

**STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION
81 Higuera Street
San Luis Obispo, California 93401**

WASTE DISCHARGE REQUIREMENTS ORDER NO. 99-075
Waste Discharger Identification No.

For

**REDWOOD ELEMENTARY SCHOOL
SAN LORENZO VALLEY UNIFIED SCHOOL DISTRICT
Santa Cruz County**

The California Regional Water Quality Control Board, Central Coast Region, (hereafter the Board) finds:

1. Jeffrey A. Mast, Director of Maintenance and Operations for the San Lorenzo Valley Unified School District, filed a Report of Waste Discharge on February 22, 1999 in accordance with Section 13260 of the California Water Code. The report was filed on behalf of the San Lorenzo Unified School District for authorization to discharge septic tank effluent within the San Lorenzo Valley River ground water basin. The information supports a request for issuance of revised waste discharge requirements.
2. Redwood Elementary School, San Lorenzo Valley Unified School District (hereafter Discharger), 16900 Hwy 9, Boulder Creek, operates septic tank and mound disposal facilities located in Santa Cruz County along Highway 9, 3.4 miles north of Boulder Creek. These facilities are owned by the San Lorenzo Unified School District. The facilities are in the SE ¼ of the NE ¼ of Section 12, T9S, R3W, MD B&M, as shown on Attachment "A" of this order.
3. Approximately 1500 gallons per day (5.68 m³/day) of domestic wastewater will be disposed at this facility. The treatment facility consists of two 7500-gallon septic tanks in series. Wastewater discharge is alternated between two 5,355-square foot mound systems. Design disposal capacity is 5,000 gallons per day (18.9 m³/day).
4. The mound system is located on fairly level (<4% slope) topography consisting of clayey soils to a depth of fifteen to forty feet. Depth to ground water was measured at 5.6 feet in March 1986. The Discharger has been required under "Monitoring and Reporting Program No. 89-05" to measure the depth to ground water up and down gradient of wastewater disposal areas. Data collected by the Discharger and recently evaluated by Board staff show depth to ground water ranging from 4.3 feet to 15.4 feet, with an average depth to ground water of 9 feet up gradient of disposal areas and 11.8 feet down gradient of disposal areas. Ground water migrates in a southerly direction. Ground water is considered of good quality for domestic and agricultural uses. Historic ground water quality based on 1971 data had the following characteristics:

Total Dissolved Solids	242	mg/L
Sodium	19	mg/L
Chloride	23	mg/L
Nitrate (as N)	2.2	mg/L
5. Ground water data collected over the period of 1992 through 1999 from the up gradient and

down gradient wells had the following characteristics:

Up Gradient

Total Dissolved Solids	436	mg/L
Sodium	79	mg/L
Chloride	127	mg/L
Nitrate (as N)	0.24	mg/L

Down Gradient

Total Dissolved Solids	552	mg/L
Sodium	83	mg/L
Chloride	72	mg/L
Nitrate (as N)	1.75	mg/L

6. San Lorenzo River is located 180 feet east of the facility and flows in a southerly direction.
7. The San Lorenzo Wastewater Management Plan (WWMP), adopted by Santa Cruz County Board of Supervisors, was approved by the Regional Board on April 5, 1995 as Resolution 95-04. The WWMP includes findings and recommendations resulting from investigation of elevated nitrate levels in surface water and groundwater in the San Lorenzo River watershed. The WWMP recommends the Regional Board require nitrogen control measures in the issuance of new or revised waste discharge requirements. The WWMP's goal is for at least 50 % reduction in nitrogen from onsite disposal systems.
8. This order requires 50 % reduction of nitrates in effluent, consistent with Resolution No. 95-04. A
9. The discharge is presently regulated by Waste Discharge Requirements Order No. 89-05.
10. The *Water Quality Control Plan, Central Coastal Basin* (Basin Plan), was adopted by the Board on November 17, 1989, and approved by the State Water Resources Control Board on August 16, 1990. The Regional Board approved amendments of the Plan on February 11, 1994 and September 8, 1994. The Basin Plan incorporates statewide plans and policies

by reference and contains a strategy for protecting beneficial uses of State waters.^A

