WASHINGTON RANKING METHOD

ROUTE SCORES SUMMARY AND RANKING CALCULATION SHEET

Site name: N-Way Cleaners Region: CRO

City, county: Yakima, Yakima

This site was ranked on August 12, 1991, based on quintile values from 259 assessed/scored sites.

Pathway	Route Score(s)	Quintile Group number(s)
SW-HH	0.9	1
Air-HH	23.7	4
GW-HH	68.1	5
Sed-HH	—	—
SW-En	1.4	1
Air-En	9.1	3
Sed-En	—	—

Priority scores:

$\frac{H^2 + 2M + L}{8} = \frac{25 + 8 + 1}{8} = 34/8 = 4.3 = 5$

$\frac{H^2 + 2L}{7} = \frac{9 + 2}{7} = 11/7 = 1.6 = 2$

Use the matrix presented to the right, along with the two priority scores, to determine the site ranking. N/A refers to where there is no applicable pathway.

Human Health \ Environment	5	4	3	2	1	N/A
5	1	1	1	(1)	1	1
4	1	2	2	2	3	4
3	1	2	3	4	4	5
2	2	3	4	4	5	5
1	2	3	4	5	5	5
N/A	3	4	5	5	5	5

DRAFT / (FINAL)

Matrix ("bin") Ranking: 1, or _____ No Further Action

CONFIDENCE LEVEL: The relative position of this site within this bin is:

____almost into the next higher bin.
__x__right in the middle, unlikely to ever change.
____almost into the next lower bin.

rev. 8/91

WORKSHEET 1
SUMMARY SCORE SHEET

Site Name: NU-WAY CLEANERS

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

801 South 3rd Street
Yakima, Washington (Yakima County)

SW¼ SE¼ of Section 19 T13N R19E

Site Description: (Include management areas, compounds of concern, and quantities) The site is an active dry cleaning business which includes an office and storage area, a dry cleaning room, a chemical dye storage area, a spray booth, a bunkhouse, a laundry room, and a garage. Leakage from a dry cleaning machine was noted during a 1989 site inspection, with staining of the concrete floor in the dry cleaning room. Floor drains flow to a sump that was noted to be in poor condition, and probably has an open bottom, allowing discharge of the sump contents to the subsurface. A sample of soil from the bottom of the sump contained acetone, tetrachloroethene, toluene, ethylbenzene, xylene, napthalene, 2-methylnapthalene, and phthalate esters. The facility has been operated by three different operators since the 1950s. Stoddard solvent, which is stored in a 750 gallon UST, has been used for dry cleaning at the site since 1971.

Special Considerations: (Include limitations in site file data, data which cannot be accomodated in the model, but which are important in evaluating the risk associated with the site)

The facility is located in the Yakima Railroad Study Area, a commercial and residential area in downtown Yakima in which tetrachloroethene (PCE) has been detected at concentrations in groundwater from 3 ppb to 23 ppb.

ROUTE SCORES:

Ground Water/Human:	46.3	**Overall Rank:**	_____
Surface Water/Human:	0.6		
Air/Human:	19.0		
Air/Environmental:	10.5		
Surface Water/Environmental:	1.1		

WORKSHEET 2
ROUTE DOCUMENTATION

SURFACE WATER ROUTE

List substances to be considered for scoring. Source: 1, 2

1. ACETONE
2. TETRACHLOROETHENE (PCE)
3. TOLUENE
4. ETHYLBENZENE
5. XYLENE
6. NAPTHALENE
7. 2-METHYLNAPTHALENE
8. PHTHALATE ESTERS

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

THE FIRST SIX SUBSTANCES WERE USED IN SCORING BECAUSE THEY WERE JUDGED TO REPRESENT THE RANGE OF ENVIRONMENTAL THREATS PRESENT.

List management units to be considered in scoring: Source: 1, 2

1. SUMP
2. UST

Explain basis for choice of unit used in scoring.

ANALYSIS DETECTED CONTAMINATION IN SOIL FROM BOTTOM OF SUMP

AIR ROUTE

List substances to be considered for scoring. Source: 1, 2

1. ACETONE
2. PCE
3. TOLUENE
4. ETHYLBENZENE
5. XYLENE
6. NAPTHALENE
7. 2-METHYLNAPTHALENE
8. PTTHALATE ESTERS

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

THE FIRST SIX SUBSTANCES WERE USED IN SCORING BECAUSE THEY WERE JUDGED TO REPRESENT THE RANGE OF ENVIRONMENTAL THREATS PRESENT.

