CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2005-0837
CALIFORNIA WATER CODE SECTION 13267
FOR

J.R. SIMPLOT COMPANY
MILLER SPRINGS REMEDIATION MANAGEMENT, INC.
FORMER WINTON FACILITY
MERCED COUNTY

Miller Springs Remediation Management, Inc. and J.R. Simplot Company (collectively Discharger) operated a retail agricultural chemical distribution facility at 6245 Winton Way, Winton. Fertilizers, fumigants, and pesticides are present in groundwater, which is about 70 feet below ground surface. This pollution impaired the beneficial uses of this water resource. The Discharger has excavated polluted soil, removed vapors from soil gas, extracted contaminated groundwater, and is evaluating insitu bioremediation for nitrate removal.

This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to delineate groundwater pollutant plumes and determine whether remediation efforts are effective. Existing data and information about the site show the presence of various chemicals, including nitrate, 1,2,3-trichloropropane and dieldrin emanating from the property under the control of the Discharger. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. This MRP includes provisions to monitor a remediation pilot study and replaces the requirements listed in MRP No. R5-2002-0828, which was issued on 26 August 2002.

Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Regional Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

GROUNDWATER MONITORING

As shown on Figure 1, there are 13 routine groundwater monitoring wells (W-1, W-2, W-3, W-4, W-6, W-7, W-8, W-9, W-10, W-11, W-12, W-12B, and W-13), and 6 remediation monitoring wells (RW-1, RW-2, RW-3, RW-4, RW-5, and RW-6). Monitoring wells W-7 through W-11 are scheduled to be destroyed in 2005, and are not subject to this monitoring program. The groundwater monitoring program for the eight groundwater monitoring wells, and the remediation monitoring program for the six remediation monitoring wells, and any wells installed subsequent to the issuance of this MRP, shall follow the schedules below. Sample collection and analysis shall follow standard EPA protocol.

GROUNDWATER MONITORING SCHEDULE

Constituents	Method	Practical Quantitation Limit[1]	Wells	Frequency
Depth to Groundwater	---	0.01 ft	W-1 through W-4, W-6, W-12, W-12B, W-13	Semi-Annually[2]
			RW-1 through RW-6	Annually[3]
Total Oxidizable Nitrogen	EPA 353.2	1 mg/L	W-1 through W-4, W-6, W-12[4], W-13	Semi-Annually[2]
Organochlorine pesticides[5]	EPA 8081	0.05 µg/L	W-2, W-13	Semi-Annually[2]
Volatile Organic Compounds[6] (including 1,2,3-trichloropropane)	EPA 8260B	0.5 µg/L	W-1, W-2, W-4, W-6, W-12[4], and W-13	Semi-Annually[2]

[1] For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.
[2] In the first and third quarters (January - March, and July-September).
[3] In the first quarter (January - March).
[4] If W-12 contains insufficient water to purge the well and obtain samples, samples shall be obtained from W-12B in lieu of W-12.
[5] Practical quantitation limit for toxaphene is 1 µg/L.
[6] Practical quantitation limit for bromomethane and dichlorodifluoromethane is 1 µg/L, and for methylene chloride is 5 µg/L.

REMEDIATION MONITORING

The remediation monitoring program is specific for the pilot study scheduled to commence in October 2005 and terminate by October 2006 at the latest. Remediation monitoring may be terminated when remediation wells W-12 and W-13 contain dissolved organic carbon of less than 1.1 mg/l, and alkalinity of less than 121 mg/l, subject to confirmation by Regional Board staff. If remediation wells RW-4 through RW-6 contain less than the above listed concentrations of dissolved organic carbon and alkalinity, they may be removed from the remediation monitoring schedule.

