

CSID 4601

**WORKSHEET 1  
SUMMARY SCORE SHEET**

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

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

Everett Plating, 2413 Hewitt Avenue, Everett, Snohomish, 20/29N/5E

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

Historical information indicates that in the 1930's Arden Farms occupied subject site then became a King Size Photo facility. In 1974 Pete Petrik purchased the property and operated a plating business called Metal Finishing & Plating Company later called Pacific Plating. In 1986 Mr. Petrik sold part of the operation to Mike Piller called Custom Pacific Plating later changed to Everett Plating. This was a small scale copper, nickel, chrome and brass plating operation.

The City of Everett records indicate that sewer line replacement in 1984. The side sewers were replaced to both Aero Pacific Finishing and Everett Plating in 1989. The depth of the sewer line in the alley is about 15 feet.

An inspection of Pacific Plating conducted by Department of Ecology in October of 1986 indicated the bright line part of the business involved copper, nickel, chrome, and brass plating. Zinc plating was separated from other plating lines. The report indicated that rinse water tanks emptied to sewer. Also notes a potential for spills discharging in sanitary sewers and that solution tanks were not bermed off. An industrial pretreatment form filled out by Mr. Petrik indicated that some of the chemicals used in the facility included cyanide, cadmium, chromium, copper, zinc, trichloroethylene, muriatic and nitric acids.

A report completed by RZA AGRA of adjacent property to the west (Cordz Au to Electric) in February of 1992 indicated that chromium and total petroleum hydrocarbon - diesel exceeded Model Toxics Control Act residential cleanup levels. Samples with the elevated readings were found at a depths of two to three feet and eight to nine feet. The ground water direction was indicated as southeast. Dan Krause of ALS, hired by Pete Petrik to conduct a Phase 1 Environmental Assessment of Fancy Stamps (formerly Pacific Plating) in April of 1996. The report indicated that ground water depth was about 50 feet. He also indicated ground water direction flow as southeast to southwest.

The building complex which houses three businesses is on a concrete slab and is surrounded by either concrete or asphalt. There are some residential properties located to the north of the facility. The City of Everett indicated that the property was zoned general commercial.

A Site Hazard Assessment was conducted by the Snohomish Health District of Everett Plating and Cordz Auto Electric on June 19, 1996. Soil samples were collected in three locations and different depths. The soil sample



on the northwest side of the building (under Cordz parking lot) contained TPH - heavy oils above MTCA cleanup levels. A soil sample collected on the southeast side of the building contained chromium just at the cleanup level.

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):

The site was scored based on chromium found on an adjacent lot at a depth of about nine feet and found on the southeast side of the building complex (near former Pacific Plating site). The surface water and air pathways were not believed to be significant and were not scored due to subsurface contamination only.

**ROUTE SCORES:**

|                             |             |                         |           |
|-----------------------------|-------------|-------------------------|-----------|
| Surface Water/Human Health: | <u>NS</u>   | Surface Water/Environ.: | <u>NS</u> |
| Air/Human Health:           | <u>NS</u>   | Air/Environmental:      | <u>NS</u> |
| Ground Water/Human Health:  | <u>17.6</u> |                         |           |

**OVERALL RANK:** 5

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**WORKSHEET 2  
ROUTE DOCUMENTATION**

