S10830

# New York State Department of Environmental Conservation Division of Environmental Remediation Bureau of Technical Support

ADDITIONS/CHANGES TO REGISTE	
SITE NAME: Former Canada Dry Plant S	ite DEC I.D. NUMBER_704050
Current ClassificationP	Volunteer Yes No No Sign (7) below
Activity: Add as Class Reclassify to	Delist Category Modify
Approvals:	
1. Regional Hazardous Waste Engineer Yes	No 3 19-07
2. BEEI of NYSDOH Yes	No 04-17-07
3. DEE Yes	No 3-15-67
4. Dave Smith Remedial Action Bureau Director  Yes	No 2-14-07
5. Site Control Section  Sells	a Lewandon Ali Date 4/25/07 5
6. Director	1 2 - Enghan Date 5/18/01
7. Assistant Division Director (Required only for Class 2 sites)	ATE FINALIZED 06-12-07
Completion Checklist for Registry Sites	Completed By:  Initials Date
OWNER NOTIFICATION LETTER?	$\frac{\text{Initials}}{\text{BW}/\text{SS}} = \frac{\text{Date}}{5 - 24 - 07}$
ADJACENT PROPERTY OWNER NOTIFICATION LETTER?	Bw/ss 6-6207
ENB / LEGAL NOTICE SENT? (For Deletion Only)	
COMMENTS SUMMARIZED / PLACE IN REPOSITORY?	
FINAL NOTIFICATION SENT TO OWNER? (For Deletion Only	

# **New York State Department of Environmental Conservation**

**Division of Environmental Remediation** 

Bureau of Technical Support, 11<sup>th</sup> Floor 625 Broadway, Albany, New York 12233-7020

**Phone**: (518) 402-9543 • **FAX**: (518) 402-9595

Website: www.dec.state.ny.us



#### MEMORANDUM

**TO:** Gregg Townsend, RHWE, Region 7

Dick Dana, Division of Environmental Enforcement

Gary Litwin, NYSDOH, Bureau of Environmental Exposure

FROM: Kelly A. Lewandowski, Chief, Site Control Section Kelly A. Lewandowski

**SUBJECT:** Review of New Class 2 Classification Package for

Former Canada Dry Plant Site #704050

**DATE:** February 21, 2007

The attached Site Classification Form with supporting documentation is attached for your review and approval. The Site Control Section is initiating this review via email, a hard copy will follow only to DOH due to their email attachment size restrictions.

If acceptable, sign at the bottom of the Site Classification Form in the appropriate approval space and return to us in PDF format by email or you may print and sign the form then return it to us as a hard copy. Please respond by Thursday, March 22, 2007.

Gary - Would you include a statement for the Assessment of Health Problems for the package. It will not be altered without DOH approval. Do not include if you know it has been updated.

If unacceptable, return with an explanation of your position in a separate memo or letter.

An important part of your review should include modifying, if necessary, the statement in Basis for Classification Change of the Site Classification Form so that it can be used in all appropriate notification documentation (i.e., ENB, owner and adjacent property owner notification letter, and newspaper legal notice.

Keep the supporting documentation for your records.

#### Attachments

ecc: Sally Dewes

Bob Cozzy Dave Smith

# New York State Department of Environmental Conservation Division of Environmental Remediation



#### **MEMORANDUM**

**TO:** Kelly Lewandowski, Chief, Site Control Section, Bureau of Technical Support

**FROM:** Robert Cozzy, Section Chief/RHWRE

Sally Dewes, Project Manager

**THRU:** P. David Smith, Director, Remedial Bureau B

**SUBJECT:** Proposed Site Classification Change

Site NameFormer Canada Dry PlantSite Code704050CityEndicottCountyBroome

Current Classification P Proposed Classification 02

**DATE:** 5/17/2007

We propose that the classification of this site be changed as indicated above. Please initiate the review and concurrence process for this proposed change. Attached is a Site Classification Form that provides information regarding the site and the basis for the proposed change. Also attached is the support document (in PDF format) that provides a site map, the classification worksheet, and other supporting information.

### Attachments

ec w/att: P. David Smith, Director, Remedial Bureau B

Robert Cozzy, Section Chief/RHWRE

Sally Dewes, Project Manager



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION

#### **Site Classification Form**



5/17/2007

Site Code 704050 Site Name Former Canada Dry Plant

CityEndicottTownUnionRegion7CountyBroome

Current Classification P Proposed Classification 02

Estimated Size (acres) 0.3000 Site Type

Significant Threat: - Yes - No - NA

Priority ranking Score 250 Project Manager Sally Dewes

### **Site Description**

2 and 7 Badger Ave. It is in a mixed commercial, industrial, and residential area in Broome Co. The site encompasses all of the 2 Badger Ave. parcel and one small section of the 7 Badger Avenue parcel. The 2 Badger parcel has one building on it that is not used. The portion of the 7 Badger parcel that is within the site boundard is paved with no buildings. Both 2 and 7 Badger were part of the Canada Dry Bottling Company. Now 2 Badger is not used and 7 Badger is used as a recycling facilty (paper and printer cartridges).

This site was investigated in the early 1990s. Two drywells were excavated inside the building on 2 Badger Ave. An other excavation was completed to the east of the building and a fourth excavation was completed off the NE corner of the building; this area is part of 7 Badger Ave. A SVE system was installed and operated there. Monitoring wells were installed and sampled. High levels of TCE were found in the groundwater.

The site was sampled again as part of the Endicott Area Wide Study (#704038) in 2005 and 2006. High levels of TCE persist in the groundwater and high levels of TCE in soil gas were found.

Materials Disposed at Site

**Quantity Disposed** 

**OU 01** 

TRICHLOROETHENE (TCE) UNKNOWN

**Analytical Data Available for:** Groundwater, Soil Vapor **Applicable Standards Exceeded for:** Groundwater

### **Assessment of Environmental Problems**

Data from both groundwater and soil gas sampling indicate high levels of TCE and other chlorinated VOCs. The highest concentrations were found in the northwest portion of the site.

