

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

MEETING OF NOVEMBER 16, 2010
South Lake Tahoe

ITEM: 4

SUBJECT: **REVISED WASTE DISCHARGE REQUIREMENTS FOR
U.S. FOREST SERVICE – LASSEN NATIONAL FOREST
EAGLE LAKE WASTEWATER FACILITY, LASSEN COUNTY**

CHRONOLOGY:

June 28, 1973	Water Board Order No. 6-73-77 adopted, first Waste Discharge Requirements (WDRs) for the Facility.
June 6, 1975	Water Board Order No. 6-75-56 adopted to update the WDRs.
June 13, 1985	Water Board Order No. 6-85-57 adopted including WDRs for the first lined evaporation basins.
September 8, 1994	Water Board Order No. 6-94-94 adopted to update the WDRs

ISSUES: Should the Water Board adopt updated WDRs for the U.S. Forest Service (Discharger) Facility as needed to allow for modifications to upgrade the treatment and disposal of wastewater to meet Basin Plan requirements? Should the Water Board require the Discharger to design disposal ponds (evaporation ponds) to California Code of Regulations (CCR) title 27 design standards?

DISCUSSION: The Discharger operates an existing sewage treatment and disposal system that provides services for a picnic area, marina, campgrounds and a children's camp at the south end of Eagle Lake. The treatment and disposal facility (Facility) is designed to treat and dispose of up to 2.83 million gallons of wastewater yearly. The Facility is made up of a primary pond that is constructed from local clay soils and has 36-mil hypalon membrane liner on the side slopes of the pond. A second primary pond and the three evaporation ponds (disposal ponds) are fully lined with 36-mil hypalon membrane liner.

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The Discharger has had a difficult time maintaining the integrity of the pond liners at the Facility in the last several years. Liner damage was exposed annually by the receding water in the evaporation ponds. The Water Board required the Discharger to conduct investigations at the Facility. An investigation of the lined ponds showed a number of holes present beneath the surface of the treated wastewater (not visible). A preliminary ground water investigation by the Discharger indicated nutrient as nitrate at concentrations staff consider indicative of wastewater impacts.

The Water Quality Control Plan for the Lahontan Region (Basin Plan) contains the following specific prohibition for the U.S. Forest Service within the Eagle Lake basin.

"The discharge of wastes containing nutrients from the wastewater treatment facility on lands administered by the U.S. Forest Service, Lassen National Forest, to surface waters or ground waters in the Eagle Lake basin is prohibited."

The data provided by the Discharger as a result of required monitoring, reporting and investigations is insufficient to demonstrate compliance with the Basin Plan prohibition.

The Discharger is in a process to replace the liners and upgrade the Facility and has requested revised WDRs that allow for a design-build contract. The Discharger has initiated contracts to complete the upgrades by the end of 2012. The Discharger has not demonstrated that the current waste containment system prevents nutrient discharges associated with wastewater to the local ground water. Therefore, Water Board staff reviewed waste control standards in CCR title 27 as applicable to the Facility.

Sewage treatment ponds are precluded from being held to title 27 standards due the California Water Code section 13172 and may comply with Basin Plan requirements by any means acceptable to the Water Board. However, based on the analysis, the disposal ponds are required to meet the design requirements for surface impoundments in CCR title 27. The Board Order therefore requires the Discharger to propose a Facility design and a monitoring program for the disposal ponds that will satisfy CCR title 27 prescriptions for waste containment. For the treatment ponds the Discharger must propose a design and monitoring program that will demonstrate that no prohibited nutrient discharges are occurring in violation of above-cited Basin Plan prohibition.

The Discharger is not in compliance with the existing WDRs and will not be in compliance with these updated WDRs if adopted as proposed. The WDRs establish the standards to be met for waste control at the Facility. The Water Board retains discretion to consider additional actions to enforce the requirements as may be necessary or desirable and staff intends to propose additional actions to remedy the noncompliance.

Comments were solicited on tentative WDRs and a public notice was published in the Lassen County Times on September 21, 2010. Comments were provided by the Discharger (see Enclosure 3) that are addressed in the proposed Order (Enclosure 2).

RECOMMENDATION:

Adopt the Order as proposed.

Enclosures:

1. Fact Sheet
2. Proposed Board Order
3. Discharger comments on tentative WDRs

ENCLOSURE 1

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**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION
FACT SHEET**

ITEM NO: 4

DISCHARGER NAME: U.S. National Forest Service
Lassen National Forest

FACILITY TYPE: Wastewater disposal site, CCR title 27

PROJECT NAME: Eagle Lake Wastewater Facility

WDID NO.: 6A188505700

LOCATION: Approximately one mile south of Eagle Lake, Lassen County

TYPE OF WASTE: Municipal domestic waste (sewage)

PROGRAM: Waste Discharge Requirements (WDRs)

TREATMENT FACILITIES: Primary Settling

DISPOSAL FACILITIES: Lined evaporation ponds

PRESENT FLOW: Annual flow less than 2.8 million gallons

RECEIVING WATERS: Ground waters of the Eagle Lake Valley

BENEFICIAL USES: Ground waters – Municipal and domestic supply (MUN)
Agricultural (AGR)
Freshwater replenishment (FRSH)

CEQA COMPLIANCE: Water Board, acting as Lead Agency, adopted a mitigated negative declaration

LANDOWNER: Lassen National Forest

NEARBY DEVELOPMENT: Open land, cattle grazing, Forest Service campground

NATURE OF AREA: Mountain lake, closed watershed basin

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ENCLOSURE 2

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

BOARD ORDER NO. R6T-2010-(PROPOSED)
WDID NO. 6A188505700

REVISED WASTE DISCHARGE REQUIREMENTS

FOR

U.S. FOREST SERVICE – LASSEN NATIONAL FOREST
EAGLE LAKE WASTEWATER FACILITY

Lassen County

The California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. Discharger

For the purposes of this Order, the United States Department of Agriculture, United States Forest Service, Lassen National Forest, is referred to as the "Discharger."

2. Facility

The Discharger operates an existing sewage collection, treatment and disposal system that provides services for a picnic area, marina, campgrounds and a children's camp at the south end of Eagle Lake. The Discharger's sewage treatment and evaporation ponds are referred to as the "Facility." The Facility is located approximately one mile south of Eagle Lake in Lassen County, Section 21, T31N, R10E, MDB&M. See Attachment "A" for the vicinity map of the Facility.

The Facility design allows for the treatment and disposal of up to 2.83 million gallons of wastewater yearly. The untreated sewage is pumped uphill for a couple of miles and into the Facility. The Facility consists of two primary settling ponds (treatment ponds) and three evaporation ponds (disposal ponds). The first primary pond has a clay bottom constructed from clay soils at the Facility site, with a 36-mil hypalon membrane liner on the side slopes. The second primary pond and the three evaporation ponds are fully lined with 36-mil hypalon membrane liner.

3. Order History

The Water Board previously established Waste Discharge Requirements (WDRs) for the Facility under Board Order No. 6-94-94 adopted on September 8, 1994. Earlier WDRs were established under Board Order No. 6-85-57 adopted June 13, 1985, and Board Order No. 6-75-56 adopted June 6, 1975.

4. History

In 2007 and 2008 the Water Board received complaints from the public about the liners for the Facility ponds having a number of visible holes. Water Board staff conducted follow up inspections and confirmed a number of holes present in the liners. A series of Water Board enforcement actions were initiated requiring the Discharger to conduct investigations on both the integrity of the pond liners and on potential effects on ground water. Various holes in the liners were repaired in response to the Water Board actions. An October 2009 investigation report on the pond liners at the site confirmed the ponds have additional holes not visible from the surface and the liners are leaking.

