

CSID 4350

**SITE HAZARD ASSESSMENT  
WORKSHEET 1  
SUMMARY SCORE SHEET**

Site Name/Location (Street, City, County, Section/Township/Range, Facility Site ID):

SMI Inc. Trust  
8733 Greenwood Ave N  
Seattle, WA 98103  
King County  
T-26N, R-03E, Sec-36  
Facility Site ID: 74731271  
Longitude: 122° 21' 18.42"  
Latitude: 47° 41' 33.71"  
Site assessed for August 24, 2005 update

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

The SMI Inc. Trust site is located west of Greenwood Avenue N between N 87<sup>th</sup> and N 90<sup>th</sup> Streets in north Seattle. An alleyway borders the western side of the property. This 0.15-acre site consists of three building structures. The building facing Greenwood Avenue N houses a BBQ restaurant and an electronic repair business. The two other building structures are a garage/shop and a storage shed located behind the restaurant along the alleyway. The area between these two structures is a covered carport area with a wall dividing the area in two. A majority of the site is paved with the exception of some gravel and grass/brush areas behind the restaurant. Municipal water and sewer systems serve this site.

On April 2, 1998, the Washington State Department of Ecology (Ecology) received an anonymous complaint regarding pressure washing of car engines directly onto the ground by the tenants of the site. The complainant also indicated that no oil drums were present to collect the used oil. According to the complainant, fluids were dripping and draining from the cars that had the engines removed from them. In addition, antifreeze residue in buckets were tipped over and drained onto the ground. The poor waste management practices had been ongoing for a year. On April 7, 1998, Ecology referred this complaint to Public Health - Seattle & King County (PHSKC) to conduct an initial investigation.

On May 13, 1998, PHSKC conducted the initial investigation and met with the tenant who currently occupied the space at the time of the site visit but was not the same tenant that was the reason for the original complaint. The tenant did not have a pressure washer on-site. He told PHSKC that he took his engines to a car wash, collected the used oil in a 200-gallon metal aboveground storage tank (AST) and had the AST pumped by a recycler periodically. He also indicated he collected the antifreeze to the best of his ability into containers for recycling. PHSKC noticed some oil and antifreeze in puddles on the concrete and on the soil flooring of a portion of the covered carport area where cars were being repaired and prepped for sale. PHSKC also observed an area of dark soil between the restaurant building and the storage shed. According to the tenant, there was a broken sewer line and the soil had been churned due to the sewer line replacement. Most of the areas that the current tenant was using for repair were the blacktop and concrete areas. PHSKC noted a storm drain that was combined with sewer and led to a treatment plant.

On February 19, 1999, PHSKC conducted another site visit to check the status of the property. PHSKC did not observe any auto repair activity on the site. The cars appeared to be stored in place for quite some time. The tenant that PHSKC previously spoke to was not present at the time of the site visit. There was an oil barrel with used oil that was discharging oil to concrete and then to the storm drain in the alleyway. PHSKC contacted Seattle Public Utilities Surface Water

Management so that they could address the issue of the discharge into the storm drain.

On November 9, 2000, PHSKC conducted a third site visit and observed oil containers and barrels that appeared to be empty. No fluids were leaking to the ground or to the storm drain at the time of the site visit. PHSKC indicated there were a lot of broken pieces of asphalt and concrete on the site in the covered shop area. Due to the site conditions and past management practices, PHSKC recommended the SMI Inc. Trust site to be added to Ecology's Confirmed and Suspected Contaminated Sites (CSCS) list.

On August 24, 2001, Ecology added the SMI Inc. Trust site onto the CSCS list and sent two early notice letters to notify the property owner on August 27, 2001 and then later on October 16, 2001, when the first letter was returned. Ecology listed the SMI Inc. Trust site as a confirmed contaminated site for petroleum products and suspected contaminated site for metals in the soil media. This site was also listed as a suspected contaminated site for petroleum and metals in the surface water media however as previously mentioned, the storm drain was combined with sewer and led into a treatment plant.

On August 27, 2004, Ecology sent a notification letter indicating that Yolanda Pon from PHSKC was going to conduct a site hazard assessment on the SMI Inc. Trust site. Since there was no response to the letter from the property owner, PHSKC conducted a site visit on September 1, 2004 to find some contact numbers. The BBQ restaurant named the OK Corral was still in business and the phone number was advertised in the front of the building. On September 21, 2004, PHSKC contacted the OK Corral and spoke with Otis, owner of the OK Corral restaurant. He indicated that he was the tenant and gave me the number for Christina, who collected his rent every month. PHSKC left several voice mail messages for Christina to request permission to access the site, but was unsuccessful. As a result, PHSKC contacted Otis on November 9, 2004 and set up an appointment to meet with him and discuss the previously mentioned issues of soil contamination on the site.

