

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM NO. R5-2004-0021

FOR  
CITY OF VACAVILLE  
GIBSON CANYON CREEK WASTEWATER TREATMENT PLANT  
CLOSURE AND CORRECTIVE ACTION  
SOLANO COUNTY

The Discharger shall submit reports required by this Monitoring and Reporting Program (MRP) and the Standard Provisions and Reporting Requirements dated 1 March 1991 pursuant to Section 13267 of the California Water Code. Failure to submit the required reports can result in the imposition of civil monetary liability. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

**GROUNDWATER MONITORING**

The Discharger shall sample groundwater monitoring wells MW-1 through MW-8, and extraction well EW-1 at the facility, as well as any additional monitoring wells installed at the treatment plant following the adoption of this Order. The Discharger shall collect samples from the groundwater monitoring wells as specified in Table 1. Sample collection shall follow standard EPA protocol.

<b>TABLE 1 - GROUNDWATER MONITORING PROGRAM</b>		
<b><u>Parameter</u></b>	<b><u>Units</u></b>	<b><u>Frequency</u></b>
<b>Field Parameters</b>		
Groundwater Elevation	Feet (100ths), MSL	Quarterly
Electrical Conductivity	µmhos/cm	Semiannually
pH	Number	Semiannually
Turbidity	Turbidity Units	Semiannually
<b>Monitoring Parameters</b>		
Ammonia	mg/l	Semiannually
Bicarbonate as CaCO <sub>3</sub>	mg/l	Semiannually
Chloride	mg/l	Semiannually
Nitrate as Nitrogen	mg/l	Semiannually
Phosphorous	mg/l	Semiannually
Sulfate	mg/l	Semiannually
Total Kjeldahl Nitrogen	mg/l	Semiannually
Total Dissolved Solids	mg/l	Semiannually
Total Organic Carbon	mg/l	Semiannually
Total coliform organisms	MPN/100 ml	Semiannually

The Discharger shall measure the water level in each monitoring well (in feet and hundredths, MSL) and determine groundwater gradient and direction at least quarterly, including the times of expected highest and lowest water level elevations for the respective groundwater body. Groundwater elevations shall be measured for a given groundwater body within a period of time short enough to avoid temporal groundwater flow variations which could preclude accurate determination of groundwater gradient and direction.

### REPORTING

The Discharger shall report field and laboratory test results in semiannual monitoring reports. The Discharger shall submit the semiannual monitoring reports to the Regional Water Board by **15 January** and **15 July** of each year. The Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. A discussion of the monitoring results shall precede the tabular summaries.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional engineer or geologist (or their subordinate) and signed by the registered professional.

Each semiannual report is to include the following information:

- (a) A narrative discussion of the analytical results and assessment of the progress of groundwater cleanup relative to predictions in the approved Corrective Action Plan. Any changes in groundwater flow and magnitude, and changes in pollutant concentrations from previous monitoring events shall be identified.
- (b) Tabulated **cumulative** monitoring data including depth to groundwater measurements, groundwater elevations above mean sea level, and groundwater analytical data.
- (c) Tabulated **cumulative** monitoring data in electronic format on a 3.5-inch floppy diskette or compact disk.
- (d) Graphs of concentration vs. time for the **cumulative** monitoring data for each well for electrical conductivity, total dissolved solids, and chloride.
- (e) Groundwater contour maps prepared using groundwater elevation data for the reporting period that shows the hydraulic gradient, flow direction and estimated flow velocity.
- (f) A copy of the laboratory analytical reports and chain of custody.
- (g) The status of interim measures and other tasks required by this Order.

The results of any monitoring done more frequently than required at the locations specified in the MRP shall also be reported to the Regional Water Board.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of requirement violations found during the reporting period, and actions

taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions and Reporting Requirements.

The Discharger shall implement the above monitoring program on the effective date of this Order.

Ordered by: \_\_\_\_\_  
PAMELA C. CREEDON, Executive Officer  
\_\_\_\_\_  
3 March 2008  
Date

WLB