



SECOR
INTERNATIONAL
INCORPORATED

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August 7, 2003

Mr. Stew Cogan, Arbitrator
Suite 2600
1301 Fifth Avenue
Seattle, WA 98101-2618

**RE: RESULTS – INDOOR AIR SAMPLING
FORMER BARG FRENCH DRY CLEANING FACILITY
1923 THIRD AVENUE, SEATTLE, WASHINGTON
SECOR PN: 01OT.13201.01**

Dear Mr. Cogan:

This letter summarizes results of indoor air sampling conducted by SECOR International Inc. (SECOR) on May 30, 2003 at the former Barg French Dry Cleaning Facility located at 1923 Third Avenue in Seattle, Washington (site).

The sampling was completed in accordance with a scope of work submitted to Mr. Stew Cogan on May 20, 2003. The scope of work was based on discussions during a meeting on April 10, 2003 involving Mr. Stew Cogan, Mr. Marc Sauze of SECOR, and Mr. Brian Sato of the Washington State Department of Ecology (Ecology). Mr. Edward Pettigrew, an attorney for the law firm Graham and Dunn PC, was also present at the meeting, acting as an observer for the Union Bank of California.

PURPOSE

The purpose of collecting and testing indoor air from the facility was to screen the air quality within the facility and compare results of the testing with standard formula values presented in the Ecology's Model Toxics Control Act (MTCA) Cleanup Regulations.

METHOD

SECOR collected two fixed volume indoor air samples from inside the former location of the Barg French Dry Cleaning facility. The samples were collected in passivated stainless steel canisters (SUMMA canisters) in general accordance with the United States Environmental Protection Agency (US EPA) Standard Operating Procedure (SOP) # 1704 *SUMMA Canister Sampling* dated 07/27/95 Revision # 0.1.

The samples were collected from within the immediate vicinity of the former location of the dry cleaning machine. This is an area of the facility located above the highest impacts to perched groundwater. The samplers were located at approximately five feet above ground surface to coincide with the approximate breathing height for human intake. Samples were collected in evacuated SUMMA canisters under subambient pressure. The canisters were fitted with mass flow controllers adjusted to control the flow of air into the canister. The difference in pressure between the canister and the ambient environment provided the driving force for collecting the sample. The sample collected in Canister 1 was collected over an eight hour period. The sample collected in Canister 2 was collected over a period of less than two minutes and is considered a grab sample. The sample location is shown on the attached figure.

The analytical test method for the air samples collected is based on the collection of air samples in passivated stainless steel canisters. The volatile organic compounds (VOCs) were subsequently removed from the canisters, separated by gas chromatography, and measured by mass spectrometric detector. The test method is applicable to specific VOCs that have been tested and determined to be stable when stored in pressurized and subatmospheric pressure canisters. As discussed with Ecology, testing for the following VOCs was completed:

RECEIVED

AUG 22 2003

DEPT OF ECOLOGY

- Tetrachloroethylene;
- Trichloroethylene;
- Vinyl Chloride;
- Cis dichloroethylene 1,2;
- Trans dichloroethylene 1,2, and;
- Dichloroethylene 1,1

The samples were submitted under chain-of-custody seal to Environmental Analytical Service Inc. in San Luis Obispo, California for analysis using United States Environmental Protection Agency (US EPA) Method TO-14.

RESULTS

The following table summarizes analytical results of constituents for which a Method B formula value was published or calculated. Analytical reports are provided as an attachment.

Volatile Organic Compound	Standard Method B Formula Value (µg/M ³)	Result–Air Sampling 5/30/2003 (µg/M ³)	
		Cannister-1	Cannister-2
Tetrachloroethylene	4.31*	12.199	21.064
Trichloroethylene	0.515	<0.216	<0.209
Vinyl Chloride	0.284	<0.051	<0.050
dichloroethylene 1,1	0.0500	<0.027**	<0.026**

* Value calculated by SECOR according to the formulas presented in Washington Administrative Code (WAC) 173-340-750(3)

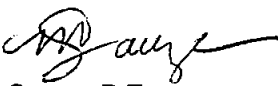
** minimum detection limit – all other results reported with respect to reporting limit


Results of the air sampling indicate that tetrachloroethylene concentrations in the air samples collected exceeded the Standard Method B formula value as calculated by SECOR. The formula value for tetrachloroethylene may need to be adjusted lower as a result of recent changes to input parameters used to calculate the formula value. Any adjustment to the formula value would require a review of current input parameters and consultation with Ecology.

