CSID 1318

WORKSHEET 1
SUMMARY SCORE SHEET

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

Site Name/Location (Street, City, County, Section/Township/Range).
PARKWATER RAILYARD, Sections 11 and 14, T25N, R43E.
BURLINGTON NORTHERN RAILROAD
East 5302 Trent Ave.
SPOKANE, WASHINGTON

Site Description (Include management areas, substances of concern, and quantities):
The Burlington Northern Railroad (BNRR) Parkwater Railyard is located in Spokane county on the eastern side of the city, between Trent and Sprague Avenues. The site is utilized as a fueling railyard and consists of raillines, buildings, and gravel roads. In December 1990, three underground storage tanks were removed from around the fueling area. The tanks consisted of a 25,000 gallon diesel tank and a 10,000 gallon diesel tank and an 18,000 gallon waste oil tank. A subsurface investigation report prepared by Remediation Technologies, Inc. dated January 1992 disclosed diesel contaminated soils ranging up to 5000 mg/kg. Analytical samples (19) were taken from six boreholes around each UST site. Elevated concentrations, exceeding MTCA method A cleanup levels, were detected in 7 of the 19 samples. The diesel contamination is believed to have resulted from surface spillage, associated with the fueling area at the 25,000 gallon and 10,000 gallon UST's. The former waste oil tank (18,000 gallon) was observed to have a hole during tank removal. TPH, in the heavy fuel oil/diesel range, was detected at concentrations exceeding MTCA standards. The zone of hydrocarbon contaminated soil was reported to extend to 30 feet below ground surface.

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):
To date, all reports filed with Ecology pertaining to this site do not conclude with adequate remediation to warrant a NO FURTHER ACTION (NFA) under Model Toxics Control Act (MTCA). Remaining diesel impacted soils which exceed MTCA standards are reported to exist in permeable subsurface soils over a Federally Designated Sole Source Aquifer. **Contaminants were discovered during UST decommissioning and are located primarily in subsurface soils. Site hazard assessment concludes that the contaminants do not present a hazard by airborne or surface water pathways.**

ROUTE SCORES:

Surface Water/Human Health: _NA__ Surface Water/Environ.: _NA____

Air/Human Health: _NA____ Air/Environmental: _NA____

Ground Water/Human Health: _41.2____

OVERALL RANK: __3___

Rev. 3/10/93

WORKSHEET 2
ROUTE DOCUMENTATION

1. **SURFACE WATER ROUTE** Not Applicable.

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

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

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

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

2. **AIR ROUTE** Not Applicable.

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

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

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

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

WORKSHEET 2 (CONTINUED)
ROUTE DOCUMENTATION

3. GROUND WATER ROUTE

List those substances to be considered for scoring: Source: 1
TPH-DIESEL

Explain basis for choice of substance(s) to be used in scoring.
Contaminants exceed MTCA method A standards in soil
TPH-Diesel levels were reported up to 5000 mg/kg (ppm) exceeding the 200 ppm MTCA standard.

List those management units to be considered for scoring: Source: 1
Contaminated subsurface soil / ground water only.

Explain basis for choice of unit to be used in scoring.
Contaminants were discovered during UST decommissioning and are located primarily in subsurface soils. Site hazard assessment concludes that the contaminants do not present a hazard by airborne or surface water pathways.

WORKSHEET 6
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.TPH-DIESEL	20	6	490	5	0.004	3	**	**	**
2.									
3.									
4.									
5.									
6.									

*Potency Factor

Source: 2
Highest Value: 6
+2 Bonus Points? 0
Final Toxicity Value: 6

1.2 Mobility (Use numbers to refer to above listed substances)
Cations/Anions: 1= ; 2= ; 3= ; 4= ; 5= ; 6= . Source: 2 **Value:** 1

OR
Solubility(mg/l): 1= TPH Diesel = 1 factor solubility

1.3 Substance Quantity Source: 1 & 3 **Value:** 6
Explain basis: UNKNOWN
UST report indicate 3,000 cu/yrds. of soil stockpiled from tank removal, remaining soils estimated by scale drawing at approximate 102 cu/yrds. value based on 102 cu/yrds

2.0 MIGRATION POTENTIAL

2.1 Containment Source: 1 & 3 **Value:** 10
Explain basis: Spills, Discharges and contaminated soils

2.2 Net Precipitation: 7.2 inches Source: 4 **Value:** 1

2.3 Subsurface Hydraulic Conductivity: >10-5 to 10-3 Source: 5 **Value:** 3

2.4 Vertical Depth to Ground Water: < 50 feet Source: 1 & 6 **Value:** 6

WORKSHEET 6 (CONTINUED)
GROUND WATER ROUTE

3.0 TARGETS

3.1 Ground Water Usage: Fed Designated Aquifer Source: 7 **Value:** 10
(Max.=10)

3.2 Distance to Nearest Drinking Water Well: >=2000 ft Source: 6 & 8 **Value:** 3
(Max.=5)

3.3 Population Served within 2 Miles: √pop.=√100000=>100 Source: 6 & 8 **Value:** 100
(Max.=100)

3.4 Area Irrigated by (Groundwater) Wells
within 2 miles: 0.75√no.acres=4900 Source: 9 **Value:** 50
0.75√ =0.75 (70)= 52
(Max.=50)

4.0 RELEASE
Explain basis for scoring a release to ground water: NONE Source: 1 **Value:** 0
(Max.=5)

SOURCES USED IN SCORING

1. SUBSURFACE INVESTIGATION OF UNDERGROUND STORAGE TANK RELEASES
   PARKWATER RAILYARD SPOKANE, WASHINGTON
   REMEDIATION TECHNOLOGIES, INC. ReTeC Project No. 30-613-300 January 1992
2. TOXICOLOGY DATABASE WARM
3. WARM SCORING MANUAL
4. WASHINGTON CLIMATE, SPOKANE CO. WSU DEPT. OF AGRICULTURE
5. SOIL SURVEY OF SPOKANE CO. WASHINGTON, USDA SOIL CONSERVATION SVC.
6. WASHINGTON DEPT. OF ECOLOGY, WELL LOGS
7. AQUIFER SENSITIVE AREA OVERLAY ZONE MAP, SPOKANE CO. WASHINGTON
8. WASHINGTON DEPT. OF HEALTH DRINKING WATER INFORMATION NETWORK
9. WRIS WASHINGTON DEPARTMENT OF ECOLOGY