The ground water investigation has not been sufficient to determine to what extent the leaking ponds may have impacted the ground water. However, preliminary data indicates ground water may be present 10 feet below the ground surface in the area of the Facility. The limited ground water sampling indicated nitrate as nitrogen concentrations as high as 5.5 mg/l. Ground water appears to be impacted by nitrate constituents originating from the Facility.

5. Violations and Reason for Action

The condition of the Facility is such that holes in the pond liners would allow for substantial leaks from the Facility ponds. The leaks are discharges in violation of Board Order No. 6-94-94 requirements, including, but not limited to:

I.C.1. "Any discharge from the Facility with other than a zero discharge of nutrients to surface waters or ground waters in the Eagle Lake basin is prohibited."

I.C.2. "There shall be no discharge, bypass, or diversion of raw or partially treated sewage, sewage sludge, grease, or oils from the collection, transport, treatment, or disposal facilities to adjacent land areas or surface waters."

I.C.8. The integrity of pond liners shall be maintained throughout the life of the ponds and shall not be diminished as the result of any maintenance or cleaning operation.”

The Discharger has proposed to resolve the ongoing violations by constructing a new evaporation pond, modifying and relining the existing ponds, and constructing a sludge drying bed, but has not filed a report of the significant changes proposed to the Facility with the Water Board as required pursuant to California Water Code (CWC) section 13260. Therefore, in accordance with CWC section 13263, these revised WDRs are being prescribed even though no report of waste discharge has been filed. In response to these violations, Water Board staff intends to present a Cease and Desist Order pursuant to CWC section 13301 that will direct compliance with these revised WDRs, forthwith or in accordance with a time schedule determined by the Water Board.

6. Wastewater Characterization

Wastewater that enters the Facility consists of sewage from picnic areas, marina, campgrounds and a children's camp at Eagle Lake. The wastewater is similar to that which any publicly-owned treatment system receives, including nitrogen and phosphorus constituents, which are considered "nutrients" for the purposes of this Order. The wastewater receives primary treatment (settling) and disposal pond sampling in 2008 and 2009 indicated total nitrogen in the range from 3 mg/l to as high as 94 mg/l.

7. Waste Classification

Pursuant to the CWC section 13173 waste classification provisions, a "designated waste" is defined as the following:

(b) "Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan."

The sewage discharged at the Facility is nonhazardous within the meaning of Section 13173 but contains elevated levels of nitrogen and phosphorus as does all domestic wastewater. The treated wastewater in the disposal ponds is being released and could be impacting the beneficial use of the ground water. As noted in Finding No. 6, total nitrogen in the disposal ponds was measured at a concentration as high as 94 mg/l. Under ambient

environmental conditions, such total nitrogen releases from the ponds would be expected to be converted to nitrate and/or nitrite at levels above applicable standards. The treated wastewater satisfies the definition of a designated waste in that it contains pollutants that could affect the beneficial uses of the ground or surface waters of the State.

8. Basin Plan and Prohibition

The Water Board adopted the *Water Quality Control Plan for the Lahontan Region* (Basin Plan), which became effective in 1995. This Order implements the requirements of the Basin Plan. The following Basin Plan prohibition is applicable specifically to the Facility.

"The discharge of wastes containing nutrients from the wastewater treatment facility on lands administered by the U.S. Forest Service, Lassen National Forest, to surface waters or ground waters in the Eagle Lake basin is prohibited."

The Discharger has not provided sufficient monitoring data or other information to demonstrate compliance with the prohibition and that the pond liners have prevented releases of nutrients to the ground water over the years of operation.

9. Regulations for Wastewater Treatment and Disposal

California Water Code (CWC) Section 13172 directed the State Water Resources Control Board to write regulations for waste disposal sites to protect water quality "except for sewage treatment plants..." Those regulations are now incorporated in the California Code of Regulations (CCR) title 27 for waste disposal sites and surface impoundments. The Facility has primary ponds for the treatment of the wastewater that are statutorily exempt from CCR title 27. Regulation is appropriate for the treatment ponds under CCR title 23. The disposal ponds for the Facility are not exempt from CCR title 27, as discussed below.

10. California Code of Regulations Title 27

CCR title 27, section 20090, defines in regulation the activities that may be exempt from CCR title 27 requirements; the section provides a list of preconditions that must be met for the exemptions to apply. Section 20090(b) is the most applicable exemption, applying to discharges of wastewater to land, including evaporation ponds. The full text of the exemption follows"

"The following activities shall be exempt from the [State Water Resources Control Board] SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:

- (b) Wastewater -Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:*
- (1) the applicable RWQCB [Water Board] has issued WDRs, reclamation requirements, or waived such issuance;*
 - (2) the discharge is in compliance with the applicable water quality control plan; and*
 - (3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.*

The discharge to the disposal ponds is regulated by WDRs that are consistent with the Basin Plan. However, the Discharger is not in compliance with WDRs in Board Order No. 6-94-94. In addition, the Discharger has not provided sufficient information to prove that the leaks from the disposal ponds have not adversely affected the ground water and that the discharge is in compliance with the Basin Plan prohibition, "The discharge of wastes containing nutrients from the wastewater . . . to surface waters or ground waters in the Eagle Lake basin is prohibited." Preliminary ground water data indicates that the shallow ground water has received nutrients from the Facility (nitrate as nitrogen concentration of up to 5.5 mg/l found in the shallow ground water). The waste in the disposal ponds does not need to be managed as a hazardous waste.

The Discharger cannot demonstrate compliance with the Basin Plan requirements. Therefore, the discharge to the disposal ponds does not meet the section 20090(b) preconditions for exemption from CCR title 27 requirements. The disposal ponds are not exempt from CCR title 27 and must be designed and constructed, at a minimum, to the standards contained in the regulation.

11. Disposal Pond Unit Classification

The waste discharged to the disposal ponds meets the definition of a designated waste as discussed in Finding No. 7 of this Order. The disposal ponds are not exempt from the CCR title 27 design requirements. The disposal ponds meet the criteria for a Class II surface impoundment and must be designed and constructed as specified in CCR title 27.

12. Regulatory Requirements for Facility Treatment Ponds

Pursuant to CWC 13172 the treatment ponds are exempt from CCR title 27 requirements. Requirements applicable to the discharge are established in CCR title 23. Pursuant to CWC section 13360(a), no waste discharge requirement or other order established (under title 23) “. . . shall specify the design, location, type of construction, or particular manner in which compliance may be had with that requirement or order . . . and the person so ordered shall be permitted to comply with the order in any lawful manner” This statute is applicable to the treatment ponds at the Facility. Design and construction must ensure compliance with WDRs through application of appropriate design standards, together with consideration of information on site and subsurface soil and water quality conditions. To demonstrate compliance with Basin Plan requirements and WDRs, pursuant to CWC section 13360, the Discharger may use specifications like CCR title 27 for the treatment ponds or the Discharger may use any other means to comply that is lawful. Verification monitoring requirements will be established, subject to modification by the Executive Officer, to demonstrate that the treatment ponds discharges are in compliance with WDRs, and may include quality assurance verification and reporting procedures for the treatment pond design and construction (similar to title 27 QA/QC reporting procedures, but under other authority).

13. Sludge Treatment and Disposal

The Discharger has not reported any sludge being removed from the Facility since the Board Order was updated in 1994. The Discharger is now planning for the removal of sludge accumulated in the bottom of the ponds. The Discharger has not fully described the on-site sludge handling processes that will be used (typically storage areas, and drying or dewatering processes, are described), or the method of final disposal for the sludge. The Discharger has described proposed sludge drying facilities only for processing sludge and to assist in drying or otherwise treating the sludge prior to proper disposal at an authorized facility (e.g., meeting the title 27 requirements for landfills). This Order requires the Discharger to provide a detailed sludge disposal plan to the Executive Officer for acceptance prior to sludge removal from the Facility. Sludge disposal on site is not authorized by this Order.