List management units to be considered in scoring: Source: 1, 2

1. SUMP
2. UST

Explain basis for choice of unit used in scoring.

ANALYSIS DETECTED CONTAMINATION IN SOIL FROM BOTTOM OF SUMP

GROUND WATER ROUTE

List substances to be considered for scoring. Source: 1, 2

1. ACETONE
2. PCE
3. TOLUENE
4. ETHYLBENZENE
5. XYLENE
6. NAPTHALENE
7. 2-METHYLNAPTHALENE
8. PHTHALATE ESTERS

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

THE FIRST SIX SUBSTANCES WERE USED IN SCORING BECAUSE THEY WERE JUDGED TO REPRESENT THE RANGE OF ENVIRONMENTAL THREATS PRESENT.

List management units to be considered in scoring: Source: 1, 2

1. SUMP
2. UST

Explain basis for choice of unit used in scoring.

ANALYSIS DETECTED CONTAMINATION IN SOIL FROM BOTTOM OF SUMP.

WORKSHEET 3
SUBSTANCE CHARACTERISTIC WORKSHEET
FOR MULTIPLE UNIT/SUBSTANCE SITES

	Combination 1	Combination 2	Combination 3
Unit: Substance: <u>AIR ROUTE</u> Human Toxicity/Mobility Value: Environmental Toxicity/ Mobility Value: Containment Value:			
Air Human Subscore: Air Environmental Score:			
<u>SURFACE WATER ROUTE</u> Human Toxicity Value: Environmental Toxicity Value: Containment Value:			
Surface Water Human Subscore: Surface Water Environmental Subscore:			
<u>GROUND WATER ROUTE</u> Human Toxicity/Mobility Value: Containment Value:			
Ground Water Subscore:			

WORKSHEET 4
SURFACE WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Std. (µg/l)	Value	Chronic Toxicity mg/kg/day	Value	Acute Toxicity mg/kg-bw	Value	Carcinogencity WOE	Potency Factor	Value
1. ACETONE	1. X	—	1. .1 RFD ORAL	1	1. 5800 LD_{50} ORAL RAT	1	X	—	—
2. PCE	2. 5 PMCL	8	2. .01 RFD ORAL	3	2. 800 LD_{50} ORAL RAT	5	B2	.051	4
3. TOLUENE	3. 2000 PMCL	2	3. .3 RFD ORAL	1	3. 5000 LD_{50} ORAL RAT	3	D	X	—
4. ETHYLBENZENE	4. 700 PMCL	4	4. .1 RFD ORAL	1	4. 3500 LD_{50} ORAL RAT	3	D	X	—
5. XYLENE	5. X	—	5. X	—	5. 4300 LD_{50} ORAL RAT	3	X	—	—
6. NAPTHALENE	6. X	—	6. .04 RFD	3	6. 490 LD_{50} ORAL RAT	5	X	—	—

Source: 4, 5
Highest Value: 8
+2 Bonus Points?: 0
Value: 8

1.2 Environmental Toxicity

Source: 4, 7 Value: 3

Substance	Acute Criteria (µg/L)	Non-human mammalian acute toxicity (mg/kg)	Value
1. ACETONE	X	5800 LD_{50} ORAL RAT	1
2. PCE	5,280	800 LD_{50} ORAL RAT	2
3. TOLUENE	17,500 LOEL	5,000 LD_{50} ORAL RAT	2
4. ETHYLBENZENE	32,000 LOEL	3,500 LD_{50} ORAL RAT	2
5. XYLENE	X	4,300 LD_{50} ORAL RAT	3
6. NAPTHALENE	2300	490 LD_{50} ORAL RAT	2

