



TETRA TECH EC, INC.

DOCKET

09-AFC-8

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April 30, 2010

California Energy Commission
Docket No. 09-AFC-8
1516 9th St.
Sacramento, CA 95814

Genesis Solar Energy Project - Docket Number 09-AFC-8

Docket Clerk:

Enclosed for filing with this letter is one hard copy and one electronic copy of our ***Proposed Conditions of Certification for Other Resource Areas (excluding Biology and Soil and Water) for the Genesis Solar Energy Project.***

Sincerely,

A handwritten signature in black ink, appearing to read 'Tricia Bernhardt'.

Tricia Bernhardt
Project Manager/Tetra Tech EC

cc: Mike Monasmith /CEC Project Manager



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Genesis Solar Energy Project (09-AFC-8)

Responses to Conditions of Certification

Other Resources

(excludes Biology and Soil and Water)

- C.1 – Air Quality
- C.4 – Hazardous Materials
- C.5 – Health and Safety
- C.7 – Noise and Vibration
- C.10 – Traffic and Transportation
- C.12 – Visual Resources
- C.13 – Waste Management
- C.14 – Worker Safety

April 30th, 2010

Genesis Solar LLC

Other Resources

C.1 – Air Quality

C.1 - AIR QUALITY

General Comment #1

SA-EIS Statement (page C.1-1) - Staff have concluded that the proposed project would not have the potential to exceed Prevention of Significant Deterioration emission threshold levels during direct source operation and the facility is not considered a major stationary source with potential to cause adverse National Environmental Policy Act air quality impacts. However, without adequate control, the fugitive dust emissions from construction would have the potential to exceed Prevention of Significant Deterioration particulate emission threshold levels. This potential exceedance of a federal air quality emission threshold would be considered a direct, adverse impact under National Environmental Policy Act. This impact would be less than adverse with the proposed mitigation measures controlling fugitive dust emissions during construction.

Applicant Comment – The Applicant wishes to clarify several points in the above noted staff statement.

(1) Construction related emissions (secondary emissions) do not count towards PSD applicability per 40 CFR 52.21(b) (4) and (18), i.e., the interplay of “potential to emit” and “secondary emissions” definitions, and the PSD applicability criteria.

(2) GSEP is not a major source (either for construction or operation) for any identified PSD pollutant. As such, the PSD “significant” emission rates do not apply.

(3) The Applicant did not propose an “uncontrolled” construction phase with respect to fugitive dust emissions. The applicant proposed numerous mitigation measures as an integral part of its construction phase for the control of fugitive dust emissions. The Applicant’s proposed controls result in fugitive dust emissions during construction of approximately 46 tons of PM₁₀ over the 3-year construction period, or an annualized emissions level of approximately 15 tons of PM₁₀ per year.

(4) The Applicant believes that staff application of the PSD emissions thresholds is incorrect. Applicability of PSD is based on a strict set of applicability criteria as presented in the *OAQPS-New Source Review Workshop Manual-10/90, Chapter A, Pages A.1 through A.32.*

As such, the applicant concludes that construction emissions are not applicable to, nor do they count towards, a PSD applicability determination. Construction emissions of fugitive dust (PM₁₀ or PM_{2.5}), although not countable towards an applicability determination under PSD, are nonetheless well below the PSD major source applicability threshold of 250 tons per year, and the “significant” emissions rates under PSD do not apply to GSEP construction emissions. Furthermore, the Applicant concludes that there is no potential exceedance of a federal air quality emission threshold and therefore no adverse impact under the National Environmental Policy Act.

The Applicant also notes that staff provides its own clarification on the PSD issue at section C.1.3.4 (bullet item 2), i.e., that PSD applicability thresholds only apply to GSEP operations. This clarification by staff supports the Applicants statement that “there is no potential exceedance of a federal air quality emission threshold and therefore no adverse impact under the National Environmental Policy Act”.

General Comment #2

SA-EIS Statement (page C.1-17) - The applicant used an “oversimplified” fugitive dust emission calculation method that staff does not consider appropriate for a project with the construction complexity and requirements of GSEP. Staff believes this oversimplified calculation method underestimates the fugitive dust emissions during construction.

Applicant Comment – The Applicant disagrees with staff that the method used to estimate fugitive dust emissions from construction activities is “oversimplified”, and that it underestimates fugitive dust emissions during construction. In the Applicants responses to Data Requests (Request #4 , Data Request Set #1, 09-AFC-8, November 13, 2009), the Applicant provided a detailed response covering the use of the method chosen as well as a detailed list of credible references to support the method. The following summary is provided for the record:

1. The method chosen is based upon the Midwest Research Institute studies per (1) Improvement of Specific Emissions Factors-BACM #1, MRI, 3/96, (2) Estimating Particulate Matter Emissions from Construction Operations, USEPA, MRI, 9/99, and (3) MRI Report of 2005 which updates the PM_{2.5}/PM₁₀ ratios developed for the Western Regional Air Partnership (WRAP).
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2. The method chosen is currently used by the California Air Resources Board for the preparation of its statewide fugitive dust emissions inventories for construction activities, and the method is currently delineated and supported in the CARB Area Source Methodology references (Section 7.7, 9/2002).
3. The method chosen is currently delineated in the USEPA, AP-42, Section 13.2.3 (Heavy Construction, 1/1995, corrected 2/2010).
4. The method chosen is currently implemented in the URBEMIS model (Version 9.2.4), Users Manual, Appendix A, Page A-6. The URBEMIS model is presently funded by, and guidance is provided by the following California air districts; Bay Area, Feather River, Imperial, Mendocino, Monterey Bay, Placer, Sacramento Metropolitan, San Joaquin Valley Unified, San Luis Obispo, Santa Barbara, South Coast, and Yolo-Solano. In addition, the Applicant is not aware of any California city or county planning agency that does not recommend, sanction, or allow the use of the URBEMIS model in the evaluation of development project construction phase fugitive dust emissions.
5. The method chosen is currently implemented by the Western Regional Air Partnership (WRAP) in its revised WRAP Fugitive Dust Handbook (9/06, Chapter 3- Construction and Demolition). The WRAP consists of the following State members: Alaska, Hawaii, Washington, Oregon, California, Arizona, New Mexico, Colorado, Utah, Wyoming, Montana, North Dakota, South Dakota, and Idaho, as well as the following federal agencies, the USDA and the USDOJ.
6. In addition, the URBEMIS software developers (Rimpo and Associates, Inc.) are currently developing a version of URBEMIS for use in the other 49 states (for use on projects outside of California). The 49-state version will incorporate EPA Mobile 6.2 on-road emissions data as well as EPA NONROAD construction emissions factors. No changes to the construction fugitive dust methodology were noted at this time.

Based on the above, the Applicant concludes that the method chosen to estimate fugitive dust emissions from construction activities for GSEP is widely accepted, widely implemented by numerous city, county, state, and federal agencies, and well documented.

In addition, the Applicant disagrees with staff's statement that the method chosen "underestimates" fugitive dust emissions from construction for the following reasons:

- The MRI (1996) report states that “the results from comparing limited emissions measurements to estimated values proved inconclusive, with no clear-cut tendency for over- or under-prediction”.

 - AP-42 Section 13.2.3 states that “because the above emission factor is referenced to TSP, use of this factor to estimate particulate matter no greater than 10 um in aerodynamic diameter emissions will result in conservatively high estimates. Also, because derivation of the factor assumes that construction activity occurs 30 days per month, the above estimate is somewhat conservatively high for TSP as well.” The Applicant assumes that the conservative nature of the overall method per AP-42 is maintained even with the application of the conservative statewide PM_{10/2.5} fraction values.

 - The WRAP Handbook data states that “separate emission factors segregated by type of construction activity provide better estimates of PM10 emissions that are more accurate than estimates obtained using a general emission factor.” The applicant partially agrees with this statement, but notes that; (1) the statement only applies to accuracy, not to whether a specific method under- or over-predicts emissions, and (2) the assumption that emissions estimates based on segregated activities “provide better estimates that are more accurate” is not substantiated anywhere in the WRAP Handbook. (See the following comment.)

 - Based on data presented in AP-42, the quality ratings of emissions factors (equations and support data) ranges from A to E, i.e., A=excellent, B=above average, C=average, D=below average, and E=poor. Data obtained from the South Coast AQMD website (CEQA page) indicates that for projects seeking to calculate emissions segregated by type of activity, the primary AP-42 sections are, (1) 11.9, (2) 13.2.2, and (3) 13.2.4. A summary review of the quality ratings for factors presented in these sections shows the following:
 - Ratings in section 11.9 (Western Mining) for activities such as topsoil scraping/removal, grading, etc., are quality level “E”.

 - Ratings in section 13.2.2 (Unpaved Roads) for roads being watered and evaluated for future use (prospective analyses), the quality rating drops from level “B” to level “D”.
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- Ratings in section 13.2.4 (Aggregate Handling and Storage Piles) are generally level "A", but can drop to level "B" or "C" if the site specific data fall outside of the "range of source conditions".

Furthermore, AP-42 Section 13.2.3 (Heavy Construction, Table 13.2.3-1, 2/10) clearly indicates that if the emissions are calculated by activity type using the equations in the various AP-42 sections as noted above, the "quality rating" must be lowered (per the recommended values) due to the application of the method to heavy construction activities. These required adjustments would further reduce the quality level of the calculations, and would by implication impact the level of accuracy of such estimates. This is highlighted by data in this section which requires no adjustment to factors in Section 11.9 because the quality ratings are already at level "E" (poor).

The Applicant concludes that, for many of the onsite construction activities which can be segregated by activity type, the quality ratings are typically in the level "D" to "E" range, and there is no data which indicates that these quality ratings result in any significant increase of emissions calculation accuracy above the method chosen. Also this information does not provide any additional clarification as to whether fugitive dust emissions are over- or under-predicted by any particular method.

General Comment #3

SA-EIS Statement (page C.1-17, footnote 5) - Staff is currently in the process of determining a consistent approach for HTF piping component emission factors with other local agencies that are currently permitting thermal solar facilities, where light liquid Synthetic Organic Chemical Manufacturing Industry (SOCMI) factors are being used to estimate VOC emissions for other projects that also use Therminol® VP-1 HTF. Staff will provide a revised emission estimate for this and other emission consistency issues related to the FDOC in the Air Quality Staff Assessment Addendum, if necessary.

Applicant Comment – The Applicant, in its evaluation of fugitive emissions from the solar field HTF use, used “light liquid” emissions factors. It is our understanding that CEC staff may be in favor of applying “heavy liquid” factors to the HTF solar field fugitive scenario. The Applicant understands this position given the HTF fluid properties at standard conditions, but it is our opinion, that staff should consider the properties of the HTF fluid under the conditions of its use in the solar field and power generation process. Under actual use conditions, the properties of HTF are clearly those of a “light liquid”. It is standard practice, in the process of calculating emissions from various systems, that process parameters such as temperature and pressure are integral inputs to correctly computing emissions. The Applicant believes that these parameters cannot be ignored in the evaluation of HTF solar field fugitive emissions calculations, and we suggest that CEC staff consider these issues in their evaluation.

General Comment #4

SA-EIS Statement (page C.1-25) - However, in light of the existing PM10 and ozone non-attainment status for the project site area, staff considers the operation NOx, VOC, and PM emissions to be potentially CEQA significant and recommends that the off-road equipment and fugitive dust emissions be mitigated pursuant to CEQA.

Applicant Comment – Although the Applicant understands the staff criteria for determining significance under CEQA, we do not agree that emissions of NOx and VOC from the proposed off-road equipment used onsite during the operations phase could be “potentially CEQA significant”. The emissions from the proposed off-road equipment delineated for onsite use during operations, as well as the MDAQMD CEQA significance thresholds are presented in the table below. The comparison indicates that these emissions are not only “insignificant” but “de minimus” at best, which calls into question the need for further mitigation such as proposed in condition AQ-SC-6.

Comparison of GSEP mobile source related emissions for onsite dedicated equipment versus the MDAQMD CEQA Significance Thresholds.

<u>Pollutant</u>	<u>MDAQMD Annual Threshold, tons</u>	<u>MDAQMD Daily Threshold, lbs</u>	<u>GSEP Onsite Mobile Emissions, tpy</u>	<u>GSEP Onsite Mobile Emissions, lbs/day</u>
<u>NOx</u>	<u>25</u>	<u>137</u>	<u>0.35</u>	<u>0.08</u>
<u>CO</u>	<u>100</u>	<u>548</u>	<u>0.24</u>	<u>0.05</u>
<u>VOC</u>	<u>25</u>	<u>137</u>	<u>0.05</u>	<u>0.01</u>

<u>SOx</u>	<u>25</u>	<u>137</u>	<u>0</u>	<u>0</u>
<u>PM10</u>	<u>15</u>	<u>82</u>	<u>0.03</u>	<u>0.01</u>
<u>PM2.5</u>	<u>15</u>	<u>82</u>	<u>0.03</u>	<u>0.01</u>

The total estimated onsite facility emissions for the operational phase are as follows:

- NOx 1.38 tpy 42.18 lbs/day
- CO 0.56 tpy 17.24 lbs/day
- VOC 7.62 tpy 44.24 lbs/day
- SOx 0.01 tpy 0.26 lbs/day
- PM10 19.49 tpy 125.26 lbs/day
- PM2.5 7.19 tpy 57.96 lbs/day

Onsite mobile emissions from the use of off-road equipment during operations account for the following percentage's of total operational emissions:

- NOx 25.3% of annual 0.19% of daily
- CO 42.9% of annual 0.29% of daily
- VOC 0.66% of annual 0.023% of daily
- SOx negligible
- PM10 0.15% of annual 0.008% of daily
- PM2.5 0.41% of annual 0.017% of daily

The above data does not, in the opinion of the Applicant, support further mitigation of onsite operations off-road equipment emissions.

C.1.11 MITIGATION MEASURES/ PROPOSED CONDITIONS OF CERTIFICATION

C.1.11.1 STAFF CONDITIONS OF CERTIFICATION

Staff conditions AQ-SC1 through AQ-SC4 are both CEQA and NEPA mitigation conditions. Staff conditions AQ-SC5 through AQ-SC8 are CEQA-only conditions.

AQ-SC1 Air Quality Construction Mitigation Manager (AQCMM): The project owner shall designate and retain an on-site AQCMM who shall be responsible for directing and documenting compliance with Conditions of Certification **AQSC3, AQ-SC4** and **AQ-SC5** for the entire project site and linear facility construction. The on-site AQCMM may delegate responsibilities to one or more AQCMM Delegates. The AQCMM and AQCMM Delegates shall have full access to all areas of construction on the project site and linear facilities, and shall have the authority to stop any or all construction activities as warranted by applicable construction mitigation conditions. The AQCMM and AQCMM Delegates may have other responsibilities in addition to those

described in this condition. The AQCMM shall not be terminated without written consent of the Compliance Project Manager (CPM).