14. Action Leakage Rate

An action leakage rate (ALR) is established based on design dimensions and specifications of a surface impoundment, and a 1992 United States Environmental Protection Agency (USEPA) guidance document, *Action Leakage Rates for Leak Detection Systems, Supplemental Background*

Document for the Final Double Liners and Leak Detection Systems Rule for Hazardous Waste Landfills, Waste Piles, and Surface Impoundments. An ALR of no more than 20 gallons/day/acre through the upper liner of the double-lined surface impoundment into a leachate collection sump must be included in the surface impoundment design plans for evaporation ponds at this Facility.

15. Site Geology

The Eagle Lake region has outcrops of basalt, older lake deposits and recent lake deposits. Natural clay materials have been identified in the subsurface and laboratory test results on the potential permeability of soils in the shallow subsurface formation were in the range of 8.7×10^{-5} cm/sec to 1.6×10^{-7} cm/sec. The Discharger has plans to site a new water supply well at the Facility that may provide additional information on the site geology.

16. Hydrogeology

On December 8, 2009, the Water Board received from the Discharger a hydrogeologic investigation report by Cascade Earth Sciences. The investigation found ground water within 10 feet of the land surface at the Facility. Additional subsurface investigation must be accomplished at the Facility to understand the local subsurface hydrogeology and ground water quality. There are verbal reports from the Discharger that an onsite well supplies ground water from approximately 300 feet or more below ground surface.

17. Site Hydrology

The Facility is located at Merrill Flat, adjacent to a meadow that forms the headwaters of Merrill Creek. The nearest surface water, Merrill Creek, is an ephemeral drainage tributary to Eagle Lake. The Facility and Merrill Creek channel are on opposite sides of the Merrill Flat meadow. Merrill Creek is down gradient from the Facility and is a potential receiving water for any pond overflows or discharge to the groundwater. The Facility is located at an approximate elevation of 5460 feet above mean sea level. Water Board Resolution No. 82-6 defines the high water line of Eagle Lake to be 5117.5 feet. The Facility is roughly 340 feet above the high water line of Eagle Lake and one mile from the shoreline of Eagle Lake.

18. Authorized Disposal Sites

The authorized disposal sites for the discharge of treated sewage are the Evaporation Ponds 1, 2, and 3, and planned Evaporation Pond 4. No other disposal site is authorized.

19. Technical Requirements

The disposal ponds must meet all applicable design requirements in CCR title 27 for Class II surface impoundments, hereby incorporated by reference. The Discharger, as part of the monitoring and reporting requirements established in this Order, must develop the following list of items and satisfy all applicable portions of each section:

- a. Pursuant to sections 20310 through section 20375 the Discharger will design and construct the Class II surface impoundments to satisfy the requirements of these sections.
- b. Pursuant to section 20390 the Discharger will produce Water Quality Protections Standards (WQPS) that will satisfy the requirements of this section. The WQPS will consist of constituents of concern (including monitoring parameters such as total nitrogen and total phosphorus), concentration limits, Monitoring Points, and the Point of Compliance.
- c. Pursuant to section 20400 the Discharger will comply with all applicable portions of this section and will produce concentration limits for the constituents of concern generated for the WQPS above.
- d. Pursuant to section 20415 the discharger will produce a Ground Water Monitoring Program to satisfy the requirements of this section.
- e. Pursuant to section 20420 the Discharger will produce a Detection Monitoring Program to satisfy the requirements of this section.
- f. Pursuant to section 20425 the Discharger will produce an Evaluation Monitoring Program to satisfy the requirements of this section.

20. Engineered Alternative to the Prescriptive Standard for Surface Impoundments

The Discharger may propose an engineered alternative design to prescriptive design requirements in CCR title 27 for the disposal ponds. However, if the Discharger proposes an engineered alternative design that does not meet CCR title 27 design requirements, the Discharger must demonstrate that the alternative design will provide water quality protection meeting or exceeding the requirements contained in CCR title 27. Additionally, alternative designs for the disposal ponds are not authorized in this Board Order so any engineered alternative design will require that the Board Order be reopened to allow the Water Board to consider revised WDRs at a noticed public meeting.

21. Protection From Storm Events

This order includes requirements for the Discharger to provide information to demonstrate that the disposal ponds are designed to contain the

additional volume of water from a 1,000-year, 24-hour storm event, in addition to the maximum design volume, while maintaining two feet of freeboard (CCR, title 27, section 20320, Table 4.1).

22. Receiving Waters

The potential receiving waters for the discharge are the ground waters in the Eagle Lake Valley Basin (Department of Water Resources Basin No. 6-96).

23. Beneficial Uses of Ground Water

The beneficial uses for the ground waters of the Eagle Lake Valley Basin, as specified and defined in the Basin Plan, are:

- a. Municipal and Domestic Supply (MUN)
- b. Agricultural (AGR)
- c. Fresh Water Replenishment (FRSH)

24. Water Code Section 13241 Considerations

Pursuant to California Water Code section 13241 the requirements of this Order take into consideration:

(a) Past, present, and probable future beneficial uses of water.

The findings of this Order identify past, present and probable future beneficial uses of water, as described in the Basin Plan, that are potentially affected by the discharge. Present or probable future beneficial uses of the water, including municipal water supply, agricultural supply and freshwater replenishment will not be affected by the discharge, and will be maintained.

(b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.

The findings of this Order concerning geology, hydrogeology, and hydrology provide general information on the hydrographic unit. There is limited information on the ground water at the Facility at shallow depths below ground surface. Ground water near the land surface may eventually flow underground to Merrill Creek and thence to Eagle Lake. The limited data indicated ground water has nitrate as nitrogen concentration as high as 5.5 mg/l. Nitrate concentrations that high would not be expected in Eagle Lake Basin absent the effects of sewage. The shallow ground water data indicates that the Facility has impacted ground water quality, but not beyond levels that would violate the designated municipal beneficial use standard of 10 mg/l for nitrate as N. The

Water Board has considered the environmental characteristics of the hydrographic unit, including the quality of water available.

(c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect water quality in the area.

The Discharger must contain and isolate the untreated and treated waste to prevent adverse effects on ground water. The requirement for the disposal ponds is reasonable to achieve based on CCR title 27 requirements and the Basin Plan prohibition. The requirement for the treatment ponds to provide adequate controls for maintaining water quality and to demonstrate compliance with the Basin Plan prohibition is also reasonable. There are no other significant sources of waste in the area that are not being controlled pursuant to Basin Plan control measures.

(d) Economic considerations.

Upgrades are needed to improve and repair the wastewater treatment and disposal Facility. This Order does not prohibit the Discharger from providing continued wastewater services while it designs and upgrades its wastewater treatment and disposal Facility. However, it must be understood that waste discharges from leaking ponds and/or continued discharges due to operation of the wastewater sources are in continued violation of the requirements of this Order, and subject to other requirements of the Water Board as may be established after notice and hearing. Keeping the Facility in operation will prevent the campgrounds, marina, and children's camp from closing, and prevent an economic loss for the area. Wastewater facility upgrades are expected to cost millions of dollars.

(e) The need for developing housing within the region.

The Discharger is not responsible for developing housing within the region. The Discharger provides seasonal wastewater treatment and disposal services for the Discharger's seasonal campgrounds, picnic and marina facilities, which the Discharger controls access to. This Order is not associated with the need to develop housing within the Region.

(f) The need to develop and use recycled water.

The Eagle Lake Basin has a number of discharge prohibitions primarily to limit nutrients (nitrogen and phosphorus) from getting to the surface and ground waters in the Eagle Lake hydrologic unit. The current treated wastewater would need additional infrastructure and possibly require increased treatment for irrigation uses within the Eagle Lake Basin. The other possible reuses of treated wastewater would be very limited, such as

using recycled water for camp ground toilets. There is no demonstrated need in this locale for using recycled wastewater for either of the above. Ground water in the area is adequate to meet the needs for the area; therefore, recycled water use in this location is presently not being developed.