**1. SURFACE WATER ROUTE**

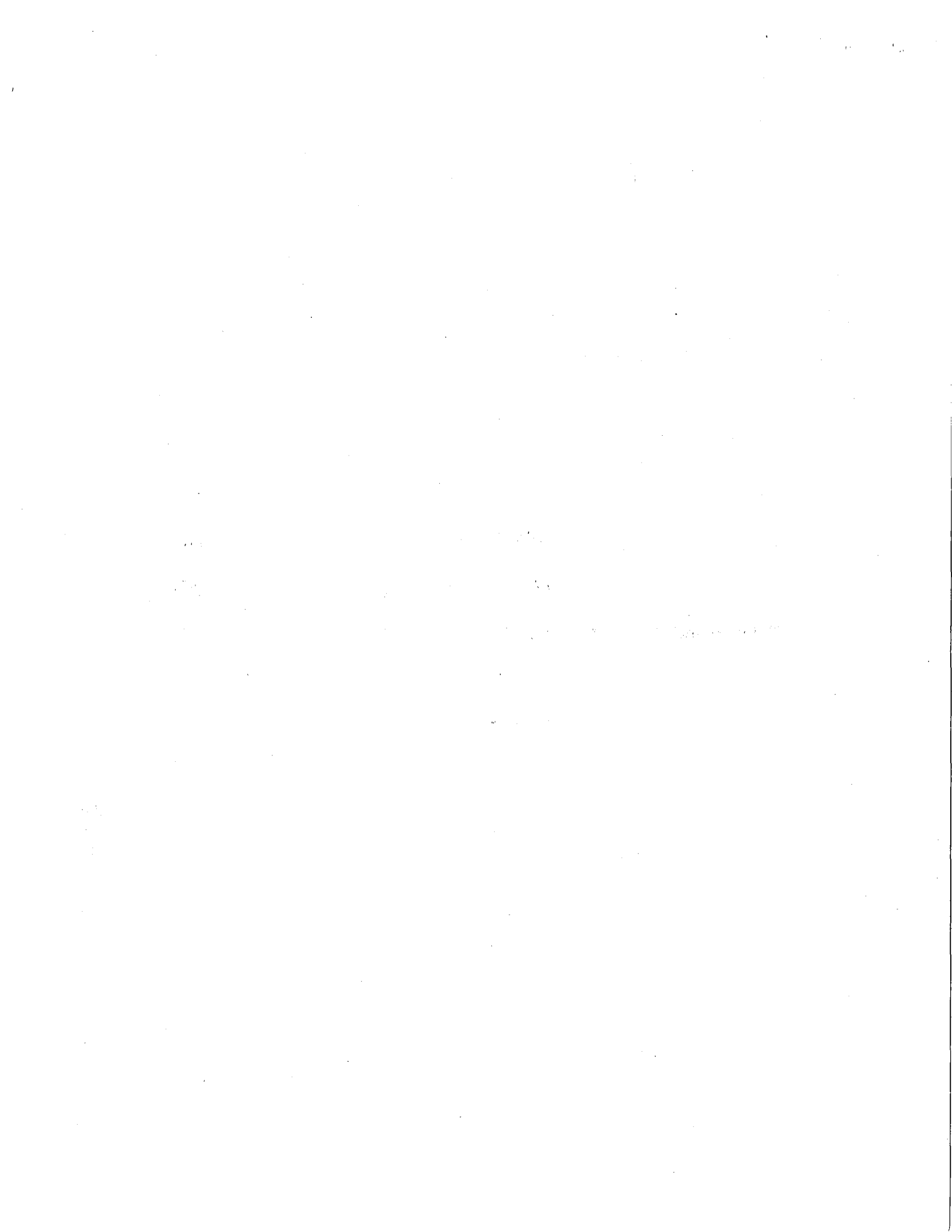
List those substances to be considered for scoring: Source: \_\_\_\_\_

**Not applicable to site/not scored.**

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

List those substances to be considered for scoring: Source: \_\_\_\_\_

**Not applicable to site/not scored.**

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: \_\_\_\_\_

## 3. GROUND WATER ROUTE

List substances to be considered for scoring: Source: 1,3

Chromium

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

Chromium will be used in scoring the ground water route, as its measured concentration exceeds MTCA cleanup levels and is available due to less than perfect containment.

List management units to be considered in scoring: Source: 1,3

Contaminated subsurface soil

Explain basis for choice of unit used in scoring. Source: 1,3

Contaminated subsurface soil will be used in scoring as the measured concentration of Chromium was from this management unit. No containment was observed of this unit allowing contaminants to be available to the ground water pathway.