Verification: At least 60 days prior to the start of ground disturbance, the project owner shall submit to the BLM's Authorized Officer and CPM for approval, the name, resume, qualifications, and contact information for the on-site AQCMM and all AQCMM Delegates.

AQ-SC2 Air Quality Construction Mitigation Plan (AQCMP): The project owner shall provide an AQCMP, for approval, which details the steps that will be taken and the reporting requirements necessary to ensure compliance with Conditions of Certification **AQ-SC3**, **AQ-SC4**, and **AQ-SC5**.

Verification: At least 60 days prior to the start of any ground disturbance, the project owner shall submit the AQCMP to the BLM's Authorized Officer and CPM for approval. The AQCMP shall include effectiveness and environmental data for the proposed soil stabilizer. The BLM's Authorized Officer or CPM will notify the project owner of any necessary modifications to the plan within 30 days from the date of receipt.

AQ-SC3 Construction Fugitive Dust Control: The AQCMM shall submit documentation to the BLM's Authorized Officer and CPM in each Monthly Compliance Report that demonstrates compliance with the Air Quality Construction Mitigation Plan (AQCMP) mitigation measures for the purposes of preventing all fugitive dust plumes ([as defined in AQ-SC-4](#)) from leaving the project. Any deviation from the AQCMP mitigation measures shall require prior BLM Authorized Officer and CPM notification and approval.

Verification: The AQCMM shall provide the BLM's Authorized Officer and the CPM a Monthly Compliance Report (**COMPLIANCE-6**) to include the following to demonstrate control of fugitive dust emissions:

- A. a summary of all actions taken to maintain compliance with this condition;
- B. copies of any complaints filed with the District in relation to project construction; and
- C. any other documentation deemed necessary by the BLM Authorized Officer, CPM, and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.

The following fugitive dust mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by **AQ-SC2**.

- a. The main access roads through the facility to the power block areas will be either paved or stabilized using soil binders, or equivalent methods, to provide a stabilized surface that is similar for the purposes of dust control to paving, that may or may not include a crushed rock (gravel or similar material with fines removed) top layer, prior to initiating construction in the main power block area, and delivery areas for

operations materials (chemicals, replacement parts, etc.) will be paved prior to taking initial deliveries.

- b. All unpaved construction roads and unpaved operational site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent that can be determined to be as efficient as or more efficient for fugitive dust control than ARB approved soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation. All other disturbed areas in the project and linear construction sites shall be watered as frequently as necessary during grading; and after active construction activities shall be stabilized with a nontoxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods, in order to comply with the dust mitigation objectives of Condition of Certification **AQ-SC4**. The frequency of watering can be reduced or eliminated during periods of precipitation.
- c. No vehicle shall exceed 10 miles per hour on unpaved areas within the construction site, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.
- d. Visible speed limit signs shall be posted at the construction site entrances.
- e. All construction equipment vehicle tires shall be inspected and washed as necessary to be cleaned free of dirt prior to entering paved roadways.
- f. Gravel ramps of at least 20 feet in length must be provided at the tire washing/cleaning station.
- g. All unpaved exits from the construction site shall be graveled or treated to prevent track-out to public roadways.
- h. All construction vehicles shall enter the construction site through the treated entrance roadways, unless an alternative route has been submitted to and approved by the CPM and BLM Authorized Officer.
- i. Construction areas adjacent to any paved roadway below the grade of the surrounding construction area or otherwise directly impacted by sediment from site drainage shall be provided with sandbags or other equivalently effective measures to prevent run-off to roadways, or other similar run-off control measures as specified in the Storm Water Pollution Prevention Plan (SWPPP), only when such SWPPP measures are necessary so that this condition does not conflict with the requirements of the SWPPP.
- j. All paved roads within the construction site shall be swept daily or as needed (less during periods of precipitation) on days when construction activity occurs to prevent the accumulation of dirt and debris.
- k. At least the first 500 feet of any paved public roadway exiting the construction site or exiting other unpaved roads en route from the construction site or construction staging areas shall be swept as needed (less during periods of precipitation) on days

when construction activity occurs or on any other day when dirt or runoff resulting from the construction site activities is visible on the public paved roadways.

- l. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or shall be treated with appropriate dust suppressant compounds.
- m. All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard.
- n. Wind erosion control techniques (such as windbreaks, water, chemical dust suppressants, and/or vegetation) shall be used on all construction areas that may be disturbed. Any windbreaks installed to comply with this condition shall remain in place until the soil is stabilized or permanently covered with vegetation.

AQ-SC4 Dust Plume Response Requirement: The AQCMM or an AQCMM Delegate shall monitor all construction activities for visible dust plumes. Observations of visible dust plumes that have the potential to be transported (A) off the project site and within 400 feet upwind of any regularly occupied structures not owned by the project owner or (B) 200 feet beyond the centerline of the construction of linear facilities, [that exceed the opacity limits and time frames in Rule 401](#), indicate that existing mitigation measures are not resulting in effective mitigation. The AQCMP shall include a section detailing how the additional mitigation measures will be accomplished within the time limits specified. The AQCMM or Delegate shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:

[Justification for Change:](#)

[The Applicant is requesting that this condition be limited to visible dust plumes in excess of the MDAQMD opacity standards \(and evaluation timeframes\) as delineated in Rule 401. Use of the Rule 401 evaluation criteria and timeframes will provide a clear and established set of criteria for determining when a visible plume could be potentially problematic offsite.](#)

Step 1: The AQCMM or Delegate shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.

Step 2: The AQCMM or Delegate shall direct implementation of additional methods of dust suppression if Step 1, specified above, fails to result in adequate mitigation within 30 minutes of the original determination.

Verification: Step 3: The AQCMM or Delegate shall direct a temporary shutdown of the activity causing the emissions if Step 2, specified above, fails to result in effective mitigation within one hour of the original determination. The

- A a summary of all actions taken to maintain compliance with this condition;
- B. copies of any complaints filed with the District in relation to project construction; and
- C. any other documentation deemed necessary by the CPM and AQCMM to verify compliance with this condition. Such information may be provided via electronic format or disk at the project owner's discretion.

AQ-SC5 Diesel-Fueled Engine Control: The AQCMM shall submit to the CPM, in the Monthly Compliance Report, a construction mitigation report that demonstrates compliance with the AQCMP mitigation measures for purposes of controlling diesel construction-related emissions. Any deviation from the AQCMP mitigation measures shall require prior and CPM notification and approval.

Verification: The AQCMM shall include in the Monthly Compliance Report (COMPLIANCE-6) the following to demonstrate control of diesel construction-related emissions:

- A. A summary of all actions taken to maintain compliance with this condition;
- B. A list of all heavy equipment used on site during that month, including the owner of that equipment and a letter from each owner indicating that equipment has been properly maintained; and
- C. Any other documentation deemed necessary by the CPM, and the AQCMM to verify compliance with this condition, including any District permits necessary for temporary stationary diesel engines, or ARB certification for state registered portable equipment. Such information may be provided via electronic format or disk at the project owner's discretion.

The following off-road diesel construction equipment mitigation measures shall be included in the Air Quality Construction Mitigation Plan (AQCMP) required by AQ-SC2.

- a. All diesel-fueled engines used in the construction of the facility shall have clearly visible tags issued by the on-site AQCMM showing that the engine meets the conditions set forth herein.
- b. All construction diesel engines with a rating of 50 hp or higher and lower than 750 hp shall meet, at a minimum, the Tier 3 California Emission Standards for Off-Road Compression-Ignition Engines, as specified in California Code of Regulations, Title

13, section 2423(b)(1), unless a good faith effort to the satisfaction of the CPM that is certified by the on-site AQCMM demonstrates that such engine is not available for a particular item of equipment. Engines larger than 750 hp shall meet Tier 2 engine standards. In the event that a Tier 3 engine is not available for any off-road equipment larger than 100 hp and smaller than 750 hp, that equipment shall be equipped with a Tier 2 engine, or an engine that is equipped with retrofit controls to reduce exhaust emissions of nitrogen oxides (NOx) and diesel particulate matter (DPM) to no more than Tier 2 levels unless certified by engine manufacturers or the on-site AQCMM that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is “not practical” for the following, as well as other, reasons.

1. There is no available retrofit control device that has been verified by either the California Air Resources Board or U.S. Environmental Protection Agency to control the engine in question to Tier 2 equivalent emission levels and the highest level of available control using retrofit or Tier 1 engines is being used for the engine in question; or
 2. The construction equipment is intended to be on site for 5 days or less.
 3. The CPM may grant relief from this requirement if the AQCMM can demonstrate a good faith effort to comply with this requirement and that compliance is not practical.
- c. The use of a retrofit control device may be terminated immediately, provided that the CPM is informed within 10 working days of the termination and that a replacement for the equipment item in question meeting the controls required in item “b” occurs within 10 days of termination of the use, if the equipment would be needed to continue working at this site for more than 15 days after the use of the retrofit control device is terminated, if one of the following conditions exists :
1. The use of the retrofit control device is excessively reducing the normal availability of the construction equipment due to increased down time for maintenance, and/or reduced power output due to an excessive increase in back pressure.
 2. The retrofit control device is causing or is reasonably expected to cause engine damage.
 3. The retrofit control device is causing or is reasonably expected to cause a substantial risk to workers or the public.
 4. Any other seriously detrimental cause which has the approval of the CPM prior to implementation of the termination.
- d. All heavy earth-moving equipment and heavy duty construction-related trucks with engines meeting the requirements of (b) above shall be properly maintained and the engines tuned to the engine manufacturer’s specifications.

- e. All diesel heavy construction equipment shall not idle for more than five minutes. Vehicles that need to idle as part of their normal operation (including, but not limited to such as concrete trucks) are exempted from this requirement.
- f. Construction equipment will employ electric motors when feasible.

AQ-SC6 The project owner, when obtaining dedicated on-road or off-road vehicles for mirror washing activities and other facility maintenance activities, shall only obtain new model year vehicles that meet California on-road vehicle emission standards or appropriate U.S.EPA/California off-road engine emission standards for the model year when obtained.

Verification: At least 60 days prior to the start commercial operation, the project owner shall submit to the CPM a copy of the plan that identifies the size and type of the on-site vehicle and equipment fleet and the vehicle and equipment purchase orders and contracts and/or purchase schedule. The plan shall be updated every other year and submitted in the Annual Compliance Report (**COMPLIANCE-7**).

AQ-SC7 The project owner shall provide a site Operations Dust Control Plan, including all applicable fugitive dust control measures identified in the verification of AQ-SC3 that would be applicable to reducing fugitive dust from ongoing operations; that:

- A. describes the active operations and wind erosion control techniques such as windbreaks and chemical dust suppressants, including their ongoing maintenance procedures, that shall be used on areas that could be disturbed by vehicles or wind anywhere within the project boundaries; and
- B. identifies the location of signs throughout the facility that will limit traveling on unpaved portion of roadways to solar equipment maintenance vehicles only. In addition, vehicle speed shall be limited to no more than 10 miles per hour on these unpaved roadways, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions.

The site operations fugitive dust control plan shall include the use of durable non-toxic soil stabilizers on all regularly used unpaved roads and disturbed off-road areas, or alternative methods for stabilizing disturbed off-road areas, within the project boundaries, and shall include the inspection and maintenance procedures that will be undertaken to ensure that the unpaved roads remain stabilized. The soil stabilizer used shall be a non-toxic soil stabilizer or soil weighting agent that can be determined to be as efficient as or more efficient for fugitive dust control than ARB approved soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation.

The performance and application of the fugitive dust controls shall also be measured against and meet the performance requirements of

condition **AQ-SC4**. The performance requirements of **AQ-SC4** shall also be included in the operations dust control plan.

Verification: At least 60 days prior to start of commercial operation, the project owner shall submit to the BLM's Authorized Officer and the CPM for review and approval a copy of the site Operations Dust Control Plan that identifies the dust and erosion control procedures, including effectiveness and environmental data for the proposed soil stabilizer, that will be used during operation of the project and that identifies all locations of the speed limit signs. At least 60 days after commercial operation, the project owner shall provide to the BLM's Authorized Officer and the CPM a report identifying the locations of all speed limit signs, and a copy of the project employee and contractor training manual that clearly identifies that project employees and contractors are required to comply with the dust and erosion control procedures and on-site speed limits.

AQ-SC8 The project owner shall provide the CPM copies of all District issued Authority-to-Construct (ATC) and Permit-to-Operate (PTO) documents for the facility.

The project owner shall submit to the CPM for review and approval any modification proposed by the project owner to any project air permit. The project owner shall submit to the CPM any modification to any permit proposed by the District or U.S. Environmental Protection Agency (U.S. EPA), and any revised permit issued by the District or U.S. EPA, for the project.

Verification: The project owner shall submit any ATC, PTO, and proposed air permit modifications to the CPM within 5 working days of its submittal either by 1) the project owner to an agency, or 2) receipt of proposed modifications from an agency. The project owner shall submit all modified air permits to the CPM within 15 days of receipt.

C.1.11.2 DISTRICT CONDITIONS

DISTRICT PRELIMINARY DETERMINATION OF COMPLIANCE CONDITIONS (MDAQMD 2010a)

District conditions **AQ-1** through **AQ-40** are CEQA-only required conditions.

[Comments on District Conditions per the PDOC \(Section C.1.11.2\). These comments have been supplied to the MDAQMD on the PDOC, but due to timing issues were not incorporated into the CEC/BLM SA-EIS.](#)

Application No. 00010788 and 00010789 (Two - 30 MMBtu/hr Natural Gas Fired Auxiliary Boiler)

EQUIPMENT DESCRIPTION:

Two 30 MMBtu/hr natural gas boilers with low-NOx burner systems.

