WORKSHEET 1
Summary Score Sheet

SITE INFORMATION:

Name: Grand Building Valetor Cleaners
Address: 3011 Grand Avenue
City: **Everett** County: **Snohomish** State: **WA** Zip: **98201**
Section: 30, Township: 29N, Range: 5E
Latitude: **47° 58' 38.60" N** Longitude: **122° 12' 46.84" W**

FS ID #: **88593256**
ERTS#: **537968**

Site scored/ranked for the August 22, 2007 update
July 31, 2007

SITE DESCRIPTION

The Grand Building Valetor Cleaners site, hereinafter referred to as the site, is located at 3011 Grand Avenue, in what would be considered downtown Everett. The site is immediately to the west, across the alley from the Snohomish Health District.

The site is a building which appears to have been a dry cleaner since the early 1970s until 1991 according to a Phase One site assessment conducted in November 2002, by Wolfe Environmental Consulting, Inc.

The site is paved with asphalt or concrete. Ground level planter strips exist on the north and south sides of the building. Properties to the north, south, east and west of the site are either paved or have buildings covering soils. The site and its neighboring properties are predominately paved and any remaining contamination is in the subsurface soil. As a result, surface water and air routes will not be scored.

Management areas are subsurface soils and potentially ground water.

The substances of concern are Total Petroleum Hydrocarbon (TPH) - gasoline range organics and Tetrachloroetheylene (PERC).

The quantity released is unknown. However, a September 24, 2003, Pinnacle Geo Sciences Report for tank pulls at the site indicates that two 500-gallon steel tanks on the east side of the building, presumed to contain Stoddard solvent, showed pin holes and had evidence of leaking.

Background

As previously noted a Phase One site evaluation was conducted by Wolfe. The Phase One identified underground storage tanks (USTs) and other site uses at the site and as a result recommended further evaluation of the site.

In September of 2003, Pinnacle Geosciences observed activities at the site including removal of three USTs. The Health District has reviewed a report regarding the activities at the site dated September 24, 2003. The September report includes sampling from the excavation of the three tanks. In summary, a 2000-gallon UST containing diesel fuel was located on the west side of the building. The tank was removed. Pinnacle reported no visual evidence of leaking or soil contamination. Analysis of soil samples collected from the 2000-gallon UST excavation did not indicate Model Toxics Control Act (MTCA) exceedances for TPH diesel range organics.

Two 500-gallon USTs were located and removed from the east side of the building. Pinnacle noted in the September 2003 report, that the tanks were in "poor condition" and "moderately corroded with visible pin holes."

The Pinnacle report identifies 2 soil samples taken from the north base and west wall which exceed the MTCA Method A soil clean up standards for both gasoline and PERC. See Pinnacle results outlined in Table 1.

Table 1
Pinnacle September 2003

Sample Name	Location	Gasoline Range Organics (Method NWTPH-G)	EPA 8260	
S-2-8.0	North base	8000	240	
S-3-6.0	West wall	6100	950	
MTCA Method A Clean Up Level		100	.05	
All results are quoted in mg/kg unless otherwise noted				

The Pinnacle report indicates a stockpile of excavated soils. However, it does not detail the volume of soils excavated, or how the excavated soils were disposed of. Further, the Pinnacle report does not detail over-excavation of soils that were confirmed to be contaminated.

Finally, Pinnacle recommends that the documented release in the vicinity of the 500-gallon tanks be reported to Department of Ecology (Ecology). Further Pinnacle recommended "that site conditions be further explored to evaluate the distribution and concentration of the soil contaminated with Stoddard Solvent and chlorinated dry cleaning solvents." Pinnacle advised, "Soil contaminated with PECR may be designated as a Dangerous Waste..." and as a result recommended, "We recommend against further excavation until the scope of the residual contamination is better understood."

A January 2004 report completed by ADEPT Geosciences and Environmental reviewed prior work and existing site conditions during late 2003. At the time ADEPT was at the site they observed open excavations from the 2000-gallon UST and the two 500-gallon USTs.

