WASHINGTON RANKING METHOD

ROUTE SCORES SUMMARY AND RANKING CALCULATION SHEET

Site name: Paxton Sales Corp 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	46.9	5
GW-HH	65.4	5
Sed-HH	—	
SW-En	1.7	1
Air-En	0	1
Sed-En	—	—

Priority scores:

$\frac{H^2 + 2M + L}{8}$ = $\frac{25 + 10 + 1}{8} = 36/8 = 4.5 = 5$

$\frac{H^2 + 2L}{7}$ = $\frac{1 + 2}{7} = 3/7 = 1$

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

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WORKSHEET 1
SUMMARY SCORE SHEET

Site Name: PAXTON SALES CORPORATION

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

108 West Mead Avenue
Yakima, Washington (Yakima County)

NW¼ NW¼ of Section 31, T. 13 N., R. 19 EWM

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

The site is an active metal case hardening shop that has operated for 21 years. Rinse waters from case hardening and noncontact cooling water ~~are~~ HAVE BEEN discharged to an on-site dry well. No evidence of groundwater contamination was found from sampling of nearby domestic wells, but soil contamination due to metals, tetrachlorethene, methylene chloride, acetone, toluene, ethylbenzene and xylene was detected in a sediment sample taken from the dry well. The facility used cutting oils that contained halogenated hydrocarbons until 1984. Reportedly, the cutting oils have not been disposed on-site.

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)

ROUTE SCORES:

Ground Water/Human:	58.3	Overall Rank:	_____
Surface Water/Human:	0.8		
Air/Human:	46.9		
Air/Environmental:	0.0		
Surface Water/Environmental:	1.7		

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WORKSHEET 2
ROUTE DOCUMENTATION

SURFACE WATER ROUTE

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

1. METHYLENE CHLORIDE
2. ACETONE
3. TETRACHLOROETHENE (PCE)
4. TOLUENE
5. ETHYLBENZENE
6. XYLENE
7. CYANIDE
8. BARIUM
9. CHROMIUM
10. COBALT
11. COPPER
12. IRON
13. LEAD
14. MERCURY
15. NICKEL
16. SODIUM
17. ZINC
18. NAPTHALENE
19. 2-METHYLNAPTHALENE
20. 4-CHLORO-3-METHYLPHENOL

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

METHYLENE CHLORIDE, PCE, XYLENE, HCN, ZINC AND 4-CHLORO-3-METHYLPHENOL WERE CHOSEN FOR SCORING BASED ON THREAT, CONCENTRATION, AND REPRESENTATION OF OVERALL PROBLEM.

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

1. DRY WELL (SEEP PIT)

Explain basis for choice of unit used in scoring.

CONTAMINATION WAS DETECTED IN A SEDIMENT SAMPLE TAKEN FROM THE DRY WELL.

AIR ROUTE

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

1. METHYLENE CHLORIDE
2. ACETONE
3. PCE
4. TOLUENE
5. ETHYLBENZENE
6. XYLENE
7. CYANIDE
8. BARIUM
9. CHROMIUM
10. COBALT
11. COPPER
12. IRON
13. LEAD
14. MERCURY
15. NICKEL
16. SODIUM
17. ZINC
18. NAPTHALENE
19. 2-METHYLNAPTHALENE
20. 4-CHLORO-3-METHYLPHENOL

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

METHYLENE CHLORIDE, PCE, XYLENE, HCN, ZINC AND 4-CHLORO-3 METHYLPHENOL WERE CHOSEN FOR SCORING BASED ON THREAT, CONCENTRATION AND REPRESENTATION OF OVERALL PROBLEM.

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

1. DRY WELL (SEEP PIT)

Explain basis for choice of unit used in scoring.

CONTAMINATION WAS DETECTED IN A SEDIMENT SAMPLE TAKEN FROM THE DRY WELL.

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GROUND WATER ROUTE

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

1. METHYLENE CHLORIDE
2. ACETONE
3. PCE
4. TOLUENE
5. ETHYLBENZENE
6. XYLENE
7. CYANIDE
8. BARIUM
9. CHROMIUM
10. COBALT
11. COPPER
12. IRON
13. LEAD
14. MERCURY
15. NICKEL
16. SODIUM
17. ZINC
18. NAPTHALENE
19. 2-METHYL NAPTHALENE
20. 4-CHLORO-3-METHYLPHENOL

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

METHYLENE CHLORIDE, PCE, XYLENE, HCN, ZINC AND 4-CHLORO-3-METHYLPHENOL WERE CHOSEN FOR SCORING BASED ON THREAT, CONCENTRATION AND REPRESENTATION OF OVERALL PROBLEM.

