

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. _____

FOR
THOMAS V. FOGARTY AND MARY R. FOGARTY, TRUSTEES, AND
THOMAS V. AND MARY R. FOGARTY REVOCABLE TRUST
FOR
POST-CLOSURE MAINTENANCE OF
HUMBOLDT ROAD PRIVATE PROPERTIES OPERATIONAL UNIT
BUTTE COUNTY

Compliance with this Monitoring and Reporting Program, with Title 27, California Code of Regulations, Section 20005, et seq. (hereafter Title 27), and with the *Standard Provisions and Reporting Requirements for Waste Discharge Requirements for Nonhazardous Solid Waste Discharges Regulated by Title 27 and/or Subtitle D (27 CCR §20005 et seq. and 40 CFR 258)*, dated April 2000, is ordered by Waste Discharge Requirements Order No.
_____.

A. REQUIRED MONITORING REPORTS

	<u>TYPE</u>	<u>DUE</u>
1.	Groundwater Monitoring	See Tables I & II
2.	Facility Monitoring	Annually by 31 January
3.	Response to a Release (Standard Provisions and Reporting Requirements)	As Necessary

B. REPORTING

The Discharger shall report monitoring data and information as required in this Monitoring and Reporting Program and as required in Order No. _____ and the Standard Provisions and Reporting Requirements. Reports that do not comply with the required format will be **REJECTED** and the Discharger shall be deemed to be in noncompliance with the waste discharge requirements. In reporting the monitoring data required by this program, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the units are readily discernible. The data shall be summarized in such a manner so as to illustrate clearly the compliance with waste discharge requirements or lack thereof. Data shall also be submitted in a digital format acceptable to the Executive Officer.

Field and laboratory tests shall be reported in each monitoring report. Semiannual monitoring reports shall be submitted to the Regional Water Board in accordance with the following schedule for the calendar period in which samples were taken or observations made.

<u>Sampling Frequency</u>	<u>Sample Collection Month</u>	<u>Reporting Frequency</u>	<u>Reporting Period Ends</u>	<u>Report Due Date</u>
Annually	October	Annually	31 December	31 January

The Discharger shall submit an **Annual Monitoring Summary Report** to the Regional Water Board **by 31 January** covering the previous monitoring year. The annual report shall contain the information specified in the Standard Provisions and a discussion of compliance with the waste discharge requirements.

The results of **all monitoring** conducted at the site shall be reported to the Regional Water Board in accordance with the reporting schedule above for the calendar period in which samples were taken or observations made.

C. MONITORING

The Discharger shall comply with the approved 14 October 2004 *Groundwater Detection Monitoring, Sampling, and Analysis Plan*.

Method detection limits and practical quantitation limits shall be reported. All peaks shall be reported, including those that cannot be quantified and/or specifically identified. Metals shall be analyzed in accordance with the methods listed in Table II.

The Discharger may, with the approval of the Executive Officer, use alternative analytical test methods, including new USEPA approved methods, provided the methods have method detection limits equal to or lower than the analytical methods specified in this Monitoring and Reporting Program.

1. Groundwater

Three completed wells (MW-5, MW-6, MW-7) are installed to monitor groundwater adjacent to the Unit; well construction details are tabled below. Monitoring wells MW-1, MW-2 and MW-3 are maintained by the City of Chico to monitor groundwater beneath the Humboldt Road Burn Dump Operational Unit, operated by the City of Chico Redevelopment Agency on an adjacent parcel. MW-4 was abandoned by the City of Chico during construction.

Well	Date Completed	Total Depth (ft bgs)	Screen Interval (ft bgs)	TOC Elevation (ft MSL)
MW-5	12/2005	44	22-44	281.16
MW-6	12/2006	80	60-80	288.7
MW-7	12/2007	100	60-100	294.18

The Discharger shall determine the groundwater flow rate and direction in MW-5, MW-6, MW-7 and in any additional zone of saturation monitored pursuant to this Monitoring and Reporting Program, and report the results **annually**, including the times of highest and lowest elevations of the water levels in the wells.

Hydrographs of each well shall be submitted showing the elevation of groundwater with respect to the elevations of the top and bottom of the screened interval and the elevation of the pump intake. Hydrographs of each well shall be prepared **annually** and submitted **annually**.

Samples shall be collected from MW-5, MW-6, MW-7, and analyzed for the monitoring parameters in accordance with the methods and frequency specified in Tables I and II. If no groundwater is observed in any monitoring well, the report shall state such fact.

