

WORKSHEET 1
Summary Score Sheet

SITE INFORMATION:

Name: **La Bamba Restaurant**
Address: **3202 Main Street**
City: **Union Gap** County: **Yakima** State: **WA** Zip: **98903**
Section: **05** Township: **12** Range: **19**
Latitude: **46° 29' 52.10"** Longitude: **120° 21' 48.00"**
FS ID #: **4171173**

Site scored/ranked for the August 20, 2008 update

July 31, 2008

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

The La Bamba Restaurant Site (Site) is comprised of a single-story building located on 0.23 acres at 3202 Main Street in Union Gap, Yakima County, Washington. According to a Phase I Environmental Site Assessment (ESA) conducted of the property, the Site has historically contained a residence and a service station that has operated for at least 20 years. Since about 1990, the Site has contained one single-story building operated as the La Bamba Restaurant.

In 2003, a limited Phase II ESA was conducted to assess potential contamination related to the former service station operations identified during the Phase I ESA. Fourteen soil samples and five groundwater samples were collected from five Geoprobe borings located throughout the Site. Gasoline- and diesel-range petroleum contaminants were not detected in soil samples collected from the borings. However, laboratory results identified total petroleum hydrocarbons (TPH) – gasoline and TPH – diesel in groundwater at concentrations above their respective Model Toxics Cleanup Act (MTCA) Method A cleanup levels.

Ecology is not aware of any additional investigative or remedial work conducted at the property since 2003.

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:	<u>NS</u>	Surface Water/Environmental.:	<u>NS</u>
Air/Human Health:	<u>NS</u>	Air/Environmental:	<u>NS</u>
Groundwater/Human Health:	<u>59.5</u>		

OVERALL RANK: 2

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
Gasoline- and diesel-range hydrocarbons
- b. Explain basis for choice of substance(s) to be used in scoring:
Analytical results indicate gasoline and diesel concentrations in excess of MTCA Method A groundwater cleanup levels
- c. List those management units to be considered for scoring: Source: 1,2
Groundwater
- d. Explain basis for choice of unit to be used in scoring:
Confirmed 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 TPH - Gasoline	5	8	3306	3	ND	-	1	0.029	6
2 TPH - Diesel	160	4	490, rat	5	0.004	3	ND	ND	-

* Potency Factor

Source: 2,3,4

Highest Value: 8

(Max = 10)

Plus 2 Bonus Points? 0

Final Toxicity Value: 8

(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= 1800 = 3
2=	2= 30 = 1

Source: 2,3,4

Value: 3

(Max = 3)

1.3 Substance Quantity:	
<p>Explain basis:</p> <p>Unknown – use default value = 1</p>	<p>Source: <u>2,4</u></p> <p>Value: 1</p> <p>(Max=10)</p>

2.0 MIGRATION POTENTIAL

		Source	Value
2.1	Containment (explain basis): None – contaminants were discharged directly to soil and groundwater	2,4,5	10 (Max = 10)
2.2	Net precipitation: 4.7" – 3.0" = 1.7"	4,6	1 (Max = 5)
2.3	Subsurface hydraulic conductivity: Sandy Gravel	2,4	4 (Max = 4)
2.4	Vertical depth to groundwater: Confirmed release to groundwater	2,4	8 (Max = 8)

3.0 TARGETS

		Source	Value
3.1	Groundwater usage: Public supply, unthreatened alternatives available	4,7,8	4 (Max = 10)
3.2	Distance to nearest drinking water well: <u>1760</u> feet	4,7,8	3 (Max = 5)
3.3	Population served within 2 miles: $\sqrt{\text{pop.}} = >10,000$	4,7,8	100 (Max = 100)
3.4	Area irrigated by (groundwater) wells within 2 miles: $(0.75) * \sqrt{\# \text{ acres}} = (0.75) * \sqrt{1053} = 24.33$	4,7,8	24 (Max = 50)

4.0 RELEASE

		Source	Value
	Explain basis for scoring a release to groundwater: Analytical results of groundwater samples collected from wells at the Site	2,6	5 (Max = 5)

SOURCES USED IN SCORING

1. *Phase I Environmental Site Assessment*, PBS Environmental, March 2003
2. *Limited Phase II Environmental Site Assessment*, PBS Environmental, May 2003
3. Washington State Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992
4. Washington State Department of Ecology, WARM Scoring Manual, April 1992
5. Site Hazard Assessment Drive-by conducted by Brianne Plath, July 30, 2008
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, Office of Drinking Water Sentry website printout for public water supplies
9. Yakima County GIS information, obtained online April 2008