1.3 Substance Quantity

Source: ___ Value: 1

Explain basis: BEST PROFESSIONAL JUDGEMENT BY SCORER
AREA OF SUMP ESTIMATED AT 7 FT^2

2.0 MIGRATION POTENTIAL

2.1 Containment

Source: 1 Value: 0

Explain basis: SPILL IN SUBSURFACE ONLY

2.2 Surface Soil Permeability: HIGH, SAND, GRAVEL

PAGE 11 Source: 1 Value: 1

2.3 Total Annual Precipitation: 7.2 INCHES

PAGE 11 Source: 1 Value: 1

2.4 Maximum 2-Year 24-Hr Precipitation: 1.0 INCH

PAGE 11 Source: 1 Value: 1

2.5 Flood Plain: NOT IN FLOOD PLAIN

PAGE 11 Source: 1 Value: 0

2.6 Terrain Slope: LESS THAN 2%

PAGE 11 Source: 1 Value: 1

3.0 TARGETS

3.1 Distance to Surface Water: YAKIMA RIVER 1.5 MILES — PAGE 13 Source: 1 Value: 2

3.2 Population Served within 2 miles: 0 — Source: 9,10 Value: 0

3.3 Area Irrigated by Sources within 2 miles: 20 ACRES .75 √20 — Source: 9 Value: 3

3.4 Distance to Fishery Resource: YAKIMA RIVER 1.5 MILES — PAGE 13 Source: 1 Value: 3

3.5 Distance to Sensitive Environment: .75 MILE — PAGE 13 Source: 1 Value: 6

List: WASHINGTON PARK

4.0 RELEASE

Explain basis: NONE DOCUMENTED — Source: 1 Value: 0

WORKSHEET 5
AIR ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Introduction - please review before scoring

1.2 Human Toxicity

Substance	Air Std. µg/m³	Value	Chronic Toxicity mg/kg/day	Value	Acute Toxicity m³ mg/kg-bw	Value	Carcinogencity WOE	Potency Factor	Value
1. ACETONE	1. 5927.4	1	1. X	—	1. LC_{40} MOUSE 110,000 $\frac{mg}{m^3}$	1	X	—	—
2. PCE	2. X	—	2. ND	X	2. 5200 PPM = 36,000 $\frac{mg}{m^3}$	3	B2	.0033	2
3. TOLUENE	3. 12481.6	1	3. 2 REQ	1	3. X	—	D	X	—
4. ETHYL BENZENE	4. 1448.6	1	4. 136 NOAEL	1	4. X	—	D	X	—
5. XYLENE	5. X	—	5. X	—	5. 2,212 LC_{50}	5	X	—	—
6. NAPTHALENE	6. 166.5	4	6. X	—	6. X	—	X	—	—

Source: 4, 5, 6
Highest Value: 5
+2 Bonus Points?: 0
Toxicity Value: 5

1.3 Mobility

1.3.1 Gaseous Mobility

mm Hg at 25° C

Vapor Pressure: 1. 2.19 3. 28 4. 10 5. 7 6. .082 Source: 4, 8
Value: 1. 4 2. 4 3. 4 4. 4 5. 3 6. 3

1.3.2 Particulate Mobility

Soil Type: _____ Source: ___
Erodibility: _____
Climatic Factor: _____
Particulate Mobility Potential Value: _____

1.4 Final Human Health Toxicity/Mobility Matrix:

TOXICITY - 5
MOBILITY - 3

Value: 8

1.5 Environmental Toxicity/Mobility

Substance	Non-human mammalian Acute Toxicity	Value	Mobility	Value
1. ACETONE	LC_{40} MOUSE 110,000 $\frac{mg}{m^3}$	1	4	2
2. PCE	LC_{50} MOUSE = 5200 PPM = 36,000 $\frac{mg}{m^3}$	3	4	6
3. TOLUENE	X	—		
4. ETHYL BENZENE	X	—		
5. XYLENE	2,212 LC_{50}	5	3	8
6. NAPTHALENE	X	—	—	—

Environmental Toxicity Mobility Matrix: Source: 4, 6 Value: 8

1.6 Substance Quantity:

REST PROFESSIONAL JUDGMENT BY SCORER. AREA OF SUMP ESTIMATED AT 7 FT².

