

CONFIRMATION MONITORING PLAN

80C Parcel
(Former Tally Printer Site)
18220 80th Place South
Kent, Washington

VCP-NW2826

CONFIRMATION MONITORING PLAN

**80C Parcel
(Former Tally Printer Site)
8301 South 180th Street
Kent, Washington**

**Prepared for:
Hill Family I, LLC
PO Box 700
Mercer Island, Washington 98040**

Questions regarding this investigation, the conclusions reached and the recommendations given should be addressed to one of the following undersigned.

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VCP Number: NW2826

February 25, 2014

Environmental Associates, Inc.

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Introduction / Background

Since the mid to late 1990s, the Former Tally Printer site has been the subject of environmental site assessment, active remediation, and post-remediation groundwater monitoring and vapor intrusion risk assessment. The Washington State Department of Ecology (WDOE) through the Voluntary Cleanup Program (VCP) has determined that the site qualifies for a determination of “no further action” (NFA). The NFA determination is contingent on continued compliance with the terms and conditions set forth in an environmental covenant filed with King County and the continued performance of “confirmation monitoring” as specified in this WDOE approved monitoring plan.

Additional details regarding the environmental history of this site can be found in the numerous publically available reports and documents maintained at the WDOE as listed in Attachment-A.

Site Description

The approximate location of the Former Tally Printer Site is depicted on Plate 1, Vicinity / Topographic Map. The WDOE defines a “site” to be comprised of all parcels of land that have been impacted by contaminants from a particular source or release. The “Former Tally Printer Site” is composed of two (2) adjoining parcels of land as further described in the table below and depicted on Plate 2, attached:

Parcel Name / King Co. Tax Parcel#	Parcel Size	Occupancy	Ownership
Tally Printer - Parcel KCTP# 362304-9005	10.83 acres	Commercial - Retail/Warehouse	Hill Family II, LLC
80C-Parcel KCTP# 362304-9063 (Subject Parcel)	6.30 acres	Commercial - Warehouse	Hill Family I, LLC

The above two (2) parcels are subject to separate and independent determinations of “no further action.” This monitoring plan is specific to the 80C - Parcel (KCTP# 362304-9063), who’s boundary is highlighted in yellow on Plate 2, attached.

Groundwater Monitoring Plan

While contaminated groundwater remains on a portion of the subject parcel (as depicted on Plate 2), periodic groundwater monitoring is a required element of maintaining the determination of “no further action” (NFA) granted by the WDOE.

Conditional Points of Compliance Wells

Monitoring wells 80C-MW-4 and 80C-MW-11, as depicted on Plate 2, are designated as “conditional points of compliance.” Periodic sampling and laboratory testing of groundwater at these locations is intended to confirm that groundwater impacted with residual dissolved concentrations of chlorinated solvents is constrained within the property boundary thus minimizing the risk of impact to Springbrook Creek to the west (a primary potential receptor area).

Plume Stability Monitoring Wells

Monitoring wells 80C-MW-2, 80C-MW-3, and 80C-MW-6, depicted on Plate 2, are designated to be sampled periodically to assess stability within the “core” of the residual groundwater plume.

Groundwater Sampling Methodology

A peristaltic pump and single-use disposal tubing will be used to micro-purge and sample the groundwater from each monitoring well. Micro-purging will continue until changes in temperature, pH, conductivity, etc, suggest that the groundwater being withdrawn is representative of ambient conditions. The groundwater samples will be transferred directly into laboratory-prepared glassware. All recovered groundwater samples will be stored in an iced cooler for transport to the project laboratory. Maintenance of chain-of-custody documentation will be observed during each sampling event.

Analytical Methodology

The recovered groundwater samples will be submitted to a WDOE accredited laboratory to be analyzed for chlorinated volatile organic compounds (cVOC's) by EPA test method 8260C or a WDOE approved equivalent method. Laboratory minimum detection limits will not exceed the target compliance levels as specified in the Performance Standards section of this monitoring plan.

Performance Standards

The following target compliance levels are to be met at the “conditional points of compliance” (80C-MW-4 & 11).

Contaminant	Target Compliance Level
PCE	Groundwater WDOE Method-A (5 ppb)
TCE	Groundwater WDOE Method-A (5 ppb)
cis-DCE	Groundwater WDOE Method-B (16 ppb)
Vinyl Chloride (VC)	Groundwater WDOE Method-A (0.2 ppb)

Target compliance levels for any other chlorinated VOC (if detected) will be either Method-A or Method-B levels for unrestricted land use as published in the WDOE's CLARC database.