On November 10, 2004, PHSKC conducted a site visit and met with Otis at the site. Otis indicated that he had leased the site for his restaurant for the past 11 years. According to Otis, he cleaned up the site after the other tenants had left and got rid of all the waste products and inoperable vehicles. PHSKC noted the northern half of the carport area had a gravel floor with an oven and refrigerator stored against the wall separating the northern and southern halves of the covered carport. The southern half of the carport had a paved floor with his two vehicles parked on it and the AST located adjacent to the garage. There was also vegetation on both sides of a separate concrete pad located between the shop area and the back of the restaurant. PHSKC was unable to locate the storm drain at the time of the site visit however the alleyway appeared to have been paved within the last few years.

Although there had not been any auto repair done in the last few years according to Otis, three soil samples were selected by PHSKC based on the observations made in the initial investigation of the SMI Inc. Trust site. On December 1, 2004, PHSKC retrieved the first and second soil samples in the gravel area beneath the covered carport where vehicles had been repaired in the past. The third soil sample was collected in the grassy area just north of the concrete pad to analyze for possible run-off from the concrete pad. All three samples were collected at depths ranging from six to eight inches and tested for Northwest Total Petroleum Hydrocarbons- Diesel extended (NWTPH-Dx), and total metals.

Although heavy oil was detected in all three soil samples and NWTPH-Diesel was detected in the second and third sample, the levels detected did not exceed their current Model Toxics Control Act (MTCA) Method A cleanup levels of 2,000 parts per million (ppm) for both heavy oil and NWTPH-Diesel. As shown in the table below, elevated levels of cadmium and lead were detected in samples SMI

#1 and SMI #2 exceeding their current Model Toxics Control Act (MTCA) Method A cleanup levels of 2.0 ppm and 250 ppm, respectively. Their elevated levels are shown in bold.

SOIL SAMPLE	Cadmium (ppm)	Lead (ppm)
SMI #1	<b>3.1</b>	<b>940</b>
SMI #2	<b>2.4</b>	<b>6500</b>
SMI #3	1.9	140
MTCA Method A Cleanup Level	2.0	250.0

On December 30, 2004, PHSKC contacted Otis and Christina regarding the elevated levels discovered on the SMI Inc. Trust site. PHSKC requested Christina to contact the owner regarding the site contamination. PHSKC also indicated to Christina that the owner needed to decide whether to have the SMI Inc. Trust site enter into the Voluntary Cleanup Program (VCP) or do nothing and the property would be ranked and placed on the Hazardous Sites List. PHSKC requested Christina to respond back by January 15, 2005 with a decision.

In January 2005, PHSKC attempted to contact Christina by leaving several voice mail messages on her cellular phone regarding the owner's decision on the SMI Inc. Trust site, but PHSKC did not receive a response from her.

On May 31, 2005 and June 17, 2005, PHSKC was able to talk to Christina directly over the phone and she claimed she would hear from the owner by June 20, 2005 regarding his decision. PHSKC indicated to her at the June 17th phone call that if PHSKC did not hear from her or the owner within seven days, PHSKC would assume the owner has no intentions to enter into VCP and the SMI Inc. Trust site would be ranked based on the soil contaminants found last December. No response was received by PHSKC even after another voice mail message was left for Christina on June 30, 2005. As a result, the SMI Inc. Trust site will be ranked for the elevated levels of constituents found in the soil on the site.

On the basis of this SHA, completed by the PHSKC's Environmental Health Division, this site will be scored for the surface water, air, and groundwater routes under the MTCA regulations.

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): None.

**ROUTE SCORES:**

Surface Water/Human Health: n/a

Surface Water/Environmental: n/a

Air/Human Health: 23.7

Air/Environmental: 23.7

Ground Water/Human Health: 29.7

**OVERALL RANK: 4**

**WORKSHEET 2**  
**ROUTE DOCUMENTATION**

**1. SURFACE WATER ROUTE - Not applicable/not scored**

List those substances to be considered for scoring: Source:

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

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

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

**2. AIR ROUTE**

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

Cadmium, Lead

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

All of the above substance concentrations are above MTCA Method A cleanup standards.

List those management units to be considered for scoring: Source: 3

Surface soil contamination

Explain basis for choice of unit to be used in scoring. Source: 3

Surface soil is exposed to weather with no containment.

**3. GROUND WATER ROUTE**

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

Cadmium, Lead

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

All of the above substance concentrations are above MTCA Method A cleanup standards.

List those management units to be considered for scoring: Source: 3

Surface soil contamination

Explain basis for choice of unit to be used in scoring. Source: 3

Surface soil is exposed to weather with no containment.