Source: ___ Value: 1

WORKSHEET 5 (CONTINUED)
AIR ROUTE

2.0 MIGRATION POTENTIAL

2.1 Containment: SPILL IN SUBSURFACE ONLY WITH NO VAPOR RECOVERY — Source: 1 Value: 6

3.0 TARGETS

3.1 Nearest Population: 0, BUSINESS ONSITE SERVES PUBLIC — Source: 2 Value: 10

3.2 Nearest Sensitive Environment: .75 MILE — PAGE 13 Source: 1 Value: 3

List: WASHINGTON PARK

3.3 Population within 1/2 mile: 3 120 — PAGE 13 Source: 1 Value: 56

4.0 RELEASE: NONE DOCUMENTED — Source: ___ Value: 0

WORKSHEET 6
GROUND WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Std. (µg/l)	Value	Chronic Toxicity mg/kg/day	Value	Acute Toxicity mg/kg-bw	Value	Carcinogenicity Potency WOE	Factor	Value
1. ACETONE	1. X	—	1. .1 RFD ORAL	1	1. 5800 LD_{50} ORAL RAT	1	X	—	—
2. PCE	2. 5 PMCL	8	2. .01 RFD ORAL	3	2. 800 LD_{50} ORAL RAT	5	B2	.051	4
3. TOLUENE	3. 2000 PMCL	2	3. .3 RFD ORAL	1	3. 5000 LD_{50} ORAL RAT	3	D	X	—
4. ETHYLBENZENE	4. 700 PMCL	4	4. .1 RFD ORAL	1	4. 3500 LD_{50} ORAL RAT	3	X	—	—
5. XYLENE	5. X	—	5. X	—	5. 4306 LD_{50} ORAL RAT	3	X	—	—
6. NAPTHALENE	6. X	—	6. .004 RFD ORAL	3	6. 490 LD_{50} ORAL RAT	5	X	—	—

Source: 4, 5
Highest Value: 8
+2 Bonus Points?: 0
Value: 8

1.2 Mobility

SOLUBILITY mg/l

Substance: 1. 10^6 2. 1503. 515 4. 152 5. 200 6. 30

VALUE 1. 3 2. 2 3. 2 4. 2 5. 2 6. 1

Source: 4, 8 Value: 3

1.3 Substance Quantity

Source: ___ Value: 1

Explain basis: BEST PROFESSIONAL JUDGEMENT BY SCORER

$$\frac{(7\ FT^2)\ (3FT)}{\left(\frac{1\ YD^3}{27\ FT^3}\right)} \doteq .8\ YD^3$$

(ASSUMED AREA; ASSUMED DEPTH)

2.0 MIGRATION POTENTIAL

2.1 Containment

Source: 3 Value: 10

Explain basis: CONTAMINATED SOIL = VALUE OF 10.

2.2 Net Precipitation: 1.7 INCH

Source: 11 Value: 1

2.3 Subsurface Hydraulic Conductivity: GREATER THAN 10^{-3} CM/SEC

PAGE 11 Source: 1 Value: 4

2.4 Vertical Depth to Ground Water: 20 FEET

PAGE 11 Source: 1 Value: 8

3.0 TARGETS

3.1 Ground Water Usage: PUBLIC, NO ALTERNATE.

Source: 10 Value: 9

3.2 Distance to Nearest Drinking Water Well: WITHIN .5 MILE

PAGE 7 Source: 3 Value: 3

3.3 Population Served with 2 miles: 2245 PUBLIC + 57 DOMESTIC

Source: 9, 10 Value: 48

3.4 Area Irrigated by Wells within 2 miles: 2861 ACRES. .75$\sqrt{2861}$

Source: 9 Value: 40

4.0 RELEASE

Explain basis: "VERY LIKELY" SOURCE 3 PAGE VI

Source: 3 Value: 5

WORKSHEET 7
SOURCES USED IN SCORING

1. SITE HAZARD ASSESSMENT DATA COLLECTION SUMMARY SHEETS FOR WASHINGTON RANKING METHOD, SAIC, FEBRUARY, 1991.
2. DATA GAP IDENTIFICATION REPORT, SAIC, FEBRUARY, 1991.
3. SITE INSPECTION REPORT FOR NU-WAY CLEANERS, ECOLOGY AND ENVIRONMENT, JANUARY, 1990.
4. WASHINGTON DEPARTMENT OF HEALTH GUIDE TO PHYICO-CHEMICAL, TOXICOLOGICAL AND REGULATORY VALUES FOR PRIORITY POLLUTANTS, MONA KIMBELL ET AL, DRAFT, JULY, 1990.
5. RTECS, NIOSH.
6. CONSOLIDATED FREIGHTWAYS SHA WORKSHEET, SAIC, 1990.
7. QUALITY CRITERIA FOR WATER, 1986, USEPA.
8. SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, US EPA, 1986
9. RECORDED WATER RIGHTS OF THE DEPARTMENT OF ECOLOGY REGION 4, 6/8/90.
10. STATE OF WASHINGTON PUBLIC WATER SUPPLY SYSTEM LISTING, 2/16/89.
11. WASHINGTON CLIMATE, COOPERATIVE EXTENSION SERVICE, WASHINGTON STATE UNIVERSITY.