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

1. DRY WELL (SEEP PIT)

Explain basis for choice of unit used in scoring.

CONTAMINATION WAS DETECTED IN A SEDIMENT SAMPLE TAKEN FROM THE DRY WELL.

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Washington State
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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:			

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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. METHYLENE CHLORIDE	PMCL 7, 5	8	1, .06 RfD ORAL	1	1. 1600 LD_{50} ORAL RAT	3	1. B2	.0075	2
2. PCE	PMCL 2, 5	8	2. .01 RfD ORAL	3	2. 269 LD_{50} ORAL RAT	5	2. B2	.051	4
3. XYLENE	3. X	4	3. X		3. 4300 LD_{50} ORAL RAT	3	3. X	—	—
4. HCN	PMCL 4. 200		4. .02 RfD ORAL	1	4. 3700 LD_{50} ORAL MOUSE	3	4. D	—	—
5. ZINC	SMCL 5. 5000		5. .2 RfD ORAL	1	5. X		5. X	—	—
6. 4-CHLORO-3-METHYLPHENOL	6. X	2	6. 2 RfD ORAL	1	6. 1830 LD_{50} ORAL RAT	3	6. X	X	—

Source: 5, 6, 7
Highest Value: 8
+2 Bonus Points?: 2
Value: 10

1.2 Environmental Toxicity

Source: 5, 6, 8 Value: 6

Substance	Acute Criteria (µg/L)	Non-human mammalian acute toxicity (mg/kg)	Value
1. METHYLENE CHLORIDE	1. X	1600 LD_{50} ORAL RAT	3
2. PCE	2. 5280	269 LD_{50} ORAL RAT	2
3. XYLENE	3. X	4300 LD_{50} ORAL RAT	3
4. HCN	4. 22	3700 LD_{50} ORAL MOUSE	6
5. ZINC	5. 320	X	4
6. 4-CHLORO-3-METHYLPHENOL	6. 30	1830 LD_{50} ORAL RAT	6

1.3 Substance Quantity

PAGE 6 Source: 1 Value: 5

Explain basis: $(15 \text{ YEARS})\left(\frac{365 \text{ DAYS}}{\text{YEAR}}\right)\left(\frac{1 \text{ GALLON}}{\text{DAY}}\right) = 5475 \text{ GALLONS}$

2.0 MIGRATION POTENTIAL

2.1 Containment

Source: 1 Value: 0

Explain basis: DRY WELL = 0 CONTAINMENT VALUE

2.2 Surface Soil Permeability: HIGH, SAND, GRAVEL — PAGE 11 Source: 3 Value: 1

2.3 Total Annual Precipitation: 7.2 INCHES — PAGE 11 Source: 3 Value: 1

2.4 Maximum 2-Year 24-Hr Precipitation: 1.0 INCH — PAGE 11 Source: 3 Value: 1

2.5 Flood Plain: NOT IN FLOOD PLAIN — PAGE 11 Source: 3 Value: 0

2.6 Terrain Slope: LESS THAN 2% — PAGE 11 Source: 3 Value: 1

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3.0 TARGETS

3.1 Distance to Surface Water: 1 MILE, SHANO DITCH. Source: 10,11 Value: 2

3.2 Population Served within 2 miles: 0 Source: 12,13 Value: 0

3.3 Area Irrigated by Sources within 2 miles: 0 Source: 12 Value: 0

3.4 Distance to Fishery Resource: 1.5 MILES WIDE HOLLOW CREEK Source: 14 Value: 3

3.5 Distance to Sensitive Environment: 1.5 MILES Source: 14 Value: 3

List: WIDE HOLLOW CREEK (FISHERY RESOURCE) 1.5 MILES
CAHALAN PARK 1.75 MILE
YAKIMA RIVER 2 MILES

4.0 RELEASE

Explain basis: NONE Source: ___ Value: 0

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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 mg/kg-m³	Value	Carcinogencity WOE	Potency Factor	Value
1. METHYLENE CHLORIDE	1. 24	10	1. 3 RfD Inh.	1	1. 88,000 LC_{50} Inh. RAT	3	1. B2	X	—
2. PCE	2. X	—	2. ND	—	2. 34,200 LC_{50} Inh. RAT	3	2. B2	.0033	2
3. XYLENE	3. X	—	3. X	—	3. 22,120 LC_{50}	3	3. X	—	—
4. HCN	4. 16.7	7	4. X	—	4. 545 LC_{50}	8	4. D	—	—
5. ZINC	5. X	—	5. ND	—	5. X	—	5. X	—	—
6. 4-CHLORO-3 METHYLPHENOL	6. X	—	6. X	—	6. X	—	6. X	—	—