#### **Assessment of Health Problems**

The site is located in a mixed residential and commercial neighborhood. Sub-surface soils, groundwater and soil vapor are contaminated with volatile organic compounds, primarily trichloroethene (TCE). Human exposures to contaminated soils and groundwater are not expected



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION





5/17/2007

Site Code /04050 Site Name Former Canada Dry Pia	Site Code	704050	Site Name	Former Canada Dry I	Plant
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because building and pavement cover the site and public water serves the area. An investigation is in progress to evaluate and address the potential for soil vapor intrusion in nearby structures. An investigation to delineate the extent of soil and groundwater contamination is proposed. A soil vapor intrusion investigation has been conducted on-site and DOH has recommended that actions be taken to reduce exposures related to soil vapor intrusion.

	Remedy Description and Cost						
Remedy De	escription for Operable Unit	01					
<b>Total Cost</b>							
OU	Site Management Plan A	pproval:	Status:				
were as high ig/m3, respec	-						
Organization Approval Dates: SCS Distribution: 02/21/2007 RHWRE: 03/19/2007 CO Remedial Bureau: 02/14/2007		DOH: 04/17/2007 SCS Chief: 04/25/2007 BTS BUR Dir.:	DEE: 03/15/2007				
Signatura (C	oncurrence with Proposed Classifica	ation) Organization Title	Date				



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION Site Classification Form



2/14/2007

**Site Code** 

704050

Site Name Former Canada Dry Plant

**OU** 

**Site Management Plan Approval:** 

**Status:** 

### **Basis for Classification Change**

The site is curently part of the Endicott Area Wide Investigation. TCE concentrations in groundwater were as high as 600 ug/L. PCE and TCE concentrations in soil gas were as high as 710 and 52,000 ug/m3, respectively.

**Organization Approval Dates:** 

**SCS Distribution:** 

DOH:

**DEE:** 

**RHWRE:** 

**SCS Chief:** 

CO Remedial Bureau:

**BTS BUR Dir.:** 

Signature (Concurrence with Proposed Classification)

FE3

2-15-07

Organization Title

Date



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION Site Classification Form



2/20/2007

211	ha	0	M	0
ווכ	re	Co	N	C

704050

Site Name

Former Canada Dry Plant

OU

Site Management Plan Approval:

Status:

#### **Basis for Classification Change**

The site is curently part of the Endicott Area Wide Investigation. TCE concentrations in groundwater were as high as 600 ug/L. PCE and TCE concentrations in soil gas were as high as 710 and 52,000 ug/m3, respectively.

Organization Approval Dates:

**SCS Distribution:** 

DOH:

DEE:

RHWRE:

SCS Chief:

CO Remedial Bureau:

BTS BUR Dir.:

Dans Homen

RT

RHWRE

3/19/07

Signature (Concurrence with Proposed Classification)

Organization Title

Date



Flanigan Square, 547 River Street, Troy, New York 12180-2216

Richard F. Daines, M.D. Commissioner

April 17, 2007

Mr. Dale Desnoyers, Director Division of Environmental Remediation NYS Dept. of Environmental Conservation 625 Broadway, 12<sup>th</sup> Floor Albany, NY 12233-7011

**RE:** Site Classification Package

Former Canada Dry Plant Site # 704050 Endicott, Broome County

Dear Mr. Desnoyers:

Staff reviewed the re-classification package and supporting material for the Former Canada Dry Plant site located in Endicott, Broome County. I understand that high levels of trichloroethene persist in the groundwater (600 mcg/L) and soil vapor (52,000 mcg/m³) despite previous source area excavation and soil vapor extraction. I also understand that recent air sampling conducted in the on-site building detected trichloroethene in the indoor air up to 24 mcg/m³ and in the sub-slab vapor up to 15,000 mcg/m³.

Based on the available information, I concur with the re-classification of the site from a potential site to a Class 2 site on the registry of inactive hazardous waste sites. If you have any questions, please call Mr. Mark VanValkenburg at (518) 402-7870.

Sincercity

Steven M. Bates, Assistant Director

Bureau of Environmental Exposure Investigation

cc: G. A. Carlson, Ph.D. / A. Grey, Ph.D. / A. Salame-Alfie, Ph.D.

G. Litwin / M. Van Valkenburg / File

R. Cozzy / S. Dewes – DEC Central Office

M. J. Peachey / G. Townsend - DEC, Reg. 7

P:\Bureau\Sites\Region\_7\BROOME\704050\classification.doc



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION Site Classification Form



2/20/2007

Site Code

704050

Site Name

Former Canada Dry Plant

**O**U

Site Management Plan Approval:

Status:

### **Basis for Classification Change**

The site is curently part of the Endicott Area Wide Investigation. TCE concentrations in groundwater were as high as 600 ug/L. PCE and TCE concentrations in soil gas were as high as 710 and 52,000 ug/m3, respectively.

**Organization Approval Dates:** 

**SCS Distribution:** 

DOH:

DEE:

RHWRE:

**SCS Chief:** 

CO Remedial Bureau:

BTS BUR Dir.:

Jan Men 1

Signature (Concurrence with Proposed Classification)

NYS DOH

Organization Title

Assistant Di-

D-4-



# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF ENVIRONMENTAL REMEDIATION Site Classification Form



2/20/2007

Site Code

704050

Site Name

Former Canada Dry Plant

OU

Site Management Plan Approval:

Status:

### **Basis for Classification Change**

The site is curently part of the Endicott Area Wide Investigation. TCE concentrations in groundwater were as high as 600 ug/L. PCE and TCE concentrations in soil gas were as high as 710 and 52,000 ug/m3, respectively.