Please contact SECOR at (425) 372-1600 with any questions or if you require further information regarding the results of the indoor air sampling.

Sincerely,

SECOR International Incorporated


Marc Sauze, P.E.
Project Engineer


Don Clabaugh, P.E.
Senior Engineer

- ATTACHMENT 1:** Figure 1 Site Plan With Air Sampling Location
ATTACHMENT 2: Laboratory Analytical Reports

ATTACHMENT 1
Figure 1 Site Plan With Air Sampling Location

THIRD AVENUE

FORMER BARG
FRENCH DRY CLEANING
FACILITY

BOOKSTORE

CAST IRON
SEWER LINE
1.5 FEET BELOW
GROUND SURFACE

PARKING
GARAGE

LOCATION OF FORMER
DRY CLEANER

AIR SAMPLE
LOCATION

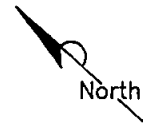
BATHROOM

ALLEY

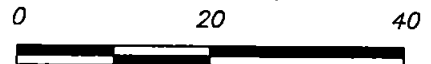
LEGEND

MOORE THEATER

--- ASSUMED SITE BOUNDARY



North



SCALE (FEET)

SOURCE: BASE MAP FROM CLAYTON ENVIRONMENTAL SERVICES, NAMED FIGURE 2, SITE PLAN.

DRAWN BY: SES
CHECKED: _____
APPROVED: _____
DATE: 8/1/03
JOB No.: 01OT.13021.01
CAD FILE: PATH ON LEFT

PREPARED BY:

SECOR
12034 134th COURT NE
REDMOND, WASHINGTON

PREPARED FOR:
**FORMER BARG FRENCH
DRY CLEANING FACILITY**

1929 THIRD AVENUE
SEATTLE, WASHINGTON

FIGURE 1
SITE PLAN
WITH AIR SAMPLING
LOCATION

ATTACHMENT 2
Laboratory Analytical Reports

METHOD BLANK REPORT

ENVIRONMENTAL

Analytical Service, Inc.



SDG: LABQC

Laboratory Number: B06033

Analytical Method:

EPA TO-14 by GC/MS SIM

File: B06033B.D

Date Sampled:

Time:

Client:

Date Received:

Description: METHOD BLANK

Date Analyzed: 06/03/03

Time:

Sam_Type: SA

QC_Batch: 060303-MS3

Analyst: EK

EDD units: ug/m3

CAS #	Compound	Flag	MDL	Amount	RL	MDL	Amount
			ppbV	ppbV	ug/m3*	ug/m3*	ug/m3*
75-01-4	Vinyl chloride	U	0.005	ND	0.040	0.013	ND
75-35-4	1,1-Dichloroethene	U	0.005	ND	0.061	0.020	ND
156-60-5	trans-1,2-Dichloroethene	U	0.040	ND	0.491	0.164	ND
156-59-2	cis-1,2-Dichloroethene	U	0.010	ND	0.123	0.041	ND
79-01-6	Trichloroethene	U	0.010	ND	0.166	0.055	ND
127-18-4	Tetrachloroethene	U	0.010	ND	0.210	0.070	ND
System Monitoring Compound			Spike	Amount		Percent	Limits
			Amount			Recovery	
	a,a,a-Trifluorotoluene		0.24	0.183		76.2	70-130

Notes: ND=Not detected at or above the listed minimum detection limit (MDL).

RL = Reporting Limit = 3 x MDL

Reported results are to be interpreted to two significant figures.

*ug/m3 calculated assuming conditions at 60 F and 1 atm.

QC REPORT

ENVIRONMENTAL

Analytical Service, Inc.