25. Policy for Maintaining High Quality Waters

State Water Resources Control Board (State Water Board) Resolution No. 68-16 requires the Lahontan Water Board, in regulating the discharge of waste, to *maintain existing high quality waters of the State until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial uses, and will not result in water quality less than that described in State or Regional Water Board policies; and require that any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters must meet waste discharge requirements which will result in the best practicable treatment or control of the discharge necessary to assure that a pollution or nuisance will not occur and the highest water quality consistent with maximum benefit to the people of the State will be maintained.*

The Discharger must design the disposal ponds in accordance with CCR title 27 design standards for Class II surface impoundments. The treatment ponds are exempt from the title 27 regulation, but the Discharger must design the treatment ponds with a monitoring system to demonstrate the treatment ponds isolate the waste in the ponds, preventing a discharge of nutrients to ground or surface water.

This Board Order includes requirements for the Discharger to demonstrate that the wastes treated and disposed of are isolated from ground and surface water. No change in the receiving water quality is proposed – no degradation is authorized by the WDRs, consistent with the Basin Plan prohibition against nutrient discharges from the Facility. No increase in the amount of discharge from current authorized levels is proposed.

26. California Environmental Quality Act

The Water Board, acting as CEQA Lead Agency, prepared and circulated a Mitigated Negative Declaration (MND) for the Eagle Lake Sewage Ponds Project (SCH #2009122076). The Water Board certified the MND for the Project on August 26, 2010, in association with a Clean Water Act section 401 water quality certification order for a fence around the Facility, and

thereafter filed a Notice of Determination with the State Clearinghouse. Mitigation measures are required.

The Project described in the MND was developed from information the Discharger provided in an Environmental Assessment under the National Environmental Policy Act. The Environmental Assessment describes various project alternatives for the construction of the revised sewage disposal system. The Discharger filed a Decision Notice and a Finding of No Significant Impact on March 10, 2010, that indicates the Discharger's chosen alternative. Attachment "B" to this Order shows the proposed layout for Facility upgrades for the chosen alternative.

27. Notification of Interested Parties

The Water Board has notified the Discharger and interested parties of its intent to issue revised WDRs for the discharge and Facility. A notice of the availability of a draft order, and that a public meeting would be held to consider adoption of the order, was published in the Lassen County Times on September 21, 2010. The Water Board has considered comments provided in accordance with applicable time limits. The Water Board, in a public meeting on November 16, 2010, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED THAT, pursuant to California Water Code Division 7, sections 13260, 13263, and 13267 the Discharger must comply with the following:

I. DISCHARGE SPECIFICATIONS

A. FLOW LIMITATION

The total flow into the Facility between October 1 and September 30 of consecutive years must not exceed 2.83 million gallons.

B. RECEIVING WATER LIMITATIONS

The discharge of waste must not cause or increase the presence of nutrients or violate the cited limitations below for the following substances or conditions in the ground waters of the Eagle Lake Valley Basin:

1. Coliform organisms attributable to human wastes.
2. Chemical Constituents – Waters designated as MUN must not contain concentrations of chemical constituents in excess of the MCL or Secondary MCL (SMCL) based upon drinking water standards specified in the following provisions of CCR, title 22: Table 64431-A of Section 64431 (Inorganic Chemicals), Table 64431-B of Section 64431

(Fluoride), Table 64444-A of Section 64444 (Organic Chemicals), Table 64449-A of Section 64449 (SMCLs – Consumer Acceptance Limits), and Table 64449-B of Section 64449 (SMCLs – Consumer Acceptance Ranges). This incorporation-by-reference is prospective including future changes to the incorporated provisions as the changes take effect.

Waters designated as AGR must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses (e.g., agricultural purposes).

Waters must not contain concentrations of chemical constituents that adversely affect the water for beneficial uses.

3. Radioactivity – Waters designated as MUN must not contain concentrations of radio nuclides in excess of limits specified in CCR, title 22, section 64442, Table 64442, and section 64443, Table 64443, including future changes as the changes take effect
4. Taste and Odors – Waters must not contain taste or odor-producing substances in concentrations that cause a nuisance or that adversely affect beneficial uses. For waters designated as MUN, at a minimum, concentrations must not exceed adopted SMCLs specified in Table 64449-A of section 64449 (SMCLs – Consumer Acceptance Limits) and Table 64449-B of section 64449 (SMCLs – Consumer Acceptance Ranges) of CCR, title 22, including future changes as the changes take effect.
5. Color – Waters must not contain color-producing substances from tracers in concentrations that cause a nuisance or that adversely affect beneficial uses.
6. Toxicity – All waters shall be maintained free of toxic substances in concentrations that individually, collectively, or cumulatively cause a detrimental physiological response in human, plant, animal, or aquatic life is prohibited.

C. REQUIREMENTS

1. The disposal ponds used for evaporating wastewater must meet all applicable design requirements in CCR title 27 for Class II surface impoundments as cited in Finding No. 19 of this Order.
2. The integrity of any pond liner must be maintained and must not be diminished as the result of any maintenance or cleaning operation.
3. Fencing must be placed and maintained on the perimeter of the Facility to prevent public access.

4. The discharge must not cause pollution, as defined in Water Code section 13050, or threatened pollution.
5. The treatment or discharge of waste must not cause a nuisance as defined in Water Code section 13050.
6. In the event of an odor or nuisance problem, corrective measures must be implemented immediately to eliminate the problem.
7. The vertical distance between the liquid surface elevation and lowest point in an evaporation pond dike or invert of an overflow structure must not be less than two (2) feet.

D. PROHIBITIONS

1. The discharge of wastes containing nutrients from the Facility to surface waters or ground waters in the Eagle Lake Basin is prohibited.
2. The discharge of treated wastewater, except to the authorized disposal site, is prohibited.
3. The discharge, bypass, or diversion of raw or partially treated sewage, sewage sludge, grease, or oils from the collection, transport, treatment, or disposal facilities to adjacent land areas or surface waters is prohibited.
4. The use of evaporation ponds to store a hazardous waste, as defined in CCR title 22, sections 66261.20 through 66261.113, is prohibited. This includes any constituent waste concentrated to hazardous waste levels by the evaporation of liquids in the ponds.

II. POND DESIGN MONITORING

A. ENGINEERING DESIGNS FOR DISPOSAL PONDS

At least **180 days prior to initiating construction**, the Discharger must produce an Engineering Design report. The design must satisfy the prescriptive design specifications in CCR title 27 in section 20250, and sections 20320 through 20375. The following must also be considered and addressed in the report:

1. The Discharger must produce with the design report a Construction Quality Assurance and Quality Control (QAQC) plan in accordance with CCR title 27 sections 20323 and 20324.
2. A final Construction QAQC completion report must be submitted to the Water Board **at least 30 days prior to use** for any new Class II surface impoundment of the Facility. The report must be certified by a Construction Quality (CQA) officer, who must be either a California registered civil engineer or a certified engineering geologist. The

certification must provide that the newly constructed portions of the Facility were constructed in accordance with the design plans. The report must contain sufficient information and test results to verify that construction was in accordance with the design plans and specifications and with the prescriptive standards and performance goals of CCR, title 27. The Discharger may produce independent reports for each new or relined pond prior to use.

3. If the design does not satisfy CCR title 27 design requirements herein the design will be rejected by the Executive Officer. Designs meeting title 27 requirements for "engineered alternatives" will be brought before the Water Board for consideration at a noticed public meeting.

B. MONITORING PROGRAMS FOR DISPOSAL PONDS

The following monitoring programs must satisfy CCR title 27 sections 20385 through 20430.

1. Detection Monitoring Program (DMP): The Discharger must provide a DMP with the Engineering Design report described above. The Discharger must design, construct and maintain a DMP as required in CCR, title 27, sections 20385, subdivision (a)(1) and section 20420. The DMP must include the monitoring of ground water, leachate and unsaturated sub-surface monitoring.