Source: 5, 6, 15
Highest Value: 10
+2 Bonus Points?: 2
Toxicity Value: 12

1.3 Mobility

1.3.1 Gaseous Mobility mm Hg
Vapor Pressure: 1. 429 2. 19 3. 10 4. 620 5. NA 6. X Source: 5, 16
Value: 1. 4 2. 4 3. 3 4. 4 5. — 6. —

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

1.4 Final Human Health Toxicity/Mobility Matrix: TOXICITY - 12
MOBILITY - 4
Value: 24

1.5 Environmental Toxicity/Mobility

Substance	Non-human mammalian Acute Toxicity	Value	Mobility	Value
1. METHYLENE CHLORIDE	88,000 LC_{50}	3	4	6
2. PCE	34,200 LC_{50}	3	4	6
3. XYLENE	22,120 LC_{50}	3	3	5
4. HCN	545 LC_{50}	8	4	16
5. ZINC	X	—		
6. 4-CHLORO	X	—		

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Environmental Toxicity Mobility Matrix: Source: 5, 6 Value: 16

1.6 Substance Quantity: $\frac{(15 \text{ YEARS})(365 \text{ DAYS})}{\text{YEAR}}\left(\frac{1 \text{ GALLON}}{\text{DAY}}\right) = 5475$ GALLONS
PAGE 6 Source: 1 Value: 5

2.0 MIGRATION POTENTIAL

2.1 Containment: SPILL OCCURRED IN SUBSURFACE ONLY WITH NO VAPOR RECOVERY. Source: ___ Value: 6

3.0 TARGETS

3.1 Nearest Population: ESTIMATE: LESS THAN 1,000 FEET RESIDENCES IMMEDIATELY SOUTH OF SITE. Source: 14 Value: 10

3.2 Nearest Sensitive Environment: 1.5 MILES 7920 FEET Source: 14 Value: 0

List: WIDE HOLLOW CREEK (FISHERY RESOURCE) 1.5 MILES
CAHALAN PARK 1.75 MILES
YAKIMA RIVER 2 MILES

3.3 Population within 1/2 mile: 3870 PAGE 13 Source: 3 Value: 62

4.0 RELEASE: NONE DOCUMENTED Source: ___ Value: 0

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WORKSHEET 6
GROUND WATER ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Human Toxicity

Substance	Drinking Water Std. (ug/l)	Value	Chronic Toxicity mg/kg/day	Value	Acute Toxicity mg/kg-bw	Value	Carcinogencity Potency WOE	Factor	Value
1. METHYLENE CHLORIDE	1. 5 PMCL	8	1. .06 RfD	1	1. 1600 LD_{50} ORAL RAT	3	1. B2	.0075	2
2. PCE	2. 5 PMCL	8	2. .01 RfD	3	2. 269 LD_{50} ORAL RAT	5	2. B2	.051	4
3. XYLENE	3. X	—	3. X	—	3. 4300 LD_{50} ORAL RAT	3	3. X	—	—
4. HCN	PMCL 4. 200	4	4. .02 RfD	1	4. 3700 LD_{50} ORAL MOUSE	3	4. D	—	—
5. ZINC	SMCL 5. 5,000	2	5. .2 RfD	1	5. X	—	5. X	—	—
6. 4-CHLORO-3-METHYLPHENOL	6. X	—	6. 2 RfD	1	6. LD_{50} ORAL RAT	3	6. X	—	—

Source: 5, 6, 7
Highest Value: 8
+2 Bonus Points?: 2
Value: 10

1.2 Mobility

SOLUBILITY, mg/L
Substance: 1. 16,700 2. 150 3. 198 4. 10^6 5. K>1 6. X
VALUE 1. 3 2. 2 3. 2 4. 3 5. 3 6. —

