United States Environmental Protection Agency
Region X
POLLUTION REPORT

Date: Tuesday, February 20, 2007
From: Michael Sibley II

Subject: Removal Actions
Japanese Auto Wrecking
7777 South 262nd Street, Kent, WA
Latitude: 47.3817000
Longitude: -122.2389000

POLREP No.:	9	**Site #:**	Z0A5
Reporting Period:		**D.O. #:**	
Start Date:	2/13/2003	**Response Authority:**	OPA
Mob Date:	7/17/2003	**Response Type:**	Time-Critical
Demob Date:	7/31/2007	**NPL Status:**	Non NPL
Completion Date:	7/31/2007	**Incident Category:**	Removal Action
CERCLIS ID #:		**Contract #**	03-06-0009
RCRIS ID #:		**Reimbursable Account #**	2003HR10N0XA550203D
FPN#	E03014		

Site Description

The Japanese Auto Wrecking (JAW) site (no longer operating at this location) originally occupied approximately 1.7 acres. The site (located at 7777 262nd Street in Kent, Washington) is a former auto wrecking yard that was referred to the EPA's Emergency Response Unit by the Washington Department of Ecology, the Washington State Patrol, and the EPA's Resource Conservation and Recovery Act (RCRA) division. The site is located near other auto wrecking yards, is within 0.25 mile of the Green River, and within 0.5 mile of residences. Prior to their February 2003 eviction, Japanese Auto Wrecking had taken over approximately 5.72 acres of the former Astro Salvage property. During the START site visit on February 13, 2003, oil was observed floating on surface water and strong petroleum odors were noted near a car-crushing area on the Japanese Auto Wrecking property. Workers on site reported dumping of thousands of gallons of gasoline directly into the soil at several locations. The site was closed by Washington Department of Labor and Industries in January, 2003, due to unsafe working conditions. On February 27, 2003, the EPA responded to the site due to the potential for buried chlorine gas cylinders to leak. On May 2, 2003, the EPA defined the entire 15 acre property (this includes the approximately 8 acres formerly occupied by Japanese Auto Wrecking) as the site area.

Current Activities

Air Sparge/Soil Vapor Extraction System
The air sparge/soil vapor extraction (AS/SVE) system was restarted on December 12 and continued to run for approximately thirteen days. Based on the air-compressor hour meter reading, the system turned off December 25, 2005. After trouble-shooting, an electrician replaced the electrical wires connecting the service panel to the power-pole lines, during the week of January 2. However, the AS/SVE system remained inoperable, apparently due to a faulty/damaged relay circuit. Additional electrical repairs are scheduled for Saturday, January 14. The current high groundwater conditions at the site, due to the extended rainfall during this month, may be contributing to the AS/SVE system problems.

An overview of the Existing Remediation System is composed of an air-sparging system (AS) and a soil vapor extraction system (SVE). Since its installation, the remediation system has produced dramatic reductions in gasoline-range petroleum hydrocarbons (TPH-G) and benzene,toluene, ethylbenzene, and xylenes (BTEX) in groundwater at the site. However,concentrations of TPH-G and Benzene in groundwater samples from monitoring well GMW-08 remain elevated. There may be residual TPH-G contamination present in the soils
located beneath the root mass of the large tree located approximately ten feet to the south of GMW-08. TPH-G and BTEX compounds in groundwater from monitoring well GMW-04 have also been significantly reduced such that samples collected in the summer months contain TPHG at concentrations below the cleanup level. However, the samples collected in the past two winter-sampling events posted TPH-G concentrations that were slightly above the cleanup level. G-

Logics' March 2005 subsurface exploration showed that elevated levels of TPH-G and benzene were present in the vadose zone at boring BH03, located approximately 15 feet to the south of GMW-04. It may be possible that vadose-zone contamination remains and is dissolving into groundwater present during the winter months.