Spike: QC06033
Spike Dup.: QC06033DUP
QC Lot: 060303-MS3

Method: EPA Method TO-14 GC/MS SIM

Compound	Theoretical	Spike	Spike Dup	% Recov.	%Recov.	%RPD	% Rec.
	Conc. ppbv	ppbv	ppbv	Spike	Spike Dup.		Limits
Vinyl chloride	0.515	0.489	0.366	95	71	29	70-130%
1,1 Dichloroethene	0.515	0.386	0.368	75	71	5	70-130%
cis-1,2-Dichloroethene	0.515	0.443	0.375	86	73	17	70-130%
Trichloroethene	0.515	0.402	0.388	78	75	4	70-130%
Tetrachloroethene	0.515	0.425	0.485	82	94	13	70-130%

ANALYTICAL REPORT

ENVIRONMENTAL

Analytical Service, Inc.



Analytical Method: EPA TO-14 by GC/MS SIM SDG: 203365
File: 0336501A.D Laboratory Number: 01
Client: SECOR Date Sampled: 05/30/03
Description: CANISTER-1 CAN# 729 500ML Date Received: 06/03/03
Sam_Type: SA Date Analyzed: 06/03/03
QC_Batch: 060303-MS3 Time:
Time:
Analyst: VP EDD units: ug/m3

CAS #	Compound	Flag	MDL	Amount	RL	MDL	Amount
			ppbV	ppbV	ug/m3*	ug/m3*	ug/m3*
75-01-4	Vinyl chloride	U	0.007	ND	0.051	0.017	ND
75-35-4	1,1-Dichloroethene	U	0.007	ND	0.080	0.027	ND
156-60-5	trans-1,2-Dichloroethene	U	0.052	ND	0.639	0.213	ND
156-59-2	cis-1,2-Dichloroethene	U	0.013	ND	0.160	0.053	ND
79-01-6	Trichloroethene	U	0.013	ND	0.216	0.072	ND
127-18-4	Tetrachloroethene		0.013	1.740	0.273	0.091	12.199
System Monitoring Compound			Spike	Amount	Percent	Limits	
			Amount		Recovery		
	a,a-Trifluorotoluene		0.24	0.061	25.4	70-130	

Notes: ND=Not detected at or above the listed minimum detection limit (MDL). RL = Reporting Limit = 3 x MDL
 Reported results are to be interpreted to two significant figures.
 *ug/m3 calculated assuming conditions at 60 F and 1 atm.

ANALYTICAL REPORT

ENVIRONMENTAL

Analytical Service, Inc.



SDG: 203365

Analytical Method:

EPA TO-14 by GC/MS SIM

Laboratory Number: 02

File: 0336502A.D Date Sampled: 05/30/03
Client: SECOR Date Received: 06/03/03
Description: CANISTER-2 CAN# 165 500ML Date Analyzed: 06/03/03
Sam_Type: SA
QC_Batch: 060303-MS3

Time:

Time:

Analyst: VP

EDD units: ug/m3

CAS #	Compound	Flag	MDL ppbV	Amount ppbV	RL ug/m3*	MDL ug/m3*	Amount ug/m3*
75-01-4	Vinyl chloride	U	0.006	ND	0.050	0.017	ND
75-35-4	1,1-Dichloroethene	U	0.006	ND	0.077	0.026	ND
156-60-5	trans-1,2-Dichloroethene	U	0.050	ND	0.619	0.206	ND
156-59-2	cis-1,2-Dichloroethene	U	0.013	ND	0.155	0.052	ND
79-01-6	Trichloroethene	U	0.013	ND	0.209	0.070	ND
127-18-4	Tetrachloroethene		0.013	3.005	0.265	0.088	21.064
System Monitoring Compound			Spike Amount	Amount	Percent Recovery	Limits	
	a,a,a-Trifluorotoluene		0.24	0.160	66.8	70-130	

Notes: ND=Not detected at or above the listed minimum detection limit (MDL).

RL = Reporting Limit = 3 x MDL

Reported results are to be interpreted to two significant figures.

*ug/m3 calculated assuming conditions at 60 F and 1 atm.