

CSID 1484

SITE HAZARD ASSESSMENT  
WORKSHEET 1  
SUMMARY SCORE SHEET

Site Name/Location (Street, City, County, Facility Site ID, Lat/Long):

Affordable Auto Wrecking  
9802 Martin Luther King Jr. Way  
Seattle, WA 98118  
King County  
Facility Site ID: 7163112  
Longitude: 122° 16' 40.00"  
Latitude: 47° 30' 50.00"  
Site assessed for August 23, 2006 update

Site Description (Include management areas, substances of concern, and quantities):

The Affordable Auto Wrecking site is located in an area that is comprised of light industrial and commercial properties in South Seattle. The site covers approximately ten acres and is bordered by Martin Luther King Jr. Way to the west, commercial properties to the north and south and a wooded area to the east. The site is served by municipal water and sewer systems. There are no documented uses of groundwater for private or municipal wells for either drinking water or irrigation purposes within a two-mile radius of the site.

Affordable Auto Wrecking operates as an auto recycling business. Vehicles are brought on site, drained of automotive fluids and have parts removed for resale. Most of the property is covered by wrecked vehicles. There are several small buildings on the site which house office, retail and storage space. There is also an area on the south end of the property where the fluids from the vehicles are drained. This area has large amounts of free-flowing automotive fluids on the ground. These fluids are collected by storm drains and routed to a large oil-water separator. Waste from the oil-water separator is then collected and disposed of. The separated water discharges to a municipal sewer system that combines sewage and stormwater. The entire Affordable Auto Wrecking site is covered by a layer of concrete that is one to three feet thick.

Historical evidence seems to indicate that the Affordable Auto Wrecking site has been used as an auto wrecking yard since the 1940's. Previous owners have stated that old vehicles may have been used as fill material for the property. The current owner of the site purchased the property in 1981. The concrete cover was added to the site in the mid 1990's. Before the concrete was added, the site cover consisted of a mixture of soil, rock and gravel. Historically, it was common practice to drain automotive fluids on the ground at the site which soaked into the soil.

On June 1, 2004, a multi-agency visit lead by the Washington Department of Ecology (Ecology) visited the site to check for any infractions that might be of interest to the different agencies present. At the time of the visit, the site was covered with wrecked vehicles and had large amounts of oil on the ground. This information was then forwarded to other investigators at Ecology to perform an Initial Investigation on the site. On August 4, 2004, an Ecology investigator conducted an Initial Investigation of the Affordable Auto Wrecking property.

After reviewing the information obtained during the Initial Investigation visit Ecology decided that the site needed further investigation. The Affordable Auto Wrecking property was listed on Ecology's Confirmed and Suspected Contaminated Sites

List on February 21, 2006, to await further assessment for suspected metals, solvents and petroleum product contamination in the soil, groundwater and surface-water pathways.

On March 13, 2006 Carsten Thomsen from Public Health-Seattle & King County (PHSKC) visited the site and met with the current owner who provided commentary and history relating to the property. Inspection of the property showed that the concrete on the south end of the site was covered by petroleum products. The remainder of the property contained wrecked vehicles and various auto parts. During the site visit the owner of the property stated that an underground storage tank that was used to collect waste oil had been removed in 2004. During the removal it was noted that the tank had leaked and contaminated the surrounding soil. The consultant working on the project supposedly notified Ecology about the leaking tank and soil contamination. No record of the notification to Ecology or a report documenting the tank removal can be found at this time.

Due to the extensive concrete cover on the Affordable Auto Wrecking property, it was decided that soil sampling would be impractical. Based on historical evidence relating to the sixty-year use of the site as an auto wrecking yard and the information relating to the leaking underground storage tank, this property will be scored and ranked under the Washington Ranking Method without any soil sampling results.

On the basis of this Site Hazard Assessment (SHA), completed by the PHSKC's Environmental Health Division, this site will be scored for the groundwater route only, due to the site cover eliminating any significant threats to human health and the environment via the surface water and air routes.

Special Considerations (Include limitations in site file data or data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site, or any other factor(s) over-riding a decision of no further action for the site):

Due to the extensive concrete cover creating an impractical ability to sample his property, soil samples were not available for scoring this site. For the purposes of this assessment, it has to be assumed that the expected constituents of waste oil would exceed their respective Method A MTCA cleanup levels.

