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VS

October 14, 2009

Jim Delwische
Southeast Region
WDNR
2300 N. Martin Luther King Jr. Dr.
Milwaukee, WI 53212

**Re: Work Plan for Site Investigation
OHM Holdings, LLC
13405 Watertown Plank Road
Elm Grove, WI
BRRTS#: 02-68-552102**

Dear Mr. Delwische:

On behalf of OHM Holdings, LLC, (EnviroForensics) is pleased to provide this Site Investigation Work Plan (Work Plan) to perform a subsurface investigation at the above-referenced site. A subsurface release of hazardous substance was previously reported to the Wisconsin Department of Natural Resources (WDNR) and additional investigation has been required by the Wisconsin Remediation and Redevelopment Program. EnviroForensics has prepared this Work Plan to conduct a Site Investigation per NR 716 of the Wisconsin Administrative Code (WAC). A written response to this submittal is not requested.

I appreciate your assistance with this matter and look forward to working with you on this project.

Sincerely,

Jeff Carnahan, LPG
Senior Project Manager

Copy: Brian Cass, OHM Holdings, LLC

Attachment



**WORK PLAN
SUBSURFACE INVESTIGATION
OHM HOLDINGS, LLC
ELM GROVE, WISCONSIN
BRRTS: 02-68-551923**

October 14, 2009

1.0 INTRODUCTION AND BACKGROUND

Tetrachloroethylene (PCE) has been identified in soil and groundwater beneath the OHM Holdings, LLC facility located at 13405 Watertown Plank Road in Elm Grove, Wisconsin. The maximum concentration of PCE detected in soil was 97 mg/kg, which is above the NR720.19 WAC, Non-Industrial Direct Contact Site-Specific Residual Contaminant Level (SSRCL) of 1.23 mg/kg, and the NR 720.19 soil-to-groundwater SSRCL of 41 ug/kg.

Groundwater was encountered at a depth of approximately 18 ft bgs, and likely flows toward the southeast based on local topography and surface water bodies. Groundwater contained 1.8 ug/L to the east of the highest soil concentration, which is above the NR 140 Preventative Action Limit (PAL) of 0.5 ug/L. The groundwater sample also contained 1.9 ug/L cis-1,2-Dichloroethylene (cis-1,2-DCE), which is below its NR 140 PAL of 7 ug/L.

To further investigate the extent of impacts at the Site, EnviroForensics has prepared the following scope of work in accordance with NR 716.

2.0 SCOPE OF WORK

EnviroForensics will conduct a subsurface investigation to investigate the horizontal and vertical extent of soil impacts and determine the nature and extent of groundwater impacts.

Task 1: Site-Specific Health and Safety Plan

EnviroForensics will prepare a site-specific Health and Safety Plan (HASP) for this Project. The HASP will be used by members of the Project team, all of whom have completed and are current with the requisite Hazardous Waste Operations Training. The revised HASP will provide health and safety guidelines for the investigation activities and will address key safety issues and potential hazards associated with the Project. The HASP will describe the scope of work, specify the appropriate personal protective

equipment (PPE), discuss emergency procedures and contacts, list project team member responsibilities, and outline work zones and decontamination procedures to be used during the Project. All site personnel will be required to read and sign the HASP prior to beginning work, to acknowledge that they understand the contents of the HASP and will abide by it. All personnel that enter the work areas will be equipped with at least the minimum level of PPE specified by the HASP. It is assumed that all work activities can be performed in Level D PPE.

Task 2: Direct Push Sampling

To define the horizontal extent of the identified soil impacts, EnviroForensics will install eight (8) soil borings. Four (4) of the borings will be advanced to a depth of approximately 18 ft bgs, or to the depth of groundwater, at the locations shown on the attached Figure. Four (4) of the borings will be advanced to a total depth of 30 ft bgs to characterize the lithology below the water table to facilitate the installation of monitoring wells. Direct-push soil samples will be collected in 4-foot long by 1.5-inch diameter vinyl acetate plastic sample sleeves, sampled and logged. A portion of each sample will be field-screened using a photoionization detector (PID), described lithologically and recorded on boring logs (WDNR 4400-122) in accordance with the United Soil Classification System (USCS). The results of field-screening using a PID will also be recorded on the boring logs. If gross impacts are identified in any of the borings near the presumed source area, any lithological zones that may be serving as confining or semi-confining units will not be punctured and those borings may be terminated.

One (1) soil sample will be collected from an interval less than six (6) ft bgs to correlate with the depth of the previously identified impacts. A second soil sample will be collected from a deeper zone that yields elevated PID readings, or that is above groundwater to vertically delineate the shallow impacts. Additionally, if PID readings indicate that impacts are present in the outermost borings, contingency step-out borings may be proposed to horizontally delineate the impacts.

Soil Sampling

Soil samples will be collected using direct-methanol preservation methods in accordance with SW-846 Method 5035, and placed in a cooler on ice. Latex gloves will be changed and new plastic sleeves will be inserted into the sample probe between each sample interval. The sample sleeve containing retrieved sample intervals will be placed on plastic and the cutting tool will be decontaminated prior to reuse.