**Organization Approval Dates:** 

**SCS Distribution:** 

DOH:

DEE:

RHWRE:

**SCS Chief:** 

CO Remedial Bureau:

BTS BUR Dir.:

Signature (Concurrence with Proposed Classification)

Organization Title

Date

# New York State Department of Environmental Conservation Division of Environmental Remediation



#### **MEMORANDUM**

TO:

Kelly Lewandowski, Chief, Site Control Section, Bureau of Technical Support

FROM:

Robert Cozzy, Section Chief/RHWRE

Sally Dewes, Project Manager

THRU:

P. David Smith, Director, Remedial Bureau B

SUBJECT:

**Proposed Site Classification Change** 

Site Name Former Canada Dry Plant

Site Code 704050

City

Endicott

County Broome

Current Classification

Proposed Classification 02

DATE:

2/14/2007

We propose that the classification of this site be changed as indicated above. Please initiate the review and concurrence process for this proposed change. Attached is a Site Classification Form that provides information regarding the site and the basis for the proposed change. Also attached is the support document (in PDF format) that provides a site map, the classification worksheet, and other supporting information.

#### Attachments

ec w/att:

P. David Smith, Director, Remedial Bureau B

Robert Cozzy, Section Chief/RHWRE

Sally Dewes, Project Manager



# Significant Threat Worksheet



		6 NYCRR 375-2.7	ECL §27-14		
Site Na	ame:	Former Canada Dry Plant	Site ID No.	704050	
City/To	own:	Endicott	County:	Broome	
1.		all available and relevant evidence regarding the Site been reviewed the factors in §375-2.7(a)(3) considered?	Yes (go to 2)	□ No (stop)	☐ Unsure (stop)
2.	Does	Site contamination result in significant adverse impacts (§375-2.7(a)	(1)) to:		
	a.	species that are endangered, threatened, or of concern?	☐ Yes (go to b)	■ No (go to b)	☐ Unsure (go to b)
	b.	protected streams, tidal/freshwater wetlands, or significant fish and wildlife habitat?	☐ Yes (go to c)	■ No (go to c)	☐ Unsure (go to c)
	c.	flora or fauna from bioaccumulation or leads to a recommendation to limit consumption?	☐ Yes (go to d)	■ No (go to d)	☐ Unsure (go to d)
	d.	fish, shellfish, crustacea, or wildlife from concentrations that cause adverse/chronic effects?	☐ Yes (go to e)	■ No (go to e)	☐ Unsure (go to e)
	e.	the environment due to a fire, spill, explosion, or reaction that generates toxic gases, vapors, fumes, mists or dusts?	Yes (go to f)	□ No (go to f)	☐ Unsure (go to f)
	f.	areas where individuals or water supplies may be present and NYSDOH has determined there to be a significantly increased risk to public health (including from soil vapor)?	Yes (go to 3)	□ No (go to 3)	☐ Unsure (go to 3)
3.	Does 2.7(a)	Site contamination result in significant environmental damage (§375)(2))?	- Yes (go to 4)	□ No (go to 4)	☐ Unsure (stop)
4.		box in items 2 or 3 have been checked "Yes," the site presents a cant threat to public health or the environment; check here.	Significant thr Public Enviror	Health	
5.		boxes in items 2 or 3 have been checked "Yes," the site does not nt a significant threat to public health or the environment; check here		ignificant Threa	t
Grou Con	undwa tamin	Main Factors Contributing to this Determination: ater has been impacted and concentrations exceed NYS standation was also found in soil vapor. The site represents a signification was also found in soil vapor. The site represents a signification was also found in soil vapor.			ssociated
l ———		AY DEWES / EE 2  ager Name/Title (Print)  Project Manager Name (Signature)	2/e) Date	114/07	

Bureau Director/RHWRE Name/Title (Print)

Bureau Director/RHWRE Name (Signature)



## SITE CLASSIFICATION WORKSHEET STATE SUPERFUND PROGRAM 6 NYCRR 375-2.7



Site Name:

Former Canada Dry Plant

Site ID No.

704050

City/Town:

Endicott

County:

Broome

1.	Has remediation been completed in accordance with a ROD including properly addressing institutional controls (ICs)?	□ Yes (go to 7)	■ No (go to 2)			
2.	Has hazardous waste as defined in ECL §27-1301.1 been disposed at the Site?	Yes (go to 3)	□ No (stop)	□ Unsure (go to 11)		
3.	Does the Site present a current or reasonably foreseeable significant threat to public health or the environment (complete Significant Threat Determination Worksheet)?	Yes (go to 4)	□ No (go to 6)	□ Unsure (go to 11)		
4.	Is the significant threat causing or presenting an imminent danger of causing irreversible or irreparable damage to public health or the environment?	□ Yes (Class 1)	■ No (go to 5)	□ Unsure (stop)		
5.	Is the Site presenting a significant but not imminent threat to public health or the environment?	Yes (Class 2)	□No (reevaluate)			
6.	Has hazardous waste been disposed but it does not present a significant threat to public health or the environment and the site is suitable for placement on the Registry?	□ Yes (Class 3)	□No (go to 10)			
7.	Is the site properly remediated but still requires continued active site management to maintain/achieve protectiveness?	□ Yes (Class 4)	□ No (go to 8)	□ Unsure (stop)		
8.	Is the site properly remediated, does not require continued active site management, but is not suitable for delisting or a required IC is not yet in place?	□ Yes (Class 5)	□ No (go to 9)	□ Unsure (stop)		
9.	Is the site properly remediated, required ICs are in place, the site does not require continued active site management, and is suitable for delisting?	□ Yes (Class: C)	□ No (go to 10)	□ Unsure (stop)		
10.	Based upon investigation, is the degree of contamination such that the Site does not qualify to be placed on the Registry and that additional remedial work is not anticipated at this time?	□ Yes (Class: N)	□ No (reevaluate)	□ Unsure (stop)		
11.	Does insufficient information exist to properly classify the site?	□ Yes (Class P)	□ No (reevaluate)	□ Unsure (stop)		
	Current Classification: P	Proposed Cl	assification: 2			
Ad	ditional Information to be Considered:					
	SALLY DEWES / EEZ Project Manager Name/Title - Print Project Manager Name - Signature  Date  Project Manager Name - Signature  Date  2/5/02  Bureau Director/RHWRE Name/Title - Print  Date					