As part of the DMP the Discharger must include a Sampling and Analysis plan. The Sampling and Analysis Plan must include, but is not limited to, the type of samples to be collected, the frequency of the samples collected, the laboratory methods to be used and the procedures used to collect the samples.

2. Evaluation Monitoring Program (EMP): The Discharger must produce an EMP to be used in the event of a known release or when the DMP detects an increase in a constituent of concern that could indicate the occurrence of an unauthorized release. The EMP must be sufficient to determine if a measurably significant release has occurred and be used to delineate the nature and extent of the release, as well as to develop, propose, and support corrective action measures to be implemented.
3. Corrective Action Program (CAP): The Discharger must be prepared to produce and submit a CAP as required in CCR, title 27, section 20430, to be considered following completion of the EMP, provided the EMP confirms the discharge has caused a measurably significant release.

C. SPECIAL PROVISIONS FOR TREATMENT POND DESIGN AND CONSTRUCTION

1. A *Construction Quality Assurance Plan* (CQA plan) for the treatment ponds must be submitted to the Water Board demonstrating how the pond(s) will be constructed to comply with the waste discharge prohibition in Finding No. 8 of this Order. The CQA plan must include specifications for sub-grade preparation, inspection frequency for liner construction, testing frequency for both destructive testing and non-destruction liner testing, and qualifications for the CQA Officer and the CQA inspector. The report must be provided **at least 180 days prior to initiating construction**. The evaporation ponds shall be constructed in accordance with construction specifications and the CQA plan.
2. No discharge to a modified treatment pond Facility is authorized until the Discharger, through the CQA officer certifies that the Facility is constructed in accordance with the CQA plan, and the certification is accepted in writing by the Water Board Executive Officer.

III. WATER QUALITY MONITORING AND RESPONSE PROGRAMS

A. WATER QUALITY PROTECTION STANDARD (WQSP)

Pursuant to title 27 section 20390 the Discharger must produce WQPS that will satisfy the requirements of this section. The Discharger must develop WQPS and submit a complete list of constituents of concern for acceptance by the Water Board Executive Officer within one year of implementing the DMP program. The list of constituents of concern (COC) at a minimum must include total nitrogen, total phosphorus and total dissolved solids. The Discharger must further determine WQPS values and/or propose a method to evaluate monitoring data that will be used to indicate a possible release from the Facility. The WQPS values and/or other Data Analysis Method will be used as triggers to conduct additional evaluation and/or sampling.

B. DATA ANALYSIS METHODS

Pursuant to CCR title 27, section 20415 (e), (7) & (8), the Discharger must provide, within one year of the submittal any CQA report, a method to analyze all the monitoring data collected. The method of analysis will be used on the data collected to indicate whether the sampling data indicates that the Facility is possibly having a release. The data analysis method submitted maybe either be statistical on non-statistical approach or a combination of both.

040023

IV. PROVISIONS

A. RESCISSION

Board Order No. 6-94-94 is rescinded on the effective date of this Order except for enforcement purposes. The rescission does not absolve the Discharger of historic violations associated with the rescinded Board Order. In rescinding Board Order No. 6-94-94, the Water Board retains discretion to take enforcement actions for or related to previous violations.

B. STANDARD PROVISIONS

The Discharger must comply with the "Standard Provisions for Waste Discharge Requirements," dated September 1, 1994, in Attachment C which is made part of this Order.

C. SPECIAL PROVISIONS FOR DISPOSAL POND CONSTRUCTION

QAQC reports may be submitted independently for each pond liner installed to allow that pond to go into use prior to the entire project or all ponds being completed. No discharge may occur to a new pond or a newly-lined, existing pond until the Water Board Executive Officer receives from the CQA officer a Construction QAQC completion report as described in item II.A.2. above, that certifies the pond or ponds have been constructed in accordance with the design specifications and tested as required by the QAQC plan.

D. CLAIM OF COPYRIGHT OR OTHER PROTECTION

Any and all reports and other documents submitted to the Lahontan Water Board pursuant to this request will need to be copied for some or all of the following reasons: (1) normal internal use of the document, including staff copies, record copies, copies for Board members and agenda packets, (2) any further proceedings of the Lahontan Water Board and the State Water Board, (3) any court proceeding that may involve the document, and (4) any copies requested by members of the public pursuant to the Public Records Act or other legal proceeding.

If the Discharger or its contractor(s) claims any copyright or other protection, the submittal must include a notice, and the notice will accompany all documents copied for the reasons stated above. If copyright protection for a submitted document is claimed, failure to expressly grant permission for the copying stated above will render the document unusable for the Lahontan Water Board's purposes and will

result in the document being returned to the Discharger as if the task had not been completed.

E. ACTION LEAKAGE RULE

If leachate generation in a leachate collection and recovery system of a Class II surface impoundment exceeds, or is equal to, an action leakage rate (ALR) of 20 gallons/day/acre, the Discharger must notify the Water Board of the rate and amount of the discharge within 72 hours of discovery, and in writing each month thereafter until such time that the ALR is below 20 gallons/acre/day for one calendar month. Additionally, the Discharger must present an ALR reduction plan within 45 days of identifying a condition in excess of the ALR that includes a description of how the liquids are getting into the leak collection system, and schedule of the actions that will be taken to stop the leakage or reduce to it to below the ALR.

F. MONITORING AND REPORTING PROGRAM

A monitoring and reporting program (MRP) is necessary to verify compliance with requirements. Pursuant to Water Code section 13267, subdivision (b), the Discharger must comply with MRP No. 2010-(PROPOSED) as specified by the Water Board Executive Officer. The MRP will be revised and prescribed by the Executive Officer after the required Monitoring Program information described in section II.B., above, is provided to the Water Board.

G. KNOWN OR REASONABLY FORESEEABLE RELEASE PLAN

The Discharger must provide a plan for addressing a known or reasonably foreseeable release from the Facility surface impoundments, in accordance with the requirements in CCR, title 27, sections 20380, subdivision (b) and 22222. The known or reasonably foreseeable release plan must include a cost estimate to implement the plan and a proposed financial assurance instrument meeting CCR, title 27, sections 22220 to 22222 and 22225 et seq. to be acceptable by the Executive Officer. The known or reasonably foreseeable release plan and cost estimate to implement the plan must be prepared by, or under the supervision of, a California registered professional geologist or a California registered professional engineer.

H. FINANCIAL ASSURANCE

The Discharger must provide a report within one year after completing construction and **by December 31 of each year** thereafter, providing

evidence that adequate financial assurance, pursuant to the requirements of the WDRs and CCR title 27, has been provided for closure and for potential releases. In addition, the Discharger must either provide evidence that the amount of financial assurance is still adequate or increase the amount of financial assurance by an appropriate amount. An increase may be necessary due to inflation, a change in regulatory requirements, a change in the approved closure plan, or other unforeseen events.

I. SLUDGE MANAGEMENT PLAN

The Discharger must provide for acceptance by the Executive Officer a Sludge Management Plan and report as specified in the MRP 2010-**(PROPOSED)**. Upon acceptance, the Discharger must comply with the Sludge Management Plan.

J. SCHEDULE FOR REPORTS

The following is a time frame for the various reports that will be needed for the upgrades to the proposed Facility.

Designs/plan and reports	Due Date
Engineering Design	180 days prior to construction
Detection Monitoring Program	120 days prior to construction
Sampling and Analysis Plan	120 days prior to construction
Known or Reasonably Foreseeable Release Plan	1 year after construction complete
Final Construction Quality Assurance Report	30 days prior to use of a surface impoundment
Water Quality Protection Standard	1 year after DMP implemented

K. OPERATOR CERTIFICATION

The Facility must be supervised by personnel possessing a wastewater treatment plant operator certificate of appropriate grade pursuant to *Classification of Wastewater Treatment Plants and Operator Certification*, California Code of Regulations, title 23, section 3670, et seq.

