CSID 1334

WORKSHEET 1
SUMMARY SCORE SHEET

Site Name/Location (Street, City, County, Section/Township/Range, TCP ID Number):

~~Washington~~ Eastern Farm Service Inc Pomeroy
2600 Villard
Pomeroy, Garfield county, WA 99347
Latitude: 46° 28′ 28″
Longitude: 117° 34′ 24″

Sec 32/T12N/R42E
Ecology Facility Site ID: 8546

Site scored/ranked for 08/17/04 update

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

Background

In the summer and fall of 1995, Western Farm Service, Inc. (WFS) completed site assessments at 67 of its branches in five western states (Washington, Idaho, Oregon, California, and Arizona). These were performed to meet terms of the sale contract between WFS and Shell Oil Company, the previous owner, in identifying any environmental issues that may have resulted from site operations during Shell's ownership.

On February 15, 1996, the Washington State Department of Ecology (Ecology) Eastern Regional Office (ERO) received a February 7, 1996, Notification of Site Assessment Results report for the WFS site in Pomeroy, Washington (hereinafter referred to as the site). Subsurface soil contamination by WTPH-gasoline and WTPH-diesel, in excess of their respective Model Toxics Control Act (MTCA) cleanup levels, was reported. Also, concentrations of WTPH-gasoline, toluene, ethlybenzene, and xylene in excess of their respective MTCA Method A cleanup levels for groundwater, were noted in several groundwater monitoring well samples. Concentrations of several pesticides (toxophene, lindane, and 4,4′-DDT) in onsite surficial soils somewhat in excess of their respective risk-based screening levels were also noted, as well as high levels of nitrate-nitrogen in soil and groundwater.

Ecology notified WSF on August 27, 1996, that the site was to be listed on Ecology's Confirmed and Suspected Contaminated Sites List, with a site status of ''Awaiting Assessment''. It was noted under affected media that soil had confirmed pesticide and petroleum products contamination, with suspected contamination by conventional inorganics. Groundwater was noted as confirmed contamination by petroleum products. Notification was made by Ecology to WFS on March 11, 2004 that a site hazard assessment (SHA) of the site would be conducted under MTCA, Chapter 173-340-320 WAC.

Site Assessment

An SHA site visit was made by Ecology April 22, 2004, meeting with Mr. Ken Uto, the WFS facility manager. The history of the site investigative and remedial activities

was discussed. The locations of the borings were pointed out, including especially the ones undergoing continuing groundwater monitoring.

The site is a bulk petroleum storage and agricultural supply facility located at 2600 Villard, Pomeroy, Garfield County, Washington. According to a July 1987 ERO Dangerous Waste Compliance Inspection report, no dangerous wastes were ever generated at the facility. No empty pesticide containers were accepted, and no pesticide rinsate was generated on site. There was a concrete wash pad and tank system at the facility used to rinse the fertilizer trucks and collect any spilled fertilizer. The vast majority of the town residents are supplied by the City of Pomeroy Municipal Supply Water System, from deep wells (up to 997 feet) south of the site, across Pataha Creek.

Mr. Uto presented an up-to-date map of the site property, showing where above ground storage tanks for petroleum products had been recently removed and re-located. Other than surficial disturbance, no major remediation of subsurface soil contamination had yet occurred at the site.

The most recent groundwater monitoring report for the site available at Ecology ERO was from May 2003. It summarized detailed results from quarterly sampling events beginning in June 1996 through late 2001, and semi-annual collections from May and November 2002. Constituents of concern remain WTPH-gasoline, benzene, WTPH-diesel, and nitrate-nitrogen. Concentrations of previously detected pesticides (in surficial soils) have consistently been non-detects, and concentrations of the other gasoline components toluene, ethylbenzene, and xylenes are of insignificant concern, compared to their respective MTCA cleanup levels.

The site will be be scored and ranked under the Washington Ranking Method (WARM) based on subsurface-only contamination of soil/groundwater by WTPH-gasoline (same WARM toxicity values as benzene), WTPH-diesel, and nitrate-nitrogen.

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):

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

ROUTE SCORES:

Surface Water/Human Health:	NS*	Surface Water/Environ.:	NS
Air/Human Health:	NS	Air/Environmental:	NS
Ground Water/Human Health:	41.9		

*Not scored

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 those substances to be considered for scoring: Source: 1,2

WTPH-gasoline, benzene, toluene, ethylbenzene, xylenes, WTPH-diesel, nitrate-nitrogen and pesticides such as toxophene, lindane, and 4,4'-DDT.

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

Will score toxicity using: WTPH-gasoline (same WARM toxicity values as benzene), WTPH-diesel, and nitrate-nitrogen.

Concentrations of previously detected pesticides (in surficial soils) have consistently been non-detects, and concentrations of the gasoline components toluene, ethylbenzene, and xylenes are significantly minor, compared to their respective MTCA cleanup levels.