One (1) duplicate soil sample will be collected for every ten (10) or fewer investigative samples, one (1) MS/MSD soil sample will be collected for every 20 or fewer investigative samples, one (1) field blank sample will be collected for every ten (10) or fewer investigative soil samples, and one (1) trip blank sample will be analyzed per sample cooler for quality assurance and quality control (QA/QC) purposes. It is

estimated that one (2) duplicate soil samples, one (1) MS/MSD soil sample, two (2) field blank sample and one (1) trip blank sample will be submitted for laboratory analysis.

All investigative soil samples and associated QA/QC samples will be submitted using appropriate chain-of-custody documentation to an environmental laboratory, certified and registered per NR 149, for analysis of VOCs using US EPA Method 8260.

Following the completion of sampling at each location, the borehole will be filled with granular bentonite. Investigation-derived media generated during direct push sampling will include soil cuttings and will be contained in labeled U.S. Department of Transportation (DOT) 17H-rated drums, or equivalent, and staged onsite awaiting management.

Task 3: Monitoring Well Installation and Sampling

Task 3 of the scope of work for this project includes the installation of four (4) permanent monitoring wells.

Well Construction and Development

Monitoring wells will be installed to approximately 30 ft bgs in the locations identified on the attached figure. Monitoring wells will be drilled, constructed, surveyed and recorded in accordance with NR 141. Expandable locking caps and keyed alike locks will be placed on each well. Flush mount well boxes will be set in 2-ft square concrete pads. Soil cuttings from the drilling and construction activities will be placed in DOT 17H-rated drums, or equivalent. Investigation derived media will be managed in accordance with the methods set forth in Task 5.

The wells will be developed in accordance with NR 141 and allowed to equilibrate for approximately 24 hours.

Surveying

Upon completion of the installation of the new monitoring wells, a licensed surveyor will locate each new monitoring well by standard surveying methods. A vertical survey will be conducted to establish the elevation of each monitoring well based on a relative benchmark, which will be utilized as a vertical control for the Site. The horizontal and vertical grid coordinates of each monitoring well and soil boring location will be recorded to within 0.1 foot and 0.01 foot, respectively. Horizontal locations will be referenced to the State Plane Coordinate System. The wells will also be recorded with the WDNR per NR 141.

Well Sampling

EnviroForensics personnel will conduct groundwater sampling approximately 24 hours after new well development activities have been completed. Prior to sampling, groundwater level measurements will be obtained from the newly constructed wells.

When appropriate, groundwater sampling will be conducted in accordance with the *Groundwater Sampling Field Manual* (PUBL-DG-038 96). Groundwater purging and sample collection will be conducted using a dedicated, disposable bailer. If ample water exists in the well, field parameters including dissolved oxygen (DO) and oxidation-reduction potential (ORP) will be measured.

All groundwater samples and associated QA/QC samples will be submitted to an environmental laboratory certified and registered per NR 149, for analysis of VOCs using US EPA Method 8260.

Additional analytical parameters will include those necessary to evaluate the potential occurrence of natural attenuation processes; including:

- Methane/ethane/ethane;
- Chloride;
- Total organic carbon (TOC);
- Nitrate/nitrite;
- Sulfate;
- Dissolved iron; and
- Dissolved manganese.

The following parameters will be measured in the field during sample collection activities and recorded:

- Dissolved oxygen (DO) ;
- Oxygen reduction potential (ORP);
- Temperature;
- pH; and
- Specific conductivity.

Investigation-derived media generated during groundwater sampling will include purge water, which will be contained in labeled U.S. Department of Transportation (DOT) 17H-rated drums, or equivalent, and staged onsite awaiting management as set forth in Task 5 and RR 556 *General Interim Guidelines for the Management of Investigative Waste*.

Task 4: Site Investigation Report

Once the results from Task 2 are available, EnviroForensics will complete a *Site Investigation Report* that complies with NR 716.15. The report will summarize the results of the work activities associated with the completed tasks. The report will also include information on further delineation of the horizontal and vertical extent of soil and/or groundwater contamination, and a summary of all analytical testing results and field measurements. Appropriate tables, maps, figures, and appendices will be provided, as appropriate, to aid data presentations and interpretation and the findings of the investigation as outlined in the WDNR Guidelines.

Task 5: Investigation Derived Media

Investigation derived media will be generated during the SI that will be characterized and managed in accordance with RR 556 *General Interim Guidelines for the Management of Investigative Waste*. Composite samples will be collected from soil cutting drums derived from the same well and from each purge water drum generated during the investigation activities for disposal characterization purposes. The soil and groundwater samples will be analyzed for total VOCs. A determination will be made if the wastes are hazardous or non-hazardous based on the results of the composite sample, and waste profiles will be prepared accordingly. A waste disposal contractor will properly manage, transport, and dispose of all IDW. A representative of the Site will be required to sign all waste manifests and shipping documents.