# Parcel List

Parcel ID	Parcel Location	Municipality	Owner Name	Mailing Address	City	State	Zip Code	Land Use
<u>157.09-2-2</u>	118 JENNINGS ST	-	75747	342 Front St	Owego	NY		7 Commercial
157.09-2-3	106 JENNINGS ST	Village of Endicott	Village of Endicott	1009 Main St	Endicott	NY	1.50	Community
<u>157.09-8-1</u>	2 BADGER AVE	Village of Endicott	ICS Industries Inc	7 Badger Ave	Endicott	NY	137604701	Commercial
<u>157.09-8-10</u>	7 BADGER AVE	Village of Endicott	ICS Industries Inc	7 Badger Ave	Endicott	NY	137604701	Commercial
<u>157.09-8-11</u>	2 NANTICOKE AVE S	Village of Endicott	Orlando J Ciotoli	8 Nanticoke Ave	Endicott	NY	1 2	Commercial
157.09-8-12	6 NANTICOKE AVE S	Village of Endicott	Orlando J Ciotoli	8 Nanticoke Ave	Endicott	NY		Commercial
157.09-8-13	8 NANTICOKE AVE S	Village of Endicott	Orlando Ciotoli	8 Nanticoke Ave	Endicott	NY	13760	Residential
157.09-8-14	10 NANTICOK E AVE S	Village of Endicott	Orlando J Ciotoli	8 Nanticoke Ave	Endicott	NY	13760	Vacant
157.09-8-15	12 NANTICOK E AVE S	Village of Endicott	Roger Bell	12 Nanticoke Ave	Endicott	NY	32	Multi-Residenti
157.09-8-16	14 NANTICOK E AVE S	Village of Endicott	James R Clubb	14 Nanticoke Ave	Endicott	NY	1 . TV	Residential
157.09-8-17	16 NANTICOK E AVE S	Village of Endicott	Central Methodist	17 Nanticoke Ave		NY	137604875	Community
157.09-8-18	18 NANTICOK E AVE S	Village of Endicott	Theodore R Warner	18 Nanticoke Ave		NY		Residential
157.09-8-2	6 BADGER AVE	Village of Endicott	F L F Associates	73 Griswold St	Binghamton	NY		Industrial
57.09-8-26	19 BADGER AVE	Village of Endicott	Sharon L Stratton	17 Badger Ave	Endicott	NY	57	Residential
57.09-8-27	17 BADGER AVE	Village of Endicott		17 Badger Ave	Endicott	NY	137604701	
57.09-8-3	14 BADGER AVE	Village of Endicott		14 Nanticoke Ave		NY	137604873	Jar.
	16 BADGER	Village of Endicott		14 Nanticoke Ave		NY	137604873	F 10.0

<sup>\*</sup>Properties in BOLD are site related

# 2 and 7 Badger Avenue, Endicott NY



parcel number
parcel boundary
site boundary



FINAL REPORT
OF
SITE REMEDIATION ACTIVITIES
AT
7 BADGER AVENUE
ENDICOTT, NEW YORK

**AUGUST 13, 1991** 

### PREPARED FOR:

MR. TONY GARUFI
TOUHEY ASSOCIATES
PINE WEST PLAZA, BUILDING 2
WASHINGTON AVENUE EXTENSION
ALBANY, NEW YORK 12205

#### PREPARED BY:

BUCK ENGINEERING 100 TOMPKINS STREET CORTLAND, NEW YORK 13045 607-753-3403

#### EXECUTIVE SUMMARY

This report presents the methodology, conclusions and recommendations of remediation actions taken at 7 Badger Avenue, Endicott, New York during the period from April through July 1991.

A small quantity of damaged asbestos containing material was removed from the building. The analysis of air samples taken at the conclusion of the abatement project provide evidence that the air quality is well within the limits set be regulatory authority for re-occupancy. Approximately 200 to 300 ln. ft. of asbestos containing pipe insulation was found in the rear of the building between the roof and a suspended ceiling. The material is in good condition, does not represent an imminent hazard to health and no action is recommended relative to this material.

Four underground petroleum storage tanks were excavated and removed from the site. One of the tanks contained contaminated sand/concrete slurry. With the exception of a small quantity of contaminated soil that was removed from one excavation, no indication of aromatic hydrocarbon contamination was found.

Four groundwater monitoring wells were installed. Samples from three of the wells showed levels of trichloroethene (TCE) ranging from 2.6 ug/L in monitoring well #2 to 286 ug/L in monitoring well #1. Groundwater flow direction was established as being slightly north of east. The data obtained from the monitoring well elevations and samples did not allow a positive conclusion to be reached relative to the source of the TCE in the groundwater. Therefore, a soil gas survey was conducted to further investigate this issue.

Four soil gas samples were taken from the area around monitoring well #1. The levels of TCE found in these soil gas samples ranged from 5,900 ug/m3 to 87,400 ug/m3 with the highest level found at SG#2, taken near the northeast corner of the building on the opposite (west) side of the street from the subject site.

Based on the direction of groundwater flow, the monitoring well and soil gas sample analyses, it is concluded that the source of the TCE contamination in the groundwater is a location up-gradient from the subject site and not the site itself. It is recommended that the results of the groundwater and soil gas sample analysis be communicated to the NYSDEC.

Four samples were obtained from floor drains and a dry well.

# SITE REMEDIATION REPORT 7 BADGER AVENUE, ENDICOTT, NY

Executive Summary Con't.)

A low level of TCE contamination was found in the dry well sample. It is believed that this contamination is from the groundwater beneath the site.

