

CSID 75

**WORKSHEET 1  
SUMMARY SCORE SHEET**

**Site Name:**

WSU Road Paint Shop  
Section 4, Township 14, Range 45 EWM  
TCP ID: E-38-3030-000 869  
Facility Site ID: Not Given  
Latitude: 46° 43 min 43.57 sec  
Longitude: 117° 8 min 59.60 sec  
Address: Washington State University Campus, Grimes Way  
Pullman, Whitman County, WA 99164-1172

**Site Scored/Ranked:** Feb. 16, 1999 update

**Site Description:**

The Road Paint Shop is located on a nearly-level plateau at the southern edge of the WSU campus. It is contained, along with several other University Physical Plant Department outbuilding and storage areas, within a chain link fence.

The Road Paint Shop itself is a relatively small (20' x 32') steel-clad building used to store paint and to conduct some limited painting activities. Past practices have included discarding paint and solvent onto the ground surface outside of the building.

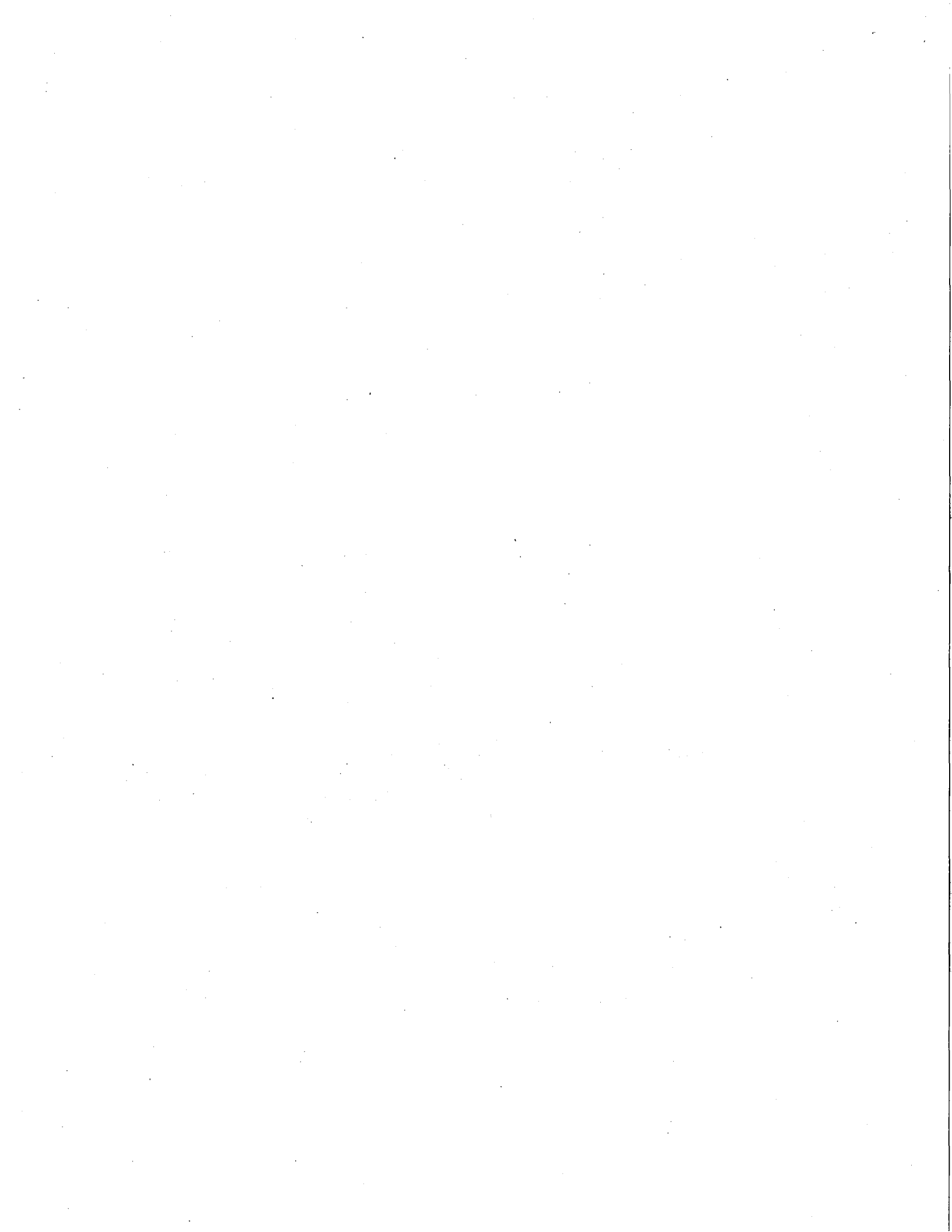
The site was added to Ecology's Site Information System listing in 1996 when contaminated soils were discovered following the removal of an underground fuel storage tank. WSU then contracted Boateng & Associates to sample and analyze the soil. Test results revealed the presence of PCBs, lead, tetrachloroethylene, and total petroleum hydrocarbons in concentrations above MTCA Method A Cleanup Levels.

