

**WORKSHEET 1
SUMMARY SCORE SHEET**

Note: This document currently has no provision for sediment route scoring.

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

Brand X
1705 West Lincoln Avenue
Yakima, WA 98902

Parcel number: R = 18 T = 13 S = 23 -1144 3

Site scored/ranked for the February 2000 update

Latitude: N 46° 36' 14.1"

Longitude: W 120 ° 31' 50"

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

Gas fumes were detected in the basement of a house to the east of this site in April of 1988. Investigation led to the Brand X site (a gas station) where a cracked flange was discovered on the piping to the pump stations. An estimated 1200 gallons of gasoline had been spilled before the flange was repaired. By September of 1988 a groundwater pump and treat remediation system was operating to remediate contaminated groundwater across the site and to control off-site migration. By March of 1989, 9.1 million gallons of contaminated groundwater had been pumped, treated, and discharged to the city sewer system. This groundwater remediation was discontinued in 1990 when gasoline range hydrocarbons in the groundwater influent were no longer detected.

In 1992 the Brand X Service Station UST system was removed. Approximately 4,000 cubic yards of petroleum contaminated soil was excavated and transported off site for treatment. Petroleum contaminated soil (PCS) was encountered to depths of 15 to 21 feet below ground surface.

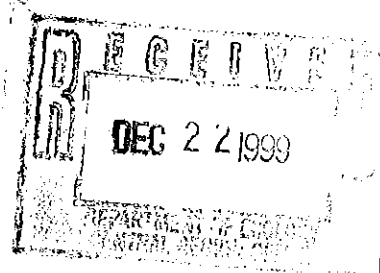
In 1998 Pacific Southwest Group performed more testing and investigation at this site. During this investigation TPH gasoline was found in the soils located in the area of excavation from 1992 and ranged from 90 ppm to 350 ppm. Soils outside the area of excavation were non-detect for gasoline. Groundwater grab samples from the test borings showed TPH-gasoline concentrations of 7,700 ppb and 21,000 ppb. All groundwater samples collected from existing site groundwater monitoring wells had non-detectable concentrations of the contaminants of concern.

TPH gasoline remains in the soils at this site, but appears to be confined to the area that was excavated in 1992. TPH gasoline is in the groundwater below this site, but also appears to be confined to the site.

This site is currently vacant land. To the north of the site is vacant land, then residential. To the east of the site is vacant land, then vacant commercial property. To the south of the site is Lincoln Avenue (5 lanes) and then a large Grocery Store. To the west of the site is vacant land and residential.

This contamination was the result of a subsurface spill with subsequent substantial clean up. All remaining contamination is below ground surface and there is no pathway open for it to reach the air so the air route was not scored. The nearest surface water is an irrigation ditch approximately ¼ mile to the north-west, so the surface water route was not scored.

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):



PATHWAY SCORES:

Surface Water/Human Health: N/A ; Surface Water/Environ.: N/A ;

Air/Human Health: N/A ; Air/Environmental: N/A ;

Ground Water/Human Health: 52.53 .

OVERALL RANK: 3 .

WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

Not Applicable/Not Scored

2. AIR ROUTE

Not Applicable/Not Scored

3. GROUND WATER ROUTE

List substances to be considered for scoring:

TPH-gasoline

Source: 1

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

TPH-gasoline is the only contaminant found at the site.

List management units to be considered in scoring:

Spill to soil.

Source: 1

Explain basis for choice of unit used in scoring.

TPH-gasoline has been spilled to the soil (via a leaking flange), is still present above MTCA method A levels, and has encountered ground water.

**WORKSHEET 4
SURFACE WATER ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

Not Applicable/Not Scored

**WORKSHEET 5
AIR ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

Not Applicable/Not scored

**WORKSHEET 6
GROUND WATER ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

	Drinking Water Standard (ug/l) Val.	Acute Toxicity (mg/kg-bw) Val.	Chronic Toxicity (mg/kg/day) Val.	Carcino- genicity WOE PF* Val.
1. <u>Substance</u> <i>gasoline</i>	5 8	3306 3	-	.029 1.0 5

*Potency Factor

Source: 1, 2
Highest Value: 8
+2 Bonus Points? 0
Final Toxicity Value: 8

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

Source Value:

OR

Solubility(mg/l) 1.8E+3 Source: 3 Value: 3

1.3 Substance Quantity approx. 615 cubic yards
Explain basis: This is the size of the area of excavation. It appears that the remaining contamination is limited to this area.

Source: 1, 4 Value: 3

2.0 MIGRATION POTENTIAL

2.1 Containment Spill Source: 1, 2, 4 Value: 10
Explain basis: The Washington Ranking Method Scoring Manual recommends a containment value of 10 for contaminated soil.

2.2	Net Precipitation:	1.7 inches	Source: 5	Value: 1
2.3	Subsurface Hydraulic Conductivity:	$>10^{-3}$	Source: 1, 4	Value: 4
2.4	Vertical Depth to Ground Water:	21 feet	Source: 1	Value: 8

3.0 TARGETS

3.1	Ground Water Usage:	Public supply but alternate sources available with minimal hookup requirements.	Source: 6	Value: 4
3.2	Distance to Nearest Drinking Water Well:	<600 feet	Source: 1	Value: 5
3.3	Population Served within 2 Miles:	$(5685)^2 = 75.4$	Source: 7	Value: 75
3.4	Area Irrigated by (Groundwater) Wells within 2 miles:	$.75(290)^2 = 12.77$	Source: 6	Value: 13

4.0 RELEASE

	Explain basis for scoring a release to ground water: Gasoline is in contact with the ground water.	Source: 1	Value: 5
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SOURCES USED IN SCORING

1. Phase I Environmental Site Assessment & Limited Phase II Subsurface Investigation Proposed Rite Aid Retail Facility #22025, July 31, 1998.
2. Groundwater Monitoring Status Report, January 15, 1999
3. Toxicology Database For Use in Washington Ranking Method Scoring, January 1992.
4. Washington Ranking Method Scoring Manual, April 1992.
5. Washington Climate for Grant, Kittitas, Klickitat, and Yakima Counties, May 1979.
6. Water Rights Application Tracking System.
7. Yakima County Geographical Information System.
8. Site Visit by Yakima Health District Personnel, December 7, 1999