**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. |
| Chromium  | 100                            | 6    | X                         | X    | 0.005                        | 3    | X               | X  | X    |

Source: 3,4,9,11  
 Highest Value: 6  
 2 Bonus Points?           
**Final Toxicity Value: 6**

1.2 Mobility (Use numbers to refer to above listed substances)  
 Cations/Anions                      K value for chromium less than .1

Source: 3,9    Value: 3

OR  
 Solubility (mg/l)

1.3 Substance Quantity  
 Explain basis:                      Unknown quantity - default value

Source: 3,9,11    Value: 1

**2.0 MIGRATION POTENTIAL**

2.1 Containment  
 Explain basis:                      Discharge and contaminated soil

Source: 3,9,11    Value: 10

2.2 Net Precipitation:              19.6 inches

Source: 3,5    Value: 2

2.3 Subsurface Hydraulic Conductivity: Silty sand, clayey sand

Source: 3,11    Value: 3

2.4 Vertical Depth to Ground Water:    50 feet

Source: 3,11    Value: 6





**WORKSHEET 6  
GROUND WATER ROUTE**

**3.0 TARGETS**

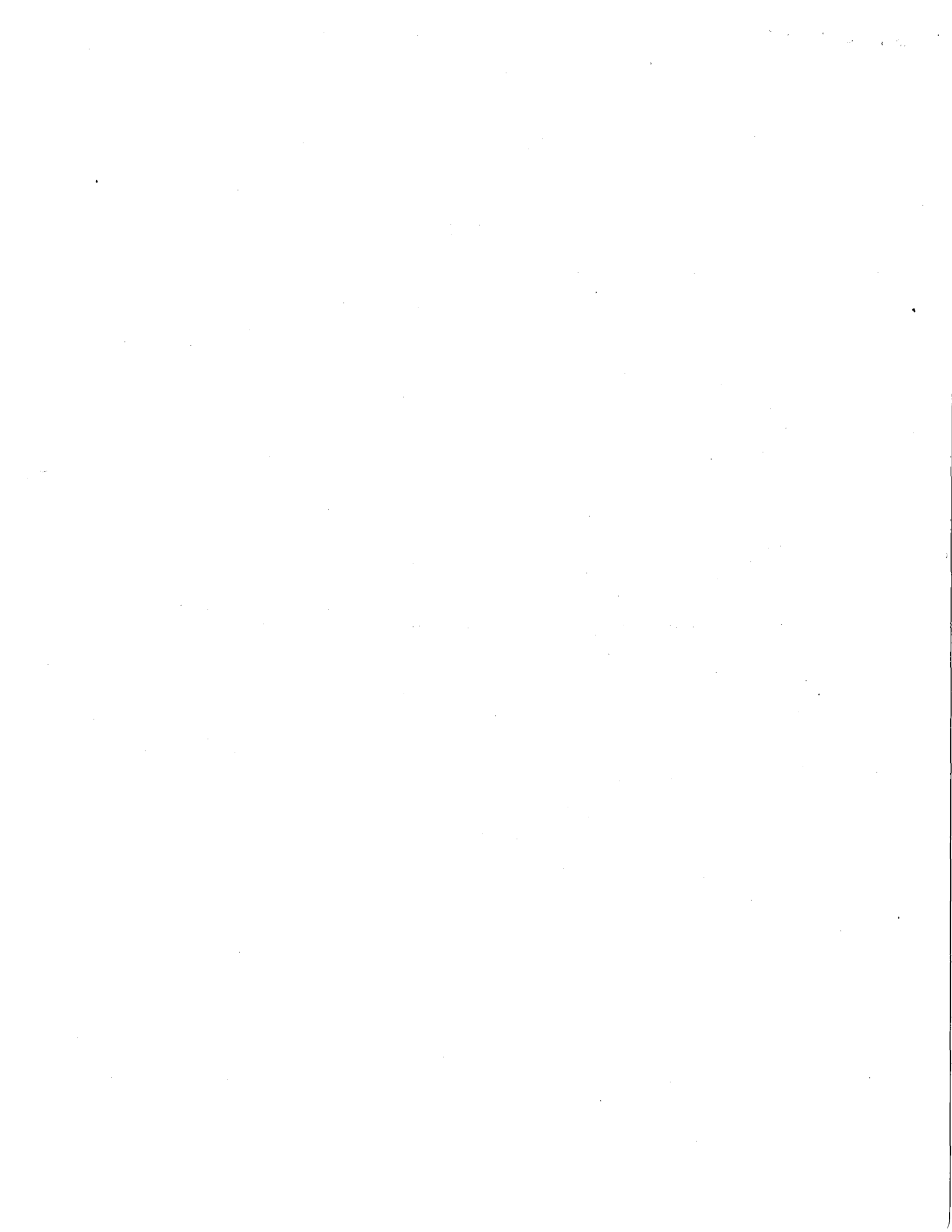
|     |  |                         |                 |
|-----|--|-------------------------|-----------------|
| 3.1 | Ground Water Usage: Ground water usable but not used       | Source: <u>3,7,8,10</u> | Value: <u>2</u> |
| 3.2 | Distance to Nearest Drinking Water Well: >10000 feet       | Source: <u>3,8,10</u>   | Value: <u>0</u> |
| 3.3 | Population Served within 2 Miles: none                     | Source: <u>3,7,8,10</u> | Value: <u>0</u> |
| 3.4 | Area Irrigated by (Groundwater) Wells within 2 miles: none | Source: <u>3,7</u>      | Value: <u>0</u> |