**SPECIAL CONSIDERATIONS:**

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

**PATHWAY SCORES:**

Surface Water: NA                      Air: NA  
Ground Water/Human Health: 44.7                      **OVERALL RANK: 3**



**WORKSHEET 2**  
**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

PCBs, Lead, Tetrachloroethylene, Total Petroleum Hydrocarbons -oil

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

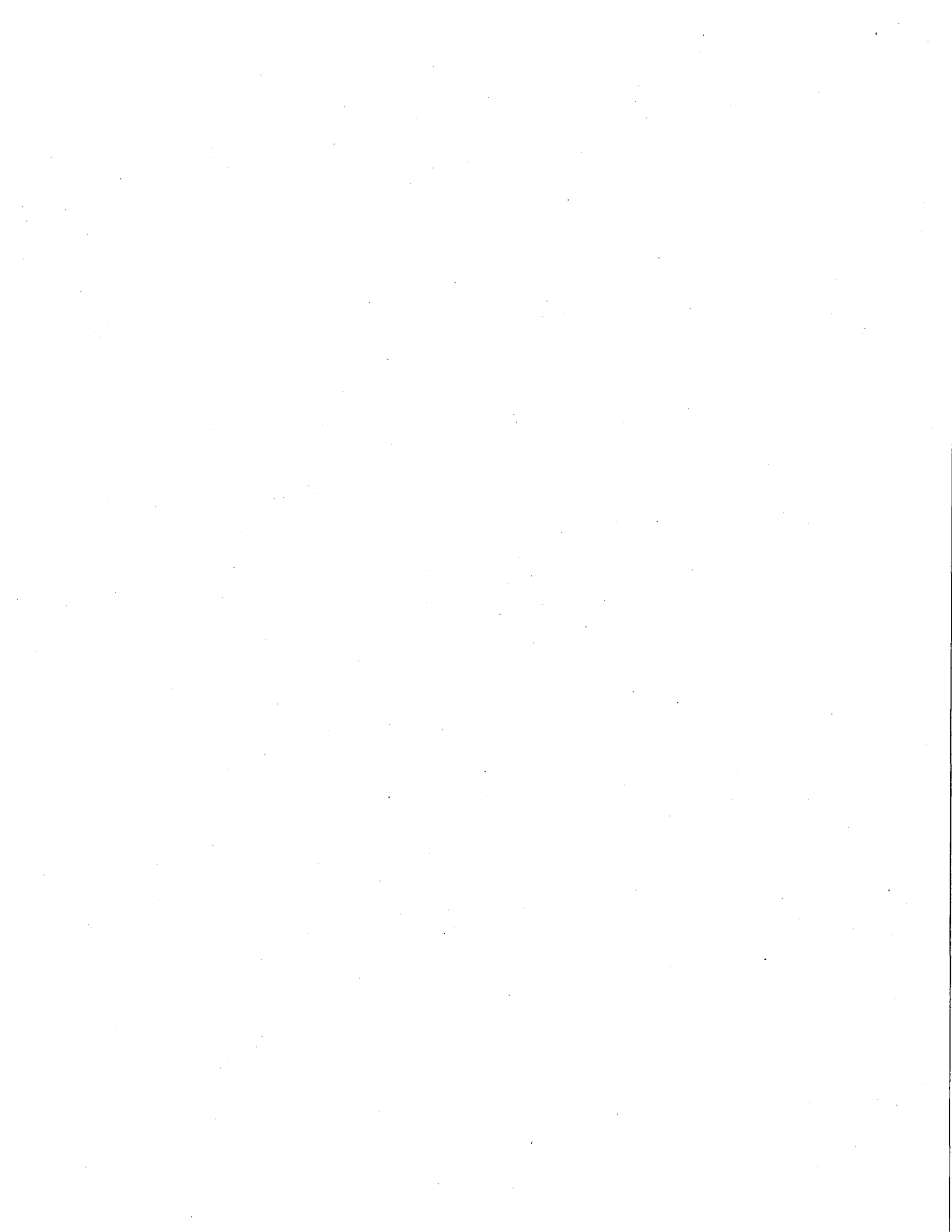
Analysis of soils outside paint shop revealed these substances to be present in concentrations above MTCA Method A Compliance Cleanup Levels