Source: 5, 16 Value: 3

1.3 Substance Quantity

PAGE 6 Source: 1 Value: 5

Explain basis: $(15 \text{ YEARS})\left(\frac{365 \text{ DAYS}}{\text{YEAR}}\right)\left(\frac{1 \text{ GALLON}}{\text{DAY}}\right) = 5475$ GALLONS

2.0 MIGRATION POTENTIAL

2.1 Containment

Source: 17 Value: 10

Explain basis: DRY WELL = 10 CONTAINMENT VALUE

2.2 Net Precipitation: 1.7 INCHES

Source: 18 Value: 1

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

PAGE 11 Source: 3 Value: 4

2.4 Vertical Depth to Ground Water: 10 TO 20 FEET

PAGE 11 Source: 3 Value: 8

3.0 TARGETS

3.1 Ground Water Usage: PUBLIC. NO ALTERNATE.

Source: 13 Value: 9

3.2 Distance to Nearest Drinking Water Well: LESS THAN 600 FEET

Source: 14 Value: 5

3.3 Population Served with 2 miles: 4471 PUBLIC + 18 DOMESTIC

Source: 12, 13 Value: 67

3.4 Area Irrigated by Wells within 2 miles: 2167 ACRES, $.75\sqrt{2167}$

Source: 12 Value: 35

4.0 RELEASE

Explain basis: LIKELY, BUT NOT DOCUMENTED BY GROUNDWATER SAMPLING

Source: ___ Value: 0

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WORKSHEET 7
SOURCES USED IN SCORING

1. SITE INSPECTION REPORT FOR PAXTON SALES CORPORATION, YAKIMA, WASHINGTON, ECOLOGY AND ENVIRONMENT, NOVEMBER, 1989
2. DATA GAP IDENTIFICATION REPORT, SAIC, FEBRUARY 1991.
3. SITE HAZARD ASSESSMENT DATA COLLECTION SUMMARY SHEETS FOR WASHINGTON RANKING METHOD, SAIC, FEBRUARY, 1991.
4. PRELIMINARY ASSESSMENT REPORT PAXTON SALES CORPORATION YAKIMA WASHINGTON, ECOLOGY AND ENVIRONMENT, JUNE, 1988.
5. PHYSICAL, CHEMICAL, TOXICOLOGICAL AND REGULATORY VALUES FOR PRIORITY POLLUTANTS, WASHINGTON DEPT. OF HEALTH, MARCH, 1991.
6. RTECS, NIOSH, APRIL, 1987.
7. HEALTH EFFECTS ASSESSMENTS SUMMARY TABLE, US EPA, 1990
8. QUALITY CRITERIA FOR WATER 1986, US EPA
9. QUANTITY ESTIMATION, BOB SWACKHAMER, 5/14/91.
10. YAKIMA EAST QUADRANGLE MAP, USGS 7.5 MINUTE TOPOGRAPHIC SERIES.
11. YAKIMA WEST QUADRANGLE MAP, USGS 7.5 MINUTE TOPOGRAPHIC SERIES.
12. RECORDED WATER RIGHTS OF THE DEPARTMENT OF ECOLOGY, REGION 4, 6/21/90.
13. STATE OF WASHINGTON PUBLIC WATER SUPPLY SYSTEM LISTING, DEPT. OF HEALTH, 2/16/89.
14. CMX CORPORATION SHA SUMMARY SCORE SHEET, DEPT. OF ECOLOGY, 1991
15. CHAPTER 173-460 WAC, DRAFT, DEPT. OF ECOLOGY, AUGUST, 1990.
16. SUPERFUND PUBLIC HEALTH EVALUATION MANUAL, US EPA, ICF CORP., 1986.
17. WASHINGTON RANKING METHOD SCORING MANUAL, DEPT. OF ECOLOGY, APRIL 1990.
18. WASHINGTON CLIMATE, COOPERATIVE EXTENSION UNIT, WASHINGTON STATE UNIVERSITY.

