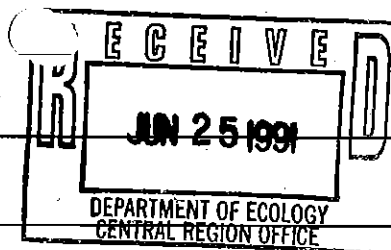


WORKSHEET 1  
SUMMARY SCORE SHEET



Site Name: Outlook Elementary School

Site Location: (City, County, or Section/Township/Range)

NE 1/4 NW 1/4 Sec. 20 T10N R22E

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

A 200-gallon heating oil tank was discovered leaking at the school during excavation of a larger intact tank. Over 1,000 yds<sup>3</sup> of contaminated soil was removed from the site; 75 gallons of product was recovered from the open pit.

Quantity: scored as once filled capacity of the heating oil tank.

Containment: scored as TPH as diesel, since no individual contaminants were identified (detected) during SHA.

Special Considerations: (Include limitations in site file data, data which cannot be accommodated in the model, but which are important in evaluating the risk associated with the site)

Surface water and air routes not scored. Contaminated soil removed, backfilled with clean fill to 6 ft. and covered with asphalt. Only ground water route still present.

ROUTE SCORES:

Ground Water/Human: 36.7

Overall Rank:           

Surface Water/Human: ns

Air/Human: ns

Air/Environmental: ns

Surface Water/Environmental: ns

WORKSHEET 2  
ROUTE DOCUMENTATION

SURFACE WATER ROUTE

List substances to be considered for scoring.

Source: \_\_\_\_\_

TPH as diesel -

Explain basis for choice of substances to be used in scoring.

only analytical work  
contents of tank

List management units to be considered in scoring:

Source: \_\_\_\_\_

tank  
contaminated soil

Explain basis for choice of unit used in scoring.

AIR ROUTE

List substances to be considered for scoring.

Source: \_\_\_\_\_

TPH as diesel

Explain basis for choice of substances to be used in scoring.

only analytical work  
contents of tank

List management units to be considered in scoring:

Source: \_\_\_\_\_

tank  
contaminated soil

Explain basis for choice of unit used in scoring.

contaminated soil

WORKSHEET 2 (CONTINUED)  
ROUTE DOCUMENTATION

GROUND WATER ROUTE

List substances to be considered for scoring.

Source: \_\_\_\_\_

TPH as diesel

Explain basis for choice of substances to be used in scoring.

~~see~~ surface water

List management units to be considered in scoring:

Source: \_\_\_\_\_

US Tanks  
contaminated soil

Explain basis for choice of unit used in scoring.

WORKSHEET 3  
SUBSTANCE CHARACTERISTIC WORKSHEET  
FOR MULTIPLE UNIT/SUBSTANCE SITES

	Combination 1	Combination 2	Combination 3
Unit: Substance:  <u>AIR ROUTE</u>  Human Toxicity/Mobility Value:  Environmental Toxicity/Mobility Value:  Containment Value:			
Air Human Subscore:  Air Environmental Score:			
<u>SURFACE WATER ROUTE</u>  Human Toxicity Value:  Environmental Toxicity Value:  Containment Value:			
Surface Water Human Subscore:  Surface Water Environmental Subscore:			
<u>GROUND WATER ROUTE</u>  Human Toxicity/Mobility Value:  Containment Value:			
Ground Water Subscore:			

**WORKSHEET 4  
SURFACE WATER ROUTE**

*Not scored*

**1.0 SUBSTANCE CHARACTERISTICS**

**1.1 Human Toxicity**

Substance	Drinking Water Std.		Chronic Toxicity		Acute Toxicity		Carcinogenicity		
	(µg/l)	Value	mg/kg/day	Value	mg/kg-bw	Value	WOE	Factor	Value
1. TPH as 2. diesel 3. 4. 5. 6.		6		5		3			0

Source: \_\_\_\_\_

Highest Value: 6

+2 Bonus Points?: -

Value: 6

**1.2 Environmental Toxicity**

Substance	Acute Criteria (µg/L)	Non-human mammalian acute toxicity (mg/kg)	Value
1. TPH as 2. diesel 3. 4. 5. 6.			2

Source: \_\_\_\_\_ Value: 2

**1.3 Substance Quantity**

Explain basis: 200 gals

Source: 1 Value: 1

**2.0 MIGRATION POTENTIAL**

**2.1 Containment**

Explain basis: Underground leak -  
no overland route

Source: 1 Value: 0

2.2 Surface Soil Permeability: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

2.3 Total Annual Precipitation: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

2.4 Maximum 2-Year 24-Hr Precipitation: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

2.5 Flood Plain: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

2.6 Terrain Slope: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

WORKSHEET 4 (CONTINUED)  
SURFACE WATER ROUTE

*Re-scored*

3.0 TARGETS

3.1 Distance to Surface Water: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

3.2 Population Served within 2 miles: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

3.3 Area Irrigated by Sources within 2 miles: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

3.4 Distance to Fishery Resource: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

3.5 Distance to Sensitive Environment: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

List: \_\_\_\_\_

\_\_\_\_\_

4.0 RELEASE

Explain basis: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

\_\_\_\_\_

**WORKSHEET 5 (CONTINUED)**  
**AIR ROUTE**

*Not scored*

**1.0 SUBSTANCE CHARACTERISTICS**

**1.1 Introduction - please review before scoring**

**1.2 Human Toxicity**

Substance	Air Std.		Chronic Toxicity		Acute Toxicity		Carcinogenicity		
	$\mu\text{g}/\text{m}^3$	Value	$\text{mg}/\text{kg}/\text{day}$	Value	$\text{mg}/\text{kg}-\text{bw}$	Value	WOE	Polency Factor	Value
1.									
2.									
3.									
4.									
5.									
6.									

