Site Hazard Assessment Summary Report
For: Everett Steel Co. Quantum Wood
2720 34th Street
Everett, WA 98201
Tax Parcel Number: 8072 000 001 00

Latitude 47° 58' 22.15"
Longitude 122° 11' 41.89"
Ecology Facility Site No. 2806

Site assessed/ranked for August 28, 2001 Update

ROUTE SCORES:

Surface Water/Human Health: **NS** SurfaceWater/Environ: **NS**

Air/Human Health: **NS** Air/Environmental: **NS**

Ground Water/Human Health: **32.8**
NS = Not Scored

OVERALL RANK: 5

Site Summary

Site Location and Description

The Everett Steel Co. Quantum Wood (AKA Quantum Windows and Doors, hereafter referred to as Quantum.) site is located at 2720 34th St. in Everett, WA. The site is located in a predominantly industrial area of Everett. Industries in the general area include heavy rail, petroleum distribution, manufacturing and warehousing. The site lies three-eighths of a mile west of the Snohomish River. The site is flat with less than 2° slope to the SE. The property is approximately 74,000 square feet in size. A single 30,000 foot warehouse/manufacturing building occupies the western portion of the property. The property is bordered on the north by manufacturing and industry. On the east the property is bordered by a private driveway, a truck repair facility and further to the east by I-5. To the west the property is bordered by Everett Steel's old surplus yard and Burlington Northern railroad property. The property is bordered to the south by more Burlington Northern property and I-5.

Site History

Aerial photos and historical data indicate that the site was vacant and undeveloped prior to 1978. Aerial photos from 1981 indicate the site appears to be in the same configuration as it is presently. The Everett Steel site appears to have had a long history as a neighbor to the Quantum site. The Everett steel site appears to have been used as part of a scrap metal operation since, at least, 1948. A 1993 ICF Kaiser Engineers report indicates that portions of the Everett steel property were used for metal crushing, metal cutting with a large guillotine, scrap metal storage, waste storage and various different activities associated with scrapping metals. As a result of these activities, contamination of soils and ground water with petroleum products and metals, in exceedence of Model Toxics Control Act (MTCA) Method A cleanup levels, have been detected.

Historical Analytical Data

On July 28, 1993 ATEC Associates, Inc. advanced one soil boring approximately at the northern border of the Quantum property and the southern border of the Everett Steel Old surplus yard. One water sample was collected from the boring. The purpose was to investigate possible impacts to the Quantum site from off site concerns.

The boring was advanced 20.0 feet below the grounds surface. Soils encountered were gravely sand, silty sand, and sand with lesser amounts of sandy silt and clay. Ground water was encountered at 15.7 feet below ground surface. Water samples were collected and are listed in the following table. Soil samples were collected but never analyzed.

total or dissolved?

Water Sample Results From 1993 ATEC Associates, Inc.		
Analysis	MTCA Limit	Result
Arsenic	5.0	**150**
Cadmium	5.0	ND
Chromium	50.0	**660**
Lead	5.0 (15 on 08/15/01)	**190**
All values in ug/L ND = Non-Detect		

In addition to sampling conducted by ATEC Associated Inc., further soil and water sampling was conducted by ICF Kaiser Engineers, Inc. on the Everett Steel site. A total of twelve soil samples were taken, which included eleven soil samples and one duplicate. The sample results are listed in the following table.

ICF Kaiser Engineers Soil Sampling - RCRA Metals June 3, 1993.							
	Sample ID #	**Arsenic**	**Barium**	**Cadmium**	**Chromium**	**Lead**	**Mercury**
MTCA Limit		**20.0**	**5600**	**2.0**	**100.0**	**250.0**	**1.0**
	BTW-1	ND	2.9	**27**	**390**	37	ND
	SB-1	**48**	52	**5.7**	80	160	ND
	SB-2	**41**	1500	**24**	**660**	**1100**	ND
	SB-3	**25**	290	**16**	**770**	**420**	.16
	GCA-1	**26**	160	**28**	**210**	**1200**	**8.1**
	GCA-2	8.7	73	**17**	**180**	**640**	**7.3**
	GCA-3	7.7	82	**17**	**140**	**640**	**7.9**
	PS-1	**22**	140	**11**	**270**	**900**	**9.8**
	PS-2	9.4	60	**6.6**	58	230	**2.7**
	PS-3	**41**	120	**21**	**320**	**350**	.54
	BS-1	ND	8.1	**28**	**480**	78	.23

In addition to the aforementioned RCRA metals, soils were also analyzed for TPH (Total Petroleum Hydrocarbons.) The results are listed as follows:

Total Petroleum Hydrocarbons Heavy Oils in Soil Samples

Sample ID #	Sample Description	MTCA 2001 Proposed Limit	Result
BTW-1	Burning Table Waste	2000	<250
SB-1	Storage Bin 1	2000	21,000
SB-2	Storage Bin 2	2000	4,600
SB-3	Storage Bin 3	2000	540
GCA-1	Guillotine 1	2000	36,000
GCA-2	Guillotine 2	2000	30,000
GCA-3	Guillotine 3	2000	31,000
PS-1	Petroleum Spill 1	2000	64,000
PS-2	Petroleum Spill 2	2000	88,000
PS-3	Petroleum Spill 3	2000	100,000
BS-1	Crane Boom Spill	2000	130,000