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May 23, 1991

MAY 30 1991

TO: Bob Swackhamer

FROM: Michael J. Spencer MJS

SUBJECT: Site Hazard Assessment Scoring Packages

I have discussed the scoring issues we ran into last week with several of your sites with Barb Morson of SAIC, and we both agreed on the following resolutions:

1) Cameron - Yakima, Inc.:

It is important to keep in mind that the "unit used in scoring", e.g. the historical (soil) contamination, most likely has resulted from the surface down, rather than upward from such as a LUST. By stating that the whole contaminated area is paved over, and assigning a containment value of zero for the surface water pathway as you do, then Barb feels (strongly!) that the air pathway realistically shouldn't be scored at all, and I tend to agree. There is even a good argument for not scoring the surface water pathway at all, however the zero value for containment assures that it scores appropriately low.

2) CMX:

The surface area to be used for the substance quantity estimation should be the same for air as for the other pathways, e.g. use the 70' X 2' dimensions of the drainfield, and <u>not</u> the dimensions of the inside sump area. I would like to point out at this time that you need to be more consistent in completing the summary scoring sheets, e.g. for this site, you listed only the "drainfield" as management unit(s) to be <u>considered</u> for scoring, than apparently made a "sump discharging to a drainfield" as the choice of unit to be used in scoring. If you score the air pathway using the drainfield as the unit, then the containment value needs to be re-assigned from the zero it now has.

3) Paxton Sales:

Rather than use an estimate of 50' X 50' for soil contamination, it would be better to come up with an estimate of the number of gallons of wastewater (having documentation of course that it indeed was contaminated by the substance(s) of concern) which were

disposed of into the dry well during the total number of years of operation of the site. We think it is very important that you have some factual information regarding the depth of the well, as that, using best professional judgment, would affect your decision as to whether or not there really are air and/or surface water pathways available, and what sort of containment values to then assign. If the well is relatively deep, maybe it is appropriate to score only the ground water pathway, unless contamination can be attributed to other, more surficial, areas of the site.

Please consider all the above points in your final analysis for each of these sites, and let me know what you decide. You have the ability to recalculate scores for the pathways I have pointed out, and, using the quintile spreads I sent to you, you can project fairly accurately where these sites will eventually rank. Use that as a guide. Call me at SCAN 585-3058 if you have any questions/comments.

cc: Pete Kmet
Elaine Peterson

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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: Paxton Sales Corporation

Location: NW¼ NW¼ NW¼ SECTION 31 T13N R19E

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: _____

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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. Halogenated Hydrocarbons						
2. Barium						
3. Cadmium						
4. Lead						
5. Mercury						
6. Cyanide Salts						
7.						
8.						
9.						
10.						

Additional?_____(list on attachment)

By which routes are these available?

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

} discharged to a dry well

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B. SOURCES

Check those known or observed:

_____ drums or other containers
_____ electrical transformers
__✓__ above ground tanks
_____ 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: sludge tanks, cleaning tanks

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: _____

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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
Tank Rinse water (composition unknown)	1 gal/day		1984	

Additional information/reference? _____

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
Tank Rinse Water		Groundwater (disposed to dry well)	

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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:_____

_____

_____

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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:_____

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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:_____

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

Present?_____ How many?_____

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_____

_____

_____

_____

_____

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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_____

_____

_____

_____

_____

_____

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

Check those that apply:

1. ✓ 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: _____

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G. CONTAINMENT--SITE CHARACTERISTICS

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

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

✓	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? _____

5. What is the terrain (BPU) 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? 10-20 feet below ground surface
(GW-15; W/S 7)

Additional comments:

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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)_____

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4. What is the distance to the nearest fishery resource (total of overland distance plus downgradient distance)? (SW-17; W/S 5) 2 miles to Yakima River

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) 1.75 miles to Cahalan Park

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? Adjacent feet (A-15, 16; W/S 6)

12. Population within one-half mile radius? 3870 (A-16; W/S 6)

Additional comments:_____

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PAXTON SALES CORPORATION

Site Description: The site is a metal case hardening shop that has operated in Yakima for 21 years. The facility used cutting oils that contained halogenated hydrocarbons until 1984. Reportedly, the cutting oils have not been disposed onsite. Rinse waters from case hardening and noncontact cooling water ~~are~~ were discharged to an onsite dry well. No evidence of ground water contamination was found from sampling of nearby domestic wells, but soil contamination due to metals, tetrachloroethylene, methylene chloride, acetone, toluene, ethylbenzene and xylene was detected in a sediment sample taken from the dry well.

Data Gaps: Based on the Preliminary Assessment and Site Inspection reports in the file, there is enough site specific information available to score the site using WARM.

Recommended Actions: The SHA and site scoring should be completed using existing file information.

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