L. ANNUAL FEE

The Discharger operating under this permit is subject to an annual fee pursuant to the CCR, title 23, section 2200 et seq., as amended.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on November 16, 2010.

HAROLD J. SINGER
EXECUTIVE OFFICER

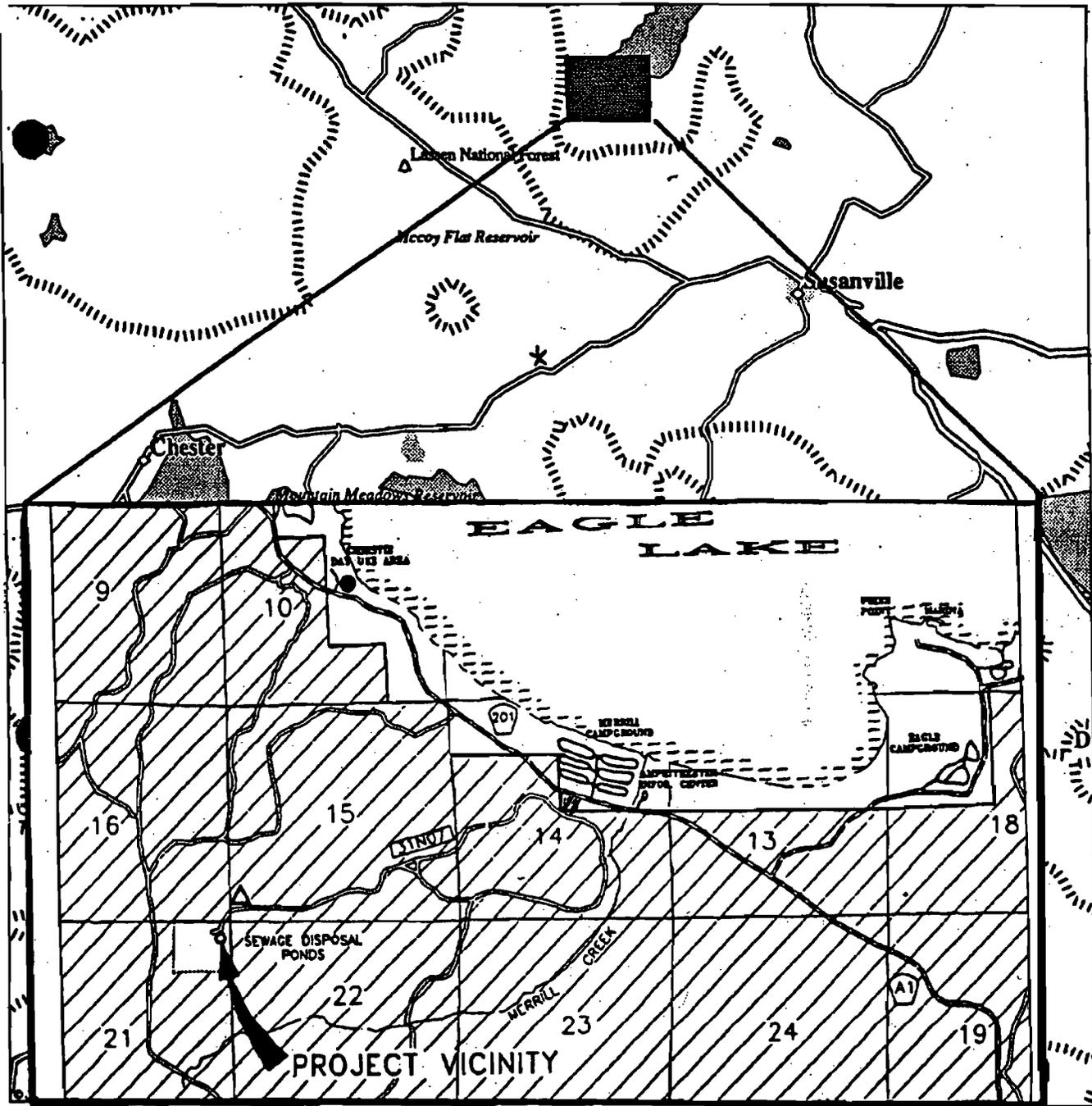
Attachments: A. Facility Location Map
 B. Proposed Facility Layout Map
 C. Standard Provisions for Waste Discharge Requirements

PROPOSED

040027

ATTACHMENT A

040028



LEGEND

- Population Center
- Geo Feature
- Town, Small City
- Hill

- Open Water
- Contour

- Major Street/Road
- State Route
- US Highway

EAGLE LAKE RECREATION AREA

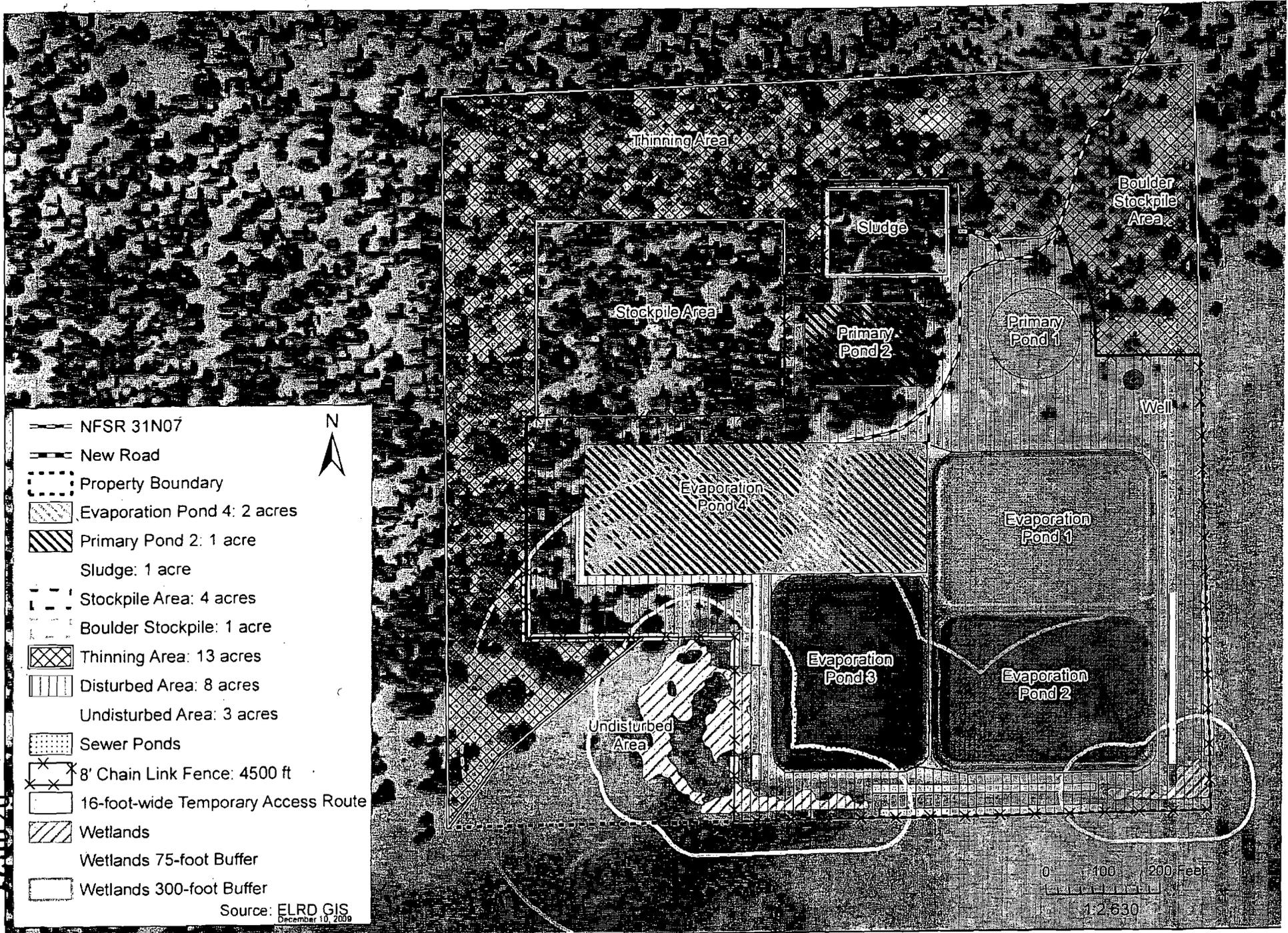
Attachment A
U.S. Forest Service – Lassen National Forest