**4.0 RELEASE**

|   |                    |                 |
|---|--------------------|-----------------|
| Explain basis for scoring a release to ground water:<br>No confirmed release documented | Source: <u>2,3</u> | Value: <u>0</u> |
|---|--------------------|-----------------|

**Sources Used in Scoring**

1. Washington Department of Ecology, Initial Investigation, Everett Plating, Everett, WA, July, 1992.
2. Snohomish Health District, Site Hazard Assessment, Everett Plating, Everett, WA, June, 1996.
3. Washington Department of Ecology, WARM Scoring Manual, April, 1992.
4. Washington Department of Ecology, Toxicology Database for Use in Washington Ranking Method Scoring, January 1992.
5. National Weather Service, Washington Climate Data, Snohomish County
6. U.S.G.S. Topo. Map, East Edmonds Quad., 7.5 Min. Series, Photorev. 1981.
7. Washington Department of Ecology, Water Rights Information System (WRIS), November 4, 1992.
8. Washington Department of Health, Public Water System List, April 26, 1993.
9. RZA AGRA, Level I & II Environmental Site Assesment - Columbia Paint Co., Feb., 1992.
10. Washington Department of Ecology, Well Logs
11. ALS Consulting, LLS, Phase I Environmental Site Assessment - Fancy Stamps, April, 1996.



Everett Score Pathway

Table 2 (Continued)

Surface Water Route - Environmental Pathway

$$SW = (SUB \times 40/175) \times \{(MIG \times 25/24)\} + REL + (TAR \times 30/115) / 24 = \underline{0.00}$$

where

SW = Pathway Score for Surface Water-Environmental =

SUB = (Env. Toxicity + 3) X (Containment + 1) + Substance Quantity =  
3

MIG = Soil Permeability + Annual Precip. + Rainfall Frequency +  
Floodplain + Slope = 0

REL = Release to the Surface Water = 0

TAR = Distance to Nearest Surface Water + Distance to Fisheries  
Resource + Distance to Sensitive Environment = 0

Ground Water Route - Human Health Pathway

$$GW = (SUB \times 40/208) \times \{(MIG \times 25/17) + REL + (TAR \times 30/165)\} / 24 = \underline{17.63}$$

GW = Pathway Score For Ground Water-Human Health =

SUB = (Human Toxicity + Mobility + 3) X (Containment + 1) +  
Substance Quantity = 133

MIG = Depth to Aquifer + Net Precipitation + Hydraulic Conductivity =  
11

REL = Release to the Ground Water = 0

TAR = Aquifer Use + Well Distance + Population Served +  
Area Irrigated = 2