

April 3, 2006
10077.007

Oregon Department of Environmental Quality
Northwest Region
2020 SW Fourth Avenue
Suite 400
Portland, Oregon 97201-4987

VIA Email/First Class

**Subject: Data Submittal
Sub-Slab Sampling Results
Port of Astoria Office Building
Remedial Investigation/Feasibility Study
Astoria Area-Wide Petroleum Site
Astoria, Oregon
DEQ ECSI File #2277**

Dear Ms. Coates:

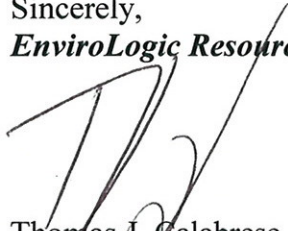
As discussed in our meeting of February 16, enclosed is a summary of the soil vapor analytical results collected in the vicinity of the Port of Astoria (the Port) office building. The results of the October and December 2004 soil vapor samples collected from four locations (SVP-01 through SVP-04) outside and immediately adjacent to the Port office building did not conclusively identify whether or not subsurface petroleum-related contamination poses a risk to building occupants. Subsequently, three of the four proposed sub-slab vapor-monitoring probes (SSP-01, SSP-03 and SSP-04) were installed directly beneath the office building and soil vapor sampled in July 2005. The thickness of the concrete floor slab at location SSP-02 exceeded 15 inches, the limit of the equipment available for installing the probes. The results of SVP and SSP soil vapor data collected to date relative to risk-based concentrations (RBCs) calculated using the Johnson-Ettinger Model are summarized in the attached tables. The soil vapor sampling locations are shown in the attached figure.

The Astoria Area-Wide Cooperating Parties intend to install the fourth sub-slab vapor-monitoring probe (SSP-02) and collect a complete round of sub-slab samples for analysis of petroleum volatile organic compounds in accordance with the June 13, 2005, work plan. Prior to implementing this work, the Cooperating Parties request concurrence from the Oregon Department of Environmental Quality (DEQ) that the spatial and temporal distribution of existing and proposed soil vapor data is sufficient to assess site-specific risk potentially posed from volatilization of subsurface contamination to indoor air. The sub-slab probe installation and sampling will continued to be conducted by GeoSyntec Consultants of Santa Barbara, California, and the Cooperating Parties seek to complete the assessment through one additional mobilization to the site.

Ms. Anna Coates
April 3, 2006
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Please call me at (503) 768-5121 if you have any questions or comments to information contained herein.

Sincerely,
EnviroLogic Resources, Inc.



Thomas J. Calabrese, RG, CWRE
Principal Hydrogeologist
Project Manager

cc: Distribution list attached

Ms. Anna Coates
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**ASTORIA AREA-WIDE PETROLEUM SITE
Distribution List**

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 - 1 Brian Jacobson, Qwest Communications International, Inc.
 - 1 David Bledsoe, Perkins Coie LLP, Attorney for Qwest Communications International, Inc.
 - 1 Anita W. Lovely, Lovely Consulting, Inc., Consultant for Exxon Mobil Corporation
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TABLE 2

