California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM ORDER NO. R1-2003-0122

FOR

SMITH RIVER RANCHERIA
COMMUNITY LEACHFIELD

Del Norte County

MONITORING

1. Wastewater Volume: The discharger shall determine and record the maximum and average waste flow in gallons per day discharged to the waste facilities.

2. Septic Tank: The sludge and scum levels in the septic tank shall be measured quarterly (during the months of February, May, August, and November) whenever more than 12 months have elapsed since the septic tank was last pumped clean. Septic tanks shall be pumped clean if the bottom of the scum layer is within three inches of the bottom of the outlet baffle, or if the top of the sludge layer is within eight inches of the bottom of the outlet device, or if the combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment. The following values shall be reported for each observation:

    a. Sludge depth in each compartment of the septic tank.
    b. Scum thickness in each compartment of the septic tank.
    c. Distance between the bottom of the scum layer and the bottom of the outlet baffle.
    d. Distance between the top of the sludge layer and the bottom of the outlet opening or baffle (whichever is lower).

The discharger shall report the date, quantity pumped, and disposal site whenever a septic tank is pumped.

3. Groundwater Levels: The discharger shall monitor the performance of the leach field by observing and recording the elevation of the free water surface, once per month, in wells located as follows:

    a. Trench monitoring wells TW-1 through TW-12 shall be constructed as shown on the site map. The bottom of the wells shall be at the same elevation as the bottom of the leach field trench.
    b. Monitoring wells MW-3 through MW-6 shall be constructed at the locations shown on the site map, but to the specifications provided in this order. These wells shall extend to a depth at least five feet below the bottom of the leach trenches.

c. At least three perimeter monitoring wells shall be constructed near the property boundaries at depths adequate to reach groundwater during all seasons. These wells are intended to establish ground-water gradients and measure down-gradient nitrate concentrations. Monitoring wells MW-1 and MW-2 shown on the site map may be used for two of these wells, provided they are constructed to the specifications of this order. For optimum determination of ground-water gradients, well placement shall result in perpendicular distances between wells of not less than 250 feet. At least one well shall be directly down-gradient of a portion of the leach field at all times. Property and leach field geometry may require more than three wells to fulfill these conditions.

4. Nitrate concentrations: Samples shall be collected quarterly (during the months of February, May, August, and November) from at least one down-gradient perimeter well. Three casing volumes of water should be purged from the well immediately prior to sample collection, and ground water level measurements should be completed prior to purging. These samples shall be analyzed for nitrogen as nitrate.

Well Construction

All wells used for groundwater level determinations shall be surveyed to determine relative elevations, and all elevations shall be reported with respect to both sea level and ground surface at the well. All monitoring wells shall be constructed of three or four-inch diameter plastic pipe (or equivalent) equipped with a locking removable cap and sealed at the ground surface to prevent infiltration of surface water. A screw cap that requires a tool for removal will suffice as a locking cap. The wells located in the leach field shall be perforated at an interval that coincides with the depth of the leach field rock. Remaining wells shall be perforated beginning at a depth of 18 inches below ground surface and extend to the bottom of the well.

REPORTING

Monthly monitoring reports shall be submitted to the Regional Water Board by the last day of the following month. Reports shall be submitted on a form similar to the attached example to clearly illustrate compliance with requirements.

Ordered by _____
Catherine E. Kuhlman
Executive Officer

October 10, 2003

(smithriverrancheriam&r)

SMITH RIVER RANCHERIA MONITORING REPORT

for the month of _____, 20___

Well	inches BGS	Well	inches BGS	inches ASL
TW-1	_____	MW-1	_____	_____
TW-2	_____	MW-2	_____	_____
TW-3	_____	MW-3	_____	_____
TW-4	_____	MW-4	_____	_____
TW-5	_____	MW-5	_____	_____
TW-6	_____	MW-6	_____	_____
TW-7	_____	MW-7	_____	_____
TW-8	_____	Date Last Pumped _____		
TW-9	_____	Gallons Pumped _____		
TW-10	_____	Pumper Disposal Location _____		
TW-11	_____	Average Flow (gal/day)		_____
TW-12	_____	Maximum Daily Flow (gal/day)		_____

\/-\/-\/ February, May, August, and November only \/-\/-\/

Nitrate concentration _____ mg/L in well # _____

Scum Thickness (inches) _____

Scum Distance (inches above outlet) _____

Sludge Distance (inches below outlet) _____

Sludge Depth (inches) _____

Signed: _____ Title: _____

(rancheriasmrform)