CSID 4064

NFA

WORKSHEET 1
SUMMARY SCORE SHEET

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

Storey Gas Station	*S-25*	*TCP ID#C-19-2019-000*
1301 E First Street	*T-20*	
Cle Elum, WA 98922	*R-15*	

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

Storey Gas Station is a high volume distributor of gas, diesel and motor oil. The site contains nine large aboveground tanks, with a capacity of 137,000 gallons of gasoline and diesel. This site also has three underground tanks with a total capacity of 4500 gallons. The underground tanks are in a pit behind the station building. This pit is deep enough that it is filled with ground water. The aboveground tanks do not have secondary containment. The site has been cited numerous times by the Kittitas County Fire Marshall for improper equipment to store and dispense hazardous materials such as gasoline and diesel. An irrigation ditch is located on the south boundary of the site. This ditch is used to irrigate approximately 600 acres of hayland and is also used to water livestock.

Reports have been made to the Department of Ecology on February 7, 1995 and April 26, 1995 by the County Fire Marshall concerning unreported releases of petroleum based products. The site was visited by the Department of Ecology on April 26, 1995 and a determination was made that a release of a hazardous substance that may pose a threat to human health and the environment has occurred.

On November 21, 1995 a complaint was filed with Kittitas County concerning oil in the irrigation ditch. The source of the oil originated from Storey Property. The following afternoon The Department of Ecology responded and applied oil booms to contain the spill. The pictures that were taken indicated approximately 55 gallons of oil was released in the irrigation ditch.

The overall history and operation of the site indicate that the equipment is in disrepair and the handling of hazardous substances is such that numerous spills have occurred the years. The oldest documentation of the condition of the tanks and indication that spills have occurred is 1991.

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):

Storey Gas Station was not sampled due to heavy snow and inclement weather. The site was scored on a history of visual observation and photographic evidence of leaking and faulty equipment associated with the operation of the gas station.

ROUTE SCORES:

Surface Water/Human Health: *29.5* Surface Water/Environ.: *25.7*

Air/Human Health: *21.2* Air/Environmental: *29.2*

Ground Water/Human Health: *48.6*

OVERALL RANK: *1*

WORKSHEET 2
ROUTE DOCUMENTATION

1. SURFACE WATER ROUTE

List those substances to be considered for scoring: Source: *8, 16*

TPH as diesel
TPH as gasoline

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

The station only dispenses gasoline, diesel fuel and motor oil. Photographs show chronic equipment failure resulting in discharge of the above.

List those management units to be considered for scoring: Source: *8, 16*

Contaminated soils.

Explain basis for choice of unit to be used in scoring. Source: *8, 16*

Visual and photographic evidence of soil staining, surface water contamination.

2. AIR ROUTE

List those substances to be considered for scoring: Source: *8, 16*

TPH as diesel
TPH as gasoline

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

The station only dispenses gasoline, diesel fuel and motor oil. Photographs show chronic equipment failure resulting in discharge of the above.

List those management units to be considered for scoring: Source: *8, 16*

Contaminated soils.

Explain basis for choice of unit to be used in scoring. Source: *8, 16*

Visual and photographic evidence of soil staining.

WORKSHEET 2 (CONTINUED)
ROUTE DOCUMENTATION

3. GROUND WATER ROUTE

List those substances to be considered for scoring: Source: *8, 16*

TPH as diesel
TPH as gasoline

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

The station only dispenses gasoline, diesel fuel and motor oil. Photographs show chronic equipment failure resulting in discharge of the above.

List those management units to be considered for scoring: Source: *8, 16*

Contaminated soils.

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

Visual and photographic evidence of soil staining.

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

	Combination 1	Combination 2	Combination 3
Unit:			

1. SURFACE WATER ROUTE

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

Not Applicable

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

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
SURFACE 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 as diesel*	*20*	*6*	*490*	*5*	*0.004*	*3*	-	-	-
2. *TPH as gasoline*	*5*	*8*	*3306*	*3*	-	-	*1.0*	*0.029*	*3*
3.									
4.									
5.									
6.									

*Potency Factor

Source: *1*
Highest Value: *8* (Max.=10)

+2 Bonus Points? *2*
Final Toxicity Value ***10*** (Max.=12)

1.2 Environmental Toxicity

(X) Freshwater
( ) Marine

Substance	Acute Water Quality Criteria (ug/l)	Value	Non-human Mammalian Acute Toxicity (mg/kg)	Value
1. *TPH as diesel*	*2300*	*2*	*490*	*5*
2. *TPH as gasoline*	*5300*	*2*	*3306*	*3*
3.				
4.				
5.				
6.				