11. Present and anticipated beneficial uses of San Lorenzo River that could be affected by the discharge include:
 - a. Domestic and municipal supply;
 - b. Agricultural supply;
 - c. Ground water recharge;
 - d. Industrial service supply;
 - e. Water contact recreation;
 - f. Non-contact water recreation;
 - g. Wildlife habitat;
 - h. Cold fresh-water habitat;
 - i. Fish migration;
 - j. Fish spawning
 - k. Preservation of Biological Habitats of Special Significance;
 - l. Rare, Threatened, or Endangered Species;
 - m. Fresh Water Replenishment and,
 - n. Commercial and Sport Fishing.^A
12. Present and anticipated uses of ground in the vicinity of the discharge include:
 - a. Domestic supply;
 - b. Agricultural supply;
 - c. Industrial process supply; and,
 - d. Industrial service supply.
13. The Board of Trustees for the San Lorenzo Unified School District certified a final Environmental Impact Report (EIR) on November 24, 1986, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000, et seq.) and the California Code of Regulations. The EIR identified one or more significant adverse effects of the project and has changed or altered the original project to mitigate or avoid the effects identified, as described in the EIR.
14. Discharge of waste is a privilege, not a right, and authorization to discharge is conditional upon the discharge complying with provisions of Division 7 of the California Water Code and any more stringent effluent limitations necessary to implement water quality control

plans, to protect beneficial uses, and to prevent nuisance. Compliance with this Order should assure this and mitigate any potential adverse changes in water quality due to the discharge.

15. On April 30, 1999, the Board notified the Discharger and interested agencies and persons of its intent to adopt waste discharge requirements for the discharge and has provided them with a copy of the proposed Order and an opportunity to submit written views and comments.
16. After considering all comments pertaining to this discharge during a public hearing on September 10, 1999, this Order was found consistent with the above findings.

IT IS HEREBY ORDERED, pursuant to authority in Section 13263 of the California Water code, San Lorenzo Valley Unified School District, its agents, successors, and assigns, may discharge waste at the Redwood Elementary School, providing compliance with the following:

[Note: Other prohibitions and conditions, definitions, and the method of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984. Applicable paragraphs are referenced in paragraph D.4 of this Order.

Throughout the Order superscripts (^A) are provided to indicate requirements taken from the Basin Plan. Requirements not referenced are based on Staff's best professional judgement.]

A. PROHIBITIONS

1. Discharge to areas other than Mound 1 and 2 areas shown in Attachment "A," is prohibited.
2. Discharge of any wastes, including overflow, bypass, seepage from transport, treatment or disposal system to San Lorenzo River, adjacent drainage ways, adjacent properties, or the treatment disposal site is prohibited.

B. DISCHARGE SPECIFICATION

1. Daily flow averaged over each month shall not exceed 5,000 gallons (18.9 m³/day).
2. Effluent discharged to Mound 1 and 2 shall not have a pH of less than 6.5 or greater than 8.4.^A
3. Surface drainage shall be excluded from Mound 1 and 2 and expansion mound areas.
4. Discharge to Mounds 1 and 2 shall be alternated at least once per year.

C. GROUND WATER LIMITATIONS

1. The discharge shall not cause nitrate concentrations in the ground water down gradient of the disposal area to exceed a concentration which is based on one-hundred and thirty percent of the ground water nitrate concentration up gradient of the disposal area, but at no time shall the discharge cause ground water down gradient of the disposal area to exceed 10 mg/l (as N).
2. The discharge shall not cause a significant increase of mineral constituent concentrations in underlying ground waters, as determined by comparison of samples collected from wells located up gradient and down gradient of the disposal area.
3. The discharge shall not cause concentrations of chemicals and radionuclides in groundwater to exceed limits set forth in Title 22, Chapter 15, Articles 4 and 5 of the California Code of Regulations.

D. PROVISIONS

1. The Discharger currently has an alternative septic disposal (mound system). This system shall be modified to reduce nitrogen levels by a minimum of 50%. The Discharger will comply with the timeline listed below for system construction:

- | Task | Completion Date |
|--|-----------------|
| Completion of extended treatment system design | 10/1/2000 |
| Installation of extended treatment system | 10/1/2002 |
| Submit a technical report detailing optimal system performance | 4/1/2003 |
2. The long-term maintenance plan (dated 6/99) for the wastewater disposal system, sub-surface drain system, surface drainage structure, and ground water monitoring wells shall be implemented.
 3. The Discharger shall comply with "Monitoring and Reporting Program No. 99-075," as specified by the Executive Officer.

