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QUALITY CONTROL BOARD

Environmental
Resources
Management

1777 Botelho Drive
Suite 260
Walnut Creek, CA 94596
(925) 946-0455
(925) 946-9968 (fax)

15 December 2006

Ms. Mary Rose Cassa
California Regional Water Quality Control Board
San Francisco Region
1515 Clay Street, Suite 1400
Oakland, CA 94612



Subject: Workplan for Off-Site A-Zone Investigation
Hookston Station
Pleasant Hill, California

Dear Ms. Cassa:

On behalf of the Hookston Station Responsible Parties (RPs), ERM-West, Inc. (ERM) has prepared this *Workplan for Off-Site A-Zone Investigation* for the Hookston Station site in Pleasant Hill, California. The Hookston Station RPs includes Union Pacific Railroad, Daniel C. Helix, Mary Lou Helix, Elizabeth Young, John V. Hook, Steven Pucell, Nancy Ellicock, and the Contra Costa County Redevelopment Agency. This workplan is submitted in response to the San Francisco Bay Area Regional Water Quality Control Board (Water Board) *Requirement for Technical Report – Hookston Station Site, 228 Hookston Road, Pleasant Hill, Contra Costa County* (13 November 2006).

This workplan presents the following:

- Investigation objectives;
- Proposed activities; and
- Project schedule and reporting.

OBJECTIVES

Increasing vinyl chloride concentrations have been observed in A-Zone ground water at monitoring well MW-16A during recent quarterly monitoring events. The objectives of the proposed investigation are to collect additional soil, soil vapor, and ground water data along the axis of the A-Zone ground water plume to refine the conceptual site model presented in the *Remedial Investigation Report* (ERM, August 2004).

PROPOSED ACTIVITIES

ERM proposes to install additional A-Zone ground water monitoring wells and vadose zone soil vapor probes along the axis of the off-site A-Zone ground water plume. Prior to installing the proposed monitoring wells and soil vapor probes, the necessary permits, including drilling and encroachment permits, will be obtained from the appropriate offices. The underground utilities will be identified by a private utility locator near each location and Underground Services Alert (USA) will also be notified at least 48 hours prior to commencing installation activities.

Monitoring Wells

Three new A-Zone monitoring wells (MW-27A to MW-29A) will be installed along the axis of the off-site A-Zone ground water plume. Proposed monitoring well locations are shown on Figure 1. The proposed location for MW-27A is near the proposed alignment for the A-Zone zero-valent iron permeable reactive barrier (PRB). A pre-design investigation will be conducted along the proposed PRB alignment and will include the collection of multiple ground water samples. The exact location of MW-27A may be modified based on the results of that pre-design investigation.

All well installation and sampling activities will be conducted in accordance with the Standard Operating Procedures provided in the *Phase I Remedial Investigation Sampling and Analysis Plan* (ERM, December 2000).

During well installation activities, soil samples will be collected continuously for logging and field-screening purposes. An ERM geologist will prepare boring logs in the field using the Unified Soil Classification System (USCS) to describe soils. The geologist will record vertical changes in soil lithology, color, moisture content, grain size, and texture, as well as any observations of staining or odors. The soils will also be screened in the field with a photoionization detector (PID) for the presence of volatile organic compounds (VOCs). One soil sample collected from the vadose zone at each monitoring well location will be submitted for laboratory analysis of VOCs by United States Environmental Protection Agency (USEPA) Method 8260.

The new monitoring wells will be developed no sooner than 2 days following installation. All well development activities will be conducted in

accordance with the Standard Operating Procedures provided in the *Phase I Remedial Investigation Sampling and Analysis Plan* (ERM, December 2000).

No sooner than 2 days following development activities, ground water levels will be measured and ground water samples will be collected from each new monitoring well. Ground water samples will be collected by traditional purge-and-sample techniques. Passive diffusion samplers may be utilized for collecting samples during future monitoring events. Samples will be submitted for laboratory analysis of VOCs by USEPA Method 8260.

Soil Vapor Probes

Three new soil vapor probes (SVP-11 to SVP-13) will be installed along the axis of the off-site A-Zone ground water plume. Proposed soil vapor probe locations are shown on Figure 1.

The new soil vapor probes will be constructed from 3 to 5 feet below ground surface, consistent with the construction of the existing probes (SVP-1 to SVP-10). The soil vapor probes will be installed and sampled in accordance with the *Soil Vapor Probe Installation and Sampling Workplan* (ERM, 10 February 2005) and the California Environmental Protection Agency Department of Toxic Substances Control *Guidance for the Evaluation and Mitigation of Subsurface Vapor Intrusion to Indoor Air* (7 February 2005).

Soil vapor samples will be collected from the new soil vapor probes no sooner than 2 days following installation. Samples will be collected for laboratory analysis of VOCs by USEPA Method TO-15.

Survey Activities

Once all sampling activities are complete, a California-registered land surveyor will survey the northing and easting coordinates for each monitoring well and soil vapor probe relative to the 1983 North American Datum. The top of well casing elevations for the new monitoring wells will also be surveyed relative to the 1988 North American Vertical Datum. All survey measurements will meet the requirements for California's GeoTracker database.

Investigation-Derived Wastes

Wastes generated during the proposed investigation activities will include soil cuttings, development water, and purge water. All wastes will be contained in 55-gallon steel drums and stored at the Hookston Station site until proper off-site disposal is arranged.

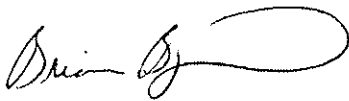
SCHEDULE AND REPORTING

The proposed monitoring wells and soil vapor probes will be installed prior to the Hookston Station First Quarter 2007 Monitoring Event, scheduled for February 2007. Ground water and soil vapor sampling will be performed at these new locations during the First Quarter 2007 event.

The installation activities and analytical results for the new locations will be summarized in the Hookston Station First Quarter 2007 Monitoring Report, which will be submitted to the Water Board by 30 April 2007.

If you have any questions regarding this status report, please call Brian Bjorklund at (925) 946-0455.

Sincerely,



Brian S. Bjorklund, P.G.
Project Manager



Kimberly Lake, P.G.
Project Geologist

BSB/kll/0020557.10

enclosure: Figure 1

cc: Mr. Daniel Helix
Mr. Michael Grant, UPRR
Mr. Jim Kennedy, Contra Costa County Redevelopment Agency