Source: *1* **Value:** *2* (Max.=10)

1.3 Substance Quantity:

Explain basis: *Once filled volume of all tanks - 141,500 gallons*

Source: *15* **Value:** *7* (Max.=10)

WORKSHEET 4 (CONTINUED)
SURFACE WATER ROUTE

2.0 MIGRATION POTENTIAL

2.1 Containment — Source: 8 **Value:** 10 (Max.=10)
Explain basis:
Contaminated soil at surface, no run on/off controls

2.2 Surface Soil Permeability: *Sand/gravel* — Source: 5 **Value:** 1 (Max.=7)

2.3 Total Annual Precipitation: *22.1* inches — Source: 6 **Value:** 2 (Max.=5)

2.4 Max. 2-Yr/24-hour Precipitation: *2.0 - 2.5* inches — Source: 7 **Value:** 3 (Max.=5)

2.5 Flood Plain: *500 year* — Source: 4 **Value:** 1 (Max.=2)

2.6 Terrain Slope: *<2* % — Source: 3 **Value:** 1 (Max.=5)

3.0 TARGETS

3.1 Distance to Surface Water: *50 feet* — Source: 3 **Value:** 10 (Max.=10)

3.2 Population Served within 2 miles (See WARM Scoring Manual Regarding Direction): $\sqrt{pop.} = \sqrt{0} =$ — Source: 18 **Value:** 0 (Max.=75)

3.3 Area Irrigated within 2 miles $0.75\sqrt{no.\ acres} = 600$
(Refer to note in 3.2.): $0.75\sqrt{600} = 0.75(24.5) = 18.4$ — Source: 13,17 **Value:** 18 (Max.=30)

3.4 Distance to Nearest Fishery Resource: *2500 feet* — Source: 3 **Value:** 9 (Max.=12)

3.5 Distance to, and Name(s) of, Nearest Sensitive Environment(s) *1100 feet to wetland labeled PROC* — Source: 9 **Value:** 9 (Max.=12)

4.0 RELEASE

Explain basis for scoring a release to surface water:
Photographs documented a release of oil to surface water. — Source: 15 **Value:** 5 (Max.=5)

WORKSHEET 5
AIR ROUTE

1.0 SUBSTANCE CHARACTERISTICS

1.1 Introduction (WARM Scoring Manual) - Please review before scoring

1.2 Human Toxicity

Substance	Air Standard (ug/m^3)	Val.	Acute Toxicity (mg/m^3)	Val.	Chronic Toxicity (mg/kg/day)	Val.	Carcino-genicity WOE	PF*	Val.
1. *WTPH - diesel*	*166.5*	*4*	*490*	*-*	*ND*		*-*	*-*	*-*
2. *WTPH - gasoline*	*0.12*	*10*	*3306*	*3*	*ND*		*1.0*	*0.029*	*3*
3.									
4.									
5.									

*Potency Factor

Source: *1*
Highest Value: *10* (Max.=10)

+2 Bonus Points? _____

Final Toxicity Value: *10* (Max.=12)

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

1.3.1 Gaseous Mobility

Vapor Pressure(s) (mmHg): 1= *0.082* ; 2= *95* ; 3= ; 4= ; 5= ; 6=

Source: *1*
Value: *4* (Max.=4)

1.3.2 Particulate Mobility

Soil type: _____
Erodibility: _____
Climatic Factor: _____

Source: _____
Value: _____ (Max.=4)

1.4 Highest Human Health Toxicity/Mobility Matrix Value (from Table A-7) equals

Source: *1*
Final Matrix Value: *20* (Max.=24)

1.5 Environmental Toxicity/Mobility

Substance	Non-human Mammalian Acute Inhal. Toxicity (mg/m^3)	Value	Mobility (mmHg)	(Table A-7) Value	Matrix Value
1. *WTPH - diesel*	*ND*	*-*	*0.082*	*2*	
2. *WTPH - gasoline*	*31947*	*3*	*95*	*4*	
3.					
4.					
5.					

