

## California Regional Water Quality Control Board Lahontan Region



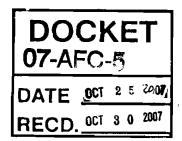
Linda S. Adams
Secretary for
Environmental Protection

Victorville Office

14440 Civic Drive, Suite 200, Victorville, California 92392 (760) 241-6583 • Fax (760) 241-7308 http://www.waterboards.ca.gov/lahontan Arnold Schwarzenegger Governor

October 25, 2007

Jack W. Caswell, Project Manager California Energy Commission 1516 Ninth Street, MS-15 Sacramento, CA 95814



## COMMENTS ON IVANPAH SOLAR ELECTRIC GENERATING SYSTEM, APPLICATION FOR CERTIFICATION (07-AFC-5), SAN BERNARDINO COUNTY

The California Regional Water Quality Control Board, Lahontan Region (Water Board) staff has reviewed the above-referenced Application for Certification transmitted by your September 12, 2007 letter. The following are Water Board staff's comments and potential issues of concern.

- 1. The proposal to pump an additional 100 acre-feet per year of groundwater from the eastern edge of the Ivanpah Valley could adversely affect groundwater quality. The additional groundwater withdrawal may create a pumping depression at the edge of the Valley where the quality of groundwater is good. This may cause poorer quality groundwater in the center of the Valley to migrate to the pumping depression where the quality of groundwater is higher. At the center of the Valley, there is both naturally-occurring poor quality groundwater and groundwater whose quality has deteriorated further due to percolation of wastewater from waste disposal ponds to groundwater. The ponds are owned by Molycorp, Inc.
- 2. Proposed concrete lined surface impoundments for emergency wastewater discharges may (or may not) be an issue depending on the quality of the wastewater, frequency of discharge, amount of time wastewater remains in impoundments, etc.
- 3. The proposal to recycle treated domestic wastewater by irrigating landscape did not describe the method for application of irrigation water. There are both sub-surface and above ground surface methods. Requirements for such systems are summarized as follows:
  - a. Above-ground surface irrigation system:
    - Under California Code of Regulations, Title 22, section 60323 (Title 22, Section 60323), file an engineering report with the California Department of Health Services and obtain their recommendations.

California Environmental Protection Agency



- Report must include package treatment plant design plans certified by a properly qualified engineer registered in the State of California. The treatment plant design must comply with Title 22, section 60333 through 60355.
- ii. Under Water Code Section 13260, file an application with the Lahontan Water Board and obtain Waste Discharge and Water Recycling Requirements (Requirements) and an attached Monitoring and Reporting Program (MRP). The Requirements will include those requirements in Title 22, section 60301.230. The attached MRP will include monitoring requirements described in Title 22, section 60321.
- iii. Hire a certified operator to operate package domestic wastewater treatment plant.
- b. Sub-surface irrigation system (e.g. 18 inches below the ground surface) with treatment by a package domestic wastewater treatment plant:
  - i. File any application (e.g., cross-connection control application) that California Department of Health Services may require.
  - ii. Under Water Code Section 13260, file an application with the Lahontan Water Board and obtain Waste Discharge and Water Recycling Requirements (Requirements) and an attached Monitoring and Reporting Program (MRP).
  - iii. Hire a certified operator to operate package domestic wastewater treatment plant.
- c. For a conventional septic tank and sub-surface disposal system, file an application with the San Bernardino County Department of Environmental Health Services (DEHS) and obtain a permit for system from DEHS.

If you have any questions, please call me at (760) 241-7305.

Sincerely.

**Curt Shifrer** 

Water Resources Control Engineer

CS\rc\ISEGS AFC Itr