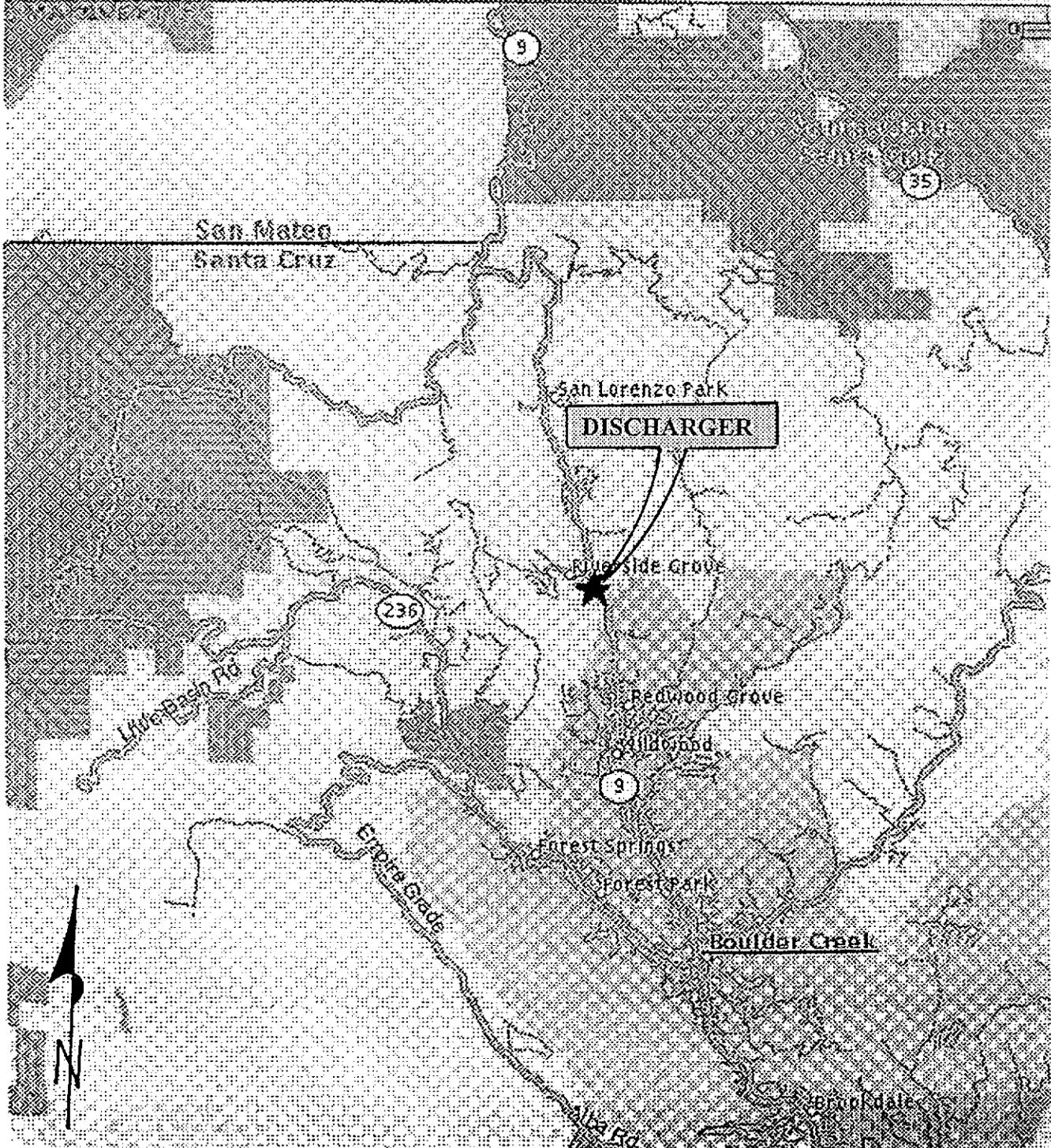
4. Discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated January, 1984; except Items A.6, and A.8.
5. Pursuant to Title 23, Chapter 3, Subchapter 9, of the California Code of Regulations, the Discharger must submit a written report to the Executive Officer not later than September 10, 2013, addressing:
 - a. Whether there will be changes in the continuity, character, location, or volume of the discharge; and,
 - b. Whether in their opinion, there is any portion of the Order that is incorrect, obsolete, or otherwise is need of revision.

