



Colorado River Basin Regional Water Quality Control Board

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COLORADO RIVER BASIN REGIONAL WATER QUALITY CONTROL BOARD COMMENTS REGARDING THE DRAFT 401 WATER QULTIY CERTIFICATION FOR THE EAGLE MOUNTAIN PUMPED STORAGE HYDROELECTRIC PROJECT – FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 13123

The Colorado River Regional Water Quality Control Board (Colorado River Basin Regional Water Board or Regional Water Board) has the following comments regarding the Draft 401 Water Quality Certification (certification) for the Eagle Mountain Pumped Storage Project (Project) circulated by the State Water Resources Control Board (State Water Board) on June 27, 2012:

- 1. Section 2.2.3.1 and Condition 6 of the certification discuss potential impacts from reservoir seepage.
 - a. Within Section 2.2.3.1 the "Colorado River Basin Regional Water Board Numeric Standards of Inorganic Chemical Constituents for MUN Use Designation" are reproduced from the Colorado River Basin Regional Water Board's Water Quality Control Plan for the Colorado River Basin Region (Basin Plan). However, the relevant Basin Plan text states that wherever existing water is better than the quality established herein as objectives, such water quality shall be maintained (emphasis added).
 - b. It is unclear what is meant by "Project waters" discussed under "Potential Impacts from Reservoir Seepage". It is the Regional Water Board's understanding that "Project waters" refers to water which may be discharged from the Project and affect the groundwater aquifer beneath the Upper and Lower Reservoirs (Central Project Area).
 - c. The Regional Water Board would like to clarify what it considers applicable water quality standards for waters that may seep or be discharged from the reservoirs.

Water quality objectives in the Basin Plan apply only to "controllable water quality factors." "Controllable water quality factors are those actions, conditions, or circumstances resulting from people's activities which may influence the quality of the waters of the State and which may feasibly be controlled. When other factors result in the degradation of water quality beyond the levels or limits established...as water quality objectives, the controllable factors shall not cause further degradation of water quality." Therefore, those factors which contribute to water quality that are not controllable are not subject to the water quality objectives.

With respect to groundwater quality objectives, the Regional Water Board's goal is to maintain the existing water quality of all non-degraded high quality groundwater basins. Therefore, the Regional Water Board's objective is to maintain existing water quality in the Chuckwalla Groundwater Basin. Discharges from the Project should not cause or contribute to further degradation - for the life of the Project - of groundwater quality or aquifer properties (e.g., decrease hydraulic conductivity, or transmissivity), and the Project should be conditioned accordingly.

Based on the above discussion, it is the opinion of the Regional Water Board that Condition 6 should be clarified to reflect that the discharge, and any controllable factors attributable to the Project, <u>must not cause or contribute to degradation of the existing background water quality of the aquifer beneath the reservoirs</u>. Background groundwater quality beneath each reservoir should be established prior to the commencement of Project construction with a minimum of three wells.

2. The certification is contingent on the approval by the State Water Board of specific studies and plans. The purpose of requiring approval of these plans/studies is to further assess site conditions to ensure all water quality impacts are addressed. The Regional Water Board supports inclusion of an additional requirement: a Project contingency plan. The Project contingency plan would cover actions the Project applicant must take if it is determined that, based on Project operations, degradation of the underlying ground water was occurring. Such a contingency plan must cover how the applicant will modify Project operations, or even cease operations if a threat to groundwater quality is encountered that cannot be adequately addressed through existing or additional operational mechanisms, as well as how ground waters will be restored to their preproject condition.

Please be advised, if adverse impacts to water quality or aquifer properties are observed in the project area in violation of conditions of the certification the State Water Board may take any enforcement action authorized by Water Code section 13385, to mitigate or eliminate impacts to water quality or aquifer properties.

Monitoring wells:

Regional Board staff request that the certification provide additional information regarding horizontal monitoring wells located beneath the reservoirs. Monitoring wells installed directly beneath the reservoir linings are necessary to determine, as early as possible, whether seepage may cause groundwater degradation.

4. Finally, staff recommend replacing the word "should" with "shall" throughout the WQC - in particular in Conditions 2 through 8 – to ensure enforceability.

Thank you for the opportunity to comment on the draft 401 Water Quality Certification for this project

Sincerely

Jon Rokke

Water Resources Control Engineer

Colorado River Basin Regional Water Quality Control Board