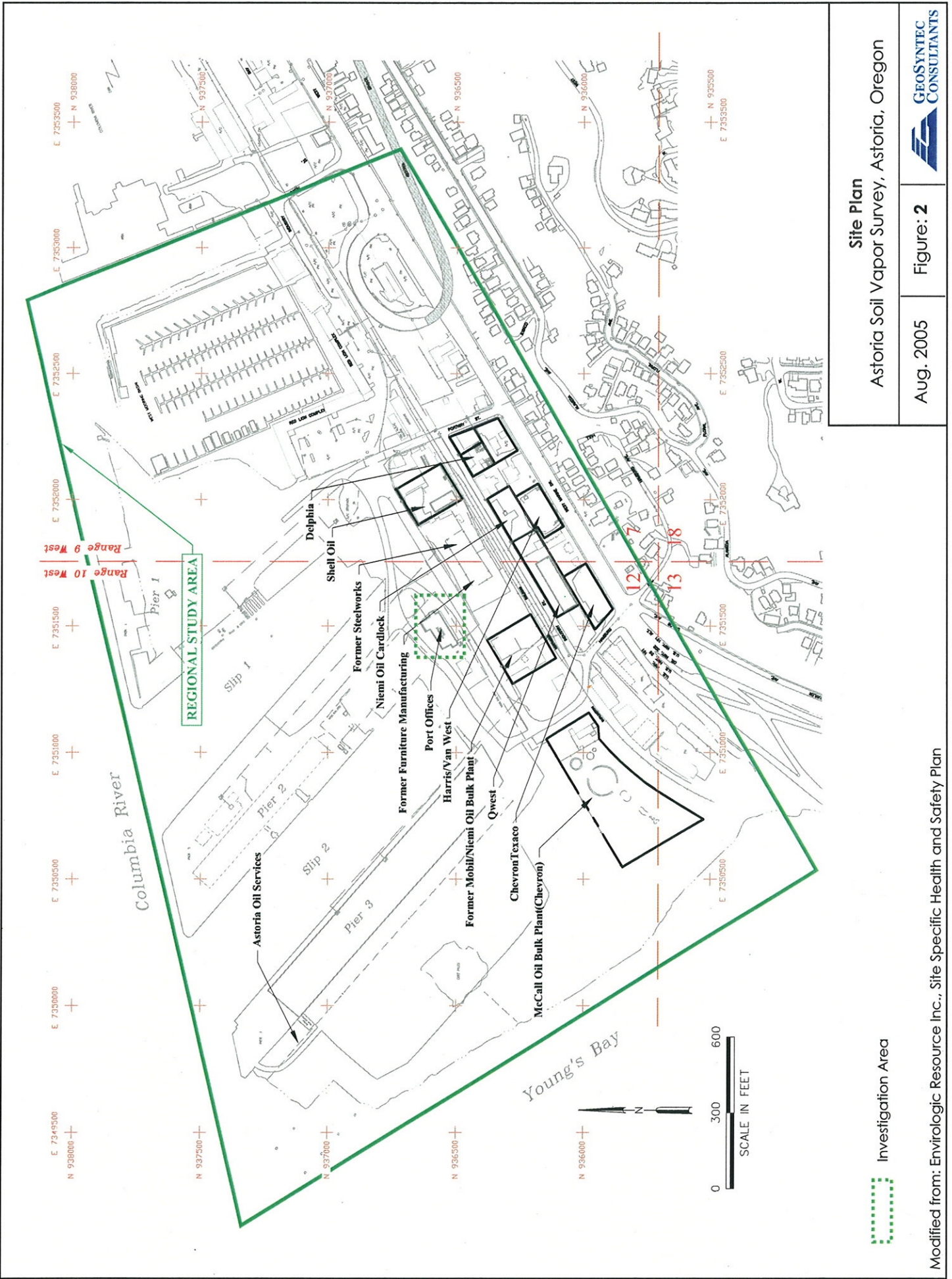
Risk Based Concentrations
and Screening Risk Evaluation

Remedial Investigation/Feasibility Study
Astoria Area-Wide Petroleum Site
Astoria, Oregon

Chemical	CAS No.	Mol. Wt. g/mol	RBC_air ug/m ³	RBC_soil_gas		Max Conc ppb	Max DL ppb	Max Risk	Max HI
				ug/m ³	ppbv				
Benzene	71432	78	1.5	5,440	1,700	31,000		1.8E-05	
Toluene	108883	92	1600	5,840,000	1,540,000	1,100			7.10E-04
Ethylbenzene	100414	106	4200	16,400,000	3,780,000		350		9.26E-05
Xylene	95476	106	420	1,530,000	352,000		1050		2.97E-03
1,2,4 Trimethylbenzene	95636	120	25	108,000	22,100		700		3.16E-02
1,3,5 Trimethylbenzene	108678	120	25	109,000	22,200		350		1.58E-02
TPH-g	TPH-G	100	2600	10,100,000	2,480,000	7,570,000			3.05E+00

Notes:

RBC_air taken from ODEQ RBDM Guidance Document
RBC_soil_gas calculated using Johnson Ettinger Model
Maximum concentrations detected in SVP-01



Site Plan
 Astoria Soil Vapor Survey, Astoria, Oregon

Aug. 2005

Figure: 2



Investigation Area

Modified from: Envirologic Resource Inc., Site Specific Health and Safety Plan

Site Plan.dwg

- SVP-04 ⊕ Soil Vapor Sample Location
- SSP-04 ⊕ Sub-Slab Probe Location
- CH4-03 ◆ Monitoring Location