ADEPT reported that they collected 4 soil samples from the site with no exeedances of the MTCA Method A soil clean up standards for NWTPH-G or PERC (all analytical results were "non-detects".) The ADEPT report contains a Rinker Materials analytical report. The report is coded with the Lab-Code 2003-186. The project name is Brad Liger. The Matrix is Soil. The date collected is December 19, 2003. The dates received and analyzed are the same. Analysis appears to be conducted for TPH-Dx only.

Table 2 Liger / Lapinski collected samples CCI analysis / Rinker analysis Reported by ADEPT November, 2003				
Sample Name	**Location**	**TPH-G**	**PERC EPA 8260**	**TPH Dx**
Liger/lapinski Collecte-CCI analysis December 18, 2003	Unknown location from excavated/stockpiled soil	89	Detection limit set at .06 sample did not exceed .06	Not analyzed
Rinker analysis Collected on December 19, 2003	Unknown location from excavated/stockpiled soil	Not analyzed	Not analyzed	93
MTCA Method A Clean Up Level		100	.05	
All results are quoted in mg/kg unless otherwise noted				

ADEPT reports that 37.89 tons of PCS were disposed of at the Everett Rinker Facility. The ADEPT report contains a Rinker Certificate of Disposal which confirms that the same volume of soil was disposed of at the Rinker site on 12/18/2003.

ADEPT reported that the excavations were partially backfilled when they arrived at the site. Soil samples were reportedly collected from native soils.

ADEPT concludes, "The only soil samples collected thus far with detectable concentration of PERC was a sample from the west sidewall collected by Pinnacle Geosciences prior to the cleanup completed by Liger / Lapinski LLC. The sample contained PERC at a concentration of 12 mg/kg." ADEPT reports that reported level PERC contamination remaining in the soil prior to an undocumented Liger / Lapinski cleanup was below the Method B clean up level for direct contact of 19.6 mg/kg. "Therefore, given the existing information and if it could be shown that groundwater is not at risk, no clean up for PCE would have been required." ADEPT concludes further that soils containing TPH and PERC contamination have been removed from the site.

A March 22, 2004, letter from the Ecology to Liger, one of the property owners of the site, references the work which had thus far been completed at the site. The letter specifically notes that, "Ground water needs to be investigated…" and " Soil and possibly ground water in the vicinity of the former dry cleaner building interior needs to be thoroughly characterized."

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):

It is unclear if soils removed from the site were soils associated with general tank removal or an effort by the property owners to "chase" contamination in the soil. None of the reviewed material regarding activity at the site specifically outlines a plan to address contamination suspected and observed in the vicinity of the 500 gallon tanks.

More specifically, it is unclear if any soil was removed from the excavation after the investigation conducted by Pinnacle which reported levels of TPH gasoline and PERC which exceeded MTCA method A soil clean up standards.

It is unclear if ground water has been impacted. To date, there is no current information that eliminates the potential for ground water contamination. Therefore, the ground water route is scored for both PERC and TPH gasoline.

ROUTE SCORES:

Surface Water/Human Health:	NS	Surface Water/Environmental.:	NS
Air/Human Health:	NS	Air/Environmental:	NS
Groundwater/Human Health:	12.9		

OVERALL RANK: 5

WORKSHEET 2
Route Documentation

1. **SURFACE WATER ROUTE – ROUTE NOT SCORED**
   a. List those substances to be considered for scoring: Source: 1

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

   c. List those management units to be considered for scoring: Source 1

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

2. **AIR ROUTE – ROUTE NOT SCORED**
   a. List those substances to be considered for scoring: Source: 1

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

   c. List those management units to be considered for scoring: Source: 1

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

3. **GROUNDWATER ROUTE**
   a. List those substances to be considered for scoring: Source: 1

      Total Petroleum Hydrocarbon – Gasoline Range Organics

      Tetrachloroethylene (PERC)