Highest Environmental Toxicity/Mobility Matrix Value (From Table A-7) equals

Source: *1*
Final Matrix Value: *6* (Max.=24)

WORKSHEET 5 (CONTINUED)
AIR ROUTE

1.6 Substance Quantity: _____ Source: *17* **Value:** *7* (Max.=10)
Explain basis: *Once filled volume of all tanks - 141,500 gallons*

2.0 MIGRATION POTENTIAL

2.1 Containment: *Containers deteriorated, leaking, not protected from the weather; waste piles outdoors and uncovered* Source: *8, 15* **Value:** *10* (Max.=10)

3.0 TARGETS

3.1 Nearest Population: *< 200 feet* Source: *3, 8* **Value:** *10* (Max.=10)

3.2 Distance to, and Name(s) of, Nearest Sensitive Environment(s) *1100 feet to wetland labeled PROC* Source: *9* **Value:** *6* (Max.=7)

3.3 Population within 0.5 miles: √pop.=√ *195* = Source: *3* **Value:** *14* (Max.=75)
65 buildings and 30 people

4.0 RELEASE

Explain basis for scoring a release to air: Source: *8* **Value:** *0*
None - documented

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.*WTPH - diesel*	*20*	*6*	*490*	*5*	*0.004*	*3*	-	-	-
2.*WTPH - gasoline*	*5*	*8*	*3306*	*3*	-	-	*-1.0*	*.029*	*3*
3.									
4.									
5.									
6.									

*Potency Factor

Source: *1*
Highest Value: *8* (Max.=10)

+2 Bonus Points? *2*
Final Toxicity Value: *10* (Max.=12)

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

OR
Solubility(mg/l): 1= *30 mg/l* ; 2= *1,800 mg/l* ; 3= ; 4=; 5=; 6= .

1.3 Substance Quantity: *141,500 gallons*
Explain basis: *Once filled volume of all tanks - 141,500 gallons.*
Source: *15* **Value:** 7 (Max.=10)

2.0 MIGRATION POTENTIAL

2.1 Containment
Explain basis: *Numerous spills; WARM assigned a containment valve of 10.*
Source: *2* **Value:** *10* (Max.=10)

2.2 Net Precipitation: *26.0* inches
Source: *6* **Value:** *3* (Max.=5)

2.3 Subsurface Hydraulic Conductivity: $> 10^{-3}$
Source: *2* **Value:** *4* (Max.=4)

2.4 Vertical Depth to Ground Water: *0* feet
Fuel tanks in a pit filled with groundwater
Source: *8* **Value:** *8* (Max.=8)

WORKSHEET 6 (CONTINUED)
GROUND WATER ROUTE

3.0 TARGETS

3.1 Ground Water Usage: *Private, alternate sources available with minimum hookups* — Source: *2* **Value:** *4* (Max.=10)

3.2 Distance to Nearest Drinking Water Well: *3000 ft* — Source: *3* **Value:** *2* (Max.=5)

3.3 Population Served within 2 Miles: √pop.=√ = *2500* — Source: *18* **Value:** *50* (Max.=50)
City of Cle Elum

3.4 Area Irrigated by (Groundwater) Wells within 2 miles: 0.75√no.acres= *30*
0.75√ *30* =0.75 (*6*)= *4.5* — Source: *17* **Value:** *5* (Max.=100)

4.0 RELEASE

Explain basis for scoring a release to ground water: *None - documented* — Source: *8* **Value:** *0* (Max.=5)

SOURCES USED IN SCORING

1. *Washington Department of Ecology, Toxicology Database for use in WARM Scoring, January 1992.*
2. *Washington Department of Ecology, WARM Scoring Manual April 1992.*
3. *USGS 7.5 minute Topographic Quadrangle - Cle Elum - Washington.*
4. *Flood Insurance Rate Map Kittitas County, Washington - Community - Panel Number 530095 0261B May 1981.*
5. *USDA Soil Conservation Survey, Soil Survey of Kittitas County.*
6. *Washington Climate for Kittitas County, May 1979.*
7. *NOAA Atlas 2, Volume IX, Isopluvials of 2 yr., 24 hr precipitation in tenths of an inch, US Dept. Of Commerce.*
8. *Kittitas County Department of Solid Waste Site Hazard Assessment Field Investigations, January 17, 1996.*
9. *National Wetland Inventory, map Cle Elum, Washington*
10. *Water Well Report, State of Washington.*
11. *Sole Source Aquifers in the State of Washington, EPA 1995.*
12. *Washington Cities Directory, 1994-1995*
13. *Water Rights Information System, Washington Department of Health, Spokane.*
14. *1995 population determination, Office of Financial Management, June 5, 1995.*

15. Numerous photographs taken by Fire Marshall, July 18, 1995 and November 21, 1995.

16. Department of Ecology early notice letter regarding a release of hazardous substance July 20, 1995

17. Conversation between Fire Marshall, Gerald L. Tousley and Mr. Hinshaw concerning volume of hazardous materials and agricultural concerns, January 22, 1996.

