

CSID 5064

WORKSHEET 1  
SUMMARY SCORE SHEET

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

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

Preservative Paint Company  
5410 Airport Way S.  
Seattle, WA 98108  
T-24N, R-4E, Sec-20  
TCP-ID# N-17-0140-000  
Longitude: 122 Degrees, 19 minutes, 16.46 Seconds  
Latitude: 47 Degrees, 33 minutes, 12.35 Seconds  
Method: 99  
Site scored for August 18, 1998 Update

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

Preservative Paint Company is located at 5410 Airport Way S. on a 1.5 acre site in the Georgetown section of Seattle. Paint product manufacturing, packaging and sales have been conducted at this site since 1908. The company was known in 1908 as Asphaltum Products Company, which manufactured a creosote-type paint for marine use as its main product from 1908-1924. In 1914, the company was renamed Preservative Paint Company. Preservative Paint is now either owned or merged with Kelly-Moore Paints (987 Commercial Street, San Carlos, CA, 94070).

The area surrounding this site is comprised of a mixed commercial, industrial, and residential neighborhood. The facility and the surrounding area are served by Seattle Municipal Water and Sewer. The Duwamish River is located approximately one mile due west of the site. The Duwamish is used for recreational boating, commercial shipping, and fishing. The area between this site and the Duwamish River is heavily developed. Surface water runoff from the site is drained by catch basins in the facility's asphalt cover into storm drains located along Airport Way South. The runoff is then channeled into the Duwamish. Some of the storm water generated by this site may be discharged to combined sewers and/or directly to the Duwamish Waterway through storm drain system in place in street.

Nearly the entire site is taken up by one large triangular-shaped building. The building consists of a warehouse for storing finished paint products, a former retail outlet store (no longer open to the public), a number of areas which contain mixing and formulation operations, a recovery and recirculation area for bad batches of paint, and an outside covered storage area containing both raw materials and drums for waste disposal. The entire area used for plant operations outside the building is surrounded by a six inch berm, which should effectively contain any spill as well as direct the material to one of two pump-equipped sump-wells for recovery. The sump pumps can contain liquids within the facility or can discharge to the existing sewer system. Two valves must be turned in order for liquid to leave the facility from the sump pump area, thus preventing inadvertent dumping to the sewer. Most process water is reused within the plant and very little, if any goes to the sewer. The paint production facility in total is covered either by concrete pad or building. Adjacent to the building on the south side is a concrete area which is bermed, covered, and fenced for use as a storage area for waste drums. Sixteen underground storage tanks used for storage of many active solvents and resins are also located adjacent to this area. This area was previously used for coal storage from 1908 until approximately 1950. The cover over the underground storage tank area is imported soil, mostly sand and gravel pipe bedding material and this area is the only exposed soil area on the property.



The United States Environmental Protection Agency (EPA) performed an inspection of the facility on September 23, 1980. Based on the information obtained in that inspection, the facility had appeared to dispose of its hazardous waste in a responsible manner and was not an evident threat to the environment.

In March 1985, Preservative Paint Company was investigated by the Municipality of Metropolitan Seattle (METRO) for a non-permitted discharge of potentially contaminated ground water to a sanitary sewer during excavation operations associated with underground storage tank removal and replacement. A single grab sample, collected by a METRO inspector showed levels of copper, zinc, and lead which exceeded the METRO limitations for industrial effluent discharge to the sewer. The effluent sample was found to contain cadmium (0.13 Parts per Million-PPM), chromium (5.1 PPM), copper (6.04 PPM), nickel (1.68 PPM), lead (6.6 PPM), and zinc (14.3 PPM). The levels for cadmium, chromium, and lead exceed Model Toxics Control Act (MTCA) Method A Cleanup Levels for Ground Water. EPA conducted an expanded investigation following this incident by hiring Ecology & Environment, Inc. (E&E) to conduct a site inspection to determine whether past operational or disposal practices employed by the facility may be contributing to deterioration of ground water in the area of the facility. Site Inspection was conducted in late 1986.

Conclusions, based on E&E's site inspection were that due to the location of the site within an industrial/commercial urban area and the lack of potential impact on drinking water quality, there appeared to be little evidence or cause to warrant further investigations and/or sampling at this site under the EPA Superfund Program. These conclusions were based on facts such as local ground water was found to contain elevated levels of heavy metals, as well as other organic compounds at a site (previously known as CHEMPRO) 1/10 mile west of Preservative Paint Co. which was extensively studied previously. Tidal influences on the Duwamish River, located one mile west of the site, also influences the direction and rate of ground water movement in the area, which further complicates a point source identification. Also the area where the ground water originated was used as a coal storage yard from 1908 to 1950, which could account for some of the elevated levels of heavy metals. The entire location is covered by building and/or concrete. Operational areas are bermed and have containment systems for spills. A spill response plan has been established and all wastes solvents/sludges generated by the facility are sent to a permitted TSD facility. E&E also agreed with EPA inspectors who determined that the facility appeared to have disposed of its hazardous waste in a responsible manner.