If specifically requested, the monitoring parameters shall also be evaluated in an Annual Monitoring Summary Report that includes a cation/anion balance, and a graphical presentation of the results using a Stiff diagram, a Piper graph, or a Schueller plot.

2. Leachate Monitoring

There is no leachate collection and removal system; however, the floor of the Unit is graded to allow leachate to flow towards a collection berm. Leachate that drains toward the berm is collected through an outlet pipe having a valve that is normally closed. The Discharger shall inspect the outlet pipe for liquid **annually** and after *major storm events*. If no liquid is observed, the report shall state such fact. If the quantity of liquid is too small for sample collection and analysis, the estimated volume shall be reported. If the volume of liquid is adequate for laboratory analysis, samples shall be collected and analyzed for the constituents in Tables I and II.

Any leachate that seeps to the surface of the Unit shall be sampled and analyzed for each monitoring parameter and constituent of concern listed in Tables I and II. The quantity of leachate seeping to the surface shall be estimated and reported as Leachate Flow Rate (in gallons/day). The Discharger shall notify the Executive Officer within 24 hours of observing leachate seeping to the surface of the Unit.

3. Facility Monitoring

a. Standard Observations

Standard Observations shall be recorded during each site visit and shall include those elements identified in Standard Provisions. Each **annual** monitoring report shall include a summary and certification of completion of all Standard Observations. Field logs of standard observations shall also be included in the report.

b. Regular Maintenance Inspections

Unit facilities (i.e. monitoring wells) shall be inspected **annually** to identify the need for maintenance and repairs. Necessary repairs shall be completed within 30 days of each inspection. Field logs of these inspections and documentation of the repairs shall be included in each **annual** monitoring report.

c. After Storm Events

The Discharger shall inspect the Unit and all precipitation, diversion, and drainage facilities for damage within 7 days after each *major storm event*. **A major storm event is one that produces 1 inch or more of precipitation within a 24-hour period.** Areas of erosion or sedimentation observed during the inspection(s) shall be flagged and repaired **within 7 days** of identification. If repairs cannot be completed within the seven-day time frame, the Discharger shall notify the Regional Water Board of such and provide a schedule for completing necessary repairs. Findings and repairs implemented as a result of these inspections shall be included in each **annual** monitoring report. If no inspection was conducted because there was no significant storm event during the semiannual period, the report shall state such fact.

d. Site Winterization

Annually, prior to the anticipated rainy season, but no later than **30 September**, the Discharger shall conduct an inspection of the facility for the purpose of winterizing the site. The inspection shall identify any damage to the landfill cover, grade, precipitation and drainage controls, access roads, and other facilities. Any necessary construction, maintenance, or repairs shall be conducted in compliance with the approved postclosure maintenance plan and be completed by **31 October** annually.

The Discharger shall document the results of the winterization inspection and any repair measures implemented in the second Semiannual Report due **by 31 January** of each year.

Documentation of the above inspections and any repairs implemented shall include field observations, the location of any damage on the site, photographs of the damage, and location and description of any repairs implemented, including post-repair photographs.

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

Ordered by:

PAMELA C. CREEDON, Executive Officer

(Date)

KC/KB: sae
1/15/2007

TABLE I
GROUNDWATER DETECTION MONITORING PROGRAM

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Field Parameters		
Groundwater Elevation	Ft. & hundredths, M.S.L.	Annually
Temperature	°C	Annually
Electrical Conductivity	µmhos/cm	Annually
pH	pH units	Annually
Turbidity	NTU	Annually
Monitoring Parameters		
Total Dissolved Solids (TDS)	mg/L	Annually
Chloride	mg/L	Annually
Carbonate	mg/L	Annually
Bicarbonate	mg/L	Annually
Sulfate	mg/L	Annually
Calcium	mg/L	Annually
Magnesium	mg/L	Annually
Potassium	mg/L	Annually
Sodium	mg/L	Annually
Inorganics – (see Table II)	mg/L	Annually

TABLE II
CONSTITUENTS OF CONCERN AND APPROVED USEPA ANALYTICAL METHODS

<u>Inorganics (dissolved):</u>	<u>USEPA Method</u>
Barium	200.7/200.8 or 6010
Vanadium	200.7/200.8 or 6010
Zinc	200.7/200.8 or 6010
Manganese	200.7/200.8 or 6010
Lead	200.9 or 6020