040029

ATTACHMENT B

040030

Attachment B Proposed Facility Plan-Eagle Lake Wastewater Facility



- NFSR 31N07
 - New Road
 - Property Boundary
 - Evaporation Pond 4: 2 acres
 - Primary Pond 2: 1 acre
 - Sludge: 1 acre
 - Stockpile Area: 4 acres
 - Boulder Stockpile: 1 acre
 - Thinning Area: 13 acres
 - Disturbed Area: 8 acres
 - Undisturbed Area: 3 acres
 - Sewer Ponds
 - 8' Chain Link Fence: 4500 ft
 - 16-foot-wide Temporary Access Route
 - Wetlands
 - Wetlands 75-foot Buffer
 - Wetlands 300-foot Buffer
- Source: ELRD GIS
December 10, 2009



040031

ATTACHMENT C

040032

ATTACHMENT C

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.
- e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or

040023

refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.

- f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

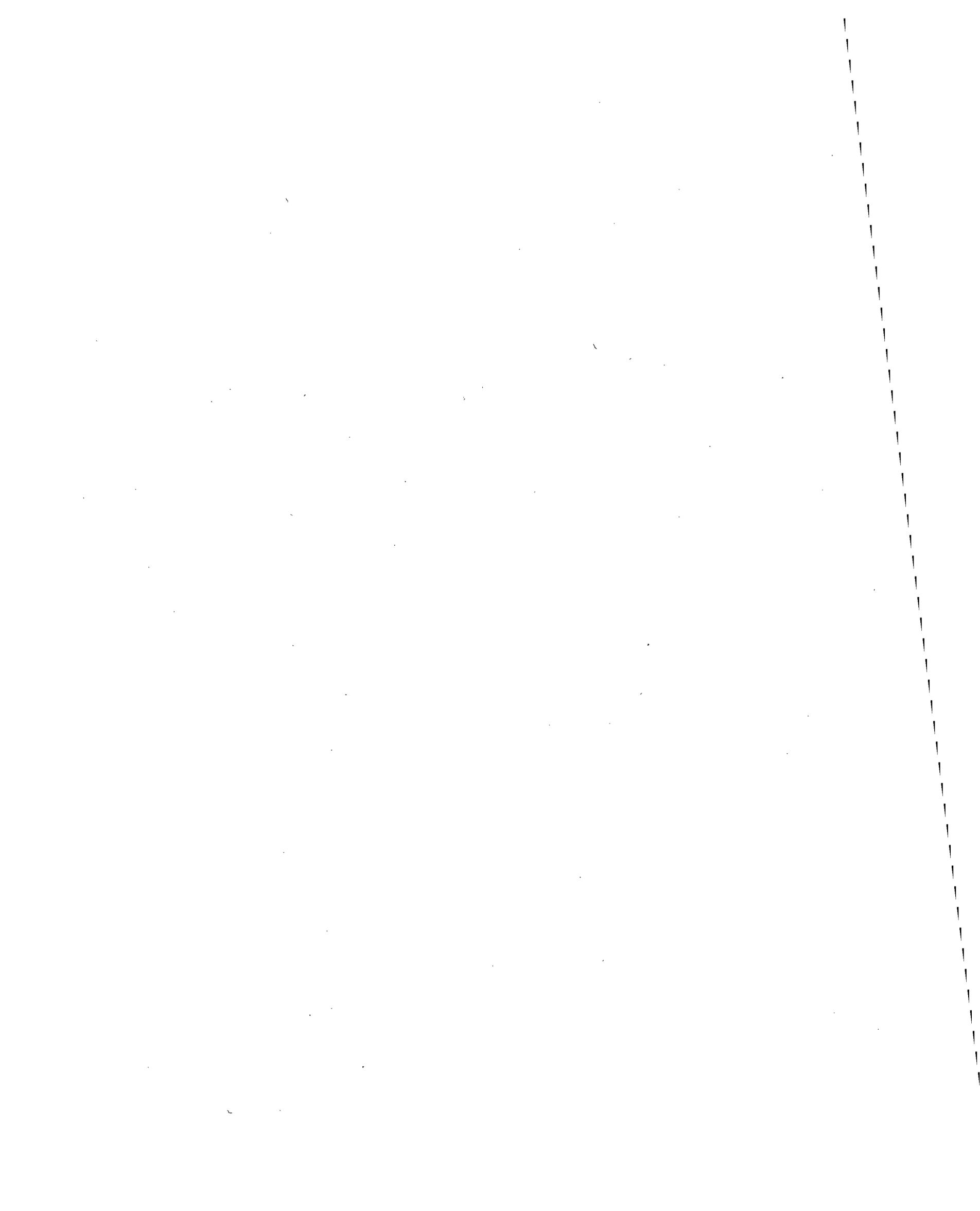
Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

MONITORING AND REPORTING PROGRAM NO. 2010-(PROPOSED)
WDID NO. 6A188505700

FOR

U.S. FOREST SERVICE — LASSEN NATIONAL FOREST
EAGLE LAKE WASTEWATER FACILITY

Lassen County

I. GENERAL REQUIREMENTS

A. Effective date

This monitoring and reporting program (MRP) is effective on the date of adoption, or as amended by the Executive Officer.

B. Overview of Reports Required

The Discharger must provide, each year, two Semi-Annual Monitoring Reports. The monitoring period covered for each report and the dates the reports are due are provided in section III, below. Each report must provide information on general operations, evaporation pond and vadose zone water quality, and other required information as specified herein. In addition, a one-time report is required concerning sludge management plans to be followed.

C. Certified Cover Letter

The Discharger must use Attachment 1 as a cover letter and certification, or a cover letter containing the same information, for all reports provided to the Water Board in connection with this Order.

D. General Provisions

The Discharger must comply with the "General Provisions for Monitoring and Reporting" dated September 1, 1994, which is made part of this Monitoring and Reporting Program as Attachment 2.

II. MONITORING

The Discharger must monitor the following and present the monitoring information in the semi-annual reports.

040036

A. General Monitoring

1. The total volume, in million gallons, of wastewater flow to the Facility during each month.
2. Measure the freeboard (distance from the top of the lowest part of the dike to the wastewater surface in the pond) for each surface impoundment every month. The pond freeboard measurements are not required if the ponds cannot be accessed due to winter conditions and the ponds are not receiving wastewater. (Reporting must include conditions that prevent access to the ponds and must state time periods that the ponds are not accessible and describe conditions that prevent access to the ponds.) If a surface impoundment does not contain water, reports must indicate that it is empty.
3. Visually inspect the condition of each evaporation pond each month. Any holes, tears, or other liner problems must be noted. The monthly pond inspection is not required if ponds cannot be accessed due to winter conditions and the ponds are not receiving wastewater. (Monitoring must include conditions that prevent access to the ponds and semi-annual reports must state time periods and conditions that prevent access.)
4. Information on the calibration results for any flow meters or other equipment required for maintaining compliance with requirements.