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 surface soils. Clean gravel placed over contaminated area.



**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.	Carcinogenicity	WOE	PF	Val.
1. PCBs	0.5	10	1315	3	-----		X			
2. Lead	5	8	-----	-----	-----		X			
3. TPH oil	20	6	490	5	0.004		3		X	
4. Tetrachloroethylene	8	8	800	5	0.01		8	B2	.051	.4
5.							.08		5	
6.										

Source: 2  
 Potency Factor 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: 2 & 3 Value: 2  
6=

OR  
 Solubility(mg/l): 1= 0 ; 2= ; 3= 1 ; 4= 2 ; 5= ;  
6=

1.3 Substance Quantity 680 yd<sup>3</sup> Source: 1 Value: 3

Explain basis: Depth and areal extent of contaminated soils estimated from soil testing results conducted by Boateng & Associates, Inc., for WSU, April 1995.

$$85 \text{ FT} \times 72 \text{ FT} \times 3 \text{ FT} = 18360 \text{ FT}^3$$

$$18360 \text{ FT}^3 \div 27 = 680 \text{ YD}^3$$

**2.0 MIGRATION POTENTIAL**

2.1 Containment Source: 3 Value: 10

Explain basis: Contaminated soil – no containment



2.2 Net Precipitation: 9.7 inches Source: 4 Value: 1