- All samples and results are noted in mg/Kg

Surface Water Features

The main surface water feature in the area is the Snohomish river which is approximately three-eighths of a mile due east of the subject property. With use of USGS topographic maps, slope to the river is less than 2%. The slope of the site is also equally flat. Visual inspection of the site indicated no surface water in the area with the exception of one retention pond on the northeast corner of the property. At the time of the site visit, the retention pond contained no water. Noted no standing water was noted at the time of the site visit.
Drains along Hill street, according to Everett Public Works, all drain to the sanitary sewer. Several other surface water feature exist within a two mile radius. However these features are either on the east side of the Snohomish River, or on the west site on the grade break which the city of Everett is built on .

Ground and Surface Water Uses

With the exception of one acre in T 29-S 31-R 5E, there are no ground or surface water uses noted in DWAIN or in the WRIS within a two mile radius of the site.

A search of Metro Scan revealed six private water sources within a mile of the subject site. Of the five locations, only the 3110 36th St. location was a single family residence. A site visit revealed the 3110 address no longer exists, and the other five locations are all served by Everett city water. A well spigot at 3300 chestnut St. Newland Construction was noted and the owners of the site confirmed that they are hooked up to Everett City water.

Soils and Ground Water

The soil boring conducted by ATEC Associates, Inc. in 1993, indicated that ground water was encountered at 15.7 feet below ground surface. Further, the boring describes the soil in the area as: From 0-2.5 feet silty gravelly sand. 2.5-7.5 feet silty fine sand rust-gray in color, 7.5-13.5 feet brown to rust, moist-stiff sandy silt with lenses of wet fine to medium sand, and 13.5-20 feet Brown fine to medium silty sand with fine to medium sandy silt. Well logs of properties in the area reveal similar stratification of the subsurface with similar sandy components, and depth to ground water. Clearly the nature of the soil indicates that no confining layer exists which prevents surface contaminants from impacting ground water. However, few if any residential drinking water systems exist within one mile of the site. The Snohomish river, 1850 feet to the east provides a significant barrier to migration as does the increased elevation and gradient of the ground water flow to the west.

Complaints

No complaints have been received other than the initial investigation performed by Gary Hanada in 1993 as a result of a ERTS report submitted to the Snohomish Health District (SHD) by the Washington Department of Ecology (WDOE).

Recent Sampling Events

Environmental Associates, Inc. under contract from the 34th Street Corporation, (Quantum Windows and Doors) conducted supplemental soil and ground water exploration of the Quantum site August 7, 1998. Two additional borings were placed SE of the original boring. Both soil and water samples were collected from the new borings and a water sample was collected from the original boring. With the addition of the two wells, it was determined that shallow ground water flows to the SE with gradient of 3.5 %. Results from the soil and water sampling for the August 7, 1998 event revealed no levels of contaminants which exceeded MTCA level A or B clean up levels. Results of this sampling event are outlined in the following tables.

Soil Sampling Results - RCRA Metals
August 7, 1998, Environmental Associates Inc.

Sample	MTCA Limit	B2 @ 2.5 Feet	B3 a@ 2.5 Feet
Arsenic	**20**	ND	ND
Barium	**5,600**	140	97
Cadmium	**2**	ND	ND
Chromium	**100**	44	33
Lead	**250**	100	21
Mercury	**1**	.41	ND
Selenium	**400**	ND	ND
Silver	**240**	ND	ND

- All results and limits are noted in mg/kg
- ND denoted non-detect

Groundwater Sampling Results - RCRA Metals August 7, 1998, Environmental Associates, Inc.				
Sample	MTCA Limit	MW-1 Original Boring	MW-2	MW-3
Arsenic	**5**	ND	ND	ND
Barium	**1120**	15	42	130
Cadmium	**5**	ND	ND	ND
Chromium	**50**	ND	ND	ND
Lead	**5**	ND	ND	ND
Mercury	**2**	ND	ND	ND
Selenium	**80**	ND	ND	ND
Silver	**48**	ND	ND	ND

- All results are noted in ug/L
- ND denotes Non-Detect

Areas of Impact

Soil and ground water have both been impacted at the Quantum site. 1993 analysis by ATEC Associates Inc. confirmed ground water impacts on the 2720 34th St. site and opined that this contamination was a result of activities occurring on the Everett Steel site. This has not been determined and is not the purpose of this SHA. Recent sampling at the Quantum site indicates few if any impacts to soil or ground water. Clearly more sampling will be needed to determine if contamination fluctuates with seasonal water tables.

Recommendations

The SHD recommends scoring and ranking this site using only the ground water, route of exposure. The surface water and air pathways are not applicable to the site due to the contamination documented at the site being primarily subsurface.