Source: \_\_\_\_\_

Highest Value: \_\_\_\_\_

+2 Bonus Points?: \_\_\_\_\_

Toxicity Value: \_\_\_\_\_

**1.3 Mobility**

**1.3.1 Gaseous Mobility**

Vapor Pressure: \_\_\_\_\_

Value: \_\_\_\_\_

Source: \_\_\_\_\_

**1.3.2 Particulate Mobility**

Soil Type: \_\_\_\_\_

Erodibility: \_\_\_\_\_

Climatic Factor: \_\_\_\_\_

Particulate Mobility Potential Value: \_\_\_\_\_

Source: \_\_\_\_\_

**1.4 Final Human Health Toxicity/Mobility Matrix:**

Value: \_\_\_\_\_

**1.5 Environmental Toxicity/Mobility**

Substance	Non-human mammalian Acute Toxicity	Value	Mobility	Value
1.				
2.				
3.				
4.				
5.				
6.				

Environmental Toxicity Mobility Matrix:

Source: \_\_\_\_\_ Value: \_\_\_\_\_

**1.6 Substance Quantity:** \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

WORKSHEET 5  
AIR ROUTE

Not done

2.0 MIGRATION POTENTIAL

2.1 Containment: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

3.0 TARGETS

3.1 Nearest Population: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

3.2 Nearest Sensitive Environment: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

List: \_\_\_\_\_

3.3 Population within 1/2 mile: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_

4.0 RELEASE: \_\_\_\_\_

Source: \_\_\_\_\_ Value: \_\_\_\_\_



**WORKSHEET 6  
GROUND WATER ROUTE**

**1.0 SUBSTANCE CHARACTERISTICS**

**1.1 Human Toxicity**

Substance	Drinking Water Std.		Chronic Toxicity		Acute Toxicity		Carcinogenicity		
	(ug/l)	Value	mg/kg/day	Value	mg/kg-bw	Value	WOE	Potency Factor	Value
1. TPH as 2. diesel 3. 4. 5. 6.		6		5		3			0

Source: \_\_\_\_\_  
Highest Value: 6  
+2 Bonus Points?: —  
Value: 7

**1.2 Mobility**

Substance: Naphthalene = 1

Source: 1 Value: 1

**1.3 Substance Quantity**

Explain basis: 200 gallons

Source: 1 Value: 1

**2.0 MIGRATION POTENTIAL**

**2.1 Containment**

Explain basis: Spill

Source: — Value: 10

2.2 Net Precipitation: 0.3 ins

Source: 1 Value: 1

2.3 Subsurface Hydraulic Conductivity:  $10^{-4}$  -  $(10^{-6})$

Source: 1 Value: 2

2.4 Vertical Depth to Ground Water: 0-contaminated

Source: 1 Value: 8

**3.0 TARGETS**

3.1 Ground Water Usage: Public-no alternate supply

Source: 1 Value: 9

3.2 Distance to Nearest Drinking Water Well: 5600 ft

Source: 1 Value: 5

3.3 Population Served with 2 miles: 9844

Source: 1 Value: 99

3.4 Area Irrigated by Wells within 2 miles: 1136

Source: 1 Value: 25

**4.0 RELEASE**

Explain basis: Analytical evidence

Source: 1 Value: 5

WORKSHEET 7  
SOURCES USED IN SCORING

1. SHA for Outlook Elementary School, May 1991

2.

3.

4.

5.

6.

7.

8.

9.

10.

# WASHINGTON RANKING METHOD

## ROUTE SCORES SUMMARY AND RANKING CALCULATION SHEET

Site name: Outlook Elem. School Region: CR0

City, county: Outlook, Yakima

This site was ranked on August 12, 1991, based on quintile values from 259 assessed/scored sites.

Route  
Pathway Score(s) Group number(s)

Priority scores:

SW-HH NS -

$$\frac{9 + 0 + 0}{8} = \frac{9}{8} = 1.125$$

Air-HH NS -

GW-HH 41.2 3

Sed-HH - -

SW-En NS -

$$\frac{H^2 + 2L}{7} = \text{N/A}$$

Air-En NS -

Sed-En - -

Use the matrix presented to the right, along with the two priority scores, to determine the site ranking. N/A refers to where there is no applicable pathway.

Human Health	Environment					
	5	4	3	2	1	N/A
5	1	1	1	1	1	1
4	1	2	2	2	3	4
3	1	2	3	4	4	5
2	2	3	4	4	5	5
1	2	3	4	5	5	5
N/A	3	4	5	5	5	5

DRAFT / FINAL

Matrix ("bin") Ranking: 5, or No Further Action

CONFIDENCE LEVEL: The relative position of this site within this bin is:

- X almost into the next higher bin.  
X right in the middle, unlikely to ever change.  
- almost into the next lower bin.