In summary, it is believed that the environmental issues identified in the initial site evaluation in the areas of asbestos containing materials and the underground petroleum storage tanks have been resolved and are no longer of concern.

The issue of the floor drains has been addressed from the perspective of potential contaminants in the drains and successfully resolved. The floor drains remain a concern from the perspective that they provide a potential path for contamination to enter the soil and groundwater beneath the site. It is recommended that the floor drains and drywells be permanently sealed with concrete.

The issue of TCE contamination of the groundwater beneath the site has been successfully resolved from the standpoint that it is believed that source of the TCE is not the subject site. However, the presence of the contaminant remains a concern. The NYSDEC should be notified of the presence of this substance and further investigation may be necessary to locate the source. However, it is believed that the owner of the 7 Badger Avenue will not be held responsible for future investigative or remediation action.

# SITE REMEDIATION REPORT 7 BADGER AVENUE, ENDICOTT, NY

#### APPENDIX B

### LABORATORY REPORTS

The laboratory reports resulting from the analysis of the samples obtained from the subject site and from the air monitoring conducted during the asbestos abatement are provided on the following pages.

# BUCKENGNEERING

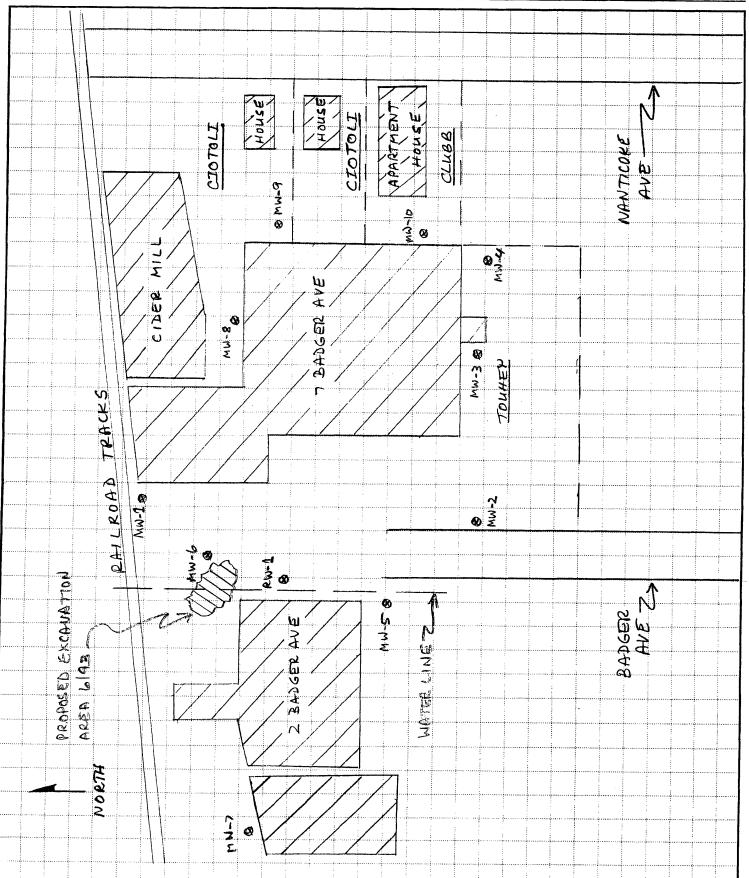
3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403 SHEET NO. OF

CALCULATED BY PHS DATE 10/22/9 2

CHECKED BY PWS DATE 6/14/93

SCALE NOT TO SCALE





100 TOMPKINS ST. CORTLAND, N.Y. 13045 607-753-3403

#### LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Report Date: 6/27/91

Sampling Date: 6/13/91

Site:

7 Badger Avenue

Sampled By: D

D. Dockstater

Sample: Water

Analysis Date: Lab Log No: 6/24/91 9106137

# Volatile Aromatic and Unsaturated Organics by EPA 503.1

	:	MW-1	:	MW-2	:	MW-3	:	MW-4	-:
Benzene	- <u>:</u> -	NTD	<b>_:</b>	NID.	- <b>:</b> -	ND.	<b>_:</b> -	ND.	<b>_:</b>
Bromobenzene	•	ND	•	ND	•	ND	•	ИD	•
n-Butylbenzene	•	ND ND	•	ND	:	ND	•	ND	:
sec-Butylbenzene	•	ND	•	ND ND	•	ND	•	ND	•
tert-Butylbenzene	•	ND	:	ND	•	ND ND	•	ND ND	•
Chlorobenzene	•	ND	•	ND	•		٠	ND ND	•
2-Chlorotoluene	•	ND	•	ND ND	•	ND ND	•	ND	•
4-Chlorotoluene	•		•		•		•		•
	•	ND	•	ND	:	ND	•	ND	•
1,2-Dichlorobenzene	•	ND	:	ND	:	ND	•	ND	:
1,3-Dichlorobenzene	:	ND	:	ND	•	ND	:	ND	•
1,4-Dichlorobenzene	:	ND	:	ND	:	ND	:	ND	:
Ethylbenzene	:	ND	:	ND	:	ND	:	ND	:
Hexachlorobutadiene	:	ND	:	ND	:	ND	:	ND	:
Isopropylbenzene	:	ND	:	ND	:	ND	:	ND	:
p-Isopropyltoluene	:	ND	:	ND	:	ND	:	ND	:
Naphthalene	:	ND	:	ND	:	ND	:	ND	:
n-Propylbenzene	:	ND	:	ND	:	ND	:	ND	:
Styrene	:	ND	:	ND	:	ND	:	ND	:
Tetrachloroethene	:	ND	:	ND	:	ND	:	ND	:
Toluene	:	ND	:	ND	:	ND	:	ND	:
1,2,3-Trichlorobenzene	:	ND	:	ND	:	ND	:	ND	:
1,2,4-Trichlorobenzene	:	ND	:	ND	:	ND	:	ND	:
Trichloroethene	:	286.	:	2.6	:	3.8	:	ND	:
1,2,4-Trimethylbenzene	:	ND	:	ND	:	ND	:	ND	:
1,3,5-Trimethylbenzene	:	ND	:	ND	:	ND	:	ND	:
o-Xylene	:	ND	:	ND	:	ND	:	ND	:
m & p-Xylene	:	ND	:	ND	:	ND	:	ND	:
	_ <b>:</b> _		_:.		_:_		_:_		_:

All concentrations are reported as ug/L.