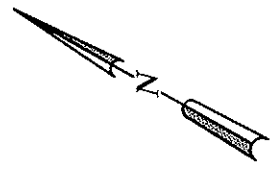
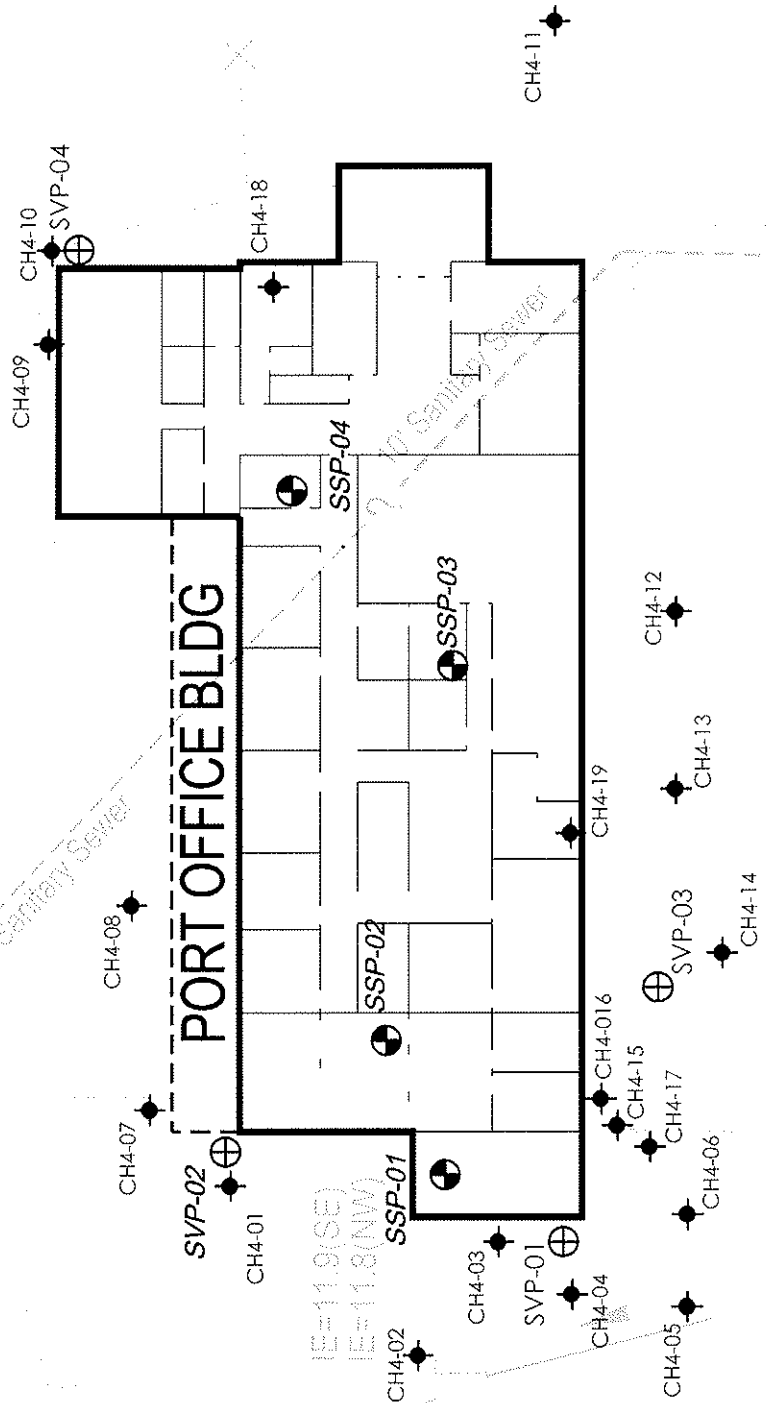
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IE=4.96(N)

IE=11.9(SE)
IE=11.8(NW)



PORT OFFICE BLDG

6" Sanitary Sewer



SCALE: 1" = 30'

Sample Locations

Astoria Soil Vapor Survey, Astoria, Oregon

Aug. 2005

Figure: 3



GEO SYNTEC
CONSULTANTS