AQ-1 Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-2 This equipment shall be exclusively fueled with natural gas and shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-3 Emissions from this equipment shall not exceed the following hourly emission limits at any firing rate, verified by fuel use and annual compliance tests:

a. NO_x as NO₂:

- ~~1. 0.082 lb/hr operating at 25% load (based on 9.0 ppmvd corrected to 3% O₂ and averaged over one hour)~~
2. 0.330 lb/hr operating at 100% load (based on 9.0 ppmvd corrected to 3% O₂ and averaged over one hour)

b. CO:

- ~~1. 0.141 lb/hr operating at 25% load (based on 50 ppmvd corrected to 3% O₂ and averaged over one hour)~~
2. 0.563 lb/hr operating at 100% load (based on 50 ppmvd corrected to 3% O₂ and averaged over one hour)

c. VOC as CH₄:

- ~~1. 0.022 lb/hr operating at 25% load~~
2. 0.088 lb/hr operating at 100% load

d. SO_x as SO₂:

- ~~1. 0.002 lb/hr operating at 25% load~~
2. 0.008 lb/hr operating at 100% load

e. PM₁₀:

- ~~1. 0.038 lb/hr operating at 25% load~~
2. 0.150 lb/hr operating at 100% load

Justification for Change :

The applicant believes the emissions rates for operating at 25% load as stated in this condition (subsections a. through e.) are inappropriate for the following reasons:

- The MDAQMD has misinterpreted the heater information as found on page 5 of the heater proposal provided by Rentech. Footnote 8 states "Emissions guarantees are from 25% to 100% MCR." This statement does not indicate that a different emissions rate applies at just the 25% MCR level, it states that the emissions guarantees are applicable for the MCR load range of 25% to 100%.
- The MDAQMD has made an unsupportable assumption that the emissions rate at 25% MCR is exactly 25% of the full load (100% MCR) emissions rate. There is no data in the boiler proposal or specification sheet to support such an assumption, and the statement in the unit specification sheet noted above clearly contradicts this assumption.
- The applicant is not aware of any combustion data on this unit that would allow the conclusion to be made that emissions of the five (5) stated criteria pollutants are linear with unit load. If the emissions guarantees apply at loads ranging from 25% to 100%, then a linear relationship is not implied by the unit designer/manufacturer, therefore such a relationship should not be implied by the AQMD.

Verification: As part of the Annual Compliance Report (**COMPLIANCE-7**), the project owner shall include information demonstrating compliance with boiler operating emission rates.

~~AQ-4 The daily emission of the following pollutants CO, NO_x (as NO₂) and SO_x (as SO₂) as well as O₂ (a diluent gas) shall be monitored using a Continuous Emissions Monitoring System (CEMS). This system shall be operating at all times in accordance with the District approved monitoring plan.~~

~~The following are the acceptability testing requirements for the CEMS:~~

- ~~For SO₂ and NO_x CEMS - Performance Specification 2 of 40 CFR 60 Appendix B.~~
- ~~For O₂ CEMS - Performance Specification 3 of 40 CFR 60 Appendix B.~~
- ~~For CO CEMS - Performance Specification 4 of 40 CFR 60 Appendix B.~~
- ~~For quality assurance - Performance Specification 40 CFR 60 Appendix F.~~

Justification for Change:

The applicant believes that the requirement for CEMS for SO₂, NO_x, and CO on such small units which will be operated on a limited basis (less than or equal to 1000 hours per year per unit) is onerous and without justification, especially for small, low-use units firing natural gas.

The applicant is requesting that Condition AQ-4 be removed and replaced with a requirement, consistent with Condition AQ-3 (which requires that compliance be verified via fuel use tracking and annual compliance tests). The applicant suggests the following language for Condition AQ-4.

Condition AQ-4. – Compliance with the emissions limits stated in Condition 3 shall be verified through monitoring and recordkeeping of the following parameters: (1) hourly, daily, and annual fuel use, (2) periodic compliance testing per conditions AQ-7 and AQ-8, (3) calculation of emissions and operational parameters per condition AQ-6, (4) strict adherence to the operational limits imposed by condition AQ-5, (5) strict adherence to the source testing requirements and methods per conditions AQ-7 and AQ-8. In addition, the applicant shall work with the MDAQMD staff to establish a verifiable set of parametric values that can be used to further track and predict emissions on an hourly, daily, and annual basis.

The deletion of the CEMS requirement is consistent with the CEC's stance on CEMS for other solar projects such as the Mojave Solar 1 project, etc.

Verification: As part of the Annual Compliance Report (**COMPLIANCE-7**), the project owner shall include CEMS information demonstrating compliance with boiler operating emission rates.

AQ-5 This equipment shall not be operated for more than 1,000 hours per rolling twelve month period and more than 14 hours per calendar day.

Verification: The project owner shall submit to the CPM the boiler hours of use records demonstrating compliance with this condition as part of the Annual Operation Report (**COMPLIANCE-7**).

AQ-6 The project owner shall maintain an operations log for this equipment on-site and current for a minimum of five (5) years, and said log shall be provided to District personnel on request. The operations log shall include the following information at a minimum:

- a. Total operation time (hours per day, hours per month, and hours per rolling twelve month period);
- b. ~~Maximum hourly, maximum daily, and t~~Total calendar year emissions of NO_x, CO, PM₁₀, VOC and SO_x (including calculation protocol); and,

Justification for Change on Condition AQ-6(b): The Applicant objects to logging the hourly and daily emissions, since the emissions will be established via the source tests

emissions as part of the quarterly report, and annual emissions as part of the annual report. Hourly emissions reporting in the absence of CEMS per revised condition AQ-4 is of little value.

- c. Any permanent changes made to the equipment that would affect air pollutant emissions, and indicate when changes were made.

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-7 The project owner shall perform initial compliance tests on this equipment in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District within 180 days of initial start up:

- a. NO_x as NO₂ in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).
- b. VOC as CH₄ in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).
- c. SO_x as SO₂ in ppmvd at 3% oxygen and lb/hr.
- d. CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).
- e. PM₁₀ in mg/m³ grains/DSCF at 3% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).
- f. Flue gas flow rate in dscf per minute.
- g. Opacity (measured per USEPA reference Method 9).

Verification: The project owner shall notify the District and the CPM within fifteen (15) working days before the execution of the compliance test required in this condition. The test results shall be submitted to the District and to the CPM within 180 days of initial start up.

AQ-8 The project owner shall perform ~~annual~~ compliance tests every three (3) years subsequent to the initial tests required in AQ-7 on this equipment in accordance with the MDAQMD Compliance Test Procedural Manual. The test report shall be submitted to the District no later than six weeks prior to the expiration date of this permit. The following compliance tests are required:

- a. NO_x as NO₂ in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 19 and 20).

- b. VOC as CH₄ in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Methods 25A and 18).
- c. SO_x as SO₂ in ppmvd at 3% oxygen and lb/hr.
- d. CO in ppmvd at 3% oxygen and lb/hr (measured per USEPA Reference Method 10).
- e. PM₁₀ in mg/m³ grains/DSCF at 3% oxygen and lb/hr (measured per USEPA Reference Methods 5 and 202 or CARB Method 5).
- f. Flue gas flow rate in dscf per minute.
- g. Opacity (measured per USEPA reference Method 9).

Justification for Change: The Applicant requests that subsequent to the required initial source test per AQ-7, that periodic testing be on a 3-year schedule. Testing of these types of small boilers is of limited value. A three year schedule is more than adequate to insure compliance for such low use boilers.

Verification: The project owner shall notify the District and the CPM within fifteen (15) working days before the execution of the compliance test required in this condition. The test results shall be submitted to the District and to the CPM within the timeframe required by this condition.

Application No. 00010842 and 00010843 (Two – HTF Ullage Expansion Tank)

EQUIPMENT DESCRIPTION:

Two HTF ullage/expansion tanks.

AQ-9 Each This tank stores HTF, specifically the condensable fraction of the vapors vented from the ullage system.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-10 Each This tank must be properly maintained at all times.

Verification: The project owner shall make the site available for inspection of HTF piping Inspection and Maintenance Program records (AQ-13) and HTF system equipment by representatives of the District, ARB, and the Energy Commission.

AQ-11 Each This tank shall be operated at all times under a nitrogen blanket.

Verification: The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

AQ-12 The ullage vent system shall be vented to a control system with at least 99% control efficiency for VOC and toxic substances.

Verification: The project owner shall provide the District and CPM ullage vent control system manufacturer guarantee data showing compliance with this condition at least 30 days prior to the installation of the ullage vent system control system.

AQ-13 Inspect the tanks and distribution system (valves, flanges, pump seals, etc.) for the presence of leaks daily and repair or shutdown as soon as possible.

Verification: The project owner shall establish an inspection and maintenance program that at a minimum includes the following:

A. A.—All pumps, compressors and pressure relief devices (pressure relief valves or rupture disks) shall be electronically, audio, or visually inspected once every operating period.

[Justification for Change on Condition AQ-13\(a\): The Applicant believes the term "operating period" needs to be more precisely defined for purposes of implementation of this condition. The Applicant is willing to work with the MDAQMD to better define the term based upon the design of the system components, expected maintenance schedules, and facility manpower levels.](#)

- B. All accessible valves, fittings, pressure relief devices (PRDs), hatches, pumps, compressors, etc. shall be inspected quarterly using a leak detection device such as a Foxboro OVA 108 calibrated for methane.
- C. VOC leaks greater than 100-ppmv shall be tagged (with date and concentration) and repaired within seven calendar days of detection.
- D. VOC leaks greater than 10,000-ppmv shall be tagged and repaired within 24-hours of detection.
- E. The project owner shall maintain a log of all VOC leaks exceeding 10,000-ppmv, including location, component type, and repair made.
- F. The project owner shall maintain record of the amount of HTF replaced on a monthly basis for a period of five years.
- G. Any detected leak exceeding 100-ppmv and not repaired in 7-days and 10,000-ppmv not repaired within 24-hours shall constitute a violation of the District's Authority to Construct (ATC)/Permit to Operate (PTO).
- H. Pressure sensing equipment shall be installed that will be capable of sensing a major rupture or spill within the HTF network.

The inspection and maintenance plan shall be submitted to the CPM for review and approval at least 30 days before taking delivery of the HTF. The project owner shall make the site available for inspection of HTF piping Inspection and Maintenance Program records and HTF system equipment by representatives of the District, ARB, and the Energy Commission.

AQ-14 If current non-criteria substances become regulated as toxic or hazardous substances and are used in this equipment, the project owner shall submit to the District a plan demonstrating how compliance will be achieved and maintained with such regulations.

Verification: The project owner shall submit a compliance plan of the toxic or hazardous substances for District approval and CPM review if current non-criteria substances in the HTF become regulated as toxic or hazardous substances.

Application No. 00010787 and 00010841 (Two Cooling Towers)

EQUIPMENT DESCRIPTION:

Two 7-cell cooling towers with drift eliminator rate of 0.0005% and water circulation rate of 94,623 gpm.

AQ-15 Operation of this equipment shall be conducted in compliance with all data and specifications submitted with the application under which this permit is issued unless otherwise noted below.

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-16 This equipment shall be operated and maintained in strict accord with the recommendations of its manufacturer or supplier and/or sound engineering principles.

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-17 The drift rate shall not exceed 0.0005 percent with a maximum circulation rate of 94,623 gallons per minute. The maximum hourly PM10 emission rate shall not exceed 2.36 pounds per hour, as calculated per the written District-approved protocol.

Verification: The manufacturer guarantee data for the drift eliminator, showing compliance with this condition, shall be provided to the CPM and the District 30 days prior to cooling tower operation. As part of the Annual Compliance Report (**COMPLIANCE-7**) the project owner shall include information on operating emission rates to demonstrate compliance with this condition.

AQ-18 ~~The project owner shall perform weekly tests of the blow-down water total dissolved solids (TDS). The TDS shall not exceed 5,000 ppmv on a calendar monthly basis. The project owner shall maintain a log which contains the date and result of each blow-down water test in TDS ppm, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District personnel on request.~~

Justification for Change:

The applicant is requesting that Condition AQ-18 be amended to read as follows:

“The operator shall perform weekly specific conductivity tests of the blow-down water to indirectly measure total dissolved solids (TDS). Quarterly tests of the blow-down water will be done to confirm the relationship between conductance and TDS. The TDS shall not exceed 5,000 ppmv on a calendar monthly basis. The project owner shall maintain a log which contains the date and result of each blow-down water test, and the resulting mass emission rate. This log shall be maintained on site for a minimum of five (5) years and shall be provided to District personnel on request.”

The requested language clarifies the fact that TDS is not measured directly, but rather indirectly via conductivity.

Verification: The cooling tower recirculation water TDS content test results shall be provided to representatives of the District, ARB, and the Energy Commission upon request.

AQ-19 The project owner shall conduct all required cooling tower water tests in accordance with a District-approved test and emissions calculation protocol. Thirty (30) days prior to the first such test the project owner shall provide a written test and emissions calculation protocol for District review and approval.

Verification: The project owner shall provide an emissions calculation and water sample testing protocol to the District for approval and CPM for review at least 30 days prior to the first cooling tower water test.

AQ-20 This equipment shall not be operated for more than 3,200 hours per rolling twelve month period and more than 15 hours per calendar day.

Verification: The project owner shall submit to the CPM the cooling tower operating data demonstrating compliance with this condition as part of the Annual Operation Report (COMPLIANCE-7).

AQ-21 The project owner shall maintain an operations log for this equipment on-site and current for a minimum of five (5) years, and said log shall be provided to District personnel on request. The operations log shall include the following information at a minimum:

- a. Total operation time (hours per day, hours per month, and hours per rolling twelve month period); and
- b. The date and result of each blow-down water test in TDS ppm, and the resulting mass emission rate.

Justification for Change on Condition AQ-21(b): Same clarification as AQ-18 needed for this condition, i.e., water test is not a TDS direct measurement, but rather conductivity testing that yields TDS indirectly.

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-22 A maintenance procedure shall be established that states how often and what procedures will be used to ensure the integrity of the drift eliminators. This procedure is to be kept onsite and available to District personnel on request.

Verification: The project owner shall make available at request the written drift eliminator maintenance procedures for inspection by representatives of the District, ARB, and the Energy Commission.

Application No. 00010790 and 00010791 (Two - 1,341 HP Emergency Generator IC Engines)

EQUIPMENT DESCRIPTION:

Two - Tier II 1,341 HP diesel fueled emergency generator engines, each driving a generator.

AQ-23 This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Verification: The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission

AQ-24 Each This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

Verification: The project owner shall make the site available for inspection of equipment and fuel purchase records by representatives of the District, ARB, and the Energy Commission.

AQ-25 A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on each this unit to indicate elapsed engine operating time. (Title 17 CCR §93115.10(e)(1)).

Verification: At least thirty (30) days prior to the installation of the engine, the project owner shall provide the District and the CPM the specification of the hour meter.

AQ-26 Each This unit shall be limited to use for emergency power, defined as in response to a fire or when commercially available power has been interrupted. In addition, each this unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit.

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-27 The project owner shall maintain a operations log for each this unit current and on-site, either at the engine location or at a on-site location, for a minimum of two (2) years, and for another year where it can be made available to the District staff within 5 working days from the District's request, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing);
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
- d. Fuel sulfur concentration (the project owner may use the supplier's certification of sulfur content if it is maintained as part of this log).

