



AGRA Earth & Environmental

ENGINEERING GLOBAL SOLUTIONS

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20 August 1997
7-91M-115020

The Norman Company
1420 Fifth Avenue, Suite 3600
Seattle, Washington 98101

Attention: Ms. Lita F. Johnson, R.P.A.

Subject: Sea-Tac Plaza
Biannual Sampling of Monitoring Well MW-3
Former Y-Pay-Mor Dry Cleaners
Federal Way, Washington

RECEIVED
AUG 25 1997
SHORT, CRESSMAN & BURGESS

Dear Ms. Johnson:

AGRA Earth & Environmental, Inc. (AEE) is pleased to present the results of our biannual groundwater sampling event on the above-referenced property under our current contract. This phase of work was completed in general accordance with our *Memorandum of Understanding* to Melody Westerdal of The Norman Company dated 5 February 1997.

AEE had previously completed an *Independent Remediation Action Report* (IRAP, dated 22 December 1994) for the former Y-Pay-Mor dry cleaner site. It is our understanding that the Washington State Department of Ecology (Ecology) requested additional sampling of the groundwater in monitoring well MW-3 to monitor the presence of cis-DCE. The well was to be sampled twice per year, once in the wet season and once in the dry season. This letter presents the results of the second sampling event completed on 23 July 1997.

Prior to sampling, approximately 3 gallons of groundwater was purged from the monitoring well (MW-3). The well was purged dry. The purge water was returned to AEE for disposal following results of the analytical testing. Following purging, the well was allowed to recover and then a groundwater sample was collected from the bottom of the well using a disposable bailer. The sample was sent to AEE's analytical lab in Portland, Oregon under AEE's chain-of-custody procedures and submitted for analysis for volatile organic halocarbons by EPA Methods 5030/8260A. The laboratory certificates are attached to this letter.

The analytical results indicate that the only analyte present at concentrations above the method detection limit is cis-1,2-dichloroethene (cis-DCE). The observed concentration of

cis-DCE was 3.63 ppb and is well below the MTCA Method B cleanup level of 80 ppb. This concentration is slightly higher than the concentrations detected on the 10 February 1997 sampling event (1.82 ppb) and the 17 November 1994 sampling event (2.2 ppb). The historic water level and analytical data are presented in Table 1. The observed increase is most likely due to a seasonal change in the amount of dilution created by wet winter conditions versus drier summer conditions and a lower water table.

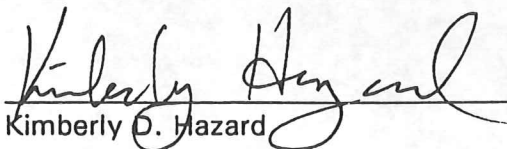
The results of this groundwater sampling event indicate that cis-DCE is currently the only volatile organic compound present at concentrations above the method detection limit of 1 ppb. The results also indicate that the concentration of cis-DCE appears to be fairly stable with some seasonal fluctuation. AEE is not currently scheduled to sample this site again.

AEE recommends that you forward copies of both this report and the one generated on 28 February 1997 to the Ecology project manager for the IRAP project, Ms. Elaine Atkinson. Ecology stipulated in a meeting attended by AEE representatives, Ms. Melody Westerdal of Norman Property Management, and Ms. Atkinson of Ecology on 30 May 1995 that monitoring well MW-3 be sampled and analyzed biannually for 3 years for volatile organic halocarbons, beginning that summer. Although this monitoring was only performed for the year 1997, it is likely that, because the concentration of cis-DCE remains an order of magnitude below the MTCA Method B cleanup level, Ecology will no longer require that The Norman Company continue the sampling program. Alternatively, AEE will contact the Ecology project manager, submit copies of these two reports, and negotiate a resolution on The Norman Company's behalf if you so request. The Ecology identification number for this site, N-17-5295-000, should be used in all correspondence with Ecology regarding this site.

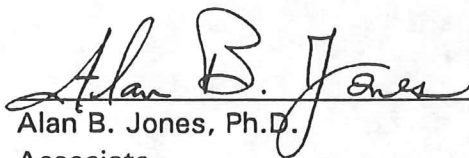
AEE appreciates the opportunity to be of continued service on this project. If you should have any questions or comments regarding this phase of work or any aspect of this project, please do not hesitate to call.

Respectfully submitted,

AGRA Earth & Environmental, Inc.



Kimberly D. Hazard
Environmental Technician



Alan B. Jones, Ph.D.
Associate

KDH/ABJ/lad

Enclosures: Table 1 - Summary of Analytical Test Results
Laboratory Analytical Test Certificates
Figure 1 - Location Map
Figure 2 - Site Plan