I, ROGER W. BRIGGS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Coast Region, on September 8, 1999.

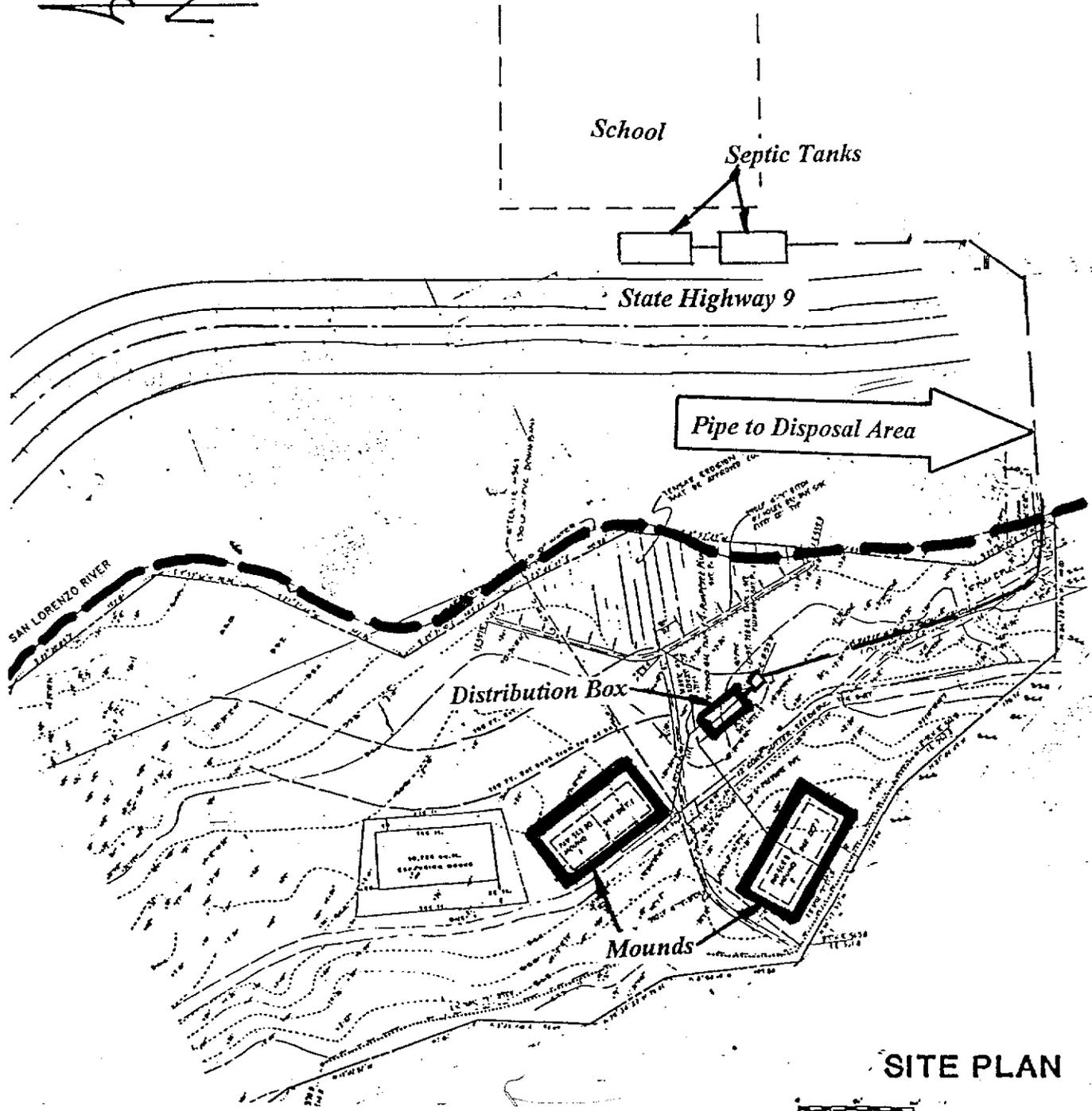
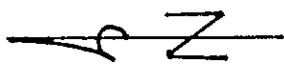


 Executive Officer

ATTACHMENT "B" LOCATION MAP
Redwood Elementary School, San Lorenzo Valley
Unified School District



NO SCALE



SITE PLAN

NO SCALE

ATTACHMENT "A" SITE MAP
Redwood Elementary School
San Lorenzo Valley Unified School District