Verification: The project owner shall submit records required by this condition that demonstrating compliance with the sulfur content and engine use limitations of conditions **AQ-24** and **AQ-26** in the Annual Compliance Report (**COMPLIANCE-7**), including a photograph showing the annual reading of engine hours. The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

~~**AQ-28** This unit shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.~~

[See Applicant comment on AQ-29 below.](#)

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

~~**AQ-29** This engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the forecasted outage, and the engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.~~

[Justification for Change on Condition AQ-28 and AQ-29: The Applicant is requesting that AQ-28 and AQ-29 be consolidated and amended to read as follows:](#)

[The proposed language describes the use of the emergency generator sets in the context of the solar facility operations.](#)

[“AQ-28: Each unit shall be limited to use for emergency power, defined as in response to a fire or when utility back-feed power is not available. In addition, each unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit. These units shall not be used to provide power to the interconnecting utility and shall be isolated from the interconnecting utility when operating. These engines may operate in response to notification of impending loss of utility back-feed power if the interconnected utility has ordered an outage to the plant or expects to order such outages at a particular time, each engine is operated no more than 30 minutes prior to the forecasted outage, and each engine is shut down immediately after the utility advises that the outage is no longer imminent or in effect.”](#)

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-30 [Each](#) This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Title 17 CCR 93115). In the event of conflict between these conditions and the ATCM, the more stringent shall govern.

Verification: Not necessary.

AQ-31 [Each](#) This unit is subject to the requirements of the Federal National Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60 Subpart IIII).

Verification: The project owner shall submit the engine specifications at least 30 days prior to purchasing the engines for review and approval demonstrating that the engines meet NSPS emission limit requirements at the time of engine purchase.

Application No. 00010792 and 00010793 (Two - 315 HP Emergency Fire Pump IC Engines)

EQUIPMENT DESCRIPTION:

Two - Tier III 315 HP diesel fueled emergency fire pump generator engines, each driving a fire suppression water pump.

AQ-32 This equipment shall be installed, operated and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

Verification: The project owner shall make the site available for inspection of equipment and records by representatives of the District, ARB, and the Energy Commission

AQ-33 Each This unit shall only be fired on ultra-low sulfur diesel fuel, whose sulfur concentration is less than or equal to 0.0015% (15 ppm) on a weight per weight basis per CARB Diesel or equivalent requirements.

Verification: The project owner shall make the site available for inspection of equipment and fuel purchase records by representatives of the District, ARB, and the Energy Commission.

AQ-34 A non-resettable hour meter with a minimum display capability of 9,999 hours shall be installed and maintained on each this unit to indicate elapsed engine operating time. (Title 17 CCR §93115.10(e)(1)).

Verification: At least thirty (30) days prior to the installation of the engine, the project owner shall provide the District and the CPM the specification of the hour timer.

AQ-35 Each This unit shall be limited to use for emergencies emergency power, defined as in response to a fire or due to low fire water pressure. In addition, each this unit shall be operated no more than 50 hours per year for testing and maintenance, excluding compliance source testing. Time required for source testing will not be counted toward the 50 hour per year limit. The 50 hour limit can be exceeded when the emergency fire pump assembly is driven directly by a stationary diesel fueled CI engine operated per and in accord with the National Fire Protection Association (NFPA) 25 - "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 1998 edition. This requirement includes usage during emergencies. {Title 17 CCR 93115.3(n)}

Verification: The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.

AQ-36 The project owner shall maintain an operations log for each this unit current and on-site, either at the engine location or at a on-site location, for a minimum of two (2) years, and for another year where it can be made available to the District staff within 5 working days from the District's request, and this log shall be provided to District, State and Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours);
- b. Reason for use (testing & maintenance, emergency, required emission testing);
- c. Calendar year operation in terms of fuel consumption (in gallons) and total hours; and,
- d. Fuel sulfur concentration (the project owner may use the supplier's certification of sulfur content if it is maintained as part of this log).

Verification: The project owner shall submit records required by this condition that demonstrating compliance with the sulfur content and engine use limitations of conditions **AQ-33** and **AQ-35** in the Annual Compliance Report (**COMPLIANCE-7**), including a photograph showing the annual reading of engine hours. The project owner shall make the site available for inspection of records by representatives of the District, ARB, and the Energy Commission.

Justification for Change on Condition AQ-37 and AQ-38: The Applicant is requesting that these two conditions be deleted as they do not apply to the emergency fire pump engine systems.

~~**AQ-37** This unit shall not be used to provide power during a voluntary agreed to power outage and/or power reduction initiated under an Interruptible Service Contract (ISC); Demand Response Program (DRP); Load Reduction Program (LRP) and/or similar arrangement(s) with the electrical power supplier.~~

~~**Verification:** The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.~~

~~**AQ-38** This engine may operate in response to notification of impending rotating outage if the area utility has ordered rotating outages in the area where the engine is located or expects to order such outages at a particular time, the engine is located in the area subject to the rotating outage, the engine is operated no more than 30 minutes prior to the~~

~~utility advises that the outage is no longer imminent or in effect.~~

Verification: ~~The project owner shall make the site available for inspection of records and equipment by representatives of the District, ARB, and the Energy Commission.~~

AQ-39 Each This unit is subject to the requirements of the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines (Title 17 CCR 93115). In the event of conflict between these conditions and the ATCM, the requirements of the ATCM shall govern.

Verification: Not necessary.

AQ-40 Each This unit is subject to the requirements of the Federal National Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR Part 60 Subpart IIII).

Verification: The project owner shall submit the engine specifications at least 30 days prior to purchasing the engines for review and approval demonstrating that the engines meet NSPS emission limit requirements at the time of engine purchase.

C.1.12 CONCLUSIONS

Staff has made the following conclusions about the Genesis Solar Energy Project:

- The proposed project would not have the potential to exceed PSD emission levels during direct source operation and the facility is not considered a major stationary source with potential to cause adverse NEPA air quality impacts. However, without adequate fugitive dust mitigation, the proposed project would have the potential to exceed the PSD emission levels for PM10 during construction, and could cause potential localized exceedances of the PM10 NAAQS during construction. Recommended Conditions of Certification AQ-SC1 through AQ-SC4 would adequately mitigate these potentially adverse NEPA impacts.

[Applicant Comment on Bullet Item One: The inference concerning PSD and construction emissions was addressed in detail in General Comment #1 above.](#)

- The proposed project would comply with applicable District Rules and Regulations and staff recommends the inclusion of the District's PDOC conditions as Conditions of Certification AQ-1 through AQ-40
- If left unmitigated, the proposed project's construction activities would likely contribute to significant CEQA adverse PM10 and ozone impacts. Staff recommends AQ-SC1 to AQ-SC5 to mitigate the potential impacts.

[Applicant Comment on Bullet Item Three: See Item \(3\) under Applicant's General Comment #1.](#)

- The proposed project's operation would not cause new violations of any NO₂, SO₂, PM_{2.5} or CO ambient air quality standards. Therefore, the project-direct operational NO_x, SO_x, PM_{2.5} and CO emission impacts are not CEQA significant.
- The proposed project's direct and indirect, or secondary emissions contribution to existing violations of the ozone and PM₁₀ ambient air quality standards are likely CEQA significant if unmitigated. Therefore, staff recommends AQ-SC6 to mitigate the onsite maintenance vehicle emissions and AQ-SC7 to mitigate the operating fugitive dust emissions to ensure that the potential ozone and PM₁₀ CEQA impacts are mitigated to less than significant over the life of the project.

[Applicant Comment to Bullet Item Five: With respect to "likely CEQA significance" and AQ-SC6, see the Applicant's General Comment #4 above.](#)

The proposed project would be consistent with the requirements of SB 1368 and the Emission Performance Standard for greenhouse gases (see Appendix Air-1).

Other Resources

C.4 – Hazardous Materials

C.4- HAZARDOUS MATERIALS

C.4.10 PROPOSED CONDITIONS OF CERTIFICATION/MITIGATION MEASURES

HAZ-1 The project owner shall not use any hazardous materials not listed in Appendix A, below, or in greater quantities or strengths than those identified by chemical name in Appendix A, below, unless approved in advance by the Compliance Project Manager (CPM).

Verification: The project owner shall provide to the CPM, in the Annual Compliance Report, a list of hazardous materials contained at the facility.

HAZ-2 The project owner shall concurrently provide a Hazardous Materials Business Plan (HMBP), a Spill Prevention, Control, and Countermeasure Plan (SPCC), and a Process Safety Management Plan (PSMP) to the Riverside County Environmental Health Department (RCEHD) and the CPM for review. After receiving comments from the RCEHD and the CPM, the project owner shall reflect all recommendations in the final documents. Copies of the final HMBP shall then be provided to the RCEHD for information and to the CPM for approval.

Verification: At least 60 days prior to receiving any hazardous material on the site for commissioning or operations, the project owner shall provide a copy of a final Hazardous Materials Business Plan, a Spill Prevention, Control, and Countermeasure Plan, and a Process Safety Management Plan to the CPM for approval.

HAZ-3 The project owner shall develop and implement a Safety Management Plan for the delivery and handling of liquid and gaseous hazardous materials. The plan shall include procedures, protective equipment requirements, training and a checklist. It shall also include a section describing all measures to be implemented to prevent mixing of incompatible hazardous materials. This plan shall be applicable during construction, commissioning, and operation of the power plant.

Verification: At least sixty (60) days prior to the delivery of any liquid or gaseous hazardous material to the facility, the project owner shall provide a Safety Management Plan as described above to the CPM for review and approval.

HAZ-4 The project owner shall place an adequate number of isolation valves in the Heat transfer Fluid (HTF) pipe ~~system for section and~~ loop ~~s so as to be able to isolate a solar panel loop~~ isolation in the event of a fluid leak of fluid. These valves shall be actuated either manually and or remotely depending on location and function. The engineering design drawings showing the number, location, and type of isolation valves shall be provided to the CPM for review and approval prior to the commencement of the solar array pipng construction.

Verification: At least ~~sixty~~ thirty (30) days or less if agreed to prior to the commencement of solar array pipng construction, the project owner shall provide the

design drawings as described above to the CPM for review and approval.

Rationale: Typically isolation valves associated with the solar field loop piping are manual valves and may not be practical to have as remote actuated valves. Loop piping is considered the smaller bore piping connecting the solar collector assemblies to the larger lateral header piping. The condition should be written to allow design flexibility so the engineer can determine which type of valve is best for the application. Verification has been changed to 30 days to match requirements discussed in MECH-1, 2, and 3.

HAZ-5 Prior to commencing construction, a site-specific Construction Site Security Plan for the construction phase shall be prepared and made available to the CPM for review and approval. The Construction Security Plan shall include the following:

1. perimeter security consisting of fencing enclosing the construction area;
2. security guards;
3. site access control consisting of a check-in procedure or tag system for construction personnel and visitors;
4. written standard procedures for employees, contractors and vendors when encountering suspicious objects or packages on site or off site;
5. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency; and
6. Evacuation procedures.

Verification: At least thirty (30) days prior to commencing construction, the project owner shall notify the CPM that a site-specific Construction Security Plan is available for review and approval.

HAZ-6 The project owner shall also prepare a site-specific security plan for the commissioning and operational phases that will be available to the CPM for review and approval. The project owner shall implement site security measures that address physical site security and hazardous materials storage. The level of security to be implemented shall not be less than that described below (as per NERC 2002).

The Operation Security Plan shall include the following:

1. permanent full perimeter fence or wall, at least eight feet high and topped with barbed wire or the equivalent;
2. main entrance security gate, either hand operated or motorized;
3. evacuation procedures;
4. protocol for contacting law enforcement and the CPM in the event of suspicious activity or emergency;
5. written standard procedures for employees, contractors, and vendors when encountering suspicious objects or packages on site or off site;

- A. a statement (refer to sample, **ATTACHMENT A**), signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to determine the accuracy of employee identity and employment history and shall be conducted in accordance with state and federal laws regarding security and privacy;
 - B. a statement(s) (refer to sample, **ATTACHMENT B**), signed by the contractor or authorized representative(s) for any permanent contractors or other technical contractors (as determined by the CPM after consultation with the project owner), that are present at any time on the site to repair, maintain, investigate, or conduct any other technical duties involving critical components (as determined by the CPM after consultation with the project owner) certifying that background investigations have been conducted on contractors who visit the project site;
- 6. site access controls for employees, contractors, vendors, and visitors;
 - 7. a statement(s) (refer to sample, **ATTACHMENT C**), signed by the owners or authorized representative of hazardous materials transport vendors, certifying that they have prepared and implemented security plans in compliance with 49 CFR 172.802, and that they have conducted employee background investigations in accordance with 49 CFR Part 1572, subparts A and B;
 - 8. closed circuit TV (CCTV) monitoring system, recordable, and viewable in the power plant control room and security station (if separate from the control room) with cameras able to pan, tilt, and zoom, have low-light capability, and are able to view the outside entrance to the control room and the front gate; and
 - 9. additional measures to ensure adequate perimeter security consisting of either:
 - A. security guard(s) present 24 hours per day, 7 days per week; **or**
 - B. power plant personnel on site 24 hours per day, 7 days per week, **and**
 - the CCTV able to view 100% of the entire solar array fence line perimeter
 - or** breach detectors **or** on-site motion detectors along the entire solar array fence line.

The project owner shall fully implement the security plans and obtain CPM approval of any substantive modifications to those security plans. The CPM may authorize modifications to these measures, or may require additional measures such as protective barriers for critical power plant components—transformers, gas lines, and compressors—depending upon circumstances unique to the facility or in response to industry-related standards, security

concerns, or additional guidance provided by the U.S. Department of Homeland Security, the U.S. Department of Energy, or the North American Electrical Reliability Council, after consultation with both appropriate law enforcement agencies and the applicant.

Verification: At least thirty (30) days prior to the initial receipt of hazardous materials on site, the project owner shall notify the CPM that a site-specific operations site security plan is available for review and approval. In the annual compliance report, the project owner shall include a statement that all current project employee and appropriate contractor background investigations have been performed, and that updated certification statements have been appended to the operations security plan. In the annual compliance report, the project owner shall include a statement that the operations security plan includes all current hazardous materials transport vendor certifications for security plans and employee background investigations.

C.4.1 2 CONCLUSIONS

Staff's evaluation of the proposed project (with proposed mitigation measures) indicates that hazardous material use, storage, and transportation would not pose a significant impact on the public. Staff's analysis also shows that there would be no significant cumulative impact. With adoption of the proposed conditions of certification, the proposed project would comply with all applicable LORS. Other proposed conditions of certification address the issues of site security matters.

Staff recommends that the Energy Commission impose the proposed conditions of certification to ensure that the project is designed, constructed, and operated in compliance with applicable LORS, and would protect the public from significant risk of exposure to an accidental release of hazardous materials. If all mitigation proposed by the applicant and by staff are implemented, the use, storage, and transportation of hazardous materials would not present a significant risk to the public.

Staff concludes that there is insignificant potential for hazardous materials release to have an impact beyond the facility boundary, and therefore concludes there is also insignificant potential for significant impacts to the environment. For any other potential impacts upon the environment, including vegetation, wildlife, air, soils, and water resulting from hazardous materials usage and disposal at the proposed facility, the reader is referred to the **Biology**, the **Air Quality**, the **Soil and Water**, and the **Waste Management** sections of this SA.