B. Pond Monitoring

Samples must be collected and analyzed in accordance with the following:

1. Grab sample of effluent from primary pond 2 that is discharged to the evaporation ponds.
2. Grab sample of wastewater flowing at gate valve between evaporation ponds No. 1 and No. 2.
3. Samples must be collected in June, August and October and analyzed for the following constituents:

Constituent	Units	Detection Limit
Total Nitrogen	mg/l	0.1 mg/l
Total Dissolved Solids	mg/l	200 mg/l
Chloride	mg/l	1 mg/l
pH ¹	pH units	N/A
Electrical Conductivity ¹	µmho/cm	300 µmho/cm

¹ The pH and Electrical Conductivity measurements may be done in the field with a hand held meter calibrated per manufacturer specification.

D. Vadose Zone Monitoring

Water samples must be collected from the three lysimeters around evaporation pond Nos. 1 and 2 and the four pond underdrain monitoring wells under the second primary pond and evaporation pond No. 3. The samples must be collected in June, August and October of each year and analyzed for the constituents listed below. If the volume of sample from the individual lysimeters and pond underdrains is insufficient to analyze for the constituents listed below, the lysimeter samples may be combined to create a composite lysimeter sample for testing. Similarly, pond underdrain samples may also be used to create a composite pond underdrain sample for testing. To create a composite sample the Discharger must note the amount of liquid collected from each location, the amount used from each location for the composite sample and that the sample is a composite for the different locations. (Lysimeter samples and pond underdrain samples must not be mixed to form a composite of the two different monitoring systems.)

<u>Constituent</u>	<u>Units</u>	<u>Detection Limit</u>
Total Nitrogen	mg/l	0.1 mg/l
Total Dissolved Solids	mg/l	10 mg/l
Chloride	mg/l	0.5 mg/l

D. Sludge Monitoring

The Discharger must monitor the following:

1. Any deviations from the Sludge Management Plan (see section III.B., below).
2. Total quantity of sludge generated (cleaned from any ponds) during the monitoring period.
3. Date and quantity of any sludge landfilled or moved offsite, recipient (including name and address), location of receiving area, and sludge disposal method (including crops grown, if applicable).
4. Cumulative total quantity of sludge currently stockpiled onsite, including the quantity of sludge added to the stockpile during the monitoring period.
5. For sewage sludge removed from ponds, stockpiled onsite, or taken offsite during the previous month, a representative composite sample must be collected and analyzed for the following constituents:
 - a. total kjeldahl nitrogen as N
 - b. ammonia nitrogen as N

- c. nitrate nitrogen as N
- d. total phosphate as P
- e. organic and inorganic persistent and bioaccumulative toxic substance listed in Section 66261.24, subsections (a)(2)(A) and (a)(2)(B), of title 22, Division 4.5, Chapter 11, Article 3 of the California Code of Regulations. The Discharger must make a determination whether the presence of these constituents in excess of these levels indicates the sludge must be considered and managed as a hazardous material.

III. REPORTING

- A. The Discharger must submit two Semi-Annual Monitoring Reports per year. The reports are due on August 15 and February 15 of each year. The August 15 report must include monitoring information for the period from February 1 to July 31. The February 15 report must include monitoring information for the period from August 1 to January 31.
- B. The Discharger must provide a Sludge Management Plan report by **March 30, 2011**. The plan must describe the sludge management, handling, and treatment processes, including all areas expected to be used in sludge management prior to final disposal offsite; control measures for leachate or free liquid retention and odors; primary pond liner maintenance considerations; and time frames for final sludge removal actions. The Plan must include a sludge sampling protocol for the analyses required in section II.D., above.
- C. The Discharger must identify in writing the data or parameters that can not be collected or reported due to the construction of the upgrades to the Facility. Missing monitoring data or parameters identified will not be considered violations of this Monitoring and Reporting Program (MRP) provided the Discharger informs the Water Board and demonstrates the data could not be collected. Failure to identify missing data or parameters will be treated as deficient monitoring and considered a violation.

Ordered By _____ Date _____
HAROLD J. SINGER
EXECUTIVE OFFICER

Attachments: A. Certified Cover Letter
B. General Provisions for Monitoring and Reporting Program

040039

ATTACHMENT A

040040

b) Section(s) of WDRs/NPDES

Permit Violated:

c) Reported Value(s) or Volume:

d) WDRs/NPDES

Limit/Condition:

e) Date(s) and Duration of Violation(s):

f) Explanation of Cause(s):

g) Corrective Action(s)

(Specify actions taken and a schedule for actions to be taken)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision following a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my knowledge of the person(s) who manage the system, or those directly responsible for data gathering, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

If you have any questions or require additional information, please contact _____ at the number provided above.

Signature: _____

Name: _____

Title: _____

040042

ATTACHMENT B

040043

ATTACHMENT B

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LAHONTAN REGION

GENERAL PROVISIONS FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.

b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.

d. Monitoring reports shall be signed by:

i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;

ii. In the case of a partnership, by a general partner;

- iii. In the case of a sole proprietorship, by the proprietor; or
 - iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
- i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

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040046

ENCLOSURE 3

040047



United States
Department of
Agriculture

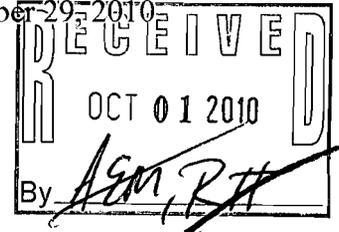
Forest
Service
Lassen
National
Forest

2550 Riverside Drive
Susanville, CA 96130
(530) 257-2151 Voice
(530) 252-6624 TTY
(530) 252-6428 Fax

File Code: 7430

Date: September 29, 2010

Harold J. Singer
Executive Officer
Regional Water Quality Control Board, Lahontan
2501 Lake Tahoe Blvd.
South Lake Tahoe, CA 96150



Dear Mr. Singer:

This letter and the enclosed form are in response to the Tentative Waste Discharge Requirements issued September 8, 2010. We concur with the proposed requirements with the following comment:

In Section 4. "History," (Page 2) the WDR states [referring to Monitoring Well 4], "The limited groundwater sampling indicated ... coliform (bacteria) concentrations of 480,000 colony forming units per 100 milliliters (cfu/100 ml) and 760,000 cfu/100ml..." As discussed in a letter from Acting Forest Supervisor John Exline to Scott Ferguson of March 17, 2010, the cited levels (which are total coliform levels) may be considered anomalous due to samples being collected immediately after construction of the well. Indeed, sampling results for total coliform in May and June 2010 were below detection limits. The July 2010 duplicate samples indicated 10 and 12 cfu/100 ml total coliform. August and September results are pending. The May, June, and July coliform values appear to be more representative of the actual conditions than the November 2009 values. (Fecal coliform samples were found to be below the detection limit in all cases.)

If you have any questions regarding this letter, please contact John Cunningham, Project Manager, at the number listed above.

Sincerely,

for 
JERRY BIRD
Forest Supervisor

Enclosure

cc: Jack Walton, Heather Blevins, Christine A Hill

040048



From: John W Cunningham <jwcunningham@fs.fed.us>
To: <rtucker@waterboards.ca.gov>
Date: 9/27/2010 2:44 PM
Subject: Another sampling question

Rob,

Another point brought up by our facility operator: currently under our Vadose Zone Monitoring requirements, composite samples are collected from lysimeters and underdrains. This works out, because of very low volumes collected. The operator is requesting this not be changed until the plan is revised based on the new design. Can you address this on the basis of this inquiry, or should I include it in formal comments?

Regards,
John

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040049

From: John W Cunningham <jwcunningham@fs.fed.us>
To: <RTucker@waterboards.ca.gov>
Date: 9/27/2010 2:30 PM
Subject: MRP for Eagle Lake Ponds

Rob,

I see you did cover the future updating of the MRP on page 17 of the WDRs (Tentative): "The MRP will be revised and prescribed by the Executive Officer after the required Monitoring Program information ...is provided to the Water Board." I think this satisfies my doubts about this.

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