8/30/90

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM

SITE HAZARD ASSESSMENT DATA COLLECTION SUMMARY SHEETS
FOR
WASHINGTON RANKING METHOD

Site Name: Nu-Way Cleaners

Location: SW¼ SE¼ SECTION 19 T13N R 19E

Site owner/operator: _____

Address: _____

Any other known PLP(s): _____

Address: _____

Site Number: _____

Date(s) of field site hazard assessment: _____

Samples or field measurements: _____soil
_____surface water
_____air _____ground water

(Attach copies of pertinent sampling and analytical data, as well as all other supporting documentation.)

Photographs: _____

Weather: _____

Lead inspector: _____

Other inspectors: _____

Signature: _____

PART I: Hazardous Substances

NOTE: Page numbers, or worksheet numbers, shown in parentheses refer to the WARM Scoring Manual.

A. LIST

List hazardous substances, known or suspected (check k or s), currently at the property, or that have been previously(check c or p) at the property:

	Hazardous Substance	K	S	C	P	Quantity	Units
1.	Stoddard solvent - nonane					1000	gal/yr
2.	-trimethylbenzene						
3.	Tetrachloroethylene						
4.	Naphthalene						
5.	2-methylnaphthalene						
6.							
7.							
8.							
9.							
10.							

Additional?_____(list on attachment)

By which routes are these available?

Number(from above)	Surface Water	Air	Groundwater
1. all			✓
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

B. SOURCES

Check those known or observed:

_____ drums or other containers
_____ electrical transformers
_____ above ground tanks
__X__ below ground tanks
_____ ponds, pits, or other impoundments
_____ pipelines (other than water, sewer, or gas)
_____ floor drains
_____ exterior drains for rainwater, surface waters, spills, etc.
_____other?Identify:_____
_____
_____

C. INDICATORS

Check those known or observed:

_____ discolored soils
_____ disturbed soils
_____ discolored standing water
_____ unusual or noxious odors
_____ sick or dead vegetation
_____ groundwater monitoring wells
_____other?Identify:_____
_____
_____
_____

If any are checked in B or C, explain details including exact locations (identify location in a map or drawing).

Additional information: 750 gal UST for new Stoddard Solvent
_____
_____
_____
_____
_____

PART II: Releases

A. KNOWN OR SUSPECTED RELEASES

List those hazardous substances identified (by number) in I.A. which are known or suspected to have been released:

Substance (#)	Quantity Released	Units	When	Location
Stoddard Solvent			1989	Drycleaning Room

Additional information/reference? See SI by E+E (enclosed)

B. SOURCES AND IMPACTS (Pages A-9, 10)

List those hazardous substances identified (by number) in II.A. and identify the source and impact:

Substance No.	Source	Impacts/affects To	Area
Stoddard Solvent	Drycleaning Machine	to sump and subsurface	

III. Migration Potential

A. CONTAINMENT--LANDFILLS (SW-7; A-12; GW-8,9)

Present?_____ How many?_____

Check those that apply:

1. _____An engineered, maintained run-on/run-off control system
2. _____An engineered/maintained cover without ponding
3. _____Unmaintained run-on/runoff control system or cover
4. _____No run-on/runoff control or no cover
5. _____Uncontaminated soil cover greater than 6" thick
6. _____Uncontaminated soil cover less than 6" thick
7. _____Contaminated soil used as cover
8. _____A functioning vapor collection system
9. _____Mixing or agitation used
10. _____No liner
11. _____Single clay or compacted soil liner (permeability_____cm/sec)
12. _____Single synthetic liner (permeability_____cm/sec)
13. _____Double liner system (permeability_____cm/sec)
14. _____Leachate collection system, maintained and functioning
15. _____Leachate collection system, unknown condition or not functioning
16. _____Liquid wastes <u>may</u> have been disposed of
17. _____Liquid wastes <u>were</u> disposed of in landfill
18. _____Reliable evidence <u>no</u> liquid wastes were disposed

Additional comments:_____

B. CONTAINMENT--SURFACE IMPOUNDMENTS (SW-7, 8; A-13; GW-10,11)

Present_____ How many?_____

Check those that apply:

1. _____The dike is apparently sound

2. _____The dike is regularly inspected and maintained

3. _____There is evidence of failure, erosion, slumping, or release of contents

4. _____Two feet of freeboard maintained automatically

5. _____The freeboard is manually controlled so that there is at least 2 feet of freeboard

6. _____Evidence of insufficient freeboard (<2 ft.)