REMEDIATION MONITORING SCHEDULE

Constituents	EPA Method	Practical Quantitation Limit[1]	Wells	Monitoring Frequency
Depth to Groundwater	---	0.01 ft	W-2, W-12[2], W-13	Bi-Monthly[3]
Alkalinity	SM 2320B	10 mg/L	W-2, W-12[2], W-13	Bi-Monthly[3]
			RW-1 through RW-6	Annually[4]
Ammonium	350.1	0.5 mg/L	W-2, W-12[2], W-13	Bi-Monthly[3]
			RW-1 through RW-6	Annually[4]
Dissolved Organic Carbon	415, 9060, or SM 5310	1 mg/L	W-2, W-12[2], W-13	Bi-Monthly[3]
			RW-1 through RW-6	Annually[4]
Manganese (dissolved)	200, 6010, or 6020	0.05 mg/L	W-2, W-12[2], W-13	Bi-Monthly[3]
			RW-1 through RW-6	Annually[4]
Nitrate (as nitrogen)	353.2	0.1 mg/L	W-2, W-12[2], W-13	Bi-Monthly[3]
			RW-1 through RW-6	Annually[4]
Volatile Organic Compounds[6] (including 1,2,3-trichloropropane)	EPA 8260B	0.5 µg/L	W-12[2], W-13	Bi-Monthly[3]
			RW-1 through RW-6	Annually[4]

[1] For nondetectable results. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.

[2] If W-12 contains insufficient water to purge the well and obtain samples, samples shall be obtained from W-12B in lieu of W-12.

[3] Every other month.

[4] Annually in the first quarter (January-March).

REPORTING

When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order. In addition, the Discharger shall notify the Regional Board within 48 hours of any unscheduled shutdown of any soil vapor and/or groundwater extraction system.

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

The Discharger shall submit semi-annual electronic data reports, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30. The semi-annual reports shall be submitted electronically over the internet to the Geotracker database system by the 1st day of the second month following the end of each respective calendar quarter, i.e. by **1 May and 1 November** until such time as the Executive Officer determines that the reports are no longer necessary.

Bi-monthly remediation monitoring reports shall be submitted to the Board by the **1st day of the second month following the end of each bi-monthly period (i.e. the February-March report is due 1 May)**, until Regional Board staff concur that the remediation pilot study is completed. At a minimum, the bi-monthly reports shall include:

(a) a description and discussion of the groundwater sampling event and results, and shall be supported by tabulated data transcribed from field logs for each well documenting depth to groundwater, parameters measured before, during, and after purging, calculation of casing volume, volume of water purged, any pertinent observations, etc.

(b) a scaled site map illustrating the location of all monitoring and remediation wells.

(c) tabulated summary of all laboratory analytical report(s). Copies of analytical data reports shall be transmitted to Regional Water Quality Control Board staff upon request.

(d) cumulative data tables containing the most recent year of water quality analytical results and depth to groundwater.

Semi-annual groundwater monitoring reports shall be submitted to the Regional Board by the **1st day of the second month following the end of each respective calendar quarter (i.e., by 1 May and 1 November**) until such time as the Executive Officer determines that the reports are no longer necessary. Each semi-annual report shall include the following minimum information:

(a) a description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated.

(b) tabulated data transcribed from field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, pertinent observations, etc.

(c) groundwater contour maps for all groundwater zones, if applicable.

(d) isocontour pollutant concentration maps for all groundwater zones, if applicable.

(e) a table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom.

(f) a table showing historical lateral and vertical (if applicable) flow directions and gradients.

(g) cumulative data tables containing at least the most recent two years of water quality analytical results and depth to groundwater. The complete historical record of data may be tabulated in hard copy, or may be submitted on electronic media.

(h) laboratory analytical data reports will be transmitted to Regional Water Quality Control Board staff upon request.

(i) if applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system.

(j) if applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

An Annual Report shall be submitted to the Regional Board by **1 November** of each year. This report shall contain an evaluation of the effectiveness and progress of the investigation and remediation, and may be substituted for the second semi-annual monitoring report. The Annual Report shall contain the following minimum information:

(a) both tabular and graphical summaries of all data obtained during the year;

(b) groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year;

(c) a discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells;

(d) an analysis of whether the pollutant plume is being captured by an extraction system or is continuing to spread;

(e) a description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system

effectiveness;