Monitoring Schedule and Data Submission

The groundwater monitoring data to date has demonstrated relative stability across the study area since active remediation efforts ended over ten (10) years ago in the summer of 2003, and no appreciable differences in contaminant concentrations have been correlated between seasonal high and low water table periods. In acknowledgment of the lengthy period of stability already observed, the identified point of compliance and plump stability monitoring wells will be sampled annually (once a year) for four (4) consecutive years. Quarterly sampling (every 3-months) will then be performed for year-five. Acknowledging that the selected monitoring wells were last sampled in 2013, the selected monitoring wells will be sampled annually again in 2014, 2015, and 2016. Quarterly sampling will be performed in 2017.

The above monitoring schedule will then repeat for the next 5-year period (2018 to 2022) and thereafter unless the WDOE requires amendments to the plan at the conclusion of the WDOE's 5-year review. No changes or alterations to the above monitoring schedule will be made without prior WDOE approval through submission of a revised compliance monitoring plan, except for instances discussed in the "further action triggers" section below. An amended confirmation monitoring plan can be submitted by the parcel owner anytime for review / consideration by the WDOE.

Following the completion of each sampling event, a very brief letter report will be prepared and submitted to the WDOE. The results will also be uploaded into the WDOE's Electronic Information Management (EIM) system.

Response To Further Action Triggers

In the event that chlorinated VOCs are detected at the conditional point of compliance at a concentration above the established target levels, the following response actions will be initiated:

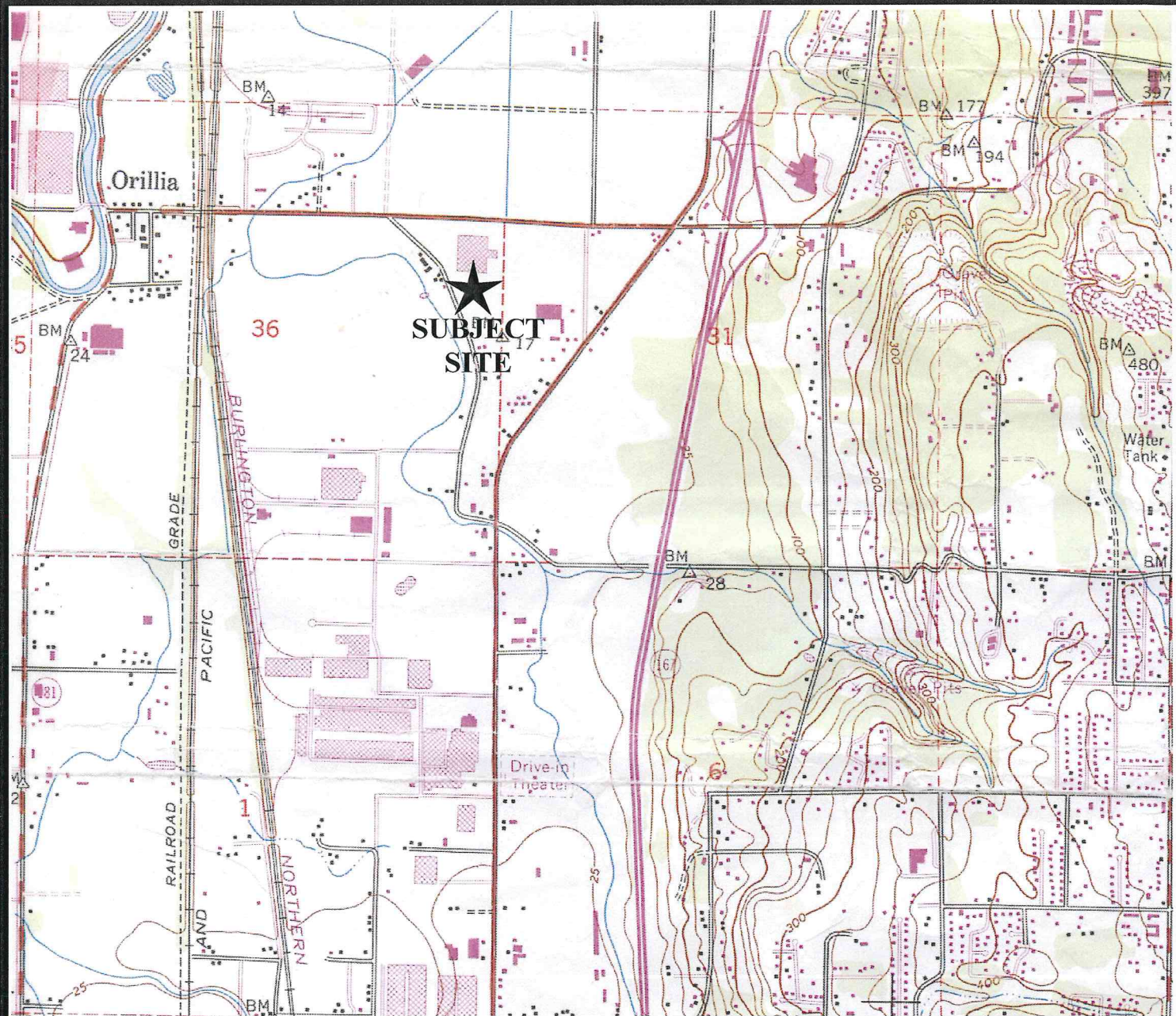
- The conditional point of compliance well will be re-sampled and groundwater sample re-analyzed. If the initial findings are not confirmed by the followup testing then the initial findings will be interpreted as a laboratory "false positive" or due to a sampling irregularity, and the previously established confirmation monitoring schedule will resume.
- If the above-referenced follow-up analysis confirms the initial result, then the findings will be disclosed to the WDOE and four (4) quarters of monitoring will be performed as an interim action to further evaluate the encountered condition. At the completion of the interim action, a report will be submitted to the WDOE presenting the data analysis long with either a proposed work plan for further site characterization and/or corrective action, or to seek the WDOE's approval to resume the previously established confirmation monitoring schedule.

