California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM
ORDER No. R1-2015-0025

Rescinding and Replacing Monitoring and Reporting Program
Order No. R1-2013-0025

FOR

WILLITS ENVIRONMENTAL REMEDIATION TRUST
934 SOUTH MAIN STREET
WILLITS, CALIFORNIA

Mendocino County

This Monitoring and Reporting Program is issued pursuant to California Water Code Section 13267(b) and requires monitoring of groundwater and submission of technical reports. Reports are required on an annual basis. The objective of monitoring conducted under this monitoring program is to provide the Discharger and the Regional Water Board with information concerning groundwater quality and contaminant trends at the site. Monitoring and Reporting Program Order No. R1-2010-0004 exists for the dechlorination of volatile organic compounds in groundwater and monitoring for the Hexavalent Chromium Interim Remedial Action, and remains in effect. This Monitoring and Reporting Program rescinds and replaces Monitoring and Reporting Program Order No. R1-2013-0025, issued on March 19, 2013.

Under the authority of the California Water Code Section 13267, the Discharger named above is required to comply with the following:

## Storm Drain and Surface Water Monitoring and Reporting

1. Catch basins SWD Nos. 1 through 7 shall be inspected weekly during the rainy season and following storm events. Observations regarding presence or absence of inflow to each basin, flow rates into each basin, and the presence/absence of flow within the storm drain shall be recorded. Daily rainfall shall be recorded. A summary of the observations shall be provided.

2. Grab samples shall be collected from the storm drain system and Baechtel Creek according to the following schedule:

    - SWD-7, SWD-9, RW-1, and RW-2 shall be sampled during or immediately after the first significant rainfall event of the wet season.
    - SWD-2R, SWD-3R, SWD-4, SWD-5, SWD-6, SWD-7, SWD-9, RW-1, and RW-2 shall be sampled annually during the month of February.

3. The grab samples specified under No. 2 above shall be unfiltered and analyzed for total chromium (EPA Method 6010), volatile organic compounds (EPA Method 8260), pH, total organic carbon (Method 5310B or 9060), total suspended solids (EPA Method 2540D gravimetric), temperature, conductivity, and specific conductance. Filtered samples shall be analyzed for total dissolved chromium using EPA Method 6010, and hexavalent chromium using EPA Method 7199.

## Groundwater Monitoring

4. Groundwater levels from all monitoring wells shall be measured annually. Current and historical data shall be tabulated and provide the following: top of casing elevation, depth to water, and water table elevation above mean sea level. Damage or water intrusion into the well head vault shall be reported and corrected. Groundwater gradient maps for each aquifer zone shall be prepared. Vertical gradients shall be calculated and presented.

5. Groundwater samples shall be collected from each monitoring well specified in Table 1 (attached). Table 1 lists the frequency of sampling, and the constituents to be analyzed.

6. Prior to sampling, the well shall be properly purged. Purging, sampling and decontamination protocols, and field sampling logs shall be submitted. Logs shall include equilibrium measurements, pumping rates, and other pertinent information.

7. Hexavalent chromium analyses must be performed within 24 hours of sample collection. Sample date and time and analysis date and time shall be reported.

8. Hexavalent chromium samples shall be filtered at the time of collection, prior to transport to the laboratory. Total dissolved chromium samples shall be filtered and preserved by acidification at the time of collection, prior to transport to the laboratory.

## Maintenance

9. The discharger shall conduct facility inspections and maintenance as specified in the September 1, 1998 Maintenance, Inspection and Discharge Contingency Plan, or modifications thereof. Records of inspection and maintenance shall be included with the monitoring reports.

## Interim Remedial Actions

10. Interim remedial actions (IRAs) underway at the facility include groundwater extraction and treatment, control of groundwater infiltration into the storm drain, performance monitoring, an IRA to reduce hexavalent chromium, and an IRA to dechlorinate volatile organic compounds (VOC) in groundwater.

## Groundwater Treatment System Monitoring and Reporting

11. The groundwater treatment system shall be operated, and sampled in accordance with the *Revised Monitoring Plan for the Interim Remedial Action (IRA) Groundwater Extraction and Treatment System at the Former Remco Hydraulics Facility* (Farr Associates, May 28, 2010), or revisions thereof. Monitoring reports shall contain the following information: summary of time on-line and off-line; influent, midpoint and effluent concentration for hexavalent and total chromium, volatile organic compounds and arsenic; total flows and flow rates discharged to the sanitary sewer on a weekly basis; and summary of carbon change-outs.

