Oregon

Department of Environmental Quality

Kate Brown, Governor

Northwest Region
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September 16, 2019 Also Sent Via Email

Stephanie Heldt-Sheller
Corporate Environmental Manager
NW Pipe Company
201 NE Park Plaza Drive, Suite 100
Vancouver, Washington 98684

RE: DEQ Comments for July 12, 2019 Passive Soil Gas Investigation Work Plan
NW Pipe Company Site
ECSI #138

Dear Ms. Heldt-Sheller:

This letter provides Department of Environmental Quality (DEQ) comments for the July 12, 2019 Passive Soil Gas Work Plan at the NW Pipe Company Site. The EPA August 12, 2019 comment letter is attached.

Comments

DEQ concurs with comments provided by EPA in their letter. DEQ requests that the EPA Primary and To Be Considered Comments be addressed in your work plan resubmittal. DEQ has the following additional comments:

- Why will only selected VOCs be reported when the results of an 8260c analysis has a much more substantial list of constituents;
- The historical location of Gatton Creek should be plotted on the work plan map;
- Vapor sampling points should be installed at the historic location of Gatton Creek in order to evaluate the potential for preferential transport of contamination by the former creek;
- Please provide a discussion of how the vapor sampling will be interpreted to determine the locations of additional monitoring wells that support monitored natural attenuation evaluation; and
- Provide a revised conceptual site model for contamination transport based on this investigation results.

Please call me at (503) 229-5039, if you have questions regarding this letter.

Sincerely,

Jim Orr, R.G.
Project Manager
Northwest Region Cleanup Program

cc: By Electronic Format Only
Tim Wilson and Shane Zeeman, NWP Portland Site
Robin Gantt, NWP CEO
Ken Shump, Haute-Geologie LLC
Claudia Powers, Ater Wynne LLP
Mike Merchant, Black Helterline LLP
Paul Seidel, DEQ
Dave Lacey, DEQ
Mike Poulsen, DEQ
Jeff Schatz, DEQ
Henning Larsen, DEQ
Mike Romero, DEQ
Eva DeMaria, EPA
Hunter Young, EPA
ECSI File 138

Attached:
EPA August 12, 2019 Comment Letter

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 155
Seattle, WA 98101-3123

SUPERFUND &
EMERGENCY
MANAGEMENT DIVISION

DATE: August 12, 2019

SUBJECT: Passive Soil Gas Investigation Work Plan
Northwest Pipe Company
ECSI # 138
July 12, 2019

FROM: Eva DeMaria, Remedial Project Manager

TO: Jim Orr, Project Manager
Oregon Department of Environmental Quality (DEQ)

The following are the United States Environmental Protection Agency's (EPA's) comments on the Passive Soil Gas Investigation Work Plan dated July 12, 2019, prepared by Jacobs Inc. for Northwest Pipe Company. The Northwest Pipe Company site is listed in the Oregon Department of Environmental Quality (DEQ) Environmental Cleanup Site Information (ECSI) database as ECSI #138. The site is located within Burgard Industrial Park at 12005 North Burgard Way, Portland, Oregon, and is in an upland area at approximately River Mile 3.9 East. The Northwest Pipe Company site is hydraulically upgradient from the Port of Portland's Terminal 4 facility. The site does not have a river bank but is listed in DEQ's upland reports and shown on DEQ Figures 4.3 and 4.6.7 and the Portland Harbor Superfund Site Record of Decision as a groundwater plume that discharges to the sediment management area at the Terminal 4 Slip 1 at approximately River Mile 4.3 E.

The purpose of the proposed data collection is to use passive soil gas results as an indicator for locating monitoring wells downgradient of MW-03 near the southern boundary of the Northwest Pipe Company site and Port of Portland (Port) monitoring wells T4S1MW-03S and T4S1MW-09 near Terminal 4 Slip 1 on the Port's Terminal 4 property. The information would then inform the upcoming work plan for collecting data and evaluating monitored natural attenuation (MNA) to contain volatile organic compounds (VOCs) in groundwater that discharges to surface water of the Willamette River. The purpose of EPA's review was to assess whether the proposed passive soil gas investigation would provide an adequate basis for siting of MNA groundwater monitoring wells.

EPA's comments are categorized as: "Primary," which identify concerns that must be resolved to achieve the objective; "To Be Considered," which, if addressed or resolved, would reduce uncertainty, improve confidence in the document's conclusions, and/or best support the objectives; and "Matters of Style," which substantially or adversely affect the presentation or understanding of the technical information provided in the document.

Primary Comments

1. The proposed soil gas grid should be expanded to cover the entire width and estimated downgradient length of the chlorinated VOC plume as determined through previous reported groundwater monitoring data and BIOCHLOR modeling results. Groundwater monitoring data from July 2017 indicates that the plume width extends to some point west of T4S1MW-23 and east of T4S1MW-22. BIOCHLOR modeling presented in the August 18, 2017, *Supplemental Groundwater Data Report*, Northwest Pipe Company, Portland, Oregon ECSI #138, indicates tetrachloroethene, trichloroethene, and vinyl chloride concentrations exceeding Portland Harbor cleanup levels extend greater than 600 feet downgradient of the source. Delineation of the plume extent is necessary to site monitoring wells downgradient of the source area, along the potential degradation pathway, and in locations where groundwater is unimpacted by the plume.

To Be Considered (TBC) Comments

1. The objectives and decision logic for application of soil gas data to select well locations should be explained in the work plan. See also TBC Comment number 4.

2. The specific objectives for the location of additional MNA monitoring wells should be stated in the work plan. For example, additional wells may be located for monitoring attenuation of chlorinated VOC concentrations in the zone of natural attenuation, or additional wells may be located for monitoring geochemical conditions necessary to support ongoing attenuation downgradient of the leading edge of the plume.

3. A standard operating procedure (SOP) for installation of the passive soil gas samplers should be provided in the work plan.

4. Further information on how the groundwater samples will be collected from MW-03 and MW-04 and how the groundwater samples will be analyzed should be provided in the work plan. The analytical laboratory that will analyze the groundwater samples should be identified, and a brief discussion of the data quality objectives for the groundwater sample analysis should be provided. The work plan should briefly describe how the groundwater sampling data will be used for comparative purposes with the co-located passive soil gas sampling probe results and the results of the other soil gas sampling probes. The work plan should state if any additional quality control samples are planned for the groundwater sampling portion of the work. An SOP for the collection of groundwater samples should also be provided in the work plan.

Matters of Style Comments

Section 2, Background, second paragraph, discusses "elevated" VOC concentrations in the shallow, unconfined aquifer. Consider revising this sentence to state that chlorinated VOCs at concentrations greater than a comparative concentration, or an applicable screening levels, are present in the

shallow unconfined aquifer. Alternatively, the discussion could provide a typical range of values detected in the previous groundwater sampling events.

Elevated concentrations when used as a descriptive term, typically refers to concentrations that are greater than the naturally occurring or other background concentrations, such as when describing metals concentrations relative to naturally occurring background concentrations. Because chlorinated VOCs do not occur naturally or would not otherwise be expected to be present in groundwater, there are no comparative background concentrations.