18. City of Cle Elum Comprehensive Plan Draft I, February 28, 1995.

DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM

SITE HAZARD ASSESSMENT DATA COLLECTION SUMMARY SHEETS FOR WASHINGTON RANKING METHOD

SURFACE WATER, AIR AND GROUND WATER ROUTES ONLY

Site Name: *Storey Gas Station*

Location: *1310 E First Street, Cle Elum WA 98922*

Site owner/operator: *Mr. Earl Storey*

Address: *1310 E First Street, Cle Elum WA 98922*

Any other known PLP (s): *N/A*

Address: *N/A*

Date (s) of field site hazard assessment: *1/17/96*

Samples or field measurements:

No surface water *No* soil

No air *No* ground water

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

Photographs: *Yes*

Weather: *Rainy, snow on ground 30° F*

Lead inspector: *Gerald L. Tousley*

Other inspectors: *Darold Gaidos, Fire Marshall*

Signature: Gerald L. Tousley

Part I. Hazardous Substances

Note: Page number shown by "route" (e.g. SW-2, A-13) in parentheses refer to the WARM Scoring Manual. WK-numbers refer to page numbers of the worksheets at the end of the scoring manual.

A. Hazardous substances

List specific hazardous substances, known or suspected (check k or s), currently, or that have been previously (check c or p), at the site property (WK-2, WK-3). Give an estimate, if available, of the **quantity** (not concentration):

Hazardous Substance	K	S	C	P	Quantity	Units
1. *TPH - Diesel*						
2. *TPH - Gasoline*						
3.						
4.						
5.						

By which routes are these available? (WK-2, WK-3)

Number (from above)	Surface Water	Air	Groundwater
1. *1.*	*X*	*X*	*X*
2. *2.*	*X*	*X*	*X*
3.			
4.			
5.			

References: *Photograph documentation*

B. SOURCES

Check those known or observed (WK-2, WK-3):

__X__ drums or other containers
_____ electrical transformers
__X__ 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.
__X__ Other? Identify: *Portable fuel pump and hoses*

Additional information/references:

C. INDICATORS Check those known or observed (SW-5; A-8, A-9; GW-6):

__X__ discolored soils
__X__ disturbed soils
__X__ discolored standing water
__X__ unusual or noxious odors
_____ sick or dead vegetation
_____ groundwater monitoring wells
__X__ other? Identify: *Water in pit where tanks are submerged*

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

Additional information/referecences: *Numerous photographs documenting spill.*

PART II: Releases

A. KNOWN OR SUSPECTED RELEASES

List those hazardous substances identified (by number) in I.A. which are know, or suspected, to have been released (WK-2, WK-3):

Substance (#)	Quant. Released	Units	Medium Released to
1	*Unknown*		*soil, groundwater, air*
2	*Unknown*		*soil, groundwater, air*

Additional information/refererences: *Photographs*

B. SOURCES AND IMPACTS (SW-5, SW-6; A-9, A-10; GW-6, GW-7)

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

Substance No.	Source	Impacts/Affects to	Area
1	*10*	*air, soil, groundwater*	*behind gas station, tank farm*
2	*10*	*air, soil, groundwater*	*behind gas station, tank farm*

Additional information/references:

III. Migration Potential

A. CONTAINMENT - - LANDFILLS (SW-7; A-11; GW-8, GW-9)

Present? *N/A* 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 or no 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 may have been disposed of
17. _____ Liquid wastes were disposed of in landfill
18. _____ Reliable evidence no liquid wastes were disposed

Additional comments/references: _____

B. CONTAINMENT - - SURFACE IMPOUNDMENTS (SW-8; A-12; GW-9)

Present *N/A* 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)
15. _____ Mixing/agitation processes used

Additional comments/references: _____

C. CONTAINMENT - - DRUMS AND SMALL CONTAINERS (SW-9; A-10; GW-10)

Present *Yes* How many? *20+*

Check those that apply:

1. X No functional containment
2. _____ There is secondary containment capacity for the total volume of containers
3. _____ There is secondary containment with capacity for at least 110% of the volume of the largest container
4. _____ The secondary containment is less that 110% of the volume of the largest 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 grave/base materials unknown
14. _____ Evidence of containment failure