## Reporting

12. A comprehensive annual groundwater monitoring report shall be submitted to the Regional Water Board on or before February 15 of each year. The groundwater monitoring report shall contain all the information requested under the headings Storm Drain and Surface Water Monitoring and Reporting, Groundwater Monitoring, Maintenance, Interim Remedial Actions, and Groundwater Treatment System Monitoring and Reporting. The annual report shall contain isoconcentration maps, groundwater elevation contour maps, depths to groundwater from each sampling event, laboratory results, and interpretation of the data. Reports shall present the data in tabular format, and contain any information from monitoring performed more frequently than required, or at locations not required by this program and shall present the data collected or sampled pursuant to IRAs conducted at the facility.

13. Groundwater elevation contour maps and isoconcentration maps for the A-zone, B-zone, and C-zone shall be submitted in the annual report. All concentrations shall be posted on the map and included in the contouring of the data. The following is a list of the isoconcentration maps required as part of this Order:

    **A-Zone**
    - Total Summed VOCs
    - Dissolved Arsenic
    - Vinyl Chloride
    - 1,4-Dioxane

    **B-Zone**
    - Total Summed VOCs
    - 1,4-Dioxane

14. Groundwater monitoring data and reports shall be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker) as required by Title 23, Division 3, Chapter 30 of the California Code of Regulations.

15. Each report shall contain copies of the chain of custody including the date and time of sample collection, the name of the person collecting the samples, and the signed laboratory sheets including QA/QC. All laboratory analyses must be performed by a laboratory certified for those analyses by the State of California Department of Health Services.

Ordered by _____
Matthias St. John
Executive Officer

April 28, 2015

**Table 1**

| Aquifer Zone | Well ID | VOCs | 1,4-Dioxane | Hexavalent Chromium | Total Dissolved Chromium | Dissolved Arsenic |
|---|---|---|---|---|---|---|
| A | EM-01 | Bi | Bi | | | |
| A | EM-04 | Bi | | | | |
| A | EW1A | A | A | | Bi | A |
| A | GMX-1A | Bi | A | | | A |
| A | GMX-2A | A | | | | A |
| A | GMX-3A | A | | | | |
| A | GMX-7A | A | A | | | A |
| A | MLW-12U | Bi | | | | |
| A | MLW-13U | Bi | | | | |
| A | MLW-14L | Bi | Bi | | | |
| A | MLW-15L | A | Bi | | | |
| A | TW-5 | | A | | Bi | A |
| A | W7 | | | | | A |
| A | W8A | A | A | | | |
| A | W9A | | | | | A |
| A | W11A | | A | | | |
| A | W12A | A | A | | | |
| A | W13A | | Bi | | | |
| A | W14A | A | A | | | A |
| A | W17A | A | A | | | |
| A | W18A | A | A | | | |
| A | W19A | A | A | | | |
| A | W20A | Bi | Bi | | | |
| A | W21A | A | A | | | A |
| A | W22A | A | A | | Bi | A |
| A | W23A | Bi | Bi | | | |
| A | W24A | A | A | | Bi | |
| A | W26A | | A | | | |
| A | W27A | Bi | Bi | | | |
| A | W28A | A | A | | | |
| A | W29A1 | A | A | | | |
| A | W34A | Bi | | | | |
| A | W35A | Bi | Bi | | | |
| A | W36A | Bi | Bi | | | |
| A | W38A | A | A | | | |
| A | W41A | A | Bi | | | Bi |

| Aquifer Zone | Well ID | VOCs | 1,4-Dioxane | Hexavalent Chromium | Total Dissolved Chromium | Dissolved Arsenic |
|---|---|---|---|---|---|---|
| A | W50A | | | | | |
| A | W51A | | Bi | | | |
| A | W52A | A | Bi | | | |
| A | W53A | A | Bi | | | |
| A | W54A | Bi | A | | | |
| A | RMW3 | | | | | |
| B | W4B | A | A | | Bi | |
| B | W8B | Bi | A | | | |
| B | EW1B | | A | A | A | |
| B | EW2B | | Bi | | | |
| B | EW3B | | Bi | | | |
| B | EW4B | A | A | | | |
| B | EW5B | | A | | | |
| B | W11B | A | Bi | | | |
| B | W12B | A | A | | | A |
| B | W28B | A | A | | | |
| B | W29B1 | A | A | | | |
| B | W30B | | | | | Bi |
| B | W31B | | A | | Bi | |
| B | W36B | | Bi | | | |
| B | W47B | | A | | | |
| B | W55B | | A | | | |
| B | W56B | | A | | | |
| B | GMX-6B | | A | | | |
| C | W6 | | Bi | | | |

Newly installed wells are sampled quarterly for 1-yr and semi-annually or annually thereafter.

A = Annual
Bi = Biennial