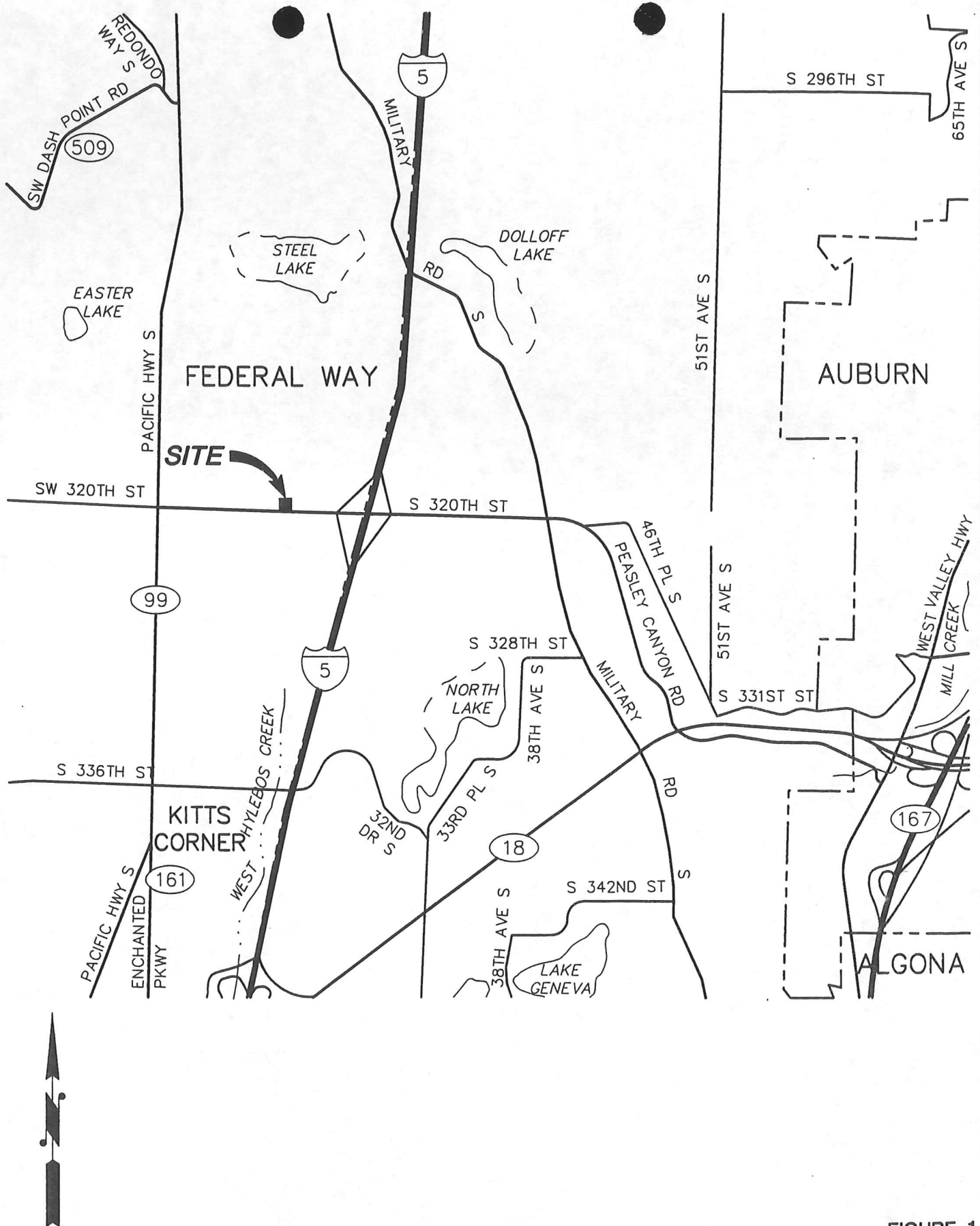


FIGURE 1

AGRA
Earth & Environmental
 11335 N.E. 122nd Way, Suite 100
 Kirkland, WA, U.S.A. 98034-6918

W.O.	7-91M-11502-0
DESIGN	ABJ
DRAWN	JMR
DATE	AUG 1997
SCALE	N.T.S.

SEATAC PLAZA
 2210 S.W. 320TH STREET
 FEDERAL WAY, WASHINGTON

LOCATION MAP

**Table 1: Summary of Analytical Test Results: Groundwater (MW-3)
SeaTac Plaza (Former Y-Pay-Mor Dry Cleaners)
2210 SW 320th Street
Federal Way, Washington
AGRA Earth & Environmental, Inc. Project No. 7-91M-11502-0**

Sample ID	Date Collected	Depth to Water * (feet)	cis-DCE (ppb)	TCE (ppb)	PCE (ppb)
MW-3	28-Oct-92	8.56	7	TI	TI
	13-Nov-92	8.15	6.6	2.3	ND
	13-Jun-94	8.12	5.4	ND	ND
	17-Nov-94	8.63	2.2	ND	ND
	10-Feb-97	NR	1.82	ND	ND
	23-Jul-97	8.20	3.63	ND	ND
MTCA Method "A" Cleanup Level			NA	5	5
MTCA Method "B" Cleanup Level			80	NA	NA

Notes:

cis-DCE = cis-1,2-Dichloroethene

TCE = Trichloroethene

PCE = Tetrachloroethene

MTCA = Washington State, Model Toxics Control Act.

NR = Depth to water was not recorded on this date.

ND = Compound was analyzed, but was below laboratory detection limits.

TI = Compound identified, is estimated below laboratory detection limit.

* = Measured from the top of monitoring well casing.

(J) = Estimated value.

All analytes are covered under EPA Method 8240 (Dec. 1992 through Nov. 1994) and EPA Method 8260A (Feb. 1997 through July 1997) for volatile organics.

These methods cover a broad scan of analytes. Compounds above are the only analytes in the broad scan that were measured above the laboratory detection limits. Analytes not shown, but covered under Methods 8240 and 8260A were below the laboratory detection limits for all samples.