List those management units to be considered for scoring: Source: 1-3

Contaminated subsurface soils/groundwater.

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

Spills/discharges caused contaminated subsurface soils/groundwater.

WORKSHEET 3 (If Required)
SUBSTANCE CHARACTERISTICS WORKSHEET
FOR MULTIPLE UNIT/SUBSTANCE SITES

	Combination 1	Combination 2	Combination 3

Unit: **Section Not Applicable.**

1. SURFACE WATER ROUTE

	Combination 1	Combination 2	Combination 3
Substance(s):			
Human Toxicity Value:			
Environ. Toxicity Value:			
Containment Value:			
Rationale:			
Surface Water Human Subscore:	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) =
Surface Water Environ. Subscore:	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) =

2. AIR ROUTE

	Combination 1	Combination 2	Combination 3
Substance(s):			
Human Toxicity/Mobility Value:			
Environ. Toxicity/ Mobility Value:			
Containment Value:			
Rationale:			
Air Human Subscore:	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) =
Air Environ. Subscore:	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) =

3. GROUND WATER ROUTE

	Combination 1	Combination 2	Combination 3
Substance(s):			
Human Toxicity Value:			
Containment Value:			
Rationale:			
Ground Water Subscore:	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) = ___	(+3)(+1)= ( )( ) =

Based on their respective highest scoring toxicity/containment combinations, the following management units will be used for route scoring:

Surface Water -
Air -
Ground Water -

WORKSHEET 4
GROUND WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)	Val.	Acute Toxicity (mg/kg-bw)	Val.	Chronic Toxicity (mg/kg/day)	Val.	Carcino-genicity WOE	PF*	Val.
1. WTPH-gasoline	5	8	3306	3	X	-	A	.029	5
2. WTPH-diesel	160	4	490	5	0.004	3	-	ND	-
3. Nitrate	10,000	2	ND	-	0.1	1	ND	-	-

*Potency Factor

Source: 1,2,5
Highest Value: 8 (Max.=10)

+2 Bonus Points? 0
Final Toxicity Value: 8 (Max.=12)

1.2 Mobility (Use numbers to refer to above listed substances)
Cations/Anions: _____ Source: 2,5 **Value: 3** (Max.=3)

Or

Solubility(mg/l): 1) 1.8E+03 = 3; 2) 3.0E+01 = 1; 3) High = 3

1.3 Substance Quantity: Unknown, use default value = 1 Source: 2,6 **Value: 1** (Max.=10)
Explain basis: _____

2.0 MIGRATION POTENTIAL

2.1 Containment Source: 1-3,6 **Value: 10** (Max.=10)
Explain basis: Contaminated soil/spill to ground

2.2 Net Precipitation: Nov-April = 9.4''-3.5'' = 5.9'' Source: 7 **Value: 1** (Max.=5)

2.3 Subsurface Hydraulic Conduct.: Perm.Till/fract.rock Source: 1,2 **Value: 3** (Max.=4)

2.4 Vertical Depth to Ground Water: Obs. Rel. = 0' Source: 1,2 **Value: 8** (Max.=8)

WORKSHEET 6 (CONTINUED)
GROUND WATER ROUTE

3.0 TARGETS

3.1 Ground Water Usage: No unthr. alts available Source: 8,9 **Value: 9** (Max.=10)

3.2 Dist. to Nearest Drinking Water Well: 1300-2600' Source: 8,9 **Value: 3** (Max.=5)

3.3 Population Served within 2 Miles: $(1558)^{-1/2} = 39$ Source: 8,9 **Value: 39** (Max.=100)

3.4 Area Irrigated by (Groundwater) Wells within 2 miles: $0.75(162)^{-1/2} = 10$ Source: 8,9 **Value: 10** (Max.=50)

4.0 RELEASE

Explain basis for scoring a release to ground water: Documented by analytical data Source: 1-3 **Value: 5** (Max.=5)

SOURCES USED IN SCORING

1. Western Farm Service, Pomeroy, Washington Facility, Semi-Annual 2002 Groundwater Monitoring Report, Landau Associates, May 29, 2003.
2. Western Farm Service, Pomeroy, Washington Facility, Fourth Quarter 2001 Monitoring Report, Landau Associates, March 27, 2002.
3. Initial Investigation Report Review for Western Farm Service, Inc. Pomeroy, WA Facility, David George, WA Dept. of Ecology, Eastern Regional Office Toxics Cleanup Program, August 26, 1996.
4. SHA site visit, April 22, 2004.
5. Washington Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992.
6. Washington Department of Ecology, WARM Scoring Manual, April 1992.
7. See attached table identified as Reference 7.
8. Washington Dept. of Health S.A.D.I.E. data printout for City of Pomeroy Water Dept.
9. Water Rights Application System (WRATS) printout for two-mile radius of site.