7. _____A maintained cover

8. _____Unmaintained cover, no cover

9. _____No liner

10. _____Single synthetic liner

11. _____Single clay or compacted soil liner

12. _____Double liner

13. _____Working leak detection system

14. _____Evidence of loss of fluid (other than by evaporation)

Additional comments:_____

C. CONTAINMENT--DRUMS AND SMALL CONTAINERS (SW-9; A-11; GW-11)

Present_____ How many?_____

Check those that apply:

1. _____No functional containment

2. _____There is secondary containment capacity for the total volume ofcontainers

3. _____There is secondary containment with capacity for at least 110% ofvolume of the largest container

4. _____The secondary containment is less than 110% of the volume of thelargest container

5. _____The containers are stored in single, or double layers on pallets,or in racks

6. _____The containers are stored in an unstable manner

7. _____Some containers are open or have visible liquid

8. _____Some containers are leaking

9. _____Containers are protected from weather

10. _____Containers showing deterioration

11. _____Containment surface is impervious

12. _____Containment surface has cracks or semi-permeable

13. _____No base material/permeable base such as gravel/base materials unknown

13. _____Containment is regularly inspected and maintained

14. _____Evidence of containment failure

Additional comments:_____

D. CONTAINMENT--STORAGE TANKS (SW-9; A-11; GW-11)

Present? Yes How many? 1

Check those that apply:

1. _____Secondary containment with a capacity of 110% of the volume of the tanks

2. _____Secondary containment at least 50% of the volume of all tanks

3. _____Containment system with capacity for at least 10% of volume of containers or tanks

4. _____No containment, or less than 10% capacity

5. _____Tank volumes maintained

6. _____Automatic controls used for volume maintenance

7. _____Tanks are covered

8. _____Uncovered tanks have aeration, mixing, or heating of tank contents

9. _____Containers sealed, protected

10. _____Containers sealed, not protected

11. _____Containers deteriorated

12 _____Containers leaking

13. Record the #s of above which apply only to above ground tank_____

14. Record the #s of above which apply only to below ground tanks _____

15. Record the #s of above which apply to both above and below ground tanks: _____

Additional comments Exact information concerning UST is unknown at this time

E. CONTAINMENT--WASTE PILES (SW-10; A-13; GW-12,13)

Present?_____ How many?_____

Check those that apply:

1. _____Waste pile is outside, no protecting structure

2. _____Waste pile is outside, in open structure with roof

3. _____Waste pile is outside, with partial or unmaintained cover

4. _____Waste pile is outdoors, with maintained cover

5. _____No cover is present

6. _____Waste pile is fully enclosed, intact building

7. _____There is an engineered run-on/run-off control

8. _____The run-on/run-off is maintained

9. _____Run-on/runoff control present, unknown condition

10. _____No run-on/runoff control system present, or unknown if present

11. _____Liner or base present; _____Not present.

12. _____Single clay or compacted soil liner

13. _____Single synthetic liner

14. _____Double liner

15. _____Maintained, functioning leachate collection system

16. _____Leachate collection system;____Unknown condition; or _____Not functioning.