Staff proposes six conditions of certification which are mentioned in the text above. **HAZ-1** ensures that no hazardous material would be used at the facility except as listed in **Appendix A** of this section, unless there is prior approval by the Energy Commission Compliance Project Manager. **HAZ-2** ensures that local emergency response services are notified of the amounts and locations of hazardous materials at the facility, **HAZ-3** requires the development of a Safety Management Plan that addresses the delivery of all liquid hazardous materials during the construction, commissioning, and operation of the project would further reduce the risk of any accidental release not specifically addressed by the proposed spill prevention mitigation measures, and further prevent the mixing of incompatible materials that could result in the generation of toxic vapors. **HAZ4** addresses the use of HTF in the solar array. Site security during both the construction and operation phases is addressed in **HAZ-5** and **HAZ-6**.

SAMPLE CERTIFICATION (Attachment C)

Affidavit of Compliance for Project Owners

I,

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

(Company name)

for employment at

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 .

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

SAMPLE CERTIFICATION (Attachment C)

Affidavit of Compliance for Contractors

I,

(Name of person signing affidavit)(Title)

do hereby certify that background investigations to ascertain the accuracy of the identity and employment history of all employees of

(Company name)

for contract work at

(Project name and location)

have been conducted as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 .

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

SAMPLE CERTIFICATION (Attachment C)

Affidavit of Compliance for Hazardous Materials Transport Vendors

I,

(Name of person signing affidavit)(Title)

do hereby certify that the below-named company has prepared and implemented security plans in conformity with 49 CFR 172.880 and has conducted employee background investigations in conformity with 49 CFR 172, subparts A and B,

(Company name)

for hazardous materials delivery to

(Project name and location)

as required by the California Energy Commission Decision for the above-named project.

(Signature of officer or agent)

Dated this _____ day of _____, 20 .

THIS AFFIDAVIT OF COMPLIANCE SHALL BE APPENDED TO THE PROJECT SECURITY PLAN AND SHALL BE RETAINED AT ALL TIMES AT THE PROJECT SITE FOR REVIEW BY THE CALIFORNIA ENERGY COMMISSION COMPLIANCE PROJECT MANAGER.

C.4.1 3 REFERENCES

GSEP 2009a – Genesis Solar Energy Project/T. Bernhardt (tn:53083) Application for Certification for the Genesis Solar Energy Project. 08/31/2009

GSEP 2009f – Genesis Solar Energy Project/T. Bernhardt (tn:54453) Data Responses Set 1A (# 1-227) for the Genesis Solar Energy Project. 12/15/2009

North American Electric Reliability Council (NERC) 2002. Security Guidelines for the Electricity Sector, Version 1.0, June 14, 2002.

Riverside County Fire Department – (tn: 54769) Letter from Captain Jason Newman, Strategic Planning Division. 1/07/10

U.S. Department of Energy (US DOE). 2002. Draft Vulnerability Assessment Methodology, Electric Power Infrastructure. Office of Energy Assurance, September 30, 2002.

**HAZARDOUS MATERIALS
APPENDIX A**

Hazardous Materials Proposed for Use at the GSEP

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Hazardous Materials Appendix A

Hazardous Materials Proposed for Use at the GSEP

Material	CAS No.	Application	Hazardous Characteristics	Maximum Quantity On Site	CERCLA SARA RQ^a
Acetylene	74-86-2	Welding gas	Health: moderate toxicity Physical: toxic	600 cubic feet	
Argon	7440-37-1	Welding gas	Health: low toxicity Physical: non-flammable gas	600 cubic feet	
Carbon Dioxide			Health: low toxicity Physical: non-flammable gas	15 tons	
Diesel Fuel		Equipment refueling and emergency diesel fire pump	Health: low toxicity Physical: combustible liquid	3,600 gallons	
Fertilizer Monopotassium Phosphate		Treatment of HTF contaminated soil	Health: low toxicity Physical: irritant	250 pounds	
Fertilizer Urea		Treatment of HTF contaminated soil	Health: low toxicity Physical: N/A	250 pounds	
Hydraulic Fluid		High-pressure combustion turbine starting system, turbine control valve actuators	Health: low to moderate toxicity Physical: Class IIIB combustible liquid	500 gallons in equipment, maintenance inventory of 110 gallons in 55-gallon steel drums	
Hydrogen		Steam turbine generator cooling	Health: low toxicity Physical: flammable gas	20,000 SCF	
Lube Oil		Lubricate rotating equipment (e.g., gas turbine and steam-turbine bearings)	Health: low toxicity Physical: N/A	10,000 gallons in equipment and piping, additional maintenance inventory of up to 550 gallons in 55-gallon steel drums	
Mineral Insulating Oil		Transformers/switchyard	Health: low toxicity Physical: N/A	32,000	
Natural Gas (Methane)	74-82-8	Auxiliary boiler operation	Health: low toxicity Physical: flammable gas	No on-site storage, up to 140 pounds of natural gas in equipment and piping	
Nitrogen	7727-37-9		Health: low toxicity Physical: flammable gas	7,500 pounds	
Material	CAS No.	Application	Hazardous Characteristics	Maximum Quantity On Site	CERCLA SARA RQ^a
Oxygen	7782-44-7	Welding gas	Health: low toxicity	600 cubic feet	

			Physical: oxidizer		
Sodium Hypochlorite (12.5%)		Cooling tower biological control	Health: high toxicity Physical: Poison-B, corrosive	8,500 gallons	100 pounds
Sulfur Hexafluoride		230-kV breaker insulating medium	Health: none Physical: none		
Sulfuric Acid (29.5%) solution			Health: high toxicity Physical: corrosive and water reactive	2,000 gallons	1,000 pounds
Sulfuric Acid (93%) solution			Health: high toxicity Physical: corrosive and water reactive	8,500 gallons	1,000 pounds
Therminol VP-1 Diphenyl Ether (73.5%) Biphenyl (26.5%)		Heat transfer fluid in the solar array	Health: moderate toxicity Physical: irritant; combustible liquid (Class III-B)	2.0 MM gallons	100 pounds
Water Treatment Chemical NALCO Tri-Act 1800 Cyclohexylamine (5– 10%) Monoethanolamine (10– 30%) Methoxypropylamine (10– 30%)			Health: high toxicity Physical: corrosive, class II combustible liquid	800 gallons	
Water Treatment Chemical NALCO Elim-Ox Carbohydazide (5– 10%)			Health: moderate toxicity Physical: corrosive	800 gallons	
Water Treatment Chemical NALCO 3D Trasar 3DT185 Phosphoric Acid (60 – 100%)			Health: high toxicity Physical: corrosive	800 gallons	
Water Treatment Chemical NALCO 3D Trasar 3DT177 Phosphoric Acid (30%)			Health: moderate toxicity Physical: irritant	800 gallons	
Material	CAS No.	Application	Hazardous Characteristics	Maximum Quantity On Site	CERCLA SARA RQ^a
Water Treatment Chemical NALCO 3D Trasar 3DT190			Health: low toxicity Physical: irritant	800 gallons	
Water Treatment Chemical NALCO Acti-Brom ® 7342 Sodium Bromide			Health: low toxicity Physical: irritant	800 gallons	

Water Treatment Chemical NALCO pHreedom © 5200M Sodium salt of phosphonomethylated diamine			Health: low to moderate toxicity Physical: irritant	800 gallons	
Water Treatment Chemical NALCO PCL-1 346			Health: low toxicity Physical: irritant	800 gallons	
Water Treatment Chemical NALCO Permcare © PC-7408 Sodium Bisulfite			Health: low toxicity Physical: irritant	800 gallons	
Water Treatment Chemical NALCO BT-3000 Sodium Hydroxide Sodium Tripolyphosphate			Health: high toxicity Physical: corrosive	800 gallons	
Water Treatment Chemical NALCO 8338 Sodium Nitrate Sodium Tolytriazole Sodium Hydroxide			Health: moderate toxicity Physical: toxic	800 gallons	

Source: GSEP 2009a Table 5.12-1

a. Reportable quantities for a pure chemical, per the Comprehensive Environmental Response, Compensation, and Liability Act.

Other Resources

C.5 – Health and Safety

C.5 – HEALTH AND SAFETY

SA-EIS STATEMENT ON PUBLIC HEALTH TABLE 7, PAGE C.5-18, ASTERISK FOOTNOTE:

*DieselExhPM is listed twice in the applicant's emissions modeling file and risks are reported in the same manner. It is unclear to staff why this substance is listed twice, however staff retained it as such in staff's calculations of risk.

Applicant Comment: The Applicant has reviewed the input files supplied to Staff and cannot find any instance (in the emissions .csv files) where diesel exhaust PM is listed twice. The applicable emissions files (.csv files) for the emergency generator engines (2), the emergency fire pump engines (2), and the onsite mobile equipment, all contain only a single listing for diesel exhaust PM. Staff's analysis and conclusions match the Applicant's, so this comment is presented as clarification only.

C.5.12 PROPOSED CONDITIONS OF CERTIFICATION/MITIGATION MEASURES

Public Health-1 The Project owner shall develop and implement a Cooling Water Management Plan to ensure that the potential for bacterial growth in cooling water is kept to a minimum. The Plan shall be consistent with either staff's "Cooling Water Management Program Guidelines" or with the Cooling Technology Institute's "Best Practices for Control of Legionella" guidelines ~~but in either case, the Plan must include sampling and testing for the presence of Legionella bacteria at least every six months. After two years of power plant operations, the Project owner may ask the CPM to re-evaluate and revise the Legionella bacteria testing requirement.~~

Verification: At least 60 days prior to the commencement of cooling tower operations, the Cooling Water Management Plan shall be provided to the CPM for review and approval.

Justification for Change:

The applicant intends to implement a Cooling Water Management Plan that is consistent with the Cooling Technology Institutes "Best Practices for Control of Legionella" guidelines. This is one of the two compliance options required in the PSA. The PSA also requires sampling and testing for the presence of Legionella bacteria, but this requirement is not consistent with the Cooling Technology Institute's (CTI's) "Best Practices for Control of Legionella". The CTI Legionella guideline referenced in the PSA specifically states that:

“Most professional and government agencies that have issued Legionella position statements and guidelines do not recommend testing for Legionella bacteria on a routine basis. These reasons derive from difficulties in interpreting Legionella test results and in using test results as a basis for control. Note the following aspects:

- An infectious dose level for Legionella has not been established and in any case (given variations in strain virulence and wide differences in individual susceptibility) the concept of a fixed infectious dose level may be misleading. Since no fixed ‘danger’ level can be assigned, it also follows that no specific level of the organism can be assigned as ‘safe’.
- Legionella may be ‘non-detectable’ in bulk water samples collected on one day but can repopulate and be found within a few days. Legionella can be released from biofilms or from host life forms associated with these films. Legionella are reported to be capable of rapid recolonization of previously cleaned systems, especially if conducive conditions are present.
- Simple detection of the organism in a cooling system does not necessarily mean there is a risk of disease, in part because not all Legionella serogroups are associated with Legionellosis.
- Culture-based techniques used by testing labs to quantify Legionella have a 1- to 14 day turnaround for results. This period is too long for Legionella monitoring to serve as an effective tool for treatment control.”

Since the CTI guideline indicates that Legionella testing cannot be used to reliably evaluate the public health risk of Legionellosis, the applicant requests that Public Health-1 be changed to read as follows:

“The Project owner shall develop and implement a Cooling Water Management Plan to ensure that the potential for bacterial growth in cooling water is kept to a minimum. The Plan shall be consistent with the Cooling Technology Institute’s ‘Best Practices for Control of Legionella’ guidelines.”

C.5.13 CONCLUSIONS

Staff has analyzed potential public health risks associated with construction and operation of the GSEP and does not expect any significant adverse cancer, short-term, or long-term health effects to any members of the public including low income and minority populations, from project toxic emissions. Staff also concludes that its analysis of potential health impacts from the proposed GSEP uses a conservative health protective methodology that accounts for impacts to the most sensitive individuals in a given population, including newborns and infants. According to the results of staff’s health risk assessment, emissions from the GSEP project would not contribute significantly to morbidity or mortality in any age or ethnic group residing in the project area. With the incorporation of staff’s proposed mitigation (Condition of Certification **Public Health-1**), the proposed facility will not present a significant health risk to the public.

Other Resources

C.7 – Noise and Vibration

C.7 – NOISE AND VIBRATION

C.7.12 PROPOSED CONDITIONS OF CERTIFICATION/MITIGATION MEASURES

NOISE-1 At least 15 days prior to the start of ground disturbance, the project owner shall notify all residents within two miles of the project site boundaries and one-half mile of linears, by mail or other effective means, of the commencement of project construction. ~~At the same time, the project owner shall establish a telephone number for use by the public to report any undesirable noise conditions associated with the construction and operation of the project and include that telephone number in the above notice. If the telephone is not staffed 24 hours per day, the project owner shall include an automatic answering feature, with date and time stamp recording, to answer calls when the phone is unattended. This telephone number shall be posted at the project site during construction in a manner visible to passersby. This telephone number shall be maintained until the project has been operational for at least one year.~~

Verification: Prior to ground disturbance, the project owner shall transmit to the Compliance Project Manager (CPM) a statement, signed by the project owner's project manager, stating that the above notification has been performed and describing the method of that notification, ~~verifying that the telephone number has been established and posted at the site, and giving that telephone number.~~

Rationale: The project site is completely isolated in the desert away from any residents. A noise notice posted at the job site would not be seen by a passerby. I-10 is the closest infrastructure to the project site, approximately 4 miles away at it's closest location. No noise will be heard; therefore there is no reason to have a telephone hot line posted.

NOISE COMPLAINT PROCESS

NOISE-2 Throughout the construction and operation of Genesis, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related noise complaints. The project owner or authorized agent shall:

Use the Noise Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each noise complaint;

Attempt to contact the person(s) making the noise complaint within 24 hours;

Conduct an investigation to determine the source of noise related to the complaint;

Take all feasible measures to reduce the noise at its source if the noise is project related; and

Submit a report documenting the complaint and the actions taken. The report shall include: a complaint summary, including final results of noise reduction efforts, and if obtainable, a signed statement by the complainant stating that the noise problem is resolved to the complainant's satisfaction.

Verification: Within five days of receiving a noise complaint, the project owner shall file a copy of the Noise Complaint Resolution Form with the CPM, documenting the resolution of the complaint. If mitigation is required to resolve a complaint, and the complaint is not resolved within a three-day period, the project owner shall submit an updated Noise Complaint Resolution Form when the mitigation is implemented

NOISE-3 The project owner shall submit to the CPM for review and approval a noise control program and a statement, signed by the project owner's project manager, verifying that the noise control program will be implemented throughout construction of the project. The noise control program shall be used to reduce employee exposure to high noise levels during construction and also to comply with applicable OSHA and Cal/OSHA standards.