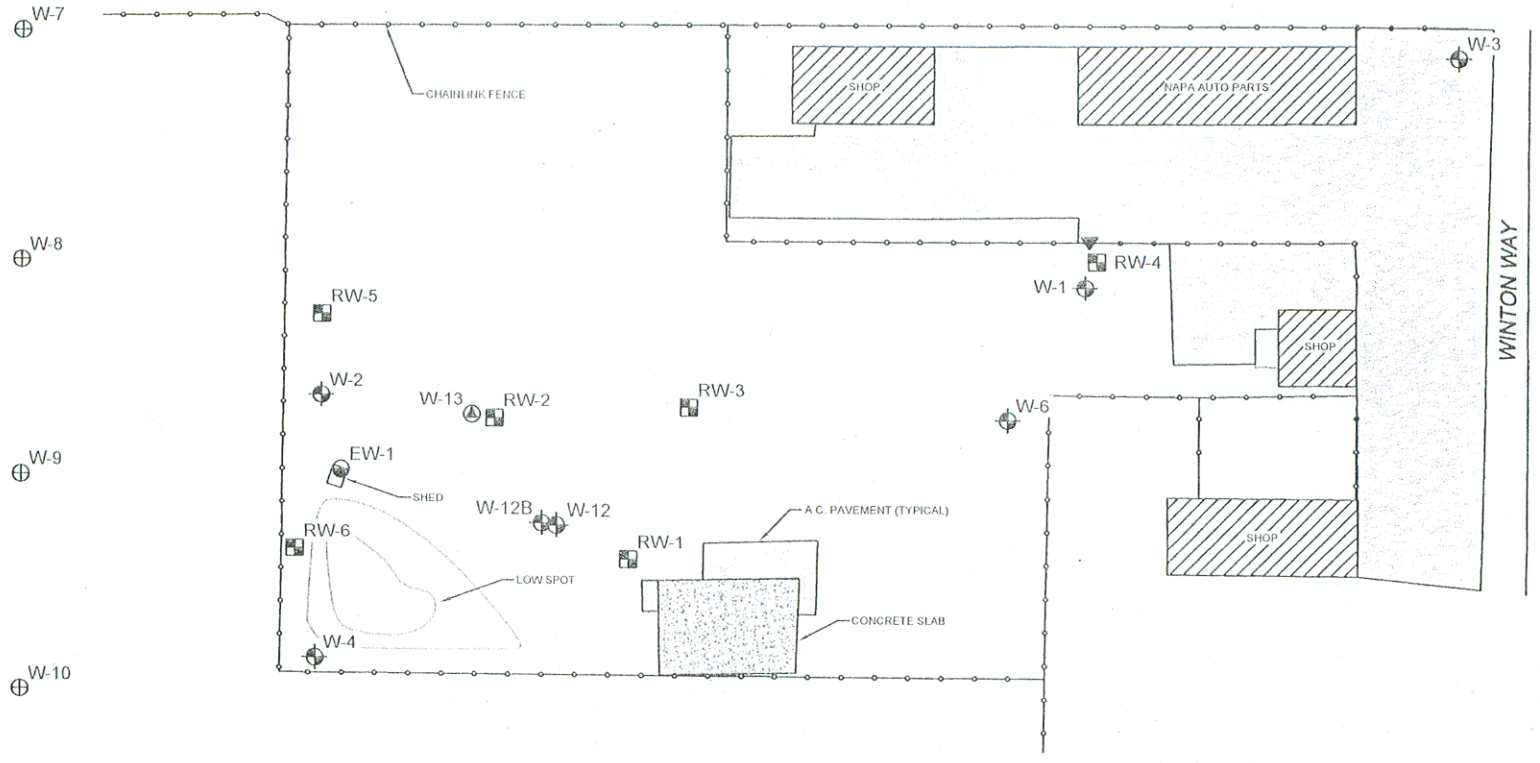
(f) an identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program; and

(g) if desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Regional Board. The Discharger shall implement the above monitoring program as of the date of the Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

_____
(Date)



EXPLANATION

- Off-site groundwater monitoring well
- On-site groundwater monitoring well
- On-site groundwater extraction well
- Remediation well
- Soil gas extraction well pair decommissioned in accordance to Merced County requirements on August 17, 2004
- On-site enhanced in situ bioremediation groundwater monitoring well
- Facility fence line
- Building outlines

N

0 100 ft.