**WORKSHEET 3  
AIR ROUTE**

**1.0 SUBSTANCE CHARACTERISTICS**

1.1 Introduction

1.2 Human Toxicity

Substance	Air Standard		Acute Toxicity		Chronic Toxicity		Carcinogenicity		
	(ug/m <sup>3</sup> )	Val.	(mg/m <sup>3</sup> )	Val.	(mg/kg/day)	Val.	WOE	PF*	Val.
1.Cadmium	.00056	10	25	10	ND	-	B1	6.1	6
2.Lead	0.05	10	ND	-	ND	-	B2	ND	-

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

1.3 Mobility (Use numbers to refer to above listed substances)

1.3.1 Gaseous Mobility

Vapor Pressure(s) (mmHg): 1= \_\_\_\_\_ ; 2= \_\_\_\_\_ ; Source:  
3= \_\_\_\_\_ ; 4= \_\_\_\_\_ ; 5= \_\_\_\_\_ ; 6= \_\_\_\_\_ Value:  
(Max.=4)

1.3.2 Particulate Mobility

Soil type: gravelly sand Source: 3  
Erodibility: 22 Value: 0  
Climatic Factor: 1-10 (Max.=4)

1.4 Highest Human Health Toxicity/Mobility Matrix Value (from Table A-7)  
equals **Final Matrix Value: 3**  
(Max.=24)

1.5 Environmental Toxicity/Mobility Source: 1

Substance	Non-human Mammalian Acute		Mobility (mmHg)	Value	Matrix Value
	Inhal. Toxicity (mg/m <sup>3</sup> )	Value			
1.Cadmium	25 (rat)	10	0.0E+00	0	3

Highest Environmental Toxicity/Mobility Matrix Value  
(From Table A-7) equals **Final Matrix Value: 3**  
(Max.=24)

1.6 Substance Quantity: unknown Source: 3 **Value: 1**  
Explain basis: \_\_\_\_\_ (Max.=10)

WORKSHEET 3 (CONTINUED)  
AIR ROUTE

2.0 MIGRATION POTENTIAL

2.1 Containment: No cover; discharges/spills directly Source: 3 Value: 10  
onto ground surface (Max.=10)

3.0 TARGETS

3.1 Nearest Population: dwelling across alley < 50 ft Source: 3 Value: 10  
(Max.=10)

3.2 Distance to, and Name(s) of, Nearest Sensitive  
Environment(s) Sandel Playground = 620 ft Source: 6 Value: 7  
(Max.=7)

3.3 Population within 0.5 miles: √pop.= pop = 8,824 Source: 3 Value: 75  
(Max.=75)

4.0 RELEASE

Explain basis for scoring a release to air: \_\_\_\_\_ Source: 3 Value: 0  
No confirmed release (Max.=5)

**WORKSHEET 4**  
**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. Lead	5.0	8	ND	-	ND	-	B2	-	-

\*Potency Factor

Source: 1,2  
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 = 2 Source: 1 Value: 3  
(Max.=3)

OR

Solubility(mg/l): 1= ; 2= ; 3= ; 4= ; 5= ; 6= .

1.3 Substance Quantity: unknown Source: 3 Value: 1  
Explain basis: \_\_\_\_\_ (Max.=10)

**2.0 MIGRATION POTENTIAL**

2.1 Containment Source: 3 Value: 10  
Explain basis: spill/discharge onto ground (Max.=10)

2.2 Net Precipitation: 24.6 - 5.9 = 18.7 inches Source: 5 Value: 2  
(Max.=5)

2.3 Subsurface Hydraulic Conductivity: sand and gravel Source: 3 Value: 4  
(Max.=4)

2.4 Vertical Depth to Ground Water: 0 - 25 feet Source: 3 Value: 8  
(Max.=8)

**3.0 TARGETS**

3.1 Ground Water Usage: ground water not used, but usable Source: 8 Value: 2  
(Max.=10)

3.2 Distance to Nearest Drinking Water Well: > 2 miles Source: 8 Value: 0  
(Max.=5)

3.3 Population Served within 2 Miles: √pop. = √0 = 0 Source: 8 Value: 0  
(Max.=100)

3.4 Area Irrigated by (Groundwater) Wells  
within 2 miles: 0.75 √no. acres = 0.75 (√ 0 acres) = 0 Source: 7 Value: 0  
(Max.=50)

**4.0 RELEASE**

Explain basis for scoring a release to ground water: none confirmed Source: 3 Value: 0  
(Max.=5)

#### SOURCES USED IN SCORING

1. Washington Ranking Method Toxicological Database
2. Analytical results for SMI Inc. Trust site, OnSite Environmental, Inc., December 1, 2004.
3. Site Hazard Assessment, Public Health - Seattle & King County, August 24, 2005
4. National Weather Service Data
5. Isopluvials of 2-YR, 24-HR precipitation, NOAA Atlas 2, Vol.IX
6. Sensitive Areas Coverage, King County Geographic Information System Data
7. Washington State Department of Health Public Water Supply Listing
8. Washington State Water Use Data