ND - None detected greater than detection limit of 1.0 ug/L.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



100 TOMPKINS ST. CORTLAND, N.Y. 13045 607-753-3403

#### LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Report Date: 6/27/91

...

Sampling Date:

6/13/91

Site:

7 Badger Avenue

Sampled By:

D. Dockstater

Sample: Water

Analysis Date: Lab Log No: 6/24/91 9106137

# Purgeable Halocarbons (By EPA 601)

CAS No.	Compound	MW-1	MW-2	MW-3
75-27-4	bromodichloromethane	ND	ND	ND
75-25-2	bromoform	ND	ND	ND
74-83-9	bromomethane	ND	ND	ND
56-23-5	carbon tetrachloride	ND	) ND	ND
108-90-7	chlorobenzene	ND	ND	ND
75-00-3	chloroethane	ND	ND	ND
100-75-8	2-chloroethylvinylether	ND	ND	ND
67-66-3	chloroform	ND	ND	ND
74-87-3	chloromethane	ND	ND	ND
124-38-1	dibromochloromethane	ND	ND	ND
95-50-1	1,2-dichlorobenzene	ND	ND	ND
541-73-1	1,3-dichlorobenzene	ND	ND	ND
106-46-7	1,4-dichlorobenzene	ND	ND	ND
75-71-8	dichlorodifluoromethane	ND	ND	ND
75-34-3	1,1-dichloroethane	ND	ND	ND
107-06-2	1,2-dichloroethane	ND	ND	ND
75-35-4	1,1-dichloroethene	ND	ND	ND
156-60-5	trans-1,2-dichloroethene	ND	ND	ND
78-87-5	1,2-dichloropropane	ND	ND	ND
10061-01-5	cis-1,3-dichloropropene	ND	ND	ND
10061-01-6	trans-1,3-dichloropropene	ND	ND	ND
75-09-2	methylene chloride	ND	ND	ND
79-34-5	1,1,2,2-tetrachloroethane	ND	ND	ND
127-18-4	tetrachloroethene	ND	ND	ND
71-55-6	1,1,1-trichloroethane	1.5	ND	ND
79-00-5	1,1,2-trichloroethane	ND	ND	ND
79-01-6	trichloroethene	320.	ND	1.0
75-69-4	trichlorofluoromethane	ND	ND	ND
75-01-4	vinyl chloride	ND	ND	ND

All concentrations are reported as ug/L.

ND - None detected greater than detection limit of 1.0 ug/L.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



100 TOMPKINS ST. · CORTLAND, N.Y. 13045 607-753-3403

#### LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Report Date: 6/27/91

Sampling Date:

6/13/91

Site: 7 Badger Avenue

Sample: Water

D. Dockstater

Analysis Date:

6/24/91

Lab Log No:

Sampled By:

9106137

# Purgeable Halocarbons (By EPA 601)

CAS No.	Compound	MW-4		·
75-27-4	bromodichloromethane	ND		
75-25-2	bromoform	ND		
74-83-9	bromomethane	ND		
56-23-5	carbon tetrachloride	ND		
108-90-7	chlorobenzene	ND		
75-00-3	chloroethane	ND		
100-75-8	2-chloroethylvinylether	ND		
67-66-3	chloroform	ND		
74-87-3	chloromethane	ND	ĺ	
124-38-1	dibromochloromethane	ND		
95-50-1	1,2-dichlorobenzene	ND		1
541-73-1	1,3-dichlorobenzene	ND	]	
106-46-7	1,4-dichlorobenzene	ND		[
75-71-8	dichlorodifluoromethane	ND		
75-34-3	1,1-dichloroethane	ND		[
107-06-2	1,2-dichloroethane	ND		
75-35-4	1,1-dichloroethene	ND		
156-60-5	trans-1,2-dichloroethene	ND		
78-87-5	1,2-dichloropropane	ND		
10061-01-5	cis-1,3-dichloropropene	ND		
10061-01-6	trans-1,3-dichloropropene	ND		
75-09-2	methylene chloride	ND		
79-34-5	1,1,2,2-tetrachloroethane	ND		
127-18-4	tetrachloroethene	ND	J	·
71-55-6	1,1,1-trichloroethane	ND		Į į
79-00-5	1,1,2-trichloroethane	ND		
79-01-6	trichloroethene	ND	'	
75-69-4	trichlorofluoromethane	ND		
75-01-4	vinyl chloride	ND		

All concentrations are reported as ug/L.

ND - None detected greater than detection limit of 1.0 ug/L.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.



100 TOMPKINS ST. CORTLAND, N.Y. 13045 607-753-3403

#### LABORATORY REPORT

Client: Touhey Associates Report Date: 8/14/91

Sampling Date: 7/31/91
Site: 7 Badger Avenue Sampled By: M.H.
Analysis Date: 7/31/91