Approximate Scale

SURVEY NOTES:

1. DATA COLLECTED ON 2-7-05
2. ELEVATIONS ON ALL WELLS WERE SHOT ON THE NORTH EDGE OF CASING.
3. VERTICAL DATUM IS NAVD 88

BENCHMARKS:
NGS HS 1558, HS4518 & HS1551

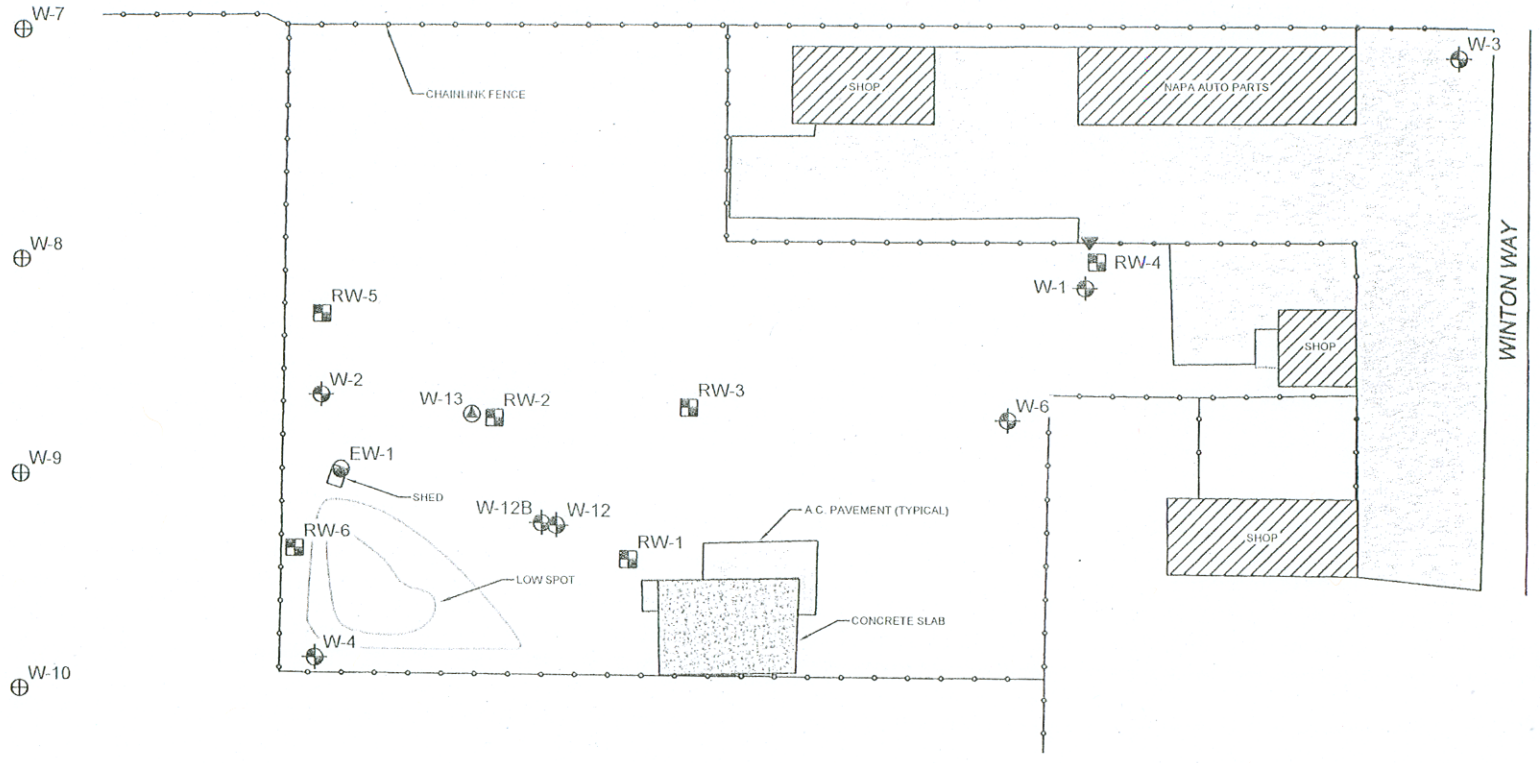
SURVEY BY:
FREMMING PARSON & PECCHENINO
118 PARK AVE.
MERCED, CA 95348
(209) 723-2066

GEOMATRIX

SITE PLAN
6245 Winton Way
Winton, California

Project No.
2589.000

Figure
1



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