Additional comments_____

_____

_____

_____

_____

_____

F. CONTAINMENT--SPILLS, DISCHARGES, AND CONTAMINATED SOIL
(SW-10, 11; A-13, 145; GW-13)

Check those that apply:

1. X Spill, discharge, or contaminated soil only in the subsurface at the site--including dry wells, drain fields, leaking underground storage tanks

2. _____ Soil contamination that has been covered partially excavated and filled with at least 6 inches of clean soil

3. _____ Soil contamination that has been covered or partially excavated and filled with less than 6 inches of clean soil

4. _____ Uncontaminated soil cover >2 feet thick

5. _____ No cover; or _____ Cover <2 inches but >6 inches thick

6. _____ Spill, discharge, or contaminated soil present at the surface in an area with maintained run-on/runoff controls

7. _____ Spill, discharge, or contaminated soil present at the surface in an area with unmaintained run-on/runoff controls

8. _____ Spill, discharge, or contaminated soil present at the surface with no run-on/runoff controls or unknown controls

9. _____ Contaminated soil has been disturbed or excavated and stored above grade

10. _____ A functioning vapor recovery system

11. _____ No vapor recovery system

Additional comments: Cannot quantify amounts spilled over entire period of operation.

G. CONTAINMENT--SITE CHARACTERISTICS

(SW-11,12; A-6; Worksheet 5)

1. How would you evaluate the site soils? Circle predominant textural class.

X	Sand, gravel, sandy gravel, well-graded sand, well-graded gravel, gravelly sand, gravelly sand loam, silty sandy loam?
_____	Poorly-graded sands with fines, silt-sand mixtures, loam, silt loam, sandy silt loam, clayey sand, clay sand loam?
_____	Clayey sands, sand-clay mixtures, clayey gravels, clay-sand-gravel mixtures, inorganic silts, clayey silt loam, silty clay loam, porous rock outcrop, sandy silty clay, sandy clay loam?
_____	Clay (organic and inorganic), clay loam, rock outcrop, peat, peaty clay?

Is the above based on personal observation, lab analysis, or professional judgement by a soil expert? (circle)

2. What is the total annual precipitation?
7.2 inches/yr (SW-12; W/S 5)

3. What is the maximum 2-year, 24 hour precipitation? 1.0 inches ((SW-14; W/S 5)

4. Is the site not in a flood plain? X (SW-14; W/S 5)
Is the site in a 500 year flood plain? _____
Is the site in a 100 year flood plain? _____
Basedon topo location

5. What is the terrain slope to the nearest surface water?
<2 % (SW-14,15; W/S 5)

6. What is the subsurface hydraulic conductivity?
$>10^{-3}$ cm/sec (GW-14; W/S 6)

7. What is the vertical depth from the deepest point of known contamination to ground water? 20 feet (GW-15; W/S 7)

Additional comments:

IV. Targets

A. DISTANCE TO SURFACE WATER (SW-16)

1. What surface water(s) (lake, stream, river, pond, bay, etc.) is/are within 10,000 feet (downgradient) of the site?

Name	Dist.-ft.	Obs.	Meas.

None?_____.Comments_____

2. What drinking water intakes are within 2 miles of the site? (all lake intakes, river intakes downstream only) (SW-12; W/S 5)

None?_____

Source	Location	Pop. Served

3. How much acreage (anywhere) is irrigated by surface water intakes (downstream only) or wells(anywhere) within 2 miles of the site? (SW-16; GW-18; W/S 5; W/S 7)

None?_____

SURFACE WATER: Acres_____ (1600 acres max.)

Source(s)_____;

GROUNDWATER: Acres_____ (4500 acres max.)

Source(s)_____

4. What is the distance to the nearest fishery resource (total of overland distance plus downgradient distance)? (SW-17; W/S 5) Yakima River 1.5 mile East

Over 10,000 feet?____ Distance if less than 10,000 feet?_____ft.

5. What is the distance to the nearest sensitive environment (total of overland distance plus downgradient distance)? (SW-18; A-15; W/S 5) Washington Park 3/4 mile NE

Over 10,000 feet?____ Distance if less than 10,000 feet?_____ft.

6. Is the aquifer a federally-designated sole source aquifer? NO (GW-16; W/S 7)

7. Is the ground water used for: (GW-16; W/S 7)

- ✓ private supply
- ✓ public supply
- _____ irrigation of human food crops or livestock
- ✓ non-food (human) vegetation
- _____ not used due to natural contaminants
- _____ ground water not used, but usable

8. Distance to nearest drinking water well?_____feet (GW-17; W/S 7)

9. Is there an alternate source available to groundwater for private or public water supply?_____

10. Population served by drinking water wells within 2 miles?_____ (GW-17; W/S 7)

11. Distance to the nearest population?_____feet (A-15, 16; W/S 6)

12. Population within one-half mile radius? 3,120 (A-16; W/S 6)

Additional comments:_____