Sample: Soil Gas Vapor Lab Log No: 9108002

## Soil Gas Vapor by EPA 8010 Instrumentation

Sample Description Air Volume (liters)	SG-1 20.0	SG-2* 20.0	SG-3 20.0	SG-4 20.0
bromodichloromethane	ND	ND	ND	ND
bromoform	ND	ND	ND	ND
bromomethane	ND	ND	ND	ND
carbon tetrachloride	ND	ND	ND	ND
chlorobenzene	ND	ND	ND	ND
chloroethane	ND	ND	ND	ND
2-chloroethylvinylether	ND	ND	ND	ND
chloroform	ND	ND	ND	ND
dibromochloromethane	ND	ND	ND	ND
1,2-dichlorobenzene	ND	ND	ND	ND
1,3-dichlorobenzene	ND	ND	ND	ND
1,4-dichlorobenzene	ND	ND	ND	ND
dichlorodifluoromethane	ND	ND	ND	ND ND
1,1-dichloroethane	ND	ND	ND	ND
1,2-dichloroethane	ND	ND	ND	ND
1,1-dichloroethene	ND	ND	ND	ND
trans-1,2-dichlorothene	ND	ND	ND	ND
1,2-dichloropropane	ND	ND	ND	ND
cis-1,3-dichloropropene	ND	ND	ND	ND
trans-1,3-dichloropropene	ND	ND	ND	ND
methylene chloride	ND	ND	ND	ND
1,1,2,2-tetrachloroethane	ND	ND	ND	ND
tetrachloroethene	23.3	123.	127.	10.4
1,1,1-trichloroethane	42.2	188.	51.1	96.4
1,1,2-trichloroethane	. ND	ND	ND	ND
trichloroethene	5,900	87,400	10,700	8,420

All concentrations are reported as ug/m3.

ND - None detected greater than detection limit of 10 ug/m3.

\* - Detection limit for this sample is 100 ug/m3.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program

100 TOMPKINS ST. • CORTLAND, N.Y. 13045 607-753-3403

#### LABORATORY REPORT

Client: TOUHRY ASSOCIATES

Site: 7 Badger Avenue

Samples: Sludge

1. South Floor Drain

2. Dry Well

Report Date: Sampling Date:

7/25/91 7/17/91

Sampled By:

P. Shaffner

Analysis Date: Lab Log No: 7/18/91 9107129

# Purgeable Halocarbons (By EPA 5030 and 8010)

CAS No.	Compound	1*	2	
75-27-4	bromodichloromethane	ND	ND	
75-25-2	bromoform	ND	ND	1
74-83-9	bromomethane	ND	ND	
56-23-5	carbon tetrachloride	ND	ND	
108-90-7	chlorobenzene	ND	ND	
75-00-3	chloroethane	ND	ND	
100-75-8	2-chloroethylvinylether	ND	ND	
67-66-3	chloroform	ND	ND	
74-87-3	chloromethane	ND	ND	
124-38-1	dibromochloromethane	ND	ND	
95-50-1	1,2-dichlorobenzene	ND	ND	
541-73-1	1,3-dichlorobenzene	ND	ND	
106-46-7	1,4-dichlorobenzene	ND	ND	
75-71-8	dichlorodifluoromethane	ND	ND	
75-34-3	1,1-dichloroethane	ND	ND	
107-06-2	1,2-dichloroethane	ND	ND	
75-35-4	1,1-dichloroethene	ND	ND	
156-60-5	trans-1,2-dichloroethene	ND	ND	
78-87-5	1,2-dichloropropane	ND	ND	
10061-01-5	cis-1,3-dichloropropene	ND	ND	
10061-01-6	trans-1,3-dichloropropene	ND	ND	
75-09-2	methylene chloride	ND	ND	
79-34-5	1,1,2,2-tetrachloroethane	ND	ND	
127-18-4	tetrachloroethene	ND	ND	
71-55-6	1,1,1-trichloroethane	ND	ND	
79-00-5	1,1,2-trichloroethane	ND	ND	
79-01-6	trichloroethene	ND	5.4	]
75-69-4	trichlorofluoromethane	ND	ND	
75-01-4	vinyl chloride	ND	ND	

<sup>\* -</sup> Detection limit for this sample is 3.0 ug/kg.

All concentrations are reported as ug/kg.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

ND - None detected greater than detection limit of 2.0 ug/kg.



100 TOMPKINS ST. • CORTLAND, N.Y. 13045 607-753-3403

#### LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Site: 7 Badger Avenue

Samples: Water

East Floor Drain
 North Floor Drain

Report Date: Sampling Date:

7/25/91 7/17/91

Sampled By:

P. Shaffner

Analysis Date: Lab Log No: 7/18/91 9107129

# Purgeable Halocarbons (By EPA 601)

CAS No.	Compound	1*	2	
75-27-4	bromodichloromethane	ND	ND	
75-25-2	bromoform	ND	ND	
74-83-9	bromomethane	ND	ND	
56-23-5	carbon tetrachloride	ND	ND	
108-90-7	chlorobenzene	ND	ND	
75-00-3	chloroethane	ND	ND	
100-75-8	2-chloroethylvinylether	ND	ND	
67-66-3	chloroform	ND	ND	
74-87-3	chloromethane	ND	ND	
124-38-1	dibromochloromethane	ND	ND	
95-50-1	1,2-dichlorobenzene	ND	ND	
541-73-1	1,3-dichlorobenzene	ND	ND	
106-46-7	1,4-dichlorobenzene	ND	ND	
75-71-8	dichlorodifluoromethane	ND	ND	
75-34-3	1,1-dichloroethane	ND	ND	
107-06-2	1,2-dichloroethane	ND	ND	
75-35-4	1,1-dichloroethene	ND	ND	
156-60-5	trans-1,2-dichloroethene	ND	ND	
78-87-5	1,2-dichloropropane	ND	ND	
10061-01-5	cis-1,3-dichloropropene	ND	ND	
10061-01-6	trans-1,3-dichloropropene	ND	ND	
75-09-2	methylene chloride	ND	ND	
79-34-5	1,1,2,2-tetrachloroethane	ND	ND	
127-18-4	tetrachloroethene	ND	ND	
71-55-6	1,1,1-trichloroethane	ND	ND	
79-00-5	1,1,2-trichloroethane	ND	ND	
79-01-6	trichloroethene	ND	ND	
75-69-4	trichlorofluoromethane	ND	ND	
75-01-4	vinyl chloride	ND	ND	

\* - Detection limit for this sample is 5.0 ug/L.

