WORKSHEET 1
Summary Score Sheet

SITE INFORMATION:

Name: **Smith-Kem Facility**
Address: **200 Railroad Avenue**
City: **Ellensburg** County: **Kittitas** State: **WA** Zip: **98926**
Section: **02** Township: **17 North** Range: **18 East**
Latitude: **46º 59' 27.00"** Longitude: **120º 32' 24.00"**
FS ID #: **12832256**

Site scored/ranked for the August 20, 2008 update

August 13, 2008

SITE DESCRIPTION (management areas, substances of concern, and quantities):

The Smith-Kem Facility (Site) comprises about 2.3-acres, and began as a petroleum business in 1923. Agricultural spray services were added in about 1948. The site contains multiple aboveground storage tanks for chemical storage, as well as buildings used for storage and business operations.

Limited site characterization activities occurred in July 2007 as a result of an interested purchaser inquiry. Fourteen test pits were excavated to characterize soil and groundwater at the site. Soil samples collected from the test pits were analyzed for NWTPH – HCID and/or NWTPH – Dx. Laboratory analysis of soil samples identified diesel-range hydrocarbons above the Model Toxics Control Act Method A soil cleanup levels in two test pits. Laboratory analysis of water collected from the bottom of test pit bottoms identified elevated levels of diesel-range hydrocarbons.

The submitted report does not discuss why collected samples weren't analyzed for possible pesticides, herbicides, and/or insecticide impact.

SPECIAL CONSIDERATIONS:

Due to the significant contamination documented onsite being primarily subsurface, the surface water and air routes are not applicable for WARM scoring for this site. Thus, only the groundwater route will be scored.

ROUTE SCORES:

Surface Water/Human Health:	**NS**	Surface Water/Environmental.:	**NS**
Air/Human Health:	**NS**	Air/Environmental:	**NS**
Groundwater/Human Health:	**51.5**		

OVERALL RANK: 3

WORKSHEET 2
Route Documentation

1. **SURFACE WATER ROUTE**
   a. List those substances to be considered for scoring: Source:

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

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

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

2. **AIR ROUTE**
   a. List those substances to be considered for scoring: Source:

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

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

   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: 1,2

      D**iesel-range hydrocarbons**

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

      Analytical results indicate diesel concentrations in excess of MTCA Method A soil and groundwater cleanup levels

   c. List those management units to be considered for scoring: Source: 1,2

      Groundwater and subsurface soil

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

      Release to groundwater

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		Value
								WOE	PF*	
1	Diesel	160	4	490, rat	5	0.004	3	ND	ND	-

** Potency Factor*

Source: 1-4
Highest Value: 5
(Max = 10)
Plus 2 Bonus Points? 0
Final Toxicity Value: 5
(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=** $3.0 \times 10^{1} = 1$

Source: 1,3,4
Value: 1
(Max = 3)

1.3 Substance Quantity:	
Explain basis: Unknown – use default value = 1	Source: 1,4 **Value: 1** (Max=10)

2.0 MIGRATION POTENTIAL

		Source	Value
2.1	**Containment (explain basis):** Spill/discharge to surface soil, no cover	1,2,4,5	**10** (Max = 10)
2.2	**Net precipitation:** 6.5" – 4.5" = 2.0"	4,6	**1** (Max = 5)
2.3	**Subsurface hydraulic conductivity:** Sandy Gravel	1,4	**4** (Max = 4)
2.4	**Vertical depth to groundwater:** Release to groundwater = 0'	1,4	**8** (Max = 8)

3.0 TARGETS

		Source	Value
3.1	**Groundwater usage:** Public supply, but alternate sources available with minimum hookup requirements	4,8,9	**4** (Max = 10)
3.2	**Distance to nearest drinking water well:** 1,400 feet	4,8,9	**3** (Max = 5)
3.3	**Population served within 2 miles: √ pop.** = >10,000	4,8,9	**100** (Max = 100)
3.4	**Area irrigated by (groundwater) wells within 2 miles: (0.75)*√# acres** = >4,500	4,8,9	**50** (Max = 50)

4.0 RELEASE

	Source	Value
Explain basis for scoring a release to groundwater: Analytical results collected of water collected from test pits confirm a release to groundwater has occurred	1,4	**5** (Max = 5)

SOURCES USED IN SCORING

1. *Limited Site Characterization Report*, Sage Environmental, July 2007.
2. Early Notice Letter to site owner, Dick Bassett, Washington Department of Ecology, June 2, 2008.
3. Bassett, Dick. Personal Communication. 5 June 2008.
4. Washington State Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992.
5. Washington State Department of Ecology, WARM Scoring Manual, April 1992.
6. Washington Climate – Net Rainfall Table.
7. Washington State Department of Ecology, Water Rights Application System (WRATS) printout for two-mile radius of site.
8. Washington State Department of Health, SADIE Database printout for public water supplies.