

CSID 1466

**WORKSHEET 1
SUMMARY SCORE SHEET**

Site Name:

Dusty Farm Co-op, Inc.
NW Corner, NW Corner, Section 10, Township 15 N, Range 41 EWM
Facility Site ID: 2932388
Latitude: 117° 39 min 27.11 sec
Longitude: 46° 48 min 34.96 sec
Address: 121 Dusty Road
Lacrosse, WA 99143

Site Scored/Ranked: Feb. 26, 2002 update

Site Description:

The Dusty Farm Co-op (DFC) is a retail fuel and farm chemical distribution facility in the unincorporated community of Dusty, Washington. Dusty is located in the wheat-growing region of southeastern Washington about 30 miles west of the Idaho border. The facility is situated on a level site bordered on the south by State Route 26, and on the north by the restaurant and half dozen residences that make up the village of Dusty. Dry-land cereal grain fields stretch to the horizon in all directions.

In 2001, a routine reconciliation of inventory records revealed a potential release of up to 4,500 gallons of premium unleaded gasoline since the last inventory reconciliation in 1998. DFC contracted Coeur d'Alene Service Station Equipment to identify and repair the source of inventory discrepancy.

Leaks and petroleum-contaminated soils were found at two locations—below the product-supply line, 20 feet west of the above-ground storage tank containment area, and the dispenser island in front of the Co-op store building. Soil at the product line release area was excavated to a depth of 12 feet over an area approximately 50 feet by 60 feet. Soil surrounding the gasoline dispenser island was excavated and removed to a depth of 14 feet over a 25 by 40 foot area.

Laboratory analysis of soil samples taken from the sidewalls of both excavations revealed remaining concentrations of gasoline hydrocarbons above Model Toxic Control Act (MTCA) Method A cleanup level of 30 mg/kg. Perched groundwater encountered at a depth of 10-12 feet in both excavations revealed a petroleum sheen.

SPECIAL CONSIDERATIONS:

Laboratory analysis of water samples taken from the on-site domestic well revealed concentrations of gasoline hydrocarbons and the BTEX constituents toluene and xylene more than 10 times greater than the laboratory reporting limits. According to the July 15, 1950 log, this well is 105 feet deep with a static water level of 52 feet.

Air and surface water routes were not considered for scoring due to the containment of contaminants below several feet of clean soil, as well as the lack of nearby surface water targets.

ROUTE SCORES:

Surface Water/Human Health: NA/Not scored Surface Water/Environ.: NA/Not scored
Air/Human Health: NA/Not scored Air/Environmental NA/Not scored
Ground Water/Human Health: 40.8

OVERALL RANK: 3

ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE. Not Applicable

2. AIR ROUTE. Not Applicable

3. GROUND WATER ROUTE

List those substances to be considered for scoring: Source: 1

Xylene, TPH Gasoline

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

Analysis of soil samples taken from excavation sidewalls and test borings revealed these substances to be present in concentrations above MTCA Method A Compliance Cleanup Levels.

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

Contaminated Soil

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

Testing indicated contaminants are confined to subsurface soils. Clean soil placed over contaminated area.

**WORKSHEET 6
GROUND WATER ROUTE**

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Standard (ug/l)	Acute Toxicity Val. (mg/kg-bw)	Chronic Toxicity Val. (mg/kg/day)	Carcinogenicity Val.	WOE	PF*	Val.
1. Xylene	2	8	50	10	2	1X	
2. TPH Gasoline	5	8	3306	3	X	A	.029 5
3.							
4.							
5.							
6.							

Potency Factor
 Source: 1, 4, 5
 Highest Value: 10
 +2 Bonus Points? 2
Final Toxicity Value: 12

1.2 Mobility (Use numbers to refer to above listed substances)

Cations/Anions: 1= ; 2= 2 ; 3= ; 4= ; 5= ; Source: 4,5 Value: 3
6= .

Solubility(mg/l): 1= 2.0E=02=2 ; 2=1.8E 03 = 3.

1.3 Substance Quantity

Source: 3 Value: 4

Explain basis: 4,500 gallons – based on product inventory for the three years preceding leak detection .

2.0 M IGRATION POTENTIAL

2.1 Containment

Source: 1, 5 Value: 10

Explain basis: Spills and discharge to soil

2.2 Net Precipitation: 5.9 inches Source: 6 Value: 1

2.3 Subsurface Hydraulic Conductivity: >10⁻⁷—10⁻⁵ Source: 5, 7 Value: 2

2.4 Vertical Depth to Ground Water: 10' feet Source: 1 Value: 8

3.0 TARGETS

3.1 Ground Water Usage: Public Supply, >Two households or six users Source: 8
Value: 9

3.2 Distance to Nearest Drinking Water Well: 220 ft Source: 1 Value: 5

3.3 Population Served within 2 Miles: square root of pop. = square root of 60 = 8
Source: 8 Value: 8

3.4 Area Irrigated by (Groundwater) Wells
within 2 miles: 0.75 no. acres= 0 Source: 1, 7, 8 Value: 0

4.0 RELEASE

Explain basis for scoring a release to ground Source: 1 Value: 5
water: Gasoline Hydrocarbons, toluene and xylene detected in a sample taken from
the on-site domestic well.

SOURCES USED IN SCORING

1. Quantum Engineering and Geologic Consulting Interim Site Investigation Dusty Farm Co-op June 26, 2001.
2. Soil analysis data from on-site test borings reported by North Creek Analytical, Inc. July 27, 2001.
3. Washington State Department of Ecology Initial Investigation Field Report, August 13, 2001.
4. Toxicology Database WARM
5. WARM Scoring Manual
6. Washington Climate, Whitman County, WSU Cooperative Extension
7. Soil Survey of Whitman County, US Soil Conservation Service
8. USGS Dusty Quadrangle Map