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

      Analytical results from soil sampling indicate the presence of TPH Gasoline and Tetrachloroethylene at concentrations which exceed current Method A cleanup levels.

   c. List those management units to be considered for scoring: Source: 1

      Subsurface soils

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

      Spills/discharges caused soil contamination

WORKSHEET 6
Groundwater Route

1.0 SUBSTANCE CHARACTERISTICS

1.2 Human Toxicity

	Substance	Drinking Water Standard (µg/L)	Value	Acute Toxicity (mg/ kg-bw)	Value	Chronic Toxicity (mg/kg/day)	Value	Carcinogenicity WOE	Carcinogenicity PF*	Value
1	TPH Gasoline	5	8	3306	3	ND	X	A	.029	5
2	Tetrachloroethylene	5	8	800	5	.01	3	B2	.051	4

* *Potency Factor*

Source: 1, 2

Highest Value: 8
(Max = 10)

Plus 2 Bonus Points? 2

Final Toxicity Value: 10
(Max = 12)

1.2 Mobility (use numbers to refer to above listed substances)

Cations/Anions [Coefficient of Aqueous Migration (K)] OR	Solubility (mg/L)
1=	1= $1.8 \times 10^3 = 3$
2=	2= $1.5 \times 10^2 = 2$

Source:1, 3

Value: 3
(Max = 3)

1.3 Substance Quantity (volume):

Explain basis: Unknown quantity released use default of 1	Source: 1, 3, 8 **Value: 1** (Max=10)

2.0 MIGRATION POTENTIAL

		Source	Value
2.1	**Containment (explain basis):** Spills to subsurface with unknown level of soil contamination. Scored as a landfill with cover (0) and no liner (3)or leachate collection system (2). 0+3+2=5	1, 3	5 (Max = 10)
2.2	**Net precipitation:** 22.8" – 5.9" = 16.9"	4	2 (Max = 5)
2.3	**Subsurface hydraulic conductivity:** sandy slit $>10^{-5}$ to 10^{-3} (cm/sec)	3,11	3 (Max = 4)
2.4	**Vertical depth to groundwater:** 25-30 feet as per ADEPT Report	3, 5	6 (Max = 8)

3.0 TARGETS

		Source	Value
3.1	**Groundwater usage:** Ground Water used for irrigation of non-food vegetation crops	3, 6	2 (Max = 10)
3.2	**Distance to nearest drinking water well:** > 2 miles or 10,000 feet	3, 5, 13	0 (Max = 5)
3.3	**Population served within 2 miles:** $\sqrt{}$ **pop.** = $\sqrt{0}$	3, 7	0 (Max = 100)
3.4	**Area irrigated by (groundwater) wells within 2 miles:** **(0.75)*$\sqrt{}$# acres** = 0.75 * $\sqrt{0}$	3, 6	0 (Max = 50)

4.0 RELEASE

	Source	Value
Explain basis for scoring a release to groundwater: Not documented	1, 3, 13	0 (Max = 5)

SOURCES USED IN SCORING

1. Washington State Department of Ecology File on Grand Building Valetor Cleaners.
2. Washington State Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992.
3. Washington State Department of Ecology, WARM Scoring Manual, April 1992.
4. Washington Climate – Net Rainfall Table.
5. Washington State Department of Ecology, Online Water Well Log database.
6. Washington State Department of Ecology, Water Rights Application System (WRATS) printouts.
7. Washington State Department of Health, Office of Drinking Water Sentry website printout for public water supplies.
8. Western Regional Climate Center's Historical Climate Information.
9. Thomas Guide, Snohomish County, 2004.
10. Department Of The Interior, US Geologic Survey, Geologic Map of the Everett 7.5 Minute Quad, James P. Minard, 1985.
11. Soil Conservation Service, Soil Survey of Snohomish County Area, July 1983.
12. Snohomish County Assessors/Treasurers On-line information page @ http://198.238.192.103/propsys/Asr-Tr-PropInq/PrpInq01-Entry.asp.
13. Snohomish County GIS mapping information.