Air Sparge System damaged air-injection point, C-1 has been repaired by Binford Metals personnel. During the thirteen days of operation, air was being supplied to all injection points at a rate of 1.4 standard cubic feet per minute (SCFM). The five Plume Eater injection/extraction wells operated with air supplied at a rate of 1.6 SCFM.

Soil Vapor Extraction System, while operating, the SVE system continued to operate as designed. The distant monitoring wells at the site remained under a vacuum exceeding 0.10-inches of water (e.g. GMW-11,which is approximately 150 feet from the nearest extraction well, has 0.14 inches of vacuum). These results continue to demonstrate that the computed radius of vacuum influence (conservatively identified as 60 feet) remains reasonable.

Vapor Treatment System On December 12, 2005, five air samples were collected & submitted for analysis.

Groundwater sampling of all monitoring wells occurred in November 2006. START-3 collected duplicate samples of all groudwater samples collected by the PRP's consultant G-logics. Analtyical results (from G-Logics and the START-3) indictated that gasoline-range hydrocarbons remained above MTCA Method A cleanup levels in those groundwater samples collected from GMW-08. On January 25, 2007, a large tree located within the vicinity of GMW-08 was removed by the PRP. The tree's root system will be excavated at a later date.

Planned Removal Actions

Continued monitoring of the air sparge/soil vapor extraction remediation system to include the collection of air and groundwater samples. Excavation of the tree's associated root system. Representative soil samples from the tree removal excavation will be collected and submitted to an analytical laboratory for TPH-G and BTEX analyses.
Subsurface samples will be collected from seven new soil borings. These borings will be placed within the vicinity of GMW-04 and GMW-08.

Prior to making the modifications to the remediation system, the tree in the vicinity of GMW-08 will be removed and additional subsurface exploration will be performed as follows:

- Binford Metals will remove the tree and associated root mass located near monitoring well GMW-08. Binford Metals will use an excavator for this work.
- Subsurface soil samples will be collected from seven new soil borings
- G-Logics will be present during the tree removal and placement of soil borings to observe and log the subsurface soils and collect soil samples.
- Representative soil samples from the tree removal excavation and new soil borings will be submitted to an analytical laboratory for TPH-G and BTEX analyses.
- If logistics allow, a mobile laboratory will be utilized, otherwise the samples will be delivered to a fixed-base laboratory.

Additional Planned Remediation System Modifications include, modifications will be performed on the BB7 parcel to increase remediation system performance in the vicinity of monitoring well GMW-08.

- Install up to four additional sparge points in the vicinity of GMW-08.
- Install new sparge point manometers and air-supply piping for the new sparge points.
- Re-establish vacuum extraction at existing well EW-1, including new vapor extraction pipe and manifold connection.

Optional Remediation System Modifications
Depending upon the findings in the explored areas on the BB5 parcel, the following modifications may be performed to increase remediation system performance as follows.

- Install up to two additional sparge points in the vicinity of new soil boring GL107 and reconnect extraction well EW-3.
- Install an additional sparge point in the vicinity of new soil boring GL102 and reconnect extraction well EW-2.

• Install up to two additional sparge points in the vicinity of new soil boring GL101 and reconnect extraction well EW-3.
• Install new vapor extraction manometers and vacuum-supply piping to reconnect the existing extraction wells as necessary.

Next Steps

To address any potential residual soil contamination, G-Logics will perform additional exploration of the subsurface soils in the vicinity of GMW-08, GMW-04(and BH03), and near former boring locations BH01, BH02, and BH07. Following the exploration work and depending upon the findings, G-Logics' may excavate any discovered contaminated soils, install new air-sparge points, and/or reactivate one or more of the abandoned vapor-extraction wells, as appropriate.

Key Issues

-Determine effectiveness of air sparge/soil vapor extraction remediation system.
-Determine if soil removal is necessary.
-Establish cleanup levels for subsurface soils.
-Establish timeline for cleanup operations for groundwater & soils.
-Field log of treatment system shut downs.
-Soil verification samples from treated areas.

response.epa.gov/JapaneseAutoWrecking