Additional comments/references: _____

D. CONTAINMENT - - STORAGE TANKS (SW-9; A-10; GW-10)

Present? *Yes* How many? *16*

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. *X* 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 *13*
14. _____ Record the #s of above which apply only to below ground tanks *3*
15. _____ Record the #s of above which apply to both above and below ground tanks: *16*

Additional comments/references: *The three below ground tanks are in groundwater*

E. CONTAINMENT - - WASTE PILES (SW-10; A-11; GW-11)

Present? *N/A* How many? _____

Check those that apply: *Previous remediation*

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 control is maintained
9. _____ Run-on/run-off control system present, unknown condition
10. _____ No run-on/run-off 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/references: _____

E. CONTAINMENT - - SPILLS, DISCHARGES, AND CONTAMINATED SOIL

(SW-10; A-12; GW-12)

Check those that apply:

1. _X_ Spill, discharge, or contaminated soil only in the subsurface at the site -- including dry wells, drainfields, 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 feet, but > 6" thick

6. ___ Spill, discharge, or contaminated soil present at the surface in an area with maintained run-on/run-off control

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

8. _X_ Spill, discharge, or contaminated soil present at the surface with no run-on/run-off control or unknown controls.
9. ___ Contaminated soil has been disturbed or excavated and stored above grade

10. ___ A functioning vapor recovery system

11. _X_ No vapor recovery system

Additional comments/references: _____

G. CONTAINMENT - - SITE CHARACTERISTICS

(SW-11, SW-12, SW-13, SW-14; GW-12, GW-13; WK-5-9)

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 sand 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 judgment by a soil expert? (Circle)

2. Total annual precipitation = *22.10* in./yr. (SW-11; WK-6)

3. Max. 2-Yr./24-hr precip. = ~~*1.5*~~ *2.-2.5* inches (SW-12; WK-6)

4. Net precipitation (see 2.2, GW-12) = *26.0* in. (WK-9)
28.3 - 2.3 = 26

5. Is the site not in a flood plain? _____ (SW-12; WK-6)
Is the site in a 500 year flood plain? *Yes - Zone B*
Is the site in a 100 year flood plain? *No*

6. What is the terrain slope to the nearest surface water? *<2* % (SW-14; WK-6)

7. What is the subsurface hydraulic conductivity? *$\geq 10^{-3}$* cm/sec (GW-13; WK-9)

8. What is the vertical depth from the deepest point of known contamination to ground water? *0* feet (GW-13; WK-9) GW at 4 feet - DOE statement

Additional comments/references: *The underground tanks are in groundwater and a very strong smell of diesel in the pit.*

IV. Targets

A. DISTANCE TO SURFACE WATER (SW-15; WK-6)

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.
Irrigation ditch	*50*	*X*	*X*
Yakima River	*2500*		*X*

None? _____. Comments/references: _____

2. What drinking water intakes are within 2 miles of the site? (All lake intakes, river intakes downstream only) (SW-15; WK-6)

None? *X*

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-15; GW-15; WK-6, WK-10)

None? _____

SURFACE WATER: Acres *600* (1600 acres max.)

Source (s) *WRIS - surrounding land owners*

GROUNDWATER: Acres *30* (4500 acres max.)

Reference (s) : *WRIS - surrounding landowners*

4. What is the distance to the nearest fishery resource (overland flow distance to nearest surface water which is a fishery resource)? (SW-16, SW-17, SW-18; WK-6)

Over 10,000 feet? _____ Distance if less than 10,000 feet? *≈ 2000* ft

5. What are the names of, and the distances to, the nearest sensitive environments (total of overland distances plus downgradient distances, count only overland flow distance if nearest sensitive environment is a fishery)? (SW-18; A-15; WK-6)

Over 10,000 feet? *No* Names and distances if less than 10,000 feet: _____
PFOC 1100 feet; Powflx 2000 feet - from National Wetlands Inventory Maps

6. Is the aquifer a federally-designated sole source aquifer? *No* (GW-14; WK-9)

7. Is the ground water used for: (GW-14; WK-10)
   - *X* private supply
   - _____ public supply
   - *X* 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? *3000* Feet
(GW-15; WK-10)

9. Is there an alternate source available to groundwater for private or public water supply?
(GW-14, WK-10) *yes*

10. Population served by drinking water wells within 2 miles? *2,500*
(GW-115; WK-10)

11. Distance to the nearest population? *<200 feet* (A-13,; WK-8)
City of Cle Elum

12. Population within one-half mile radius? *195*
(A-15; WK-8) *65 buildings X 3.0 people*

Additional comments (e.g. potential for natural resource damage, or other ecological concerns, references): _____