Maintenance & Replacement of Damaged Monitoring Wells

Routine maintenance of the condition points of compliance monitoring well and the identified plume stability monitoring wells will be performed on an as-needed basis. If a well is found to have been damaged and/or compromised beyond a point of restoration, it will be properly decommissioned and a new replacement monitoring well will be installed within reasonable proximity to the original well (i.e within a 5 to 10 foot radius). Decommissioning, installation, and maintenance of the monitoring wells will conform to the provisions set forth in WAC 173-160 Minimum Standards For Construction And Maintenance Of Wells.

Limitations

This monitoring plan has been prepared on behalf of Hill Family I, LLC., and has been approved by the Washington State Department of Ecology as a required element of maintaining “no further action” (NFA) status for the subject parcel. EAI makes no warranties regarding the results/findings of future monitoring and/or future regulatory actions that may be undertaken by the WDOE and/or other environmental regulatory agencies. This monitoring plan does not constitute a contract or agreement for EAI to perform with work specified herein. Any future work performed by EAI on this parcel will be subject to the terms, conditions, and limitations enumerated in specific proposals/contracts that may be entered into between EAI and the property owner. No other warranty, expressed or implied, is made.



Scale
1/2 Mile
0 1
Contour Interval = 20 Feet



Subject Property Location



**ENVIRONMENTAL
ASSOCIATES, INC.**

1380 - 112th Avenue NE, Suite 300
Bellevue, Washington 98004

VICINITY / TOPOGRAPHIC MAP

80C Parcel
(Former Tally Printer Site)
18220 80th Place South
Kent, Washington

Job Number:
JN-22129

Date:
January 2014

Plate:
1

South 180th Street



NAPA
Autoparts

Former Tally Printer
Parcel

80th Place South

MW-4
MW-3
MW-6
MW-2
Residual
Groundwater
Plume
MW-11
80-C
Parcel

- Point of Compliance Monitoring wells 80C-MW-4 & 11).
Plume Stability Monitoring wells (80C-MW-2, 3, & 6).



**ENVIRONMENTAL
ASSOCIATES, INC.**

1380 - 112th Avenue N.E., Suite 300
Bellevue, Washington 98004

MONITORING WELL MAP

80C Parcel
(Former Tally Printer Site)
18220 80th Place South
Kent, Washington

Job Number:

JN-22129

Date:

January 2014

Plate:

2

ATTACHMENT - A

Reference List

VCP NW 1313 - REFERENCE LIST

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