2.0 SCHEDULE

It is anticipated that the initial direct push sampling, monitoring well installation and groundwater sampling activities can be completed in three days onsite, and that a standard 10-day laboratory turn on results would be utilized.

We anticipate completing the *Site Investigation Report* within three weeks of receiving laboratory results.

3.0 PROJECT TEAM

Mr. Jeff Carnahan, LPG will manage this project and will serve as the NR712, WAC Certified Geologist as defined by NR 712.03(3). For those tasks that require certification by a Hydrogeologist as defined by NR712.03(1), Konrad Banaszak, PhD will provide hydrogeological assessment services.

As required by NR 712, these staff will meet the appropriate professional requirements necessary for each phase of the project. Resumes will be provided upon request.



PROPOSED BORING LOCATIONS

DRAFTER: LMB

APPROVED:

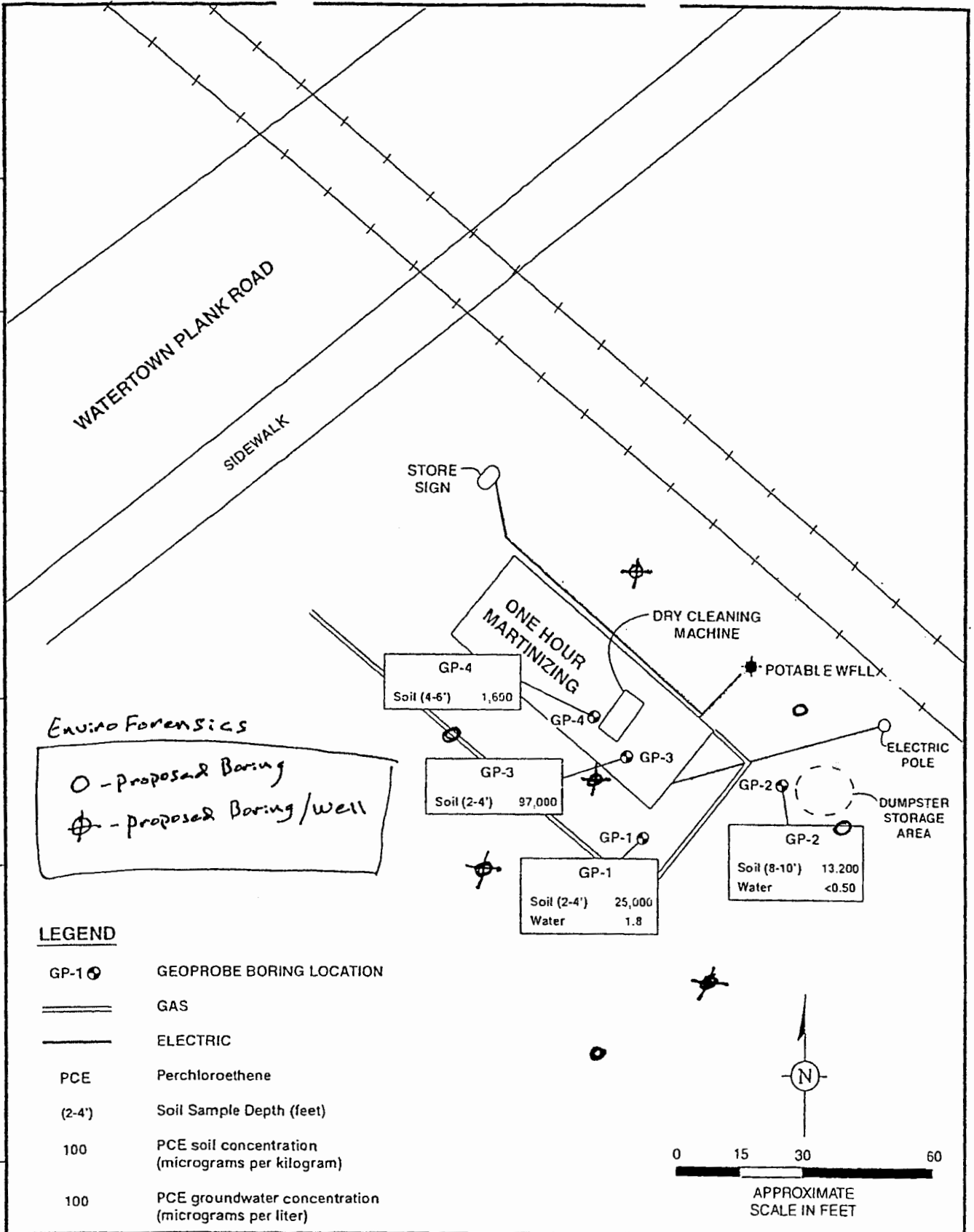
CHECKED: DMG

DRAWING: LAYOUT.A1

FILE NO.: GRAPHICS

PN: FOXCARPW1124\OHMELMGROVE

DWG DATE: 27MAR05



SITE LAYOUT AND SUMMARY OF PCE ANALYTICAL RESULTS

ONE HOUR MARTINIZING
 13405 WATERTOWN PLANK ROAD
 ELM GROVE, WISCONSIN

FIGURE

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