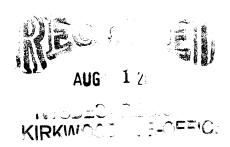
All concentrations are reported as ug/L.

ND - None detected greater than detection limit of 2.0 ug/L.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

REPORT OF SOIL EXCAVATION AND REMEDIATION SYSTEM INSTALLATION AT 2 BADGER AVENUE, ENDICOTT, NEW YORK

AUGUST 1993



#### PREPARED FOR:

MR. CARL TOUHEY
TOUHEY ASSOCIATES
WASHINGTON AVENUE EXTENSION
BUILDING 2
ALBANY, NEW YORK

#### PREPARED BY:

BUCK ENGINEERING
PO BOX 5150
3845 ROUTE 11 SOUTH
CORTLAND, NEW YORK 13045
607-753-3403

# REPORT OF SOIL EXCAVATION AND REMEDIATION SYSTEM INSTALLATION AT BADGER AVE, ENDICOTT-AUG 93

### APPENDIX B

### LABORATORY REPORTS

Laboratory reports resulting from the analysis of soil and air samples taken during the activities described herein are provided on the following pages.

P.O. BOX 5150 607-753-3403

Client: Touhey Associates

Pine West Plaza, Building 2 Washington Avenue Extension

Site: Badger Avenue

# LABORATORY REPORT Lab Log No: 9306239

Report Date: Sampling Date: Sampled By:

07/28/93 06/17/93 P. Shaffner 06/17/93

Date Received: Analyzed by:

CEB, 07/01/93

#### Sample ID: **Soil-Bottom of Excavation**

# **VOLATILES BY METHOD EPA 8021**

ANALYTE	CAS#	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	2.0	nd
Bromobenzene	108-86-1	ug/kg	2.0	nd
Bromochloromethane	74-97-5	ug/kg	2.0	nd
Bromodichloromethane	75-27-4	ug/kg	2.0	nd
Bromoform	75-25-2	ug/kg	2.0	nd - 1
Bromomethane n-Butylbenzene	74-83-9 104-51-8	ug/kg	2.0 2.0	nd d
sec-Butylbenzene	135-98-8	ug/kg ug/kg	2.0	nd nd
tert-Butylbenzene	98-06-6	ug/kg ug/kg	2.0	nd
Carbon Tetrachloride	56-23-5	ug/kg	2.0	nd
Chlorobenzene	108-90-7	ug/kg	2.0	nd
Chloroethane	75-00-3	ug/kg	2.0	nd
Chloroform	67-66-3	ug/kg	2.0	nd
Chloromethane	74-87-3	ug/kg	2.0	nd
2-Chlorotoluene	95-49-8	ug/kg	2.0	nd
4-Chlorotoluene	106-43-4	ug/kg	2.0	nd
Dibromochloromethane	124-48-1	ug/kg	2.0	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	2.0	nd
1,2-Dibromoethane	106-93-4	ug/kg	2.0	nd
Dibromomethane	74-95-3	ug/kg	2.0	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	2.0	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	2.0	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	2.0	nd
Dichlorodifluoromethane	75-71-8	ug/kg	2.0	nd
1,1-Dichloroethane	75-34-3	ug/kg	2.0	nd
1,2-Dichloroethane	107-06-2	ug/kg	2.0	nd
1,1-Dichloroethene cis-1,2-Dichloroethene	75-35-4	ug/kg	2.0 2.0	nd
trans-1,2-Dichloroethene	156-59-4 156-60-5	ug/kg	2.0	nd ∙nd
1,2-Dichloropropane	78-87-5	ug/kg ug/kg	2.0	nd nd
1,3-Dichloropropane	142-28-9	ug/kg ug/kg	2.0	nd
2,2-Dichloropropane	590-20-7	ug/kg	2.0	nd
1,1-Dichloropropene	563-58-6	ug/kg	2.0	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	2.0	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	2.0	nd
Ethylbenzene	100-41-4	ug/kg	2.0	nd
Hexachlorobutadiene	87-68-3	ug/kg	2.0	nd
Isopropylbenzene	98-82-8	ug/kg	2.0	nd
p-Isopropyltoluene	99-87-6	ug/kg	2.0	nd
Methylene Chloride	75-09-2	ug/kg	2.0	nd
Naphthalene	91-20-3	ug/kg	2.0	nd
Propylbenzene	103-65-1	ug/kg	2.0	nd
Styrene	100-42-5	ug/kg	2.0	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	2.0	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	2.0	nd
Tetrachloroethene	127-18-4	ug/kg	2.0	nd
Toluene	108-88-3	ug/kg	2.0	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	2.0	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	2.0	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	2.0	nd
1,1,2-Trichloroethane Trichloroethene	79-00-5	ug/kg	2.0	nd
i richloroeinene Frichlorofluoromethane	79-01-6	ug/kg	2.0	*6.7*
l 1,2,3-Trichloropropane	75-69-4 96-18-4	ug/kg	2.0 2.0	nd -d
l,2,4-Trimethylbenzene	96-18-4 95-63-6	ug/kg	2.0	nd 
1,2,4-1 nmemylbenzene 1,3,5-Trimethylbenzene	93-63-6 108-67-8	ug/kg	2.0	nd nd
Vinyl Chloride	75-01-4	ug/kg	2.0	nd nd
o-Xylene	75-01-4 95-47-6	ug/kg	2.0	
m,p-Xylenes	93-47-6 108-38-3/1	ug/kg	2.0	nd nd
	1/0-20-2/1	ug/kg	2.0	nd

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York

State Department of Health ELAP Program.

**Laboratory Director ELAP ID - 10795** 

# BUCK ENVIRONMENTAL

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403

Client: Touhey Associates

Pine West Plaza, Building 2
Washington Avenue Extension

Site: 7 Badger Avenue

Endicott, NY

# LABORATORY REPORT Lