to track and ensure compliance with BAAQMD control measures. Specifically, **Mitigation Measure AQ-1** provides that the following control measures for construction emissions shall be implemented during grading, site preparation and construction:

- Water all active construction areas at least twice daily.
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.
- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- All "Basic" control measures listed above.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Limit traffic speeds on unpaved roads to 15 mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.
- Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.



- Limit the area subject to excavation, grading and other construction activity at any one time.

#### **D. BIOLOGICAL RESOURCES**

1. The Project will not conflict with the provisions of any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, because there are no such plans in force within the Project site.

#### **E. CULTURAL RESOURCES**

1. The Project will not cause a substantial adverse change in the significance of historical resource as defined in Guidelines Section 15064.5 because the Project site is located in an industrial area on a site that previously was a landfill and fertilizer evaporation pond, and grading for the Project will not extend below the areas that have been historically disturbed for those prior uses.

2. The Project will not cause a substantial adverse change in the significance of an archaeological resource as defined in Guidelines Section 15064.5 because the Project site is located in an industrial area on a site that previously was a landfill and fertilizer evaporation pond, and grading for the Project will not extend below the areas that have been historically disturbed for those prior uses.

3. The Project will not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature because the Project site is located in an industrial area on a site that previously was a landfill and fertilizer evaporation pond, and grading for the Project will not extend below the areas that have been historically disturbed for those prior uses.

4. The Project will not disturb any human remains, including those interred outside of formal cemeteries because the Project site is located in an industrial area on a site that previously was a landfill and fertilizer evaporation pond, and grading for the Project will not extend below the areas that have been historically disturbed for those prior uses.

#### **F. GEOLOGY AND SOILS**

1. The Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving: (a) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault; or (b) strong seismic ground shaking because the Project is not located within a fault zone and, once constructed, the Project will be low in height, unmanned, and will not include any habitable space or structures.

2. The Project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, involving seismic-related ground failure, including liquefaction, because the site is a filled-in landfill and fertilizer evaporation pond that is highly compacted and less susceptible liquefaction; in addition, because the Project does not include any habitable space or structures, no people or habitable structures would be exposed to any potential adverse effects even if liquefaction were to occur on the site.

3. The Project will not cause landslides because the Project site is relatively flat and is not within a fault zone.

4. The Project will not result in substantial soil erosion or the loss of topsoil because the Project will be constructed to minimize ground disturbance and site preparation and grading activities will be balanced cut and fill (no import or export of materials). In addition, after construction the area will be re-vegetated to prevent erosion, and the Project will comply with Best Management Practices (“BMPs”) as outlined in a Stormwater Pollution Prevention Plan that will be prepared as required pursuant to the National Pollution Discharge Elimination System construction storm water permit; these BMPs will address runoff and limit erosion.

5. The Project will not be located on a geologic unit or soil that is unstable as a result of the Project, potentially resulting in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse because fill and compaction already have occurred due to the prior uses on the site and have changed the soil profile on the flat site, which is not impacted by landslides. In addition, during construction, grading and disturbance to the soil profile will be minimized and will prevent lateral spreading. Finally, because the Project does not include any habitable space or structures, no people or habitable structures would be exposed to any potential adverse effects even if subsidence, liquefaction, or collapse were to occur on the site, which is not expected.

6. The Project is not located on expansive soil, as defined in Table 1-B of the Uniform Building Code, thereby creating substantial risks to life or property, because the site was previously used as a landfill and fertilizer evaporation pond and fill and compaction already have occurred. The site is not expected to have highly expansive soil and the Project does not include any habitable space or gathering space that could expose people to risks from expansive soil.

7. The Project does not include any septic tanks or alternative wastewater disposal systems, and therefore the Project does not present the potential for any impacts related to soils that are incapable of adequately supporting septic tanks or alternative wastewater disposal systems.

## **G. GREENHOUSE GAS EMISSIONS**

1. The Project will not generate greenhouse gas (“GHG”) emissions, either directly or indirectly, that may have a significant impact on the environment, because overall (net) GHG emissions will decrease by approximately 5,129 metric tons CO<sub>2</sub>e through the

generation of solar energy from the Project, and the Project therefore will have a beneficial impact with respect to the reduction of GHGs.

2. The Project will not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases because the Project is a solar energy project that will directly fulfill and advance Policy EC3.1 of the Richmond General Plan 2030 Energy and Climate Element, which states, "Promote the generation, transmission and use of a range of renewable energy sources such as solar, wind power, and waste energy to meet current and future demand and encourage new development and redevelopment projects to generate a portion of their energy needs through renewable sources."

#### **H. HAZARDS AND HAZARDOUS MATERIALS**

1. The Project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school because the Project site is not located within ¼ mile of an existing or proposed school.

2. The Project is not located within an airport land use plan or, where such plan has not been adopted, within two miles of a public airport or public use airport, and thus the Project will not result in a safety hazard for people residing or working in the Project area.

3. The Project is not located within the vicinity of a private airstrip, and thus will not result in a safety hazard for people residing or working in the Project area.

4. The Project will not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, because the site does not fall within any Very High Fire Hazard Severity Zone as designated by the California Department of Forestry and Fire Protection and the site is not in or adjacent to wildland areas.

#### **I. HYDROLOGY AND WATER QUALITY**

1. The Project will not substantially deplete groundwater supplies or interfere with substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted) because the Project site, a prior landfill site, has been capped and filled in and generally prevents water from infiltrating. The area under the photovoltaic modules used in the Project will continue to be pervious. Finally, the Project will use only minimal water, for washing the solar panels approximately once per year and light irrigation for landscaping in limited areas.

2. The Project will not place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map because no housing or residential uses are included as part of the Project.

3. The Project will not place within a 100-year flood hazard area structures that would impede or redirect flood flows, because the Project will not substantially alter the topography of the site, and the Project installations will not substantially impede or redirect flood flows.

4. The Project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam because no habitable structures are included in the Project and there are no dams in the City of Richmond or western Contra Costa County.

5. The Project will not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow, because, as stated in the City of Richmond General Plan EIR, there are no designated risk areas in the City of Richmond for tsunamis or seiches.

#### **J. LAND USE**

1. The Project will not physically divide an established community, because it is located in an existing industrial area and is surrounded on all sides by industrial uses and urban development.

2. The Project will not conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the Project because the Project site is designated as Business and Industry in the General Plan and as M-2, light industrial, in the zoning code, and the Project is consistent with the uses allowed under these designations.

3. The Project will not conflict with any applicable habitat conservation plan or natural community conservation plan, because no such plans apply to the site.

#### **K. MINERAL RESOURCES**

1. The Project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state because the Project site is located at a previous landfill and fertilizer evaporation pond and is not designated for mining uses or actively mined.

2. The Project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan because the Project site is located at a previous landfill and fertilizer evaporation pond and is not designated for mining uses or actively mined.

#### **L. NOISE**

1. The Project will not expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, because the Project is a passive use and operational noise associated with the inverters that convert electricity from direct current to alternating current will be approximately

33.6 dB at the nearest multi-family dwellings, which are approximately .25 miles away; this noise level would not exceed the City of Richmond's threshold of 65 dB.

2. The Project will not expose persons to or generate excessive groundbourne vibration or noise levels because the Project is a passive use that, once operational, will not create groundbourne vibrations or noise levels. Furthermore, any construction-related impacts would be less than significant due to the nearest sensitive receptor being approximately .25 miles away and thus vibration and groundbourne noises would not be perceptible.

3. The Project will not cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project because the Project is a passive use and operational noise associated with the inverters that convert electricity from direct current to alternating current will be approximately 33.6 dB at the nearest multi-family dwellings, which are approximately .25 miles away; this noise level would not exceed the City of Richmond's threshold of 65 dB.

4. The Project is not located within an airport land use plan or within two miles of a public airport or public use airport (the nearest airport is San Rafael Airport, approximately 9.25 miles away), and thus would not expose people residing or working in the Project area to excessive noise levels from airport activities.

5. The Project is not located within the vicinity of a private airstrip, and thus would not expose people residing or working in the Project area to excessive noise levels from airstrip activities.

#### **M. POPULATION AND HOUSING**

1. The Project will not induce substantial population growth in an area either directly or indirectly because it is a solar photovoltaic project that will not increase the residential or employment populations of Richmond or the region, and no residences will be demolished or built. Any workers needed for the temporary construction of the Project will be drawn from the local workforce in Richmond or the Bay Area, and thus no impacts will occur.

2. The Project will not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere, because no housing currently exists at the site.

3. The Project will not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere, because the Project site is vacant, and previously was used as a landfill and fertilizer evaporation pond.

#### **N. PUBLIC SERVICES**

1. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered fire protection services, the construction of which could cause significant environmental impacts, because the Project is a passive, solar energy project that will have a low demand for fire protection services and no new fire facilities will be required.

2. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered police protection services, the construction of which could cause significant environmental impacts, because the Project is a passive, solar energy project that will have a low demand for police protection services and no new police facilities will be required.

3. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered schools, the construction of which could cause significant environmental impacts, because no substantial population growth will result from the Project and no new school facilities will be required.

4. The Project will not result in substantial adverse physical impacts associated with the provision or need of new or physically altered parks, the construction of which could cause significant environmental impacts, because no substantial population growth will result from the Project and no new park facilities will be required.

5. The Project is not anticipated to cause any environmental impacts related to any other type of public facility.

#### **O. RECREATION**

1. The Project will not increase the use of existing neighborhood or regional parks or other recreation facilities because the Project site is currently a vacant lot in an industrial area and the Project is a passive, solar energy project that will not increase the use of recreational facilities.

2. The Project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

#### **P. TRANSPORTATION/TRAFFIC**

1. The Project will not conflict with an applicable plan, ordinance or policy establishing a measure of effectiveness for the performance of the circulation system because the site will be used for solar energy generation, a passive use that will be unmanned and result in no more than two trips per day on average for maintenance staff vehicles. Furthermore, during construction, vehicle trips will average approximately 18 daily trips during the first two months of construction on Phase I (the most intense period of construction traffic); trips will be concentrated in the morning and afternoon outside of peak hour traffic and will be modest in number. In addition, construction will be completed in 2016, prior to the construction periods for the Chevron facility's Modernization Project, and thus cumulative construction impacts will be less than significant.

2. The Project will not conflict with an applicable congestion management program because the site will be used for solar energy generation, a passive use that will be unmanned and result in no more than two trips per day on average for maintenance staff vehicles. Furthermore, during construction, vehicle trips will average approximately 18 daily trips during the first two months of construction on Phase I (the most intense period of

construction traffic); trips will be concentrated in the morning and afternoon outside of peak hour traffic and will be modest in number. In addition, construction will be completed in 2016, prior to the construction periods for the Chevron facility's Modernization Project, and thus cumulative construction impacts will be less than significant.

3. The Project will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks, because no airport or airstrip is located in the Project area.

4. The proposed Project is not anticipated to substantially increase hazards due to a design feature because the Project does not include the construction or substantial alteration of any roads.

5. The proposed Project will not result in inadequate emergency access because the Project site is fully surrounded by existing access roads.

6. The Project will not conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) because the site will be used for solar energy generation, a passive use that will be unmanned and result in no more than two trips per day on average for maintenance staff vehicles. Furthermore, during construction, vehicle trips will average approximately 18 daily trips during the first two months of construction on Phase I (the most intense period of construction traffic); trips will be concentrated in the morning and afternoon outside of peak hour traffic and will be modest in number. In addition, construction will be completed in 2016, prior to the construction periods for the Chevron facility's Modernization Project, and thus cumulative construction impacts will be less than significant. No adverse impacts to public transit will occur.

#### **Q. UTILITIES AND SERVICE SYSTEMS**

1. The Project will not exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board because the Project is a passive, solar energy project that will not generate substantial quantities of wastewater.

2. The Project will not require or result in the construction of new water or wastewater treatment facilities or the expansion of existing facilities, the construction of which could cause significant environmental impacts, because the Project is a passive, solar energy project that will not generate substantial quantities of wastewater or require wastewater treatment, or require any new water facilities.

3. The Project will not require or result in the construction of new storm water drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental impacts, because the Project is a passive, solar energy project that will not substantially increase storm water runoff or alter or tax the existing storm water management or infrastructure.

4. The Project will have sufficient water supplies available to serve the Project from existing entitlements and resources because the Project is a passive use that requires a very limited amount of water – washing of the solar panels once per year and limited irrigation

for landscaping. 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 on-drinking uses (EBMUD, November 2015). Thus, the Project will not utilize water from onsite or require new water utility lines, or otherwise result in new or expanded water entitlements.

5. The capacity of the wastewater treatment provider serving the Project vicinity (Richmond Municipal Sewer District and Richmond Municipal Wastewater Treatment Plant) will not be impacted by the Project because the Project is a passive, solar energy project that will not generate substantial quantities of wastewater.

6. The Project will not generate substantial amounts of solid waste once operational. Any construction waste will be minimal because the site is vacant and no demolition of structures is required, and thus any construction waste will not exceed the capacity of Keller Canyon Landfill, which services the Project site.

7. The Project will comply with federal, state, and local statutes and regulations related to solid waste. The Project will not generate substantial amounts of solid waste once operational. Any construction waste will be minimal because the site is vacant and no demolition of structures is required, and thus any construction waste will not exceed the capacity of Keller Canyon Landfill, which services the Project site.

#### **IV. Effects Determined to be Less Than Significant Without Mitigation in the EIR**

The EIR found that the Project will have a less than significant impact without the imposition of mitigation on a number of environmental topic areas listed below. A less than significant environmental impact determination was made for each of the following topic areas listed below, based on the more expansive discussions contained in the Final EIR.

##### **A. BIOLOGICAL RESOURCES**

1. The Project does not contain suitable habitat for special status plant species. The Project site consists predominantly of highly disturbed, isolated patch of non-native annual grassland on a landfill cap and associated ruderal areas, with an isolated area of Valley Needlegrass Grassland habitat and a centrally located canal and adjacent Northern Salt Marsh community. 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. Furthermore, Project



development impacts are restricted to the ruderal and non-native grassland portions of the site. The canal and associated marsh habitat is outside of the proposed development areas, and the Valley Needlegrass Grassland habitat is being avoided through project design and protections as discussed in Impact BIO-1 (below).

2. The Project contains marginally suitable habitat for special status mammal species but will not result in any adverse impacts. The salt marsh habitat present adjacent to the Project site consists 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. Nevertheless, 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 (Mitigation Measures BIO-2(d) through BIO-2(f)) have been included as recommended mitigation, even though potential impacts are less than significant without the additional measures.

**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.

## **B. HAZARDS AND HAZARDOUS MATERIALS**

1. The Project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, because the potential hazards associated with the use, transport and/or storage of hazardous materials related to construction, operation, and decommissioning activities will be less than significant.

2. The Project will not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, in particular the Chevron Refinery's Emergency Response Program, because Chevron is required to update its existing emergency and evacuation plans pursuant to Mitigation Measure Haz-2 of the Chevron Richmond Refinery Modernization Project EIR. However, because MCE will oversee the Project, additional coordination on the plan is suggested through recommended Mitigation Measure HAZ-4, which is recommended to further reduce impacts, which are already less than significant, related to emergency response and evacuation plans.

**HAZ-4.** Emergency Response and Evacuation Plans. Prior to commencing grading or construction of the project, MCE shall work with the City of Richmond to ensure that Chevron updates its emergency response and evacuation plans to the City's satisfaction.

## **C. HYDROLOGY AND WATER QUALITY**

1. The Project will not violate any water quality standards or waste discharge requirements because compliance with existing federal and state requirements will ensure that impacts remain less than significant.

2. The Project will not substantially degrade water quality because compliance with existing federal and state requirements will ensure that impacts remain less than significant.

3. The Project will not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite, or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff, because the Project will not increase runoff, and therefore will not result in flooding or increased erosion downstream. The Project is not anticipated to substantially affect runoff because the Project includes minimal changes in existing natural landforms, ongoing vegetation maintenance efforts during construction and operation, and limited areas of compaction. Furthermore, the topography where the photovoltaic modules would be located is generally flat. Areas temporarily disturbed during construction-related activities would be re-vegetated (either naturally or re-planted) consistent with a Project-specific re-vegetation plan to avoid changes to peak flows and runoff volume. Impacts would be less than significant.

#### **V. Potentially Significant Environmental Impacts Determined to be Mitigated to a Less Than Significant Level**

The EIR identified the potential for the Project to cause significant environmental impacts in the areas of biological resources, hazards and hazardous materials, and hydrology and water quality. Measures were identified that would mitigate all of these impacts to a less than significant level.

MCE's Board of Directors finds that the feasible mitigation measures for the Project identified in the Final EIR would reduce the Project's impacts to a less than significant level. The Board of Directors will adopt all of the feasible mitigation measures for the Project described in the Final EIR.

#### **A. BIOLOGICAL RESOURCES**

##### **1. Biological Resources – Sensitive Natural Community (Purple Needlegrass)**

The database review identified five natural communities within the vicinity of the project site: Coastal Terrace Prairie; Northern Coastal Salt Marsh; Northern Maritime Chaparral; Serpentine Bunchgrass; and Valley Needlegrass Grassland. Areas containing North Coast Salt Marsh and jurisdictional habitat associated with freshwater emergent marsh are separated from the Project site existing paved access roads. No project disturbance in these areas is proposed as part of the project design. Since both the North Coast Salt Marsh and freshwater emergent marsh are outside the project area and buffered by existing paved roads and associated disturbed road shoulders, no direct or indirect impacts to these sensitive communities are anticipated.

The purple needlegrass community along the southeast corner of the landfill occurs in sufficient density to be considered Valley Needlegrass Grassland – a California Department of

Fish & Wildlife sensitive natural community. This community occurs on a raised berm that is unsuitable for solar panel installation and the Project has been designed to avoid development in this area. Without appropriate safeguards (BMPs) however, construction activities could adversely affect this sensitive community from staging, laydown, and storage activities, as well as vehicle travel and/or human trampling – all of which could be considered a significant impact.

#### (a) Findings

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any potential biological resources impact to sensitive natural communities. Specifically, the following mitigation measure is imposed upon the Project to ensure a less than significant impact:

**BIO-1:** A highly visible barrier fence or flagging shall be installed around the identified Valley Needlegrass Grassland community to prevent equipment and employee movement through the community. This fence or flagging shall be installed prior to the onset of grading or construction, maintained throughout project activities, and removed following project completion.

#### (b) Facts in Support of Findings

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, in any event, the Project has been designed to avoid the area where Valley Needlegrass Grassland occurs. Nonetheless, in order to ensure that no adverse impacts occur, Mitigation Measure BIO-1 requires a highly visible barrier fence and flagging to be installed around the identified Valley Needlegrass Grassland Community. This fence or flagging will be installed prior to any construction occurring, and will be maintained throughout the duration of construction on the Project site. This mitigation will ensure that construction workers have a visual way to identify where Valley Needlegrass Grassland is located and to avoid it, thereby avoiding the potential for any impacts. Once the photovoltaic panels are installed, there will be no further risk to this community because operation of the Project is passive and will not physically enter into the area of this community. Mitigation Measure BIO-1 thus will ensure that any adverse impacts are less than significant.

### 2. Biological Resources – Impacts to Burrowing Owls and Other Nesting Birds During Construction

Most special-status plant and wildlife species are not expected to occur within the highly disturbed Project area, and those that may occur have a low probability of being adversely affected by the Project. However, ruderal habitat and non-native grassland could support breeding and wintering burrowing owls if man-made structures (i.e. culverts, debris piles, open foundations, etc.) or ground squirrel, jackrabbits or other large rodent burrows are occupied by owls or available for occupation on the project site at the time of construction. The existing disturbance, lack of natural vegetation communities, and regular activity associated

with the existing Chevron refinery reduce the likelihood for nesting by burrowing owl; however, the potential for nesting by this species cannot be completely eliminated. Therefore, there is a low potential to support nesting and/or wintering burrowing owls. Construction activity – including grading, clearing and excavation, along with associated construction noise and travel – could directly (injure or kill) and/or indirectly (encourage nest or winter burrow abandonment) impact nesting or wintering burrowing owls if present onsite during construction.

In addition, the Project site and adjacent wetlands provide suitable nesting habitat for a number of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §§ 703-711) and various provisions of the California Fish and Game Code (including F&G Code § 3500). A number of species may nest within or adjacent to the project site, including but not limited to white crowned sparrow, song sparrow, killdeer, horned lark, mourning dove, Eurasian collared dove, house finch, Anna's hummingbird, and California towhee; therefore, implementation of the Project could result in direct (destruction of a nest; injury or mortality of individual birds) or indirect (nest abandonment from noise and human presence) impacts to nesting bird species should they be present within the project site and/or immediate surrounding vicinity at the time of construction. Direct and indirect impacts to nesting birds and burrowing owl are potentially significant.

#### (a) Findings

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any potential biological resources impacts to nesting birds or burrowing owls. Specifically, the following mitigation measures are imposed upon the Project to ensure a less than significant impact:

**BIO-2(a):** Avoid Nesting Bird Season. Direct disturbance (clearing/grading/vegetation removal) to nesting habitat shall be conducted between September 16 and January 31, outside of the nesting bird breeding season, to the greatest extent possible. No preconstruction nesting bird surveys would be required for construction occurring during the non-breeding season. Removal of potential nesting habitat during the non-breeding season would prevent mated pairs from nesting in proposed disturbance areas.

**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 1 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, where accessible, prior to any site disturbance (i.e., mobilization, staging, grading, or construction). If active nests are found, they shall be protected with a minimum 100-foot no-work buffer for songbirds and 500-foot buffer for raptors. These buffers could be adjusted according to existing noise, topography, or disturbance conditions. Buffer zones would be designated in the field in various ways, including flagging, fencing, and/or signage. Surveys shall be completed no more than 14 days prior to ground disturbance and vegetation removal. If buffers and follow-up monitoring are required, the qualified biologist shall submit a monthly monitoring

report identifying active nests, monitoring results, and condition of buffer zones. Reports can be combined with other reporting requirements where appropriate.

**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.

If burrowing owls are detected on-site, no ground-disturbing activities shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.

If avoidance of active burrows is not feasible during the non-breeding season, then, before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance and/or scoping, a qualified biologist shall implement a passive relocation program in accordance with the CDFW 2012 Staff Report on Burrowing Owl. If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan in accordance with CDFW's 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Plan shall include all necessary measures to minimize impacts to burrowing owls during passive relocation, including all necessary monitoring of owls and burrows during passive relocation efforts. Relocation of owls can only occur during the non-breeding season.

#### (b) Facts in Support of Findings

As noted above, the existing disturbance, lack of natural vegetation communities, and regular activity associated with the existing Chevron refinery all serve to reduce the likelihood for nesting or wintering by protected birds, including the burrowing owl. Nonetheless, to further reduce the potential for any impacts, BIO-2(a) limit construction activities, to the extent possible, to between September 16 and January 31, which is outside of the nesting bird breeding season. BIO-2(a) thus would prevent birds from nesting in the Project area and being disturbed.

In the event that direct disturbance of the area is unavoidable during the nesting season (February 1 to September 15), mitigation measure BIO-2(b) would ensure that active nests receive adequate protection. Specifically, pre-construction surveys will be required and if active nests are discovered, they will be protected with a minimum 100-foot no-work buffer for

songbirds and 500-foot buffer for raptors. These buffers could be adjusted according to existing noise, topography, or disturbance conditions. Buffer zones would be designated in the field in various ways, including flagging, fencing, and/or signage. This mitigation measure will ensure that any potential impacts to active nests are reduced to less than significant.

In addition, mitigation measure BIO-2(c) will prevent direct impacts to breeding burrowing owl. Mitigation measure BIO-2(c) requires pre-construction clearance surveys and, in the event burrowing owls are found, provides for restrictions on ground-disturbing work. If avoidance of active burrows is not feasible during the non-breeding season, then, mitigation measure BIO-2(c) would ensure that individual owls are passively relocated away from the Project site to avoid direct impacts. With the implementation of these measures, impacts would be reduced to a less than significant level.

### 3. Biological Resources – Impacts to Wetland and Non-Wetland Waters

Wetland and non-wetland waters occur outside the Project area and are separated from Project activities by at least 90 feet. No alterations to the constructed swale on the evaporation pond site are proposed. As designed, the swale would not be eliminated and storm waters that fall within the evaporation pond site would not be redirected. Consequently, wetland and non-wetland waters would not be directly affected by Project construction or operation. However, Project related ground-disturbance activities could adversely affect water quality of surrounding waters through inadvertent discharge of materials or runoff containing sediment and/or pollutants.

#### (a) Findings

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any potential biological resources impact to wetland and non-wetland waters. Specifically, the following mitigation measure is imposed upon the Project to ensure a less than significant impact:

**BIO-3:** Stormwater Control Measures. The following best management practices (BMPs) shall be implemented throughout construction activities and/or as part of project design.

- The Facility shall provide environmental awareness training for all construction personnel to address potential impacts to wetlands and waters of the US and State.
- Bright-colored fencing and signage shall identify and restrict construction within environmentally sensitive areas.
- A construction monitor/environmental inspector shall confirm the fence integrity on a daily basis to protect the area from accidental equipment damage.
- Any and all necessary fence repair and/or reinforcements shall be completed immediately.

- Temporary perimeter silt fencing shall be installed where storm water runoff and non-storm water discharges could flow into surrounding marshes.
- Placement of exclusion fencing 5–10 feet from the perimeter of the coastal brackish marsh boundary or on the edge of the temporary disturbance area when this distance is greater.
- Temporary straw wattles, sand bags, or water velocity dissipaters shall be installed around concrete drainage channels to prevent sediment from entering channels and storm drains.
- Ground disturbance and vegetation grubbing shall be minimized and limited to the area required to complete project activities.
- Bare ground exposed or inactive for more than 14 days shall be stabilized or re-vegetated to prevent erosion. Following project completion all areas of bare ground shall be stabilized or re-vegetated prior to termination of installation activities.
- Entrances and exits onto the landfill and evaporation pond sites shall be stabilized to prevent sediments from being tracked off site.
- Staging or storing of equipment and materials shall occur onsite or on existing paved surfaces and shall be covered or contained within appropriate secondary containment to prevent pollutants from running off site or onto the ground.
- BMPs shall be installed prior to initiation to work and all temporary BMPs shall be removed following project completion.

#### (b) Facts in Support of Findings

The Project will not create any direct impacts to wetland or non-wetland waters. Nonetheless, to avoid any potential indirect impacts caused by ground-disturbance activities, Mitigation Measure BIO-3 requires adherence to a series of Best Management Practices that reduce the potential for any infiltration of sediment into wetland or non-wetland waters. By implementing the Best Management Practices outlined in Mitigation Measure BIO-3, impacts to wetland and non-wetland waters will be reduced to a less than significant level.

#### 4. Biological Resources – Cumulative Impacts

The Project's impacts on biological resources have been determined to be less than significant with mitigation. The Project site was previously developed and no biological habitats or special status species would be significantly impacted with implementation of mitigation measures as described above. The site is located within Chevron Richmond Refinery, a developed industrial area. With mitigation implemented, the Project would not cause open space fragmentation in the site's vicinity as the site's vicinity is already developed with industrial uses, lead to a loss of sensitive habitats and species, contribute to proposed urban expansion into natural areas, or isolate open space. Therefore, cumulative impacts to biological resources would be less than significant with implementation of Project mitigation measures.



## B. HAZARDS AND HAZARDOUS MATERIALS

### 1. Hazards and Hazardous Materials – Impacts Relating to Exposure to Chemicals Remaining On-Site

The Project site is a part of the Chevron Richmond Refinery property. Approximately 40 acres of the Project site contain a capped landfill and the remaining 20 acres consist of filled fertilizer evaporation pond. Residual chemicals or heavy metals may be present in these areas, and construction workers could be exposed to these chemicals should ground-disturbing activities occur during grading and construction.

#### (a) Findings

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any potential impacts from exposure to hazardous materials or chemicals remaining on site. Specifically, the following mitigation measures are imposed upon the Project to ensure a less than significant impact:

**HAZ-1(a)** Prior to issuance of building permits, the applicant shall submit for City of Richmond review the design of the 10.5MW facility, and 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.

**HAZ-1(b)** Prior to issuance of building permits, the landowner (Chevron) shall submit for RWQCB review the design of the 10.5MW facility, and 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.

#### (b) Facts in Support of Findings

Phase I of the Project would involve installation of a 2 MW non-penetrating, ballasted, fixed-tilt PV array on the landfill area (approximately 13 acres of the 40 acre landfill). Phase 2 would include installation of a 5 MW non-penetrating, ballasted, fixed-tilt PV array on the additional landfill area (27 acres of the 40 acre landfill). The panels on the landfill areas in both Phase I and Phase 2 would extend from about 30 inches above grade to a maximum height of eight feet and would be south-facing at a 20-degree tilt in a series of east-to-west rows. The pads would be placed above ground and would not involve ground disturbance so as not to penetrate or otherwise jeopardize the cap. In addition, a Geotechnical Investigation (Wood Rodgers, March 2015) 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. Therefore, the likelihood that construction workers or

operational staff working on this portion of the project site could be exposed to residual chemicals in soils under the landfill cap is minor. In addition, the fertilizer ponds were filled and compacted with clean fill and asphalt base. 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.

The Project is subject to the requirements outlined in RWQCB Order No. R2-2012-0015. In addition, Mitigation measures HAZ-1(a) and HAZ-1(b) will ensure that activities under the Project are consistent with remediation programs ongoing at the site and discussed in Modernization Project EIR, and with governing regulations promulgated by the Regional Water Quality Control Board.

## 2. Hazards and Hazardous Materials – Impacts Relating to Decommissioning of Project

The solar array(s) may be either repowered or decommissioned at the end of the Project's useful life (anticipated to be 30 years or more). If repowered, the installed PV solar modules would likely be replaced with new, updated modules or other technology. Improper disposal or recycling of PV modules and other project components could result in long-term outdoor storage of metal, lead soldered, mineral oil-containing, or petroleum-lubricated parts (such as tracking motors and articulating support structures), which if exposed to rainfall over an extended period could result in contaminated runoff that can pose a hazard to people and the environment.

In addition, improper disposal of CIGS modules could result in a significant hazard to members of the public if the modules are not properly dismantled during recycling. The Project would use CIGS solar cells that do not contain cadmium, which is a carcinogen. However, recent studies have found that CIGS cells can leach several other hazardous metals after disposal such as molybdenum, zinc, aluminum, and selenium.

### (a) Findings

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any potential impacts from exposure to hazardous materials or chemicals at the time that the Project is decommissioned. Specifically, the following mitigation measures are imposed upon the Project to ensure a less than significant impact:

**HAZ-3 Disposal of PV Modules and Support Structures.** Prior to construction permit issuance, the system operator shall prepare a recycling or disposal plan for PV modules and support structures for MCE review and approval, in order that project structures not pose a risk to human health or the environment after project repowering and/or decommissioning. The plan shall specify how these project components shall be disposed of in a manner that will not pose a risk to human health or the environment, and the costs of such disposal.

## (b) Facts in Support of Findings

Although at this point it is speculative to anticipate the specific closure/decommissioning timeframe for the Project, the Final EIR includes Mitigation Measures HAZ-3 to ensure that decommissioning activities do not create any potential adverse environmental impacts. 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 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. Compliance with Mitigation Measure HAZ-3 will ensure that impacts are less than significant.

### 3. Hazards and Hazardous Materials – Cumulative Impacts

A significant cumulative hazardous materials impact is defined as the simultaneous uncontrolled release of hazardous materials from multiple locations in a form (gas or liquid) that could cause a significant impact where the release of one hazardous material alone would not cause a significant impact. Existing locations that use or store gaseous or liquid hazardous materials, or locations where such facilities might likely be built, were both considered. While cumulative impacts are theoretically possible, they are not probable because of the many safeguards implemented to both prevent and control an accidental release. The chance of one uncontrolled release occurring is unlikely. The chance of two or more occurring simultaneously is remote. In addition, the extent of potential cumulative impacts is also a function of the proximity of the incidents in relationship to one another, as well as proximity to sensitive receptors.

Due to the industrial nature of the project site and surrounding area, the distance to the closest sensitive receptors, and legal requirements related to the handling of hazardous materials, the potential for past, present, and reasonably foreseeable project to cause a cumulatively considerable impact is considered remote. Furthermore, the only large quantity hazardous materials that would be used or transported to or from the project site include motor vehicle fuels and transformer oil. Accidental spills of these substances would combine to create a cumulative impact during transport only if two transportation vehicles carrying hazardous or potentially harmful materials were to collide.

Compliance with existing laws and regulations governing the transport, use and storage of hazardous materials and wastes as well as use of appropriately trained employees for PV module installation would reduce impacts related to exposure of the public or environment to hazardous materials to a less than significant level. The Project therefore poses a minimal risk of accidental release that could result in offsite impacts. Therefore, the Project's contribution to cumulative hazardous materials release impacts, when combined with impacts from past, present, and reasonably foreseeable future projects, would be considered cumulatively less than considerable.

In addition, the Project will not interfere with the applicable emergency response plans. Chevron Refinery's emergency response plan covers the entire Chevron site and associated facilities. The Project will not contribute to a cumulative impact in this regard and impacts will not be cumulatively considerable.

## **C. HYDROLOGY AND WATER QUALITY**

### **1. Hydrology and Water Quality – Accidental Release of Hazardous Materials that Could Degrade Water Quality**

The Project could result in an accidental release of a hazardous material(s) during construction and/or operation, which could potentially degrade water quality within the Wildcat Creek Watershed. Potentially hazardous materials used in Project construction or operation may include diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, lubricant grease, cement slurry, and other fluids required for vehicles and equipment. This equipment could also leak hazardous materials such as motor oil, transmission fluid, or antifreeze due to inadequate or improper maintenance, unnoticed or unrepaired damage, improper re-fuelling, or operator error.

#### **(a) Findings**

Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen any potential impacts from exposure to accidental release of hazardous materials that could degrade water quality. Specifically, the following mitigation measure is imposed upon the Project to ensure a less than significant impact:

**HYD-2:** Maintain Vehicles and Equipment. All vehicles and equipment, including hydraulic hoses, shall be maintained in good working order to minimize leaks that could contact the ground. A vehicle and equipment maintenance log shall be updated and provided by the project proponent to Marin Clean Energy on a monthly basis for the duration of project construction.

#### **(b) Facts in Support of Findings**

The possibility of an accidental release of hazardous substances occurring is remote. Modules would be inspected regularly and replaced as necessary. Industrial wastes generated during routine operations could include dielectric fluids, cleaning agents, and solvents, which would typically be put in containers, characterized, and labelled, possibly stored briefly, and transported by a licensed hauler to an appropriate permitted off-site disposal facility as a standard practice. Damaged components, including PV modules, would be replaced as required.

The project could adversely affect water quality due to the improper handling and use of hazardous materials, and operation of construction and maintenance equipment. Compliance with existing regulatory requirements, including DTSC regulations related to the generation, treatment, disposal, and transportation of hazardous materials, NPDES construction-phase requirements, as well as other local regulatory requirements would partially reduce impacts.

In addition, the mitigation identified above will ensure that vehicles and equipment are maintained in good working order to minimize any leaks or release of hazardous materials, and thereby will minimize, to a less than significant level, potential impacts due to accidental release or spill of a hazardous material during project construction and operation.

## **2. Hydrology and Water Quality – Cumulative Impacts**

With regards to the alteration of existing drainage patterns and creation of new impervious areas potentially resulting in substantial flooding on or offsite, the Project will not increase runoff, and therefore will not result in flooding or increased erosion downstream. Therefore, the Project will not combine with similar impacts of other projects in the cumulative scenario. No cumulative impacts will occur regarding the alteration of existing drainage patterns or introduction of new impervious areas.

Cumulative impacts to water quality due to erosion and sedimentation and/or from the accidental release(s) of contaminants are highly site-specific and, due to the distance of cumulative projects from the proposed project site, a cumulative impact would not occur. In addition, it is reasonably anticipated that all projects in the cumulative scenario would be required to comply with laws and regulations relevant to water resources, and that such compliance would include development of SPCCs, SRPs, SWPPPs and BMPs to prevent water quality degradation from occurring. No significant cumulative impact related to water quality degradation from erosion/sedimentation or accidental release of hazardous materials will occur.

## **VI. Project Alternatives**

MCE considered a reasonable range of alternatives for the Project including the statutorily-required No Project Alternative and two alternate solar project scenarios identified as Alternatives 2 and 3.

Alternative 2 also proposes a photovoltaic solar panel project on the same site, but under this alternative there would be only one type of solar panel onsite, the fixed ballast type. There would be no tracker type solar panels as part of the solar array.

Alternative 3 would only affect Phase 2 of the Project and includes alternate points of interconnection that would require different pole line distribution than the Project.

MCE also considered an additional alternative that involved coverage of a larger area with solar PV arrays. This alternative would have potentially required modification of the adjacent North Coast Salt Marsh area and tidally influenced drainage channel, and coverage of more of the filled former fertilizer pond and capped landfill areas. However, MCE rejected this alternative to avoid its potentially increased impacts related to biological resources, hazards and hazardous materials, and hydrology and water quality. Ultimately, the proposed project was specifically designed to avoid/minimize such impacts.

Alternatives 1, 2, and 3 that were analyzed in the EIR are discussed below and the basis for rejecting each of these alternatives is analyzed.

## **A. ALTERNATIVE 1: NO PROJECT**

### **1. Summary of Alternative**

Under the No Project Alternative, construction and operation of the project would not occur. The baseline environmental conditions for the No Project Alternative are the same as for the Project. The current uses of the Project site would be retained. Other uses of the land (e.g., for Chevron operations) also could occur, consistent with existing zoning regulations for the site. However, for the purpose of this analysis, it was assumed that no development would occur.

### **2. Reasons for Rejecting Alternative**

The No Project would eliminate some of the environmental impacts associated with the proposed Project. However, the objectives of the proposed project would remain unfulfilled under the No Project Alternative. This means that the contribution of the Project to meeting California's renewable energy goals would not occur. Furthermore, the Project's beneficial impacts related to greenhouse gas emissions would not occur under this alternative, and thus greenhouse gas emissions impacts would be significantly greater under the No Project Alternative than under the Project.

Helping in meeting California's renewable energy goals is an important policy goal for MCE. Indeed, the purpose of MCE is to address climate change by reducing energy related greenhouse gas emissions and securing energy supply, price stability, energy efficiencies and local economic and workforce benefits. This alternative would not achieve any of the Project objectives and would not further MCE's efforts to promote its founding principles and assist in reducing energy related greenhouse gas emissions.

The Board of Directors of MCE hereby finds that each of the reasons set forth above would be an independent ground for rejecting Alternative 1, and by itself, independent of any other reason, would justify rejection of Alternative 1.

## **B. ALTERNATIVE 2: FIXED-ONLY SOLAR PV PROJECT – NO TRACKERS**

### **1. Summary of Alternative**

Similar to the Project, this alternative would involve construction and operation of an approximately 10.5 MW PV system at the approximately 60-acre site, which, in combination with approximately 11 utility scale inverters, would convert sunlight into electricity. However, under this alternative there would be only one type of solar panel onsite, the fixed ballast type. There would be no tracker type solar panels as part of the solar array. Thus this alternative would have the same amount of overall acreage on both the landfill and fertilizer pond sites but only fixed ballasts solar panels would be used, which would reduce the impacts related to ground disturbance on the site associated with the Project as proposed.

## 2. Reasons for Rejecting Alternative

The Fixed-Only Solar PV Project – No Trackers Alternative would eliminate some of the environmental impacts associated with the proposed Project. However, the tracker type solar panels give 25-30% more energy. Therefore, the No Trackers Alternative would not be as efficient or effective as the Project, and would not go as far in achieving the Project objectives, including the objective of “Increas[ing] the amount of local distributed renewable energy produced in and provided to MCE’s participating jurisdictions and their energy customers.”

The Board of Directors of MCE hereby finds that each of the reasons set forth above would be an independent ground for rejecting Alternative 2, and by itself, independent of any other reason, would justify rejection of Alternative 2.

## C. *ALTERNATIVE 3: ALTERNATE POINTS OF INTERCONNECTION (POC)*

### 1. Summary of Alternative

This alternative would only affect Phase 2 of the Project and would include alternate points of interconnection that would require different pole line distribution than the proposed project. Under this alternative, the same overall amount of acreage would be used for solar PV arrays in the same configuration as the proposed project, utilizing approximately 80,000 thin-film, non-reflective solar panels on the landfill and fertilizer pond sites with the same breakdown of fixed and tracking arrays. However, under this alternative the points of interconnection (POC) adjacent to the site would be different than the Project, which would be fed directly into the Pacific Gas & Electric (PG&E) utility grid by coupling into existing power lines running along Castro Street and connecting south at PG&E distribution circuit 1120 (shown on Figures 2-6 and 2-7) from a point along Castro Street approximately 800 feet south of the site.

Under the Alternative POC Alternative, the POC would still be adjacent to the Project site, but would require upgrades according to one of two options:

a. Alternate POC #1 - PG&E would extend circuit 1120 approximately 800 feet to the north along the existing PG&E overhead lines and then connect directly from the site to the original connection point.

b. Alternate POC #2 - The Project would use the existing Chevron pole-line exiting the southeast leased boundary to continue east across Castro Street to adjacent Chevron owned property and then continue south along existing PG&E right of way (ROW) to an existing PG&E pole location that is directly east of the original circuit 1120 Point Of Interconnection.

### 2. Reasons for Rejecting Alternative

The Alternative POCs Alternative would have greater environmental impacts than those associated with the proposed Project. Specifically, the relocation of POC and altering of utility lines may have a slightly greater impact to any nesting birds that utilize existing utility poles,

although impacts still likely could be mitigated to less than significant. In addition, similar to the Project, under this alternative, compliance with existing laws and regulations governing the transport, use and storage of hazardous materials and wastes as well as use of appropriately trained employees for PV module installation would reduce impacts related to exposure of the public or environment to hazardous materials to less than significant, although impacts may be slightly greater than Project.

Overall, the Alternate POCs Project Alternative would result in impacts equal to or slightly greater environmental impacts than the Project as this project would involve more offsite construction related to utility lines/poles.

The Board of Directors of MCE hereby finds that each of the reasons set forth above, including, specifically, the increased environmental impacts associated with Alternative 3, would be an independent ground for rejecting Alternative 3, and by itself, independent of any other reason, would justify rejection of Alternative 3.



## MITIGATION MONITORING AND REPORTING PROGRAM

This document is the Mitigation Monitoring and Reporting Program (MMRP) for the Richmond Solar PV Project EIR, a Marin Clean Energy project located in the City of Richmond. Public Resources Code Section 21081.6(a) requires that a Lead Agency adopt an MMRP prior to approving a project in order to mitigate or avoid significant impacts that have been identified in an Environmental Impact Report (EIR). The purpose of the MMRP is to ensure that the required mitigation measures identified in the EIR are implemented as part of the overall project implementation. In addition to ensuring implementation of mitigation measures, the MMRP provides feedback to agency staff and decision-makers during project implementation, and identifies the need for enforcement action before irreversible environmental damage occurs.

The following table summarizes the mitigation measures for each issue area identified in the EIR for the Richmond Solar PV Project. The table identifies each mitigation measure; the action required for the measure to be implemented; the time at which the monitoring is to occur; the monitoring frequency; and the agency or party responsible for ensuring that the monitoring is performed. In addition, the table includes columns for compliance verification. These columns would be filled out by the monitoring agency or party and would document monitoring compliance. Where an impact was identified to be less than significant, no mitigation measures were required.

This MMRP will be used by MCE staff and contractors to determine compliance with permit conditions.

Richmond Solar PV Project EIR  
Mitigation Monitoring and Reporting Program

Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
<b>Air Quality</b> <b>(Recommended) AQ-1 Construction Emissions.</b> The following control measures for construction emissions shall be implemented during grading, site preparation and construction. <ul style="list-style-type: none"> <li>• Water all active construction areas at least twice daily.</li> <li>• Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard</li> <li>• Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.</li> <li>• Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.</li> <li>• Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.</li> <li>• All "Basic" control measures listed above.</li> <li>• Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).</li> <li>• Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)</li> <li>• Limit traffic speeds on unpaved roads to 15 mph.</li> <li>• Install sandbags or other erosion control measures to prevent silt runoff to public roadways.</li> <li>• Replant vegetation in disturbed areas as quickly as possible.</li> <li>• Install wheel washers for all exiting trucks, or wash off the tires or tracks of all trucks and equipment leaving the site.</li> <li>• Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 mph.</li> <li>• Limit the area subject to excavation, grading and other construction activity at any one time.</li> </ul>	MCE Project Manager and MCE Construction Manager and Contractor	Verification of control measures	Periodically during construction		

**Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
Biological Resources					
BIO-1 A highly visible barrier fence or flagging shall be installed around the identified Valley Needlegrass Grassland community to prevent equipment and employee movement through the community. This fence or flagging shall be installed prior to the onset of grading or construction, maintained throughout project activities, and removed following project completion.	MCE Project Manager and MCE Construction Manager and Contractor	Verification of flagging	Once prior to commencement of grading or construction activities and periodically during construction		
BIO- 2(a) Avoid Nesting Bird Season. Direct disturbance (clearing/grading/vegetation removal) to nesting habitat shall be conducted between September 16 and January 31, outside of the nesting bird breeding season, to the greatest extent possible. No preconstruction nesting bird surveys would be required for construction occurring during the non-breeding season. Removal of potential nesting habitat during the non-breeding season would prevent mated pairs from nesting in proposed disturbance areas.	MCE Project Manager, MCE Construction Manager, and Contractor	Ensure disturbance of nesting habitat has been scheduled between September 16 and January 31	Once prior to initiation of grading or construction activities		
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 1 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, where accessible, prior to any site disturbance (i.e., mobilization, staging, grading, or construction). If active nests are found, they shall be protected with a minimum 100-foot no-work buffer for songbirds and 500-foot buffer for raptors. These buffers could be adjusted according to existing noise, topography, or disturbance conditions. Buffer zones would be designated in the field in various ways, including flagging, fencing, and/or signage.  Surveys shall be completed no more than 14 days prior to ground disturbance and vegetation removal. If buffers	MCE Project Manager, MCE Construction Manager, and Contractor	Review and approval of survey results (if necessary)  Field verification that sufficient space is given to nesting birds (if necessary)	Once prior to initiation of grading or construction activities  Periodically during construction		

Richmond Solar PV Project EIR  
Mitigation Monitoring and Reporting Program

Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
and follow-up monitoring are required, the qualified biologist shall submit a monthly monitoring report identifying active nests, monitoring results, and condition of buffer zones. Reports can be combined with other reporting requirements where appropriate.					
<b>BIO-2(c) Pre-Construction Burrowing Owl Surveys.</b> 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.	MCE Project Manager, MCE Construction Manager, and Contractor	Review and approval of survey reports  Field verification that sufficient space is given to burrowing owls (if necessary)	Once prior to initiation of grading or construction activities  Periodically throughout construction		
If burrowing owls are detected on-site, no ground-disturbing activities shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the					

Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
<p>level of disturbance, a smaller buffer may be established in consultation with CDFW.</p> <p>If avoidance of active burrows is not feasible during the non-breeding season, then, before breeding behavior is exhibited and after the burrow is confirmed empty by site surveillance and/or scoping, a qualified biologist shall implement a passive relocation program in accordance with the CDFW 2012 Staff Report on Burrowing Owl. If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan in accordance with CDFWs 2012 Staff Report on Burrowing Owl Mitigation and for review by CDFW prior to passive relocation activities. The Plan shall include all necessary measures to minimize impacts to burrowing owls during passive relocation, including all necessary monitoring of owls and burrows during passive relocation efforts. Relocation of owls can only occur during the non-breeding season.</p> <p><b>BIO-2(d) Small Mammal Avoidance.</b> 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 slit 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. <i>(Recommended)</i></p>			<p>Once prior to initiation of grading or construction activities</p> <p>Periodically throughout construction</p>		

Richmond Solar PV Project EIR  
Mitigation Monitoring and Reporting Program

Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
<b>BIO-2(e) Worker Environmental Awareness Program Training.</b> 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. <i>(Recommended)</i>	MCE Project Manager, MCE Construction Manager, and Contractor	Verification that training completed	Once prior to initiation of construction activities		
<b>BIO-2(f)</b> 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. <i>(Recommended)</i>	MCE Project Manager, MCE Construction Manager, and Contractor	Review and approval of construction plans  Verification of implementation during construction	Once prior to initiation of grading or construction activities  Periodically during construction		
<b>BIO-3 Stormwater Control Measures.</b> The following best management practices (BMPs) shall be implemented throughout construction activities and/or as part of project design. <ul style="list-style-type: none"> <li>The Facility shall provide environmental awareness</li> </ul>	MCE Project Manager, MCE Construction Manager, and Contractor	Review and approval of construction plans	Once prior to initiation of grading or construction activities		

**Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program**

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
<p>training for all construction personnel to address potential impacts to wetlands and waters of the US and State.</p> <ul style="list-style-type: none"> <li>Bright-colored fencing and signage shall identify and restrict construction within environmentally sensitive areas.</li> <li>A construction monitor/environmental inspector shall confirm the fence integrity on a daily basis to protect the area from accidental equipment damage.</li> <li>Any and all necessary fence repair and/or reinforcements shall be completed immediately.</li> <li>Temporary perimeter silt fencing shall be installed where storm water runoff and non-storm water discharges could flow into surrounding marshes.</li> <li>Placement of exclusion fencing 5–10 feet from the perimeter of the coastal brackish marsh boundary or on the edge of the temporary disturbance area when this distance is greater.</li> <li>Temporary straw wattles, sand bags, or water velocity dissipaters shall be installed around concrete drainage channels to prevent sediment from entering channels and storm drains.</li> <li>Ground disturbance and vegetation grubbing shall be minimized and limited to the area required to complete project activities.</li> <li>Bare ground exposed or inactive for more than 14 days shall be stabilized or re-vegetated to prevent erosion. Following project completion all areas of bare ground shall be stabilized or re-vegetated prior to termination of installation activities.</li> <li>Entrances and exits onto the landfill and evaporation pond sites shall be stabilized to prevent sediments from being tracked off site.</li> <li>Staging or storing of equipment and materials shall occur onsite or on existing paved surfaces and shall be covered or contained within appropriate secondary containment to prevent pollutants from</li> </ul>		Verification of implementation during construction	Periodically during construction		

Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
<p>running off site or onto the ground.</p> <ul style="list-style-type: none"> <li>BMPs shall be installed prior to initiation to work and all temporary BMPs shall be removed following project completion.</li> </ul>					
<b>HAZARDS AND HAZARDOUS MATERIALS</b>					
<b>HAZ-1(a)</b> Prior to issuance of building permits, the applicant shall submit for City of Richmond review the design of the 10.5MW facility, and 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.	City of Richmond	Verification and approval of study	Prior to issuance of City of Richmond building permits		
<b>HAZ-1(b)</b> Prior to issuance of building permits, the landowner (Chevron) shall submit for RWQCB review the design of the 10.5MW facility, and 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.	MCE Project Manager	Verification of submittal to RWQCB	Prior to issuance of City of Richmond building permits		
<b>HAZ-3 Disposal of PV Modules and Support Structures.</b> Prior to construction permit issuance, the system operator shall prepare a recycling or disposal plan for PV modules and support structures for MCE review and approval, in order that project structures not pose a risk to human health or the environment after project repowering and/or decommissioning. The plan shall specify how these project components shall be disposed of in a manner that will not pose a risk to human health or the environment, and the costs of such disposal.	MCE Project Manager	Review and approval of plan.	Prior to issuance of City of Richmond construction permit		



Richmond Solar PV Project Final EIR  
Mitigation Monitoring and Reporting Program

Mitigation Measure	Responsible Party	Monitoring Action	Monitoring Frequency	Verification of Completion	
				Initial	Date
<b>(Recommended) HAZ-4 Emergency Response and Evacuation Plans.</b> Prior to commencing grading or construction of the project, MCE shall work with the City of Richmond to ensure that Chevron updates its emergency response and evacuation plans to the City's satisfaction.	MCE Project Manager, City of Richmond	Coordinate with City of Richmond to ensure that Chevron updates plans.	Prior to commencing grading or construction.		
<b>Hydrology and Water Quality</b>					
<b>HYD-2 Maintain Vehicles and Equipment.</b> All vehicles and equipment, including hydraulic hoses, shall be maintained in good working order to minimize leaks that could contact the ground. A vehicle and equipment maintenance log shall be updated and provided by the project proponent to Marin Clean Energy on a monthly basis for the duration of project construction.	MCE Project Manager, MCE Construction Manager, and Contractor	Verify equipment maintenance log is complete and updated.	Periodically during construction.		