



California Regional Water Quality Control Board
Lahontan Region



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JUN 16 2009

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IN THE MATTER OF VIOLATION OF CALIFORNIA)
 WATER CODE SECTION 13267 ORDER TO SUBMIT)
 TECHNICAL REPORTS, U.S. FOREST SERVICE-) **NOTICE OF**
 LASSEN NATIONAL FOREST, EAGLE LAKE) **VIOLATION**
 WASTEWATER FACILITY, LASSEN COUNTY,)
 WDID NO. 6A188505700)

The purpose of this Notice of Violation (NOV) is to (1) document violations of California Water Code section 13267 related to the California Regional Water Quality Control Board, Lahontan Region's (Water Board) October 1, 2008 Order to Submit Technical Reports (Order), and (2) to follow up on Water Board staff's initial comments¹ regarding the United States Forest Service's (USFS) *Work Plan, Soil and Groundwater Investigation for Eagle Lake Wastewater Facility, Lassen National Forest, Lassen County CA, January 2009* (transmittal letter dated April 27, 2009; received by Water Board staff on April 29, 2009, 186 days late). Based upon our May 18, 2009 meeting, and subsequent conversations with USFS staff, I am confident that USFS staff will produce a more comprehensive Work Plan in response to the comments and direction provided below.

Comments

Requirements for the Soil and Groundwater Investigation Work Plan were identified in the Water Board's October 1, 2008 Order to Submit Technical Reports. The requirements for the Work Plan are listed below in *italics*, followed by an analysis as to whether the required information was included in the technical report.

The Soil and Groundwater Investigation Work Plan must, at a minimum, include the following information:

¹ Water Board staff's initial comments were provided during its May 18, 2009 meeting with Lassen National Forest staff.

- a. *A description of plans to collect data necessary to adequately describe the stratigraphy of soil surrounding the Facility, and any soils or other geological features which may affect groundwater movement and aquifer location(s).*

The required description is not provided in the Work Plan, nor is an explanation regarding its absence.

- b. *Proposed locations for soil investigation points (e.g., borings), with justification for each location.*

The Work Plan includes five soil sample locations where samples would be collected using a backhoe at two feet below ground surface (bgs) and six feet bgs, for a total of 10 soil samples. The Work Plan, however, does not include any justification for selecting the specific sampling locations or sampling depths.

- c. *A description of plans to collect data necessary to determine the concentrations of the constituents of concern in first-encountered groundwater up-gradient and down-gradient of the Facility. Constituents of concern include nitrate-nitrogen, total Kjeldahl nitrogen, total nitrogen, pH, total dissolved solids, chlorides, total coliform, and fecal coliform.*

The Work Plan does not include a description of plans to collect data necessary to determine the concentrations of the constituents of concern in **first-encountered** groundwater up-gradient and down-gradient of the Facility. Instead, the Work Plan proposes to collect water samples from the Merrill Flat Livestock Well and the Merrill Campground Well. The Livestock Well is located approximately 150 feet southeast of Primary Pond #1, has a completed depth of approximately 400 feet bgs, and a depth to water of 359 feet bgs. The Merrill Campground Well is located approximately two miles from the Facility, and has a completed depth of 96 feet bgs, and a depth to water of 33 feet bgs.

It is impossible to tell if either of these wells is screened across the **first-encountered** groundwater unit as no boring or construction logs are included. Additionally, the Merrill Campground Well is located two miles from the Facility, which is an excessive distance for this well to be used in accurately determining the Facility's impact on groundwater quality.

- d. *A description of plans necessary to determine groundwater elevations, groundwater gradient, and groundwater flow direction.*

No description of plans for determining groundwater elevations, groundwater gradient, and groundwater flow direction are included in the Work Plan. Water Board staff can surmise that the USFS is proposing to use the two wells identified in the Work Plan for gathering the required information, but there are unresolved issues described in the previous paragraph regarding those two wells. Additionally, groundwater elevations from a minimum of three monitoring points are required to

accurately determine groundwater flow direction, and the Work Plan proposes only two well locations for sampling.

- e. *A sampling and analysis plan that includes the quality assurance and quality control procedures necessary to ensure valid and representative data is obtained and reported. The sampling and analysis plan must also include procedures/methods that provide data that satisfies the enclosed reporting limits for the constituents of concern (Enclosure 1).*

The Work Plan provides insufficient information for an acceptable sampling and analysis plan. Water Board staff expects to see a sampling and analysis plan that at a minimum identifies (1) analytical method numbers for each parameter and the minimum reporting limit for each analytical method; (2) monitoring well preparation techniques that defined a properly purged well; (3) specific sampling techniques including container preparation and minimum sample quantity²; (4) specific sample preservation methods; (5) specific holding times; (6) chain-of-custody procedures including a blank chain-of-custody form; (7) inclusion of a travel blank in addition to the proposed split sample; (8) lab QA/QC methods and procedures, and confirmation that the USFS is using a California ELAP Certified lab for all of the analytical methods.

- f. *Proposed locations and designs for groundwater monitoring wells with justification for each location.*

There are no new monitoring wells proposed in the Work Plan. Additionally, the Work Plan does not provide any boring or construction logs for either of the two existing wells the USFS proposes to use for groundwater monitoring. Finally, the Work Plan does not provide any justification regarding the adequacy of the existing wells for investigating the Facility's impacts upon groundwater quality.

- g. *A schedule for implementing the work plan that results in submittal of the Soil and Groundwater Investigation Report by January 2, 2009.*

The Work Plan does not include an implementation schedule. Instead, the Work Plan states that the Soil and Groundwater Investigation Report will be submitted within 20 working days after receiving the analytical results. Staff expects to see a schedule that identifies when well drilling, if applicable, soil and water sampling, and sample analysis will be completed. Water Board staff expects the USFS to specify a relatively short turnaround time (i.e., maximum of two weeks) between submitting the samples and receiving the analytical results from the lab.

Based upon the deficiencies listed above, Water Board staff has determined that the Work Plan is incomplete, which constitutes a violation of California Water Code section 13267.

² Identify any additional sample quantities related to QA/QC requirements.

Recommended Actions

Water Board staff recommends that you and your staff review the deficiencies outlined above. Following your review, Water Board staff recommends submitting a revised Soil and Groundwater Investigation Work Plan that addresses the above-referenced deficiencies, rather than a letter that simply addresses each comment. Submit the revised Work Plan as soon as possible. As you are aware, Water Board staff is preparing a Cleanup and Abatement Order (CAO) to address the Facility's liner conditions and potential water quality impacts. Staff plans to include a new deadline for submitting the Soil and Groundwater Investigation Work Plan if staff has not received the Work Plan prior to issuing the CAO. If the CAO includes such a deadline, it will be a relatively short time period to comply.

Based upon conversations with your staff, Water Board staff understands that the USFS is already working on addressing many of the above-referenced deficiencies. Water Board staff appreciates the USFS's increased efforts to address the conditions at the Facility, and to begin assessing the Facility's water quality impacts. Please contact Taylor Zentner at (530) 542-5469, or me at (530) 542-5432, if you have any questions regarding these matters.



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