A Site Hazard Assessment (SHA) visit was conducted by Peter Isaksen and Carsten Thomsen of Seattle-King County Department of Public Health (SKCDPH) on October 16, 1997. A walk through of the facility matched with results and conclusions of EPA and E&E reports previously noted above. The entire production and storage ground areas are completely covered with concrete and contain concrete berms to contain spills. Most of the site is covered by enclosed building or awnings and storm water is drained away from the production and storage areas by a system of rain gutters and storm drains. The storm drains from this area of the site discharge to a combined storm and sanitary sewer that discharges to the sewer treatment plant. The only part of the site that is uncovered and not sealed is the under ground storage tank area. The combined storm and sanitary sewer system pipe in the street to the west of this site (Airport Way S.) has an overflow discharging to the Duwamish Water Way in times of peak flow. There are no wells for drinking water, nor for irrigation within two miles of this facility and the ground water from this area has no value for future use due to tidal influences of the Duwamish basin and historically high metal readings in most neighboring properties when sampled.

A documented spill occurred from one of the underground storage tanks on site, first noticed by a failed tank tightness test on February 9, 1994. A tank fitting was noticed to have leaked about 250 gallons of toluene to the soil around the tank. Bore samples taken at the time of the reported spill indicated 91 and 95 ppm toluene in the soil at 3 to 6 feet in depth. No indication is available to show these soils were cleaned of this contaminant. Therefore, it is assumed that there remains soil



contaminated with this substance. Actual soil levels are not available as soils were not tested at the time of the SHA. Water sampling wells in the neighborhood have been shown to have toluene levels above detection levels in water samples analyzed.

Therefore on the basis of this SHA, conducted by SKCDPH's Environmental Health Division, this site will be ranked on the ground water route only.

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):

Nearly the entire site is covered by impervious surfaces. The site is located in an area served by municipal water and sewer systems, which includes combined sanitary and storm sewers. Drainage arising from the processing areas is collected and recycled. Access to discharge any of the process area drainage off the site is controlled by valves, which are strictly controlled. The tank area has been recently excavated and new soils have been installed above the tank areas including new bedding material for the pipes leading from the tanks. Therefore, the site will not be ranked for the surface water nor the air routes.

**ROUTE SCORES:**

Surface Water/Human Health: N/A

Surface Water/Environ.: N/A

Air/Human Health: N/A

Air/Environmental: N/A

Ground Water/Human Health: 17.5

**OVERALL RANK: 5**



**WORKSHEET 2**  
**ROUTE DOCUMENTATION**

**1. SURFACE WATER ROUTE**

List those substances to be considered for scoring: Source: 2

**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: 2

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

**2. AIR ROUTE**

List those substances to be considered for scoring: Source: 2

**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: 2

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

**3. GROUND WATER ROUTE**

List those substances to be considered for scoring: Source: 2

Toluene

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

The above substance is associated with past uses and at least one documented discharge to soil.

List those management units to be considered for scoring: Source: 2

Material may be present in soils below the underground storage tank area.

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

Sampling of surrounding soils and or ground water has not been conducted to show soils are contaminant free.





**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.	WOE	Carcino- genicity PF*	Val.
1. Toluene	2000	2	5000	3	0.2	1	D	-	-
2.									
3.									
4.									

\*Potency Factor

Source:  
Highest Value: 3  
(Max.=10)

+2 Bonus Points? No  
Final Toxicity Value: 3

(Max.=12)

**1.2 Mobility (Use numbers to refer to above listed substances)**

Cations/Anions: \_\_\_\_\_ Source: 1 Value: 2  
(Max.=3)

OR

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

**1.3 Substance Quantity:** 201 - 500 gallons Source: \_\_\_\_\_ Value: 2  
**Explain basis:** Documented 250 gallon spill. (Max.=10)

**2.0 MIGRATION POTENTIAL**

**2.1 Containment** Source: \_\_\_\_\_ Value: 10  
**Explain basis:** Documented spill to soil. (Max.=10)

**2.2 Net Precipitation:** 19.2 inches Source: 3 Value: 2  
(Max.=5)

**2.3 Subsurface Hydraulic Conductivity:** Silty sand Source: 2 Value: 3  
(Max.=4)

**2.4 Vertical Depth to Ground Water:** 0 - 25 feet Source: 2 Value: 8  
(Max.=8)

**3.0 TARGETS**

**3.1 Ground Water Usage:** Ground water not usable Source: 5 Value: 1  
(Max.=10)

**3.2 Distance to Nearest Drinking Water Well:** >10,000 ft Source: 4 Value: 0  
(Max.=5)

**3.3 Population Served within 2 Miles:**  $\sqrt{\text{pop.}} = \sqrt{0} = 0$  Source: 5 Value: 0  
(Max.=100)

**3.4 Area Irrigated by (Groundwater) Wells**  
within 2 miles:  $0.75\sqrt{\text{no.acres}} = 0$  Source: 5 Value: 0  
 $0.75\sqrt{0} = 0.75 (0) = 0$  (Max.=50)



WORKSHEET 6  
GROUND WATER ROUTE (continued)

**4.0 RELEASE**

Explain basis for scoring a release to ground Source: 2 Value: 5  
water: Ground water has been shown above the level of (Max.=5)  
the bottom of the underground storage tanks during tank  
replacement work. Spill was directly to these soils.

**SOURCES USED IN SCORING**

1. Washington Ranking Method Toxicological Data-base
2. Site Hazard Assessment, Seattle-King County Department of Public Health, conducted October 16, 1997.
3. National Weather Service Forecast Data.
4. Washington State Department of Health Public Water Supply Listing.
5. Washington State Water Use Data.

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