2.3 Subsurface Hydraulic Conductivity:  $>10^{-5}$ — $10^{-3}$  Source: 3 Value: 3

2.4 Vertical Depth to Ground Water: >200 — 300 feet Source: 5 Value: 2

### 3.0 TARGETS

3.1 Ground Water Usage: Public Supply, Alternate Source Source: 5 Value: 4

3.2 Distance to Nearest Drinking Water Well: 3000 ft Source: 6 Value: 2

3.3 Population Served within 2 Miles:  $\sqrt{\text{pop.}} = \sqrt{23565} = 153$  Source: 6 Value: 100

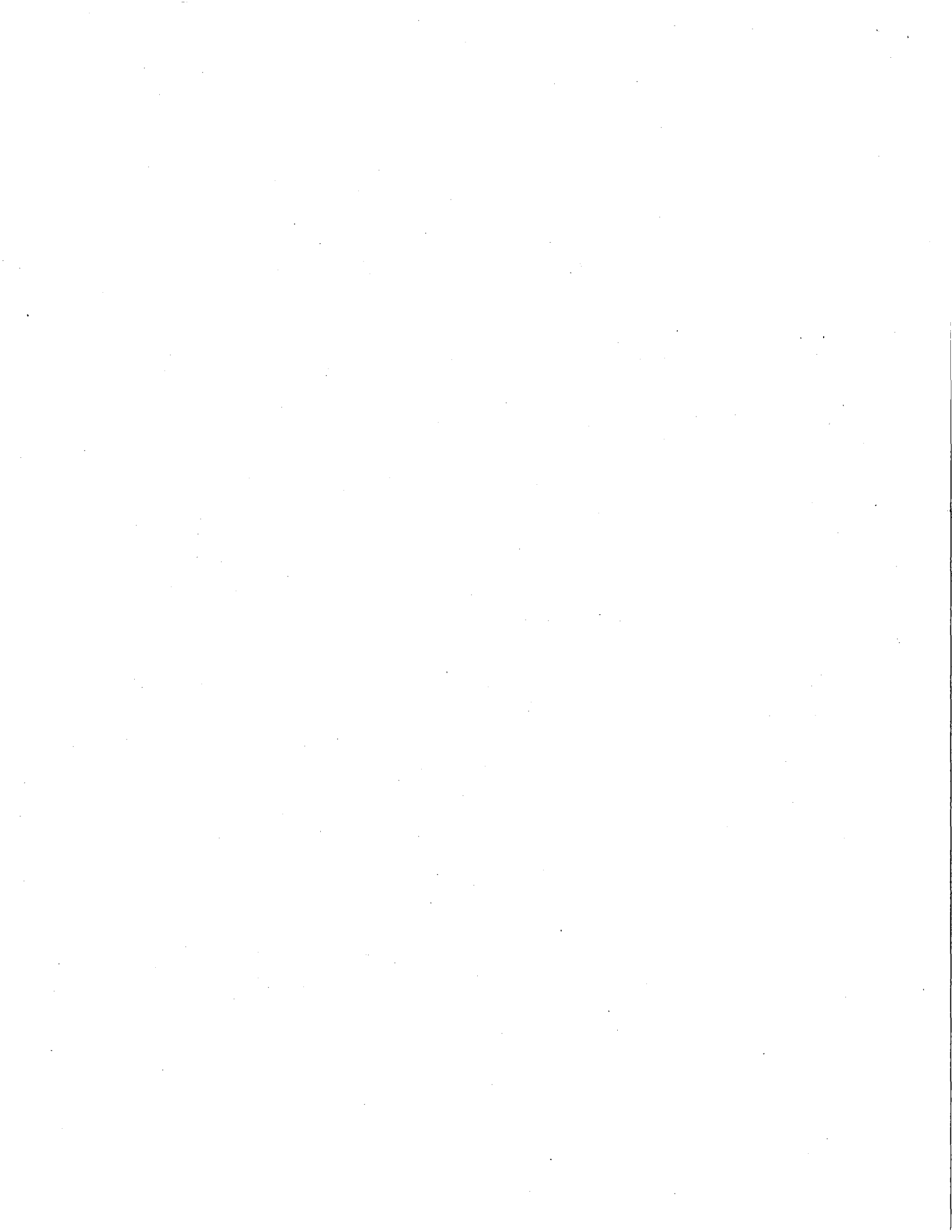
3.4 Area Irrigated by (Groundwater) Wells

within 2 miles:  $0.75\sqrt{\text{no. acres}} =$  Source: 7 Value: 7

$0.75\sqrt{78} = 0.75(8) = 7$

### 4.0 RELEASE

Explain basis for scoring a release to ground water: No documented release. Source: 1 Value: 0





## SOURCES USED IN SCORING

1. Road Paint Sampling Summary Boateng & Associates, Inc. June, 5, 1995
2. Toxicology Database WARM
3. WARM Scoring Manual
4. Washington Climate for Whitman County  
Agricultural Extension Service, WSU
5. W.S.D.O.H. Drinking Water Information Network
6. EPASITEINFO Database
7. WRIS - DOE
8. Soil Survey of Whitman County, WA  
SCS 1980