Verification: At least 30 days prior to the start of ground disturbance, the project owner shall submit to the CPM the noise control program and the project owner's project manager's signed statement. The project owner shall make the program available to Cal/OSHA upon request.

NOISE-4 Following the project's first achieving a sustained output of 90 percent or greater of rated capacity, the project owner shall conduct an occupational noise survey to identify the noise hazardous areas in the facility.

The survey shall be conducted by a qualified person in accordance with the provisions of Title 8, California Code of Regulations sections 5095–5099 and Title 29, Code of Federal Regulations section 1910.95. The survey results shall be used to determine the magnitude of employee noise exposure.

The project owner shall prepare a report of the survey results and, if necessary, identify proposed mitigation measures that will be employed to comply with the applicable California and federal regulations.

Verification: Within 30 days after completing the survey, the project owner shall submit the noise survey report to the CPM. The project owner shall make the report available to OSHA and Cal/OSHA upon request.

C.7.13 CONCLUSIONS

Staff concludes that Genesis, if built and operated in conformance with the proposed conditions of certification below, would comply with all applicable noise and vibration LORS and would produce no significant adverse noise impacts on people within the project area, directly, indirectly, or cumulatively.

Other Resources

C.10 – Traffic and Transportation

C.10 – TRAFFIC AND TRANSPORTATION

C.10.11 PROPOSED CONDITIONS OF CERTIFICATION

It should be noted that the Bureau of Land Management (BLM) has reviewed and agreed to the following conditions of certification for the Genesis Solar Energy Project.

TRAFFIC CONTROL PLAN

- TRANS-1** Prior to start of construction of the Genesis Solar Energy Project (GSEP), the project owner shall prepare and implement a Traffic Control Plan (TCP). In preparing this TCP, the applicant shall:
1. Take into account the cumulative traffic impacts of the overlapping construction schedules of the Blythe Solar Power Project (BSPP) and the Palen Solar Power Project (PSPP).
 2. Consult with Solar Millenium, LLC to:¹
 - a. ~~Provide for a coordinated park-and-ride system of bus service for workers at all three sites to ensure that I-10 operates at LOS C or higher. The park-and-ride system shall not cause any significant impacts in the vicinity of the park-and-ride facilities.~~
 - b. Address the movement of other vehicles and materials, including delivery routes, workforce travel routes, and the arrival and departure schedules of equipment, materials, and workers, to ensure that I-10 operates at LOS G or better.

For all three projects, the TCP shall include:

- ~~A coordinated park-and-ride program designed to transport construction workers to all three sites via a van or bus service.~~
- Assessment and implementation, if needed, of coordinated work hours and arrival/departure times outside of peak traffic.
- A revised traffic study designed to ensure that LOS on I-10 can be maintained by implementing measures included in the TCP. ~~The revised traffic study shall also include information about procedures designed to ensure that the park-~~

¹ Solar Mellinium LLC is the applicant for both Blythe Solar Power Project and Palen Solar Power Project.

~~and-ride program does not result in significant impacts in the vicinity of the park-and-ride facilities.~~

- ~~A plan for monitoring LOS during construction on I-10 and within the vicinity of the park-and-ride facilities. The applicant shall report LOS findings to the BLM's Authorized Officer and the Energy Commission's CPM and/or park-and-ride program as necessary.~~
- ~~Limitation of truck deliveries to the project site.~~
- Redirection of construction traffic with a flag person as necessary to ensure traffic safety and minimize interruptions to non-construction related traffic flow.
- Placement signage, lighting, and traffic control devices at the project construction site and laydown areas.
- Placement of signage along eastbound and westbound Wiley's Well Road Interchange and at the entrance of each of the I-10 northbound and southbound off-ramps at Wiley's Well Road Interchange notifying drivers of construction traffic throughout the duration of the construction period.
- A heavy-haul plan to address the transport and delivery of heavy and oversized loads requiring permits from the Department of Transportation (Caltrans) or other state and federal agencies.
- Development of a work schedule and end-of-shift plan with the Chuckawalla Valley and Ironwood State Prisons.
- Timing of heavy equipment and building material delivery to the sites.
- Emergency vehicle access to the project site.
- Temporary closing of travel lanes, if necessary.
- Parking for workforce and construction vehicles.
- Encourage carpooling for the workforce. Provide staggered shift start times if necessary.

The project owner shall consult with the County of Riverside and the Department of Transportation (Caltrans) District 8 office in the preparation and implementation of the Traffic Control Plan and shall submit in sufficient time for review and comment the proposed Traffic Control Plan to the:

1. County of Riverside and the Department of Transportation (Caltrans) District 8 office.

2. BLM's Authorized Officer and the California Energy Commission Compliance Project Manager (CPM) for review and approval. This submittal to BLM and California Energy Commission must occur prior to the proposed start of construction and implementation of the plan. BLM's Authorized Officer and the CPM shall review and approve the TCP or identify any material deficiencies within thirty (30) days of receipt.

Verification: At least 90 calendar days prior to the start of construction, including any grading or site remediation on the power plant site or its associated easements, the project owner shall submit the proposed traffic control plan to the County of Riverside and the Department of Transportation (Caltrans) District 8 office for review and comment and to BLM's authorized officer and the CPM for review and approval. The project owner shall also provide BLM's Authorized Officer and the CPM with a copy of the transmittal letter to the County of Riverside and the Department of Transportation (Caltrans) District 8 office requesting review and comment.

At least 30 calendar days prior to the start of construction, the project owner shall provide copies of any comment letters received from either the County of Riverside and the Department of Transportation (Caltrans) District 8 office, along with any changes to the proposed Traffic Control Plan to BLM's Authorized Officer and the CPM for review and approval.

Rationale: The project owner believes that creation of a park and ride location for the three projects would result in greater LOS concerns. It would concentrate the traffic to a central location and specific times. These three projects are located over a 40 mile segment of I-10 with primary access at different exits and should not have a centralized park and ride system. The project owner agrees to encourage carpooling among workers through contract conditions and programs.

TRANS-2 The project owner shall comply with limitations imposed by the Department of Transportation (Caltrans) District 8 office and other relevant jurisdictions including the County of Riverside on vehicle sizes and weights and driver licensing. In addition, the project owner or its contractor shall obtain necessary transportation permits from the Department of Transportation (Caltrans) and all relevant jurisdictions for use of roadways.

Verification: In the Monthly Compliance Reports (MCRs), the project owner shall report permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation on-site for Compliance Project Manager (CPM) inspection if requested.

TRANS-3 **Encroachment into Public Rights-of-Way** The project owner or its contractor shall comply with the Department of Transportation (Caltrans) and other relevant jurisdictions limitations for encroachment into public rights-of-way and shall

obtain necessary encroachment permits from the Department of Transportation (Caltrans) and all relevant jurisdictions.

Verification: In the MCR's, the project owner shall report permits received during that reporting period. In addition, for at least six months after the start of commercial operation, the project owner shall retain copies of permits and supporting documentation on-site for CPM inspection, if requested.

TRANS-4 Securing Permits/Licenses to Transport Hazardous Materials
The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol and Department of Transportation (Caltrans) for the transport of hazardous materials.

Verification: In the MCR's, the project owner shall report permits and/or licenses for hazardous substance transportation received during that reporting period. In addition, the project owner shall retain copies of permits, licenses, and supporting documentation on-site for CPM inspection if requested.

TRANS-5 Restorations of All Public Roads, Easements, and Rights-of-Way
The project owner shall restore all public roads, easements, and rights-of-way that have been damaged due to project-related construction activities to original or near-original condition in a timely manner, as directed by BLM's Authorized Officer and CPM. Repairs and restoration of access roads may be required at any time during the construction phase of the project to assure safe ingress and egress.

Verification: At least 30 days prior to the start of mobilization, the project owner shall photograph or videotape all affected public roads, easements, and right-of-way segments and/or intersections and shall provide BLM's Authorized Officer, the CPM, the affected local jurisdictions and the Department of Transportation (if applicable) with a copy of these images. The project owner shall rebuild, repair and maintain all public roads, easements, rights-of-way in a usable condition throughout the construction phase of the project.

Prior to the start of site mobilization, the project owner shall consult with the County of Riverside and the Department of Transportation (Caltrans) District 8 and notify them of the proposed schedule for project construction. The purpose of this notification is to request that the County of Riverside and the Department of Transportation (Caltrans) consider postponement of public right-of-way repair or improvement activities in areas affected by project construction until construction is completed and to coordinate with the project owner regarding any concurrent construction-related activities that are planned or in progress and cannot be postponed.

Within 60 calendar days after completion of construction, the project owner shall meet with BLM's Authorized Officer and the CPM, the County of Riverside and Caltrans District 8 to identify sections of public right-of-way to be repaired. At that time, the project owner shall establish a schedule to complete the repairs and to receive approval for the action(s). Following completion of any public right-of-way repairs, the project owner shall provide a letter signed by the County of Riverside and the Department of Transportation(Caltrans) District 8 stating their satisfaction with the repairs to BLM's Authorized Officer and the CPM.

C.10.13 CONCLUSIONS

1. The GSEP as proposed with conditions of certification would comply with all applicable LORS related to traffic and transportation. As a result, it would result in less than significant impacts to the traffic and transportation system.
2. Based on the GSEP's distance from the nearest airport, no impact on the Blythe Airport or Desert Center Airport would occur, and the project would not impact aviation safety.
3. Based on the GSEP's distance from the nearest rail and bus service, the project would not have an impact on these forms of transportation.
4. The GSEP as proposed with conditions of certification would not result in significant direct, indirect or cumulative traffic and transportation impacts, and therefore, no environmental justice issues.
5. Staff is proposing Condition of Certification TRANS-1, which requires the owner to develop and implement a Traffic Control Plan. The Traffic Control Plan would include a plan for reducing peak construction workforce vehicle trips.
6. Staff is proposing Condition of Certification TRANS- 2, limitation of vehicle size and weights to ensure compliance with limitations on use on roadways.
7. Staff is proposing Condition of Certification TRANS- 3 requiring compliance with limitations on encroachment into public rights-of-ways.
8. Staff is proposing Condition of Certification TRANS-4 to ensure safe transport of hazardous materials.
9. Staff is proposing Condition of Certification TRANS-5 to ensure all public roads, easements and rights-of-ways are restored to their original condition if damaged by project related construction.

Other Resources

C.12 – Visual Resources

C.12 – VISUAL RESOURCES

C.12.12 MITIGATION MEASURES/PROPOSED CONDITIONS OF CERTIFICATION/APPROVAL

SURFACE TREATMENT OF NON-MIRROR PROJECT STRUCTURES AND BUILDINGS

- VIS-1** The project owner shall treat all non-mirror surfaces of all project structures and buildings visible to the public such that a) their colors minimize visual intrusion and contrast by blending with the existing dark brown color of the background bajadas and mountain slopes as seen from the highway or, in the case of foreground transmission poles, the lighter tan color of the valley floor; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. This measure shall include coloring of security fencing with vinyl or other non-reflective coating; or with slats or similar semi-opaque, non-reflective material, to blend to the greatest feasible extent with the background soil.

The project owner shall submit for CPM and BLM Authorized Officer review and approval, a specific Surface Treatment Plan that will satisfy these requirements. The treatment plan shall include:

- A. A description of the overall rationale for the proposed surface treatment, including the selection of the proposed color(s) and finishes;
- B. A list of each major project structure, building, tank, pipe, and wall; the transmission line towers and/or poles; and fencing, specifying the color(s) and finish proposed for each. Colors must be identified by vendor, name, and number; or according to a universal designation system;
- C. One set of color brochures or color chips showing each proposed color and finish;
- D. A specific schedule for completion of the treatment; and
- E. A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated in the field, until the project owner receives notification of approval of the treatment plan by BLM's Authorized Officer and the

CPM. Subsequent modifications to the treatment plan are prohibited without BLM's Authorized Officer and CPM approval.

Verification:—At least 90 days prior to specifying to the vendor the colors and finishes of the first structures or buildings that are surface treated during manufacture.

Verification: the project owner shall submit the proposed treatment plan to BLM's Authorized Officer and the CPM for review and approval and simultaneously to ~~San Bernardino County~~ [Riverside County](#) for review and comment. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a plan with the specified revision(s) for review and approval by BLM's Authorized Officer and the CPM before any treatment is applied. Any modifications to the treatment plan must be submitted to BLM's Authorized Officer and the CPM for review and approval.

Prior to the start of commercial operation, the project owner shall notify BLM's Authorized Officer and the CPM that surface treatment of all listed structures and buildings has been completed and they are ready for inspection and shall submit to each one set of electronic color photographs ~~from the same key observation points identified in (d) above~~. The project owner shall provide a status report regarding surface treatment maintenance in the Annual Compliance Report. The report shall specify a) the condition of the surfaces of all structures and buildings at the end of the reporting year; b) maintenance activities that occurred during the reporting year; and c) the schedule of maintenance activities for the next year.

TEMPORARY AND PERMANENT EXTERIOR LIGHTING

VIS-2 To the extent feasible, consistent with safety and security considerations, the project owner shall design and install all permanent exterior lighting and all temporary construction lighting such that a) lamps and reflectors are not visible from beyond the project site, including any off-site security buffer areas; b) lighting does not cause excessive reflected glare; c) direct lighting does not illuminate the nighttime sky, except for required FAA aircraft safety lighting; d) illumination of the project and its immediate vicinity is minimized, and e) the plan complies with local policies and ordinances. The project owner shall submit to BLM's Authorized Officer and the CPM for review and approval and simultaneously to [Riverside County](#) ~~the County of San Bernardino~~ for review and comment a lighting mitigation plan that includes the following:

- A. Location and direction of light fixtures shall take the lighting mitigation requirements into account;

- B. Lighting design shall consider setbacks of project features from the site boundary to aid in satisfying the lighting mitigation requirements;
- C. Lighting shall incorporate fixture hoods/shielding, with light directed downward or toward the area to be illuminated;
- D. Light fixtures that are visible from beyond the project boundary shall have cutoff angles that are sufficient to prevent lamps and reflectors from being visible beyond the project boundary, except where necessary for security;
- E. All lighting shall be of minimum necessary brightness consistent with operational safety and security; and
- F. Lights in high illumination areas not occupied on a continuous basis (such as maintenance platforms) shall have (in addition to hoods) switches, timer switches, or motion detectors so that the lights operate only when the area is occupied. To the greatest feasible extent, project lighting shall be used on an 'as needed' basis and turned off at other times.

Verification: At least 90 days prior to ordering any permanent exterior lighting or temporary construction lighting, the project owner shall contact BLM's Authorized Officer and the CPM to discuss the documentation required in the lighting mitigation plan. At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to BLM's Authorized Officer and the CPM for review and approval and simultaneously to [Riverside County](#) ~~the County of San Bernardino~~ for review and comment a lighting mitigation plan. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM.

The project owner shall not order any exterior lighting until receiving BLM Authorized Officer and CPM approval of the lighting mitigation plan.

Prior to commercial operation, the project owner shall notify BLM's Authorized Officer and the CPM that the lighting has been completed and is ready for inspection. If after inspection, BLM's Authorized Officer and the CPM notify the project owner that modifications to the lighting are needed, within 30 days of receiving that notification the project owner shall implement the modifications and notify BLM's Authorized Officer and the CPM that the modifications have been completed and are ready for inspection.

Within 48 hours of receiving a lighting complaint, the project owner shall provide BLM's Authorized Officer and the CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation. The project owner shall notify

BLM's Authorized Officer and the CPM within 48 hours after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted to BLM's Authorized Officer and the CPM within 30 days.

RE-ALIGNMENT AND VISUAL MITIGATION OF PROPOSED TRANSMISSION INTERCONNECTION

VIS-3 To reduce the prominence of the proposed new segment of transmission line paralleling Highway I-10, the applicant shall set back the transmission line at least 1/2 mile from Highway I-10 [if possible](#). In addition, to reduce contrast and prominence of the transmission line, lattice-style transmission towers shall be utilized, and painted in non-reflective natural tones to blend with the visual background. Re-alignment of the transmission line shall be consistent with any cultural or biological constraints identified in those portions of this Staff Assessment/DEIS. In the event of conflict, cultural or biological constraints shall prevail.

Rationale:

[The Applicant will investigate the possibility of setting the transmission line back ½ mile from I-10. However the transmission line will cross I-10 and will be visible. The proposed corridor as it is now planned, was chosen carefully to avoid biological, cultural and land use concerns. It is unlikely that it could be moved away from I-10 by ½ mile.](#)

Verification: At least 90 days prior to start of construction, the project owner shall present to BLM's Authorized Officer and the CPM a revised plan ~~depicting how the proposed transmission line will be set back from the highway,~~ [showing the location of the transmission line](#) and depicting scaled architectural elevations of lattice transmission towers to be used. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM.

The project owner shall not begin construction until receiving BLM Authorized Officer and CPM approval of the revised plan.

REFLECTIVE GLARE MITIGATION

VIS-4 In order to reduce brightness of spread reflections of the sun to off-site viewers, the perimeter chain link fencing proposed by Applicant shall include opaque privacy slats of a minimum 40 [8](#) feet in height. The slats shall be of a dark tan or earth-tone color selected to blend with the visual background of the site.

Rationale:

[The perimeter fence is planned to be 8 foot in height, not 10.](#)

Verification: At least 90 days prior to start of construction, the project owner shall present to BLM's Authorized Officer and the CPM a glare mitigation plan describing the fencing measures and materials proposed for mitigating off-site glare. The plan shall include color samples of slatted fencing proposed for use. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM.

The project owner shall not begin construction until receiving BLM Authorized Officer and CPM approval of the revised plan.

Within 48 hours of receiving a glare complaint, the project owner shall provide the BLM Authorized Officer and CPM with a complaint resolution form report as specified in the Compliance General Conditions including a proposal to resolve the complaint, and a schedule for implementation. The project owner shall notify the BLM Authorized Officer and CPM within 48 hours after completing implementation of the proposal. A copy of the complaint resolution form report shall be submitted to the BLM Authorized Officer and CPM within 30 days

VISUAL MITIGATION AND RE-VEGETATION OF STAGING AREA

VIS-5 In order to minimize the visual prominence of the proposed staging area to visitors at Wiley's Well Rest Area on I-10, the project owner shall provide a revised site plan for staging that includes screening of the proposed laydown area with earth berms, opaque fencing, and/or other measures to minimize visibility from within the main rest area, and restoration and revegetation of the laydown area after completion of construction. The revised staging plan shall be consistent with any cultural or biological resource constraints identified elsewhere in this Staff Assessment/DEIS. Restoration shall include re-grading to original contours in order to appear natural and undisturbed; revegetation shall employ appropriate locally native species only, again in accordance with conditions identified in the cultural and biological resource analyses of this report. The project owner shall provide a re-vegetation plan describing how the staging site will be restored following construction. The plan shall call for beginning of restoration of the site within the shortest feasible time following completion of construction.

Verification: At least 90 days prior to start of construction, the project owner shall present to BLM's Authorized Officer and the CPM a revised staging area site plan. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and

the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM. The project owner shall not begin construction until receiving BLM Authorized Officer and CPM approval of the revised plan.

At least 60 days prior to start of operation, the project owner shall present to BLM's Authorized Officer and the CPM a revegetation plan for the staging area. If BLM's Authorized Officer and the CPM determine that the plan requires revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CPM. The project owner shall not begin operation until receiving BLM Authorized Officer and CPM approval of the revised plan.

REDUCTION OF FORM, LINE, AND TEXTURE CONTRAST

VIS-6 To the extent possible, the project owner will use applicable design principles to reduce the visual contrast of the project with the characteristic landscape. These include proper siting and location; reduction of visibility; repetition of form, line, color (see VIS-1) and texture of the landscape; and reduction of unnecessary disturbance. Design strategies to address these fundamentals will be based on the following factors:

Earthwork: Select locations and alignments that fit into the landforms to minimize the size of cuts and fills. Avoid hauling in or hauling out of excess earth cut or fill. Avoid rounding and/or warping slopes. ~~Retain existing rock formations, vegetation, and drainage. Tone down freshly broken rock faces with emulsions or stains. Use retaining walls to reduce the amount and extent of earthwork. Retain existing vegetation by using retaining walls or fill slopes, reducing surface disturbance, and protecting roots from damage during excavations.~~ Avoid soil types that generate strong color contrasts. Reduce dumping or sloughing of excess earth and rock on downhill slopes.

Vegetation Manipulation: Retain as much of the existing vegetation as possible. Use existing vegetation to screen the development from public viewing. ~~Use scalloped, irregular cleared edges to reduce line contrast. Use irregular clearing shapes to reduce form contrast. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes.~~

Structures: Minimize the number of structures and combine different activities in one structure. Use natural, self-weathering materials and chemical treatments on surfaces to reduce color contrast. ~~Bury all or part of the structure.~~ Use natural appearing forms to complement the characteristic landscape. Screen the

structure from view by using natural land forms and vegetation. ~~Reduce the line contrast created by straight edges.~~

Linear Alignments: ~~Use existing topography to hide induced changes associated with roads, lines, and other linear features. Select alignments that follow landscape contours. Avoid fall-line cuts and bisecting ridge tops. Hug vegetation lines and avoid open areas such as valley bottoms. Cross highway corridors at less sharp angles.~~

Reclamation and Restoration: ~~Reduce the amount of disturbed area and blend the disturbed areas into the characteristic landscape. Replace soil, brush, rocks, and natural debris over disturbed area. Newly introduced plant species should be of a form, color, and texture that blends with the landscape.~~

Rationale:

The natural drainage patterns and vegetation cannot be retained on the project site. The linear alignments have been carefully chosen for other environmental reasons and cannot be changed to follow landscape contours. The structures cannot be buried.

Verification: As early as possible in the site and facility design, the project owner shall meet with BLM's Authorized Office and the CPM to discuss incorporation of these above factors into the design plans. At least 90 days prior to construction ~~prior to final site and facility design~~, the project owner shall contact BLM's Authorized Officer and the CPM to review the incorporation of the above factors into the final facility and site design plans. If BLM's Authorized Officer and the CPM determine that the site and facility plans require revision, the project owner shall provide to BLM's Authorized Officer and the CPM a revised plan for review and approval by BLM's Authorized Officer and the CP.

Other Resources

C.13 – Waste Management

C.13 WASTE MANAGEMENT

C.13.11 PROPOSED CONDITIONS OF CERTIFICATION/MITIGATION MEASURES

WASTE-1 In the event that contamination is identified during assessment of the project site, during any phase of GSEP construction, any additional work to assess and/or remediate any contamination shall be conducted under the oversight of DTSC, with CPM involvement.

Verification: The project owner shall consult with the Department of Toxic Substances Control, and abide by all federal, state and local requirements for site assessment and remediation if ~~enter into a consent agreement as necessary to ensure oversight of any additional site assessment and remediation work needed to reevaluate the site or address contamination~~ ed soil is identified ~~found~~ during any phase of GSEP ~~SES Solar Two~~ site construction. The project owner shall ensure that the CPM is involved and apprised of all discussions with Department of Toxic Substances Control, and CPM concurrence shall be required for project decisions addressing site remediation.

Justification for Change: NextEra will abide by the LORS therefore a separate agreement with DTSC is not necessary. The name of the project has also been updated.

WASTE-2 The project owner shall provide the resume of an experienced and qualified professional engineer or professional geologist, who shall be available for building ~~during site characterization (if needed)~~, demolition, soil excavation, and grading activities, to the CPM for review and approval. The resume shall show experience in remedial investigation and feasibility studies.

The professional engineer or professional geologist shall be given authority by the project owner to oversee any earth moving activities that have the potential to disturb contaminated soil and impact public health, safety and the environment.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the resume to the CPM for review and approval.

Justification for Change: Additional words added to ensure the specific activities are clear.

WASTE-3 If potentially contaminated soil is identified during site characterization, demolition, excavation or grading at either the proposed site or linear facilities, as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the professional engineer or professional geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and provide a written report to the project owner, representatives of Department of Toxic Substances Control

or Regional Water Quality Control Board, and the CPM stating the recommended course of action.

Depending on the nature and extent of contamination, the professional engineer or professional geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If in the opinion of the professional engineer or professional geologist, significant remediation may be required, the project owner shall contact the CPM and representatives of the Department of Toxic Substances Control or Regional Water Quality Control Board for guidance and possible oversight.

Verification: The project owner shall submit any reports filed by the professional engineer or professional geologist to the CPM within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

WASTE-4 The project owner shall prepare a Construction Waste Management Plan for all wastes generated during construction of the facility and shall submit the plan to the CPM for review and approval prior to the start of construction. The plan shall contain, at a minimum, the following:

- A description of all construction waste streams, including projections of frequency, amounts generated, and hazard classifications; and
- Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans.

Verification: The project owner shall submit the Construction Waste Management Plan to the CPM for approval no less than 30 days prior to the initiation of construction activities at the site.

WASTE-5 The project owner shall prepare a UXO Identification, Training and Reporting Plan to properly train all site workers in the recognition, avoidance and reporting of military waste debris and ordnance. The project owner shall submit the plan to the CPM for review and approval prior to the start of construction. The plan shall contain, at a minimum, the following:

- A description of the training program outline and materials, and the qualifications of the trainers; and
- Identification of available trained experts that will respond to notification of discovery of any ordnance (unexploded or not); and
- Work plan to recover and remove discovered ordnance, and complete additional field screening, possibly including geophysical surveys to investigate adjacent areas for surface, near surface or buried ordnance in all proposed land disturbance areas.

Verification: The project owner shall submit the UXO Identification, Training and Reporting Plan to the CPM for approval no less than 30 days prior to the initiation of

construction activities at the site.

WASTE-6 The project owner shall obtain a hazardous waste generator identification number from the United States Environmental Protection Agency (USEPA) prior to generating any hazardous waste during project construction and operations.

Verification: The project owner shall keep a copy of the identification number on file at the project site and provide documentation of the hazardous waste generation and notification and receipt of the number to the CPM in the next scheduled Monthly Compliance Report after receipt of the number. Submittal of the notification and issued number documentation to the CPM is only needed once unless there is a change in ownership, operation, waste generation, or waste characteristics that requires a new notification to USEPA. Documentation of any new or revised hazardous waste generation notifications or changes in identification number shall be provided to the CPM in the next scheduled compliance report.

~~**WASTE-7** Upon notification of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts, and describe how the violation will be corrected.~~

~~**Verification:** The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the way project-related wastes are managed.~~

Justification for Change: This condition has been removed for the following reasons:

1. Many contractors are national organizations – an enforcement action against one division somewhere in the country doesn't necessarily mean a problem at the facility;

2) "enforcement action" is not defined and the mere fact of an impending enforcement action cannot appropriately be understood to mean that the "accused" is guilty before the issue is resolved.

3) "when the owner becomes aware" is very vague – how does one establish when and if the owner becomes aware of this type of information

WASTE-8 The project owner shall provide a reuse/recycling plan for at least 50 percent of construction and demolition materials prior to any building or demolition. The project owner shall ensure compliance and shall provide proof of compliance documentation to the CPM, including a recycling and reuse summary report, receipts, and records of measurement. Project mobilization and construction shall not proceed until the CPM issues an approval document.

Verification: At least 60 days prior to the start of any construction or demolition activities, the project owner shall submit a reuse recycling plan to the CPM for review

and approval. The project owner shall ensure that project activities are consistent with the approved reuse/recycling plan and provide adequate documentation of the types and volumes of wastes generated, how the wastes were managed, and volumes of wastes diverted. Project mobilization and construction shall not proceed until CPM issues an approval document. Not later than 60 days after completion of project construction, the project owner shall submit documentation of compliance with the diversion program requirements to the CPM. The required documentation shall include a recycling and reuse summary report along with all necessary receipts and records of measurement from entities receiving project wastes.

WASTE-9 The project owner shall prepare an Operation Waste Management Plan for all wastes generated during operation of the Genesis Solar Energy facility and shall submit the plan to the CPM for review and approval. The plan shall contain, at a minimum, the following:

- A detailed description of all operation and maintenance waste streams, including projections of amounts to be generated, frequency of generation, and waste hazard classifications;
- Management methods to be used for each waste stream, including temporary on-site storage, housekeeping and best management practices to be employed, treatment methods and companies providing treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/source reduction plans;
- Information and summary records of conversations with the local Certified Unified Program Agency and the Department of Toxic Substances Control regarding any waste management requirements necessary for project activities. Copies of all required waste management permits, notices, and/or authorizations shall be included in the plan and updated as necessary;
- A detailed description of how facility wastes will be managed, and any contingency plans to be employed, in the event of an unplanned closure or planned temporary facility closure; and
- A detailed description of how facility wastes will be managed and disposed of upon closure of the facility.

Verification: The project owner shall submit the Operation Waste Management Plan to the CPM for approval no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions to the CPM within 20 days of notification from the CPM that revisions are necessary.

The project owner shall also document in each Annual Compliance Report the actual volume of wastes generated and the waste management methods used during the year; provide a comparison of the actual waste generation and management methods used to those proposed in the original Operation Waste Management Plan; and update the Operation Waste Management Plan as necessary to address current waste generation and management practices.

WASTE-10 The project owner shall ensure that all spills or releases of hazardous

substances, hazardous materials, or hazardous waste are documented and cleaned up and that wastes generated from the release/spill are properly managed and disposed of, in accordance with all applicable federal, state, and local requirements.

Verification: The project owner shall document management of all unauthorized releases and spills of hazardous substances, hazardous materials, or hazardous wastes that are in excess of EPA's reportable quantities (RQ), that occur on the project property or related linear facilities during construction and on the property during operation. The documentation shall include, at a minimum, the following information: location of release; date and time of release; reason for release; volume released; how release was managed and material cleaned up; amount of contaminated soil and/or cleanup wastes generated; if the release was reported; to whom the release was reported; release corrective action and cleanup requirements placed by regulating agencies; level of cleanup achieved and actions taken to prevent a similar release or spill; and disposition of any hazardous wastes and/or contaminated soils and materials that may have been generated by the release. A copy of the unauthorized release/spill documentation shall be provided to the CPM within 30 days of the date the release was discovered.

Justification for Change: This condition requires ALL spills to be reported, therefore this would include every drip and leak from every connector or valve which is an unreasonable burden. The condition has been altered to require reporting of spills above EPA's reportable quantities (RQ) limits. The verification has also included the words "during construction and on the property during operation" as the Project owner will not be operating the liner facilities therefore will have no knowledge or control over these activities.

C.13.12 CONCLUSIONS

Consistent with the three main objectives for staff's waste management analysis (as noted in the Introduction section of this analysis), staff provides the following conclusions:

After review of the applicant's proposed waste management procedures, staff concludes that project wastes would be managed in compliance with all applicable waste management LORS. Staff notes that construction, demolition, and operation wastes would be characterized and managed as either hazardous or non-hazardous waste. All non-hazardous wastes would be recycled to the extent feasible, and nonrecyclable wastes would be collected by a licensed hauler and disposed of at a permitted solid waste disposal facility. Hazardous wastes would be accumulated onsite in accordance with accumulation time, and then properly manifested, transported to, and disposed of at a permitted hazardous waste management facility by licensed hazardous waste collection and disposal companies.

However, to help ensure and facilitate ongoing project compliance with LORS, staff proposes Conditions of Certification **WASTE-1** through **10**. These conditions would require the project owner to do all of the following:

- Ensure the project site is investigated and any contamination identified is remediated as necessary, with appropriate professional and regulatory

- Prepare Construction Waste Management and Operation Waste Management Plans detailing the types and volumes of wastes to be generated and how wastes will be managed, recycled, and/or disposed of after generation (**WASTE-4** and **9**).
- Prepare and implement a UXO Identification, Training and Reporting Plan and work plan outlining procedures to recover and dispose of ordnance, as well as complete additional field surveys (**WASTE-5**).
- Obtain a hazardous waste generator identification number (**WASTE-6**).
- ~~Report any waste management-related LORS enforcement actions and how violations will be corrected (**WASTE-7**).~~
- Comply with waste recycling and diversion requirements (**WASTE-8**).
- Ensure that all spills or releases of hazardous substances [that are in excess of EPA's RQ's](#) are reported and cleaned-up in accordance with all applicable federal, state, and local requirements (**WASTE-10**).

The existing available capacity for the Class III landfills that may be used to manage nonhazardous project wastes exceeds 160 million cubic yards. The total amount of non-hazardous wastes generated from construction, demolition and operation of the GSEP project would contribute much less than 1 percent of the projected landfill capacity. Therefore, disposal of project generated non-hazardous wastes would have a less than significant impact on Class III landfill capacity.

In addition, the two Class I disposal facilities that could be used for hazardous wastes generated by the construction and operation of GSEP have a combined remaining

capacity of 15 million cubic yards, with another 4.6 to 4.9 million cubic yards of proposed capacity. The total amount of hazardous wastes generated by the GSEP project would be less than significant in relation to the remaining permitted capacity. Therefore, impacts from disposal of GSEP generated hazardous wastes would also have a less than significant impact on the remaining capacity at Class I landfills.

Staff concludes that management of the waste generated during construction and operation of the GSEP project would not result in any significant adverse impacts, and would comply with applicable LORS, if the waste management practices and mitigation measures proposed in the GSEP project AFC and staff's proposed conditions of certification are implemented.

C.13.13 REFERENCES

CCR 2008 – California Environmental Quality Act (CEQA) Guidelines. Title 14, California Code of Regulations, section 15000 and the following (Cal. Code Regs., tit. 14, §1 5000 et seq.).

California State Water Resources Control Board (SWRCB) 2010. Geotracker website.
<http://geotracker.waterboards.ca.gov/>

California Integrated Waste Management Board (CIWMB) 2009. Jurisdictions with Construction & Demolition (C&D) Ordinances.
<<http://www.ciwmb.ca.gov/LGCentral/Summaries/33/>>

EEC 2006a – Eastshore Energy Center, LLC/ G. Trewitt (tn: 37923) Application for Certification for the Eastshore Energy Center. 09/15/2006 Rec'd 09/22/2006

GSEP 2009a (Genesis Solar Energy Project/T. Bernhardt (tn:) Application for Certification for the Genesis Solar Energy Project, Volumes 1 and 2. Submitted to the California Energy Commission, August 31, 2009.

GSEP 2009f– Applicant's Data Response Set 1A (#1 -227) for the Genesis Solar Energy Project. December 14, 2009.

Waste Management 2009 – Kettleman Hills Facility Project Update.
<http://www.kettlemanhillsfacts.com/project_update.html>

Other Resources

C.14 – Worker Safety

C.14 WORKER SAFETY

C.14.11 PROPOSED CONDITIONS OF CERTIFICATION/MITIGATION MEASURES

- WORKER SAFETY-1** The project owner shall submit to the Compliance Project Manager (CPM) a copy of the Project Construction Safety and Health Program containing the following:
- a Construction Personal Protective Equipment Program;
 - a Construction Exposure Monitoring Program;
 - a Construction Injury and Illness Prevention Program;
 - a Construction heat stress protection plan that implements and expands on existing Cal OSHA regulations as found in 8 CCR 3395;
 - a Construction Emergency Action Plan;
- and a Construction Fire Prevention Plan.

The Personal Protective Equipment Program, the Exposure Monitoring Program, the Heat Stress Protection Plan, and the Injury and Illness Prevention Program shall be submitted to the CPM for review and approval concerning compliance of the program with all applicable safety orders. The Construction Emergency Action Plan and the Fire Prevention Plan shall be submitted to the Riverside County Fire Department for review and comment prior to submittal to the CPM for approval.

Verification: At least 30 days prior to the start of construction, the project owner shall submit to the CPM for review and approval a copy of the Project Construction Safety and Health Program. The project owner shall provide a copy of a letter to the CPM from the Riverside County Fire Department stating the fire department's comments on the Construction Fire Prevention Plan and Emergency Action Plan.

- WORKER SAFETY-2** The project owner shall submit to the CPM a copy of the Project Operations and Maintenance Safety and Health Program containing the following:
- an Operation Injury and Illness Prevention Plan;
 - an Operation heat stress protection plan that implements and expands on existing Cal OSHA regulations (8 CCR 3395);
 - a Best Management Practices (BMP) for the storage and application of herbicides;
 - an Emergency Action Plan;
 - Hazardous Materials Management Program;
 - Fire Prevention Plan (8 Cal Code Regs. § 3221); and
 - Personal Protective Equipment Program (8 Cal Code Regs, §§ 3401—3411).

The Operation Injury and Illness Prevention Plan, Emergency Action Plan, Heat Stress Protection Plan, BMP for Herbicides, and Personal Protective Equipment Program shall be submitted to the CPM for review and comment concerning compliance of the programs with all applicable safety orders. The Fire Prevention Plan and the Emergency Action Plan shall also be submitted to the Riverside County Fire Department for review and comment.

Verification: ~~At least 30 days prior to the start of first fire or commissioning, the project owner shall submit to the CPM for approval a copy of the Project Operations and Maintenance Safety and Health Program. At least 30 days prior to the start of commissioning, ~~the project owner shall~~ submit the Operations Fire Prevention Plan and Emergency Action Plan to the Riverside County Fire Department and then provide a copy of any comments ~~a letter to the CPM from the Riverside County Fire Department to the CPM.~~ stating the fire department's comments on the Operations Fire Prevention Plan and Emergency Action Plan.~~

Justification for Change:

The Project Owner has no authority over the Riverside County Fire Department to make them provide comments on the Operations Fire Prevention Plan or Emergency Action Plans. Any comments received from the Riverside County Fire Department shall be passed onto the CPM.

WORKER SAFETY-3 The project owner shall provide a site Construction Safety Supervisor (CSS) who, by way of training and/or experience, is knowledgeable of power plant construction activities and relevant laws, ordinances, regulations, and standards; is capable of identifying workplace hazards relating to the construction activities; and has authority to take appropriate action to assure compliance and mitigate hazards. The CSS shall:

- have overall authority for coordination and implementation of all occupational safety and health practices, policies, and programs;
- assure that the safety program for the project complies with Cal/OSHA and federal regulations related to power plant projects;
- assure that all construction and commissioning workers and supervisors receive adequate safety training;
- complete accident and safety-related incident investigations and emergency response reports for injuries and inform the CPM of safety-related incidents; and assure that all the plans identified in Conditions of Certification Worker Safety-1 and -2 are implemented.

Verification: ~~At least 60 days prior to the start of site mobilization, the project owner shall submit to the CPM the name and contact information for the Construction Safety Supervisor (CSS). The contact information of any replacement CSS shall be submitted to the CPM within one business day.~~

The CSS shall submit in the Monthly Compliance Report a monthly safety inspection report to include:

- record of all employees trained for that month (all records shall be kept on site for the duration of the project);

- summary report of safety management actions and safety-related incidents that occurred during the month;
- report of any continuing or unresolved situations and incidents that may pose danger to life or health; and
- report of accidents and injuries that occurred during the month.

~~**WORKER SAFETY-4** The project owner shall make payments to the Chief Building Official (CBO) for the services of a Safety Monitor based upon a reasonable fee schedule to be negotiated between the project owner and the CBO. Those services shall be in addition to other work performed by the CBO. The Safety Monitor shall be selected by and report directly to the CBO and will be responsible for verifying that the Construction Safety Supervisor, as required in Condition of Certification Worker Safety-3, and for implementing all appropriate Cal/OSHA and Energy Commission safety requirements. The Safety Monitor shall conduct on-site (including linear facilities) safety inspections at intervals necessary to fulfill these responsibilities.~~

~~**Verification:** At least 60 days prior to the start of construction, the project owner shall provide proof of its agreement to fund the Safety Monitor services to the CPM for review and approval.~~

~~**Justification for Change:**~~

~~*This requires the Owner to pay the Chief Building Official (CBO) for the services of a Safety Monitor to verify that Owner's Construction Safety Supervisor is complying with all OSHA and CEC requirements. It is excessive to require the Owner to both fund a Construction Safety Supervisor and also fund another position to monitor the Owner's Safety Supervisor. The requirement for the Owner to fund the Safety Monitor should be deleted.*~~

WORKER SAFETY-5 The project owner shall ensure that a portable automatic external defibrillator (AED) is located on site during construction and operations and shall implement a program to ensure that workers are properly trained in its use and that the equipment is properly maintained and functioning at all times. During construction and commissioning, the following persons shall be trained in its use and shall be on site whenever the workers that they supervise are on site: the Construction Project Manager or delegate, the Construction Safety Supervisor or delegate, and all shift foremen. During operations, all power plant employees shall be trained in its use. The training program shall be submitted to the CPM for review and approval.

Verification: At least 60 days prior to the start of site mobilization, the project owner shall submit to the CPM proof that a portable automatic external defibrillator (AED) exists on site and a copy of the training and maintenance program for review and approval.

WORKER SAFETY-6 The project owner shall identify and provide a second access point for emergency personnel to enter the site. This access point and the method of gate operation shall be submitted to the Riverside County Fire Department for review and comment and to the CPM for review and approval.

Verification: At least sixty (60) days prior to the start of site mobilization, the project

owner shall submit to the Riverside County Fire Department and the CPM preliminary plans showing the location of a second access point gate to the site and a description of how the gate will be opened by the fire department. At least thirty (30) days prior to the start of site mobilization, the project owner shall submit final plans to the CPM review and approval. The final plan submittal shall also include a letter containing comments from the Riverside County Fire Department or a statement that no comments were received.

WORKER SAFETY-7 The project owner shall either (1) reach an agreement with the Riverside County Fire Department regarding funding of its project-related share of capital costs to build fire protection/response infrastructure and provide appropriate equipment as mitigation of project-related impacts on fire protection services, **or**, if no agreement can be reached shall (2) fund its share of the capital costs in the amount of \$350,000.

Verification: At least sixty (60) days prior to the start of site mobilization, the project owner shall provide the CEC CPM with a copy of the agreement with the RCFD or documentation that the amount of \$350,000 has been paid to the RCFD.

WORKER SAFETY-8 The project owner shall provide an annual payment of \$100,000 to the RCFD for the support of three fire department staff commencing with the date of site mobilization and continuing annually thereafter on the anniversary until the final date of power plant decommissioning.

Verification: At least 30 days prior to the start of site mobilization the project owner shall provide documentation of the payment described above to the CEC CPM.

WORKER SAFETY-9 The project owner shall develop and implement an enhanced Dust Control Plan that includes the requirements described in **AQ-SC3** and additionally requires:

- i. site worker use of dust masks (NIOSH N-95 or better) whenever visible dust is present;
- ii. site monitoring for the presence of *Coccidioides immitis* in soil before site mobilization and monthly thereafter; and
- iii. implementation of enhanced dust control methods (increased frequency of watering, use of dust suppression chemicals, etc. consistent with **AQSC4**) immediately whenever visible dust comes from or onto the site.

After three consecutive months of not finding significant soil levels of *Coccidioides immitis*, the project owner may ask the CPM to re-evaluate and revise this testing requirement.

Verification: At least 60 days prior to the commencement of site mobilization, the enhanced Dust control Plan shall be provided to the CPM for review and approval.

C.14.12 CONCLUSIONS

Staff concludes that if the applicant for the proposed GSEP project provides a Project Construction Safety and Health Program and a Project Operations and Maintenance Safety and Health Program as required by Conditions of Certification **WORKER**

SAFETY-1, and **-2** and fulfils the requirements of Condition of Certification **WORKER SAFETY-3** through-**9**, the project would incorporate sufficient measures to ensure adequate levels of industrial safety and comply with applicable LORS. Staff also concludes that the operation of this power plant, with mitigation, would not significantly impact the local fire department.

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**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
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**APPLICATION FOR CERTIFICATION FOR THE
*GENESIS SOLAR ENERGY PROJECT***

Docket No. 09-AFC-8

**PROOF OF SERVICE
(Revised 3/10/10)**

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I, Tricia Bernhardt, declare that on April 30, 2010, I served and filed copies of the *Proposed Conditions of Certification for Other Resources (excluding Biology and Soil and Water) for the Genesis Solar Energy Project*, dated April 30, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/genesis_solar].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 09-AFC-8
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

Original Signed By:



Tricia Bernhardt