#### ROUTE SCORES:

Surface Water/Human Health: NS

Surface Water/Environ.: NS

Air/Human Health: NS

Air/Environmental: NS

Ground Water/Human Health: 7.0

OVERALL RANK: 5

WORKSHEET 2  
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

Not applicable to site/not scored.

2. AIR ROUTE

Not applicable to site/not scored.

3. GROUND WATER ROUTE

List those substances to be considered for scoring: Source: 2

Cadmium

Chromium (III)

Lead

NWTPH - Heavy oil

(All substances are used crankcase oil constituents)

Explain basis for choice of substance(s) to be used in scoring.

Historical evidence of oil spills to soil.

List those management units to be considered for scoring: Source: 2

Contaminated on-site subsurface soils.

Explain basis for choice of unit to be used in scoring. Source: 2

Historical evidence of oil spills to soil suggested presence of this contaminant.

**WORKSHEET 3**  
**GROUND WATER ROUTE**

**1.0 SUBSTANCE CHARACTERISTICS**

**1.1 Human Toxicity**

Substance	Drinking Water Standard		Acute Toxicity		Chronic Toxicity		Carcinogenicity		
	(ug/l)	Val.	(mg/kg-bw)	Val.	(mg/kg/day)	Val.	WOE	PF*	Val.
1.Cadmium	5.0	8	225	5	0.0005	5	B1	ND	-
2.Chromium (III)	100	6	ND	-	1.0	1	ND	ND	-
3.Lead	5.0	8	ND	-	ND	-	B2	ND	-
4.NWTPH-Heavy oil	ND	-	ND	-	2.0	1	ND	-	-

\*Potency Factor

Source: 1  
Highest Value: 8  
(Max.=10)  
+2 Bonus Points? yes  
**Final Toxicity Value: 10**  
(Max.=12)

**1.2 Mobility (Use numbers to refer to above listed substances)**

Cations/Anions: 1=3; 2=1; 3=2; 4=0 Source: 1 Value: 3  
(Max.=3)

OR

Solubility(mg/l): 1= 0

1.3 Substance Quantity: unknown Source: 1 Value: 1  
Explain basis: \_\_\_\_\_ (Max.=10)

**2.0 MIGRATION POTENTIAL**

- 2.1 Containment site is covered score as landfill Source: 2 Value: 5  
Explain basis: no liner=3; cement cover=0; (Max.=10)  
no leachate collection=2; TOTAL=5
- 2.2 Net Precipitation: 24.4 - 5.2 = 19.2 inches Source: 4 Value: 2  
(Max.=5)
- 2.3 Subsurface Hydraulic Conductivity: silt/clay/till Source: 2 Value: 2  
(Max.=4)
- 2.4 Vertical Depth to Ground Water: 0 - 25 feet Source: 2 Value: 8  
(Max.=8)

**WORKSHEET 3 (CONTINUED)**  
**GROUND WATER ROUTE**

**3.0 TARGETS**

- 3.1 Ground Water Usage: groundwater not usable Source: 7 Value: 1  
(Max.=10)
- 3.2 Distance to Nearest Drinking Water Well: >10,000 ft Source: 7 Value: 0  
(Max.=5)
- 3.3 Population Served within 2 Miles: pop.=0= 0 Source: 7 Value: 0  
(Max.=100)
- 3.4 Area Irrigated by (Groundwater) Wells  
within 2 miles: 0.75  $\sqrt{\text{no. acres}}$  = Source: 6 Value: 0  
0.75 ( $\sqrt{0}$  acre) = 0 (Max.=50)
- 4.0 **RELEASE**  
Explain basis for scoring a release to ground water: None documented Source: 2 Value: 0  
(Max.=5)

**SOURCES USED IN SCORING**

1. Washington Ranking Method Toxicological Database
2. Site Hazard Assessment, Public Health - Seattle & King County, May 2006
3. National Weather Service Data
4. Isopluvials of 2-YR, 24-HR precipitation, NOAA Atlas 2, Vol.IX
5. Sensitive Areas Coverage, King County Geographic Information System Data
6. Washington State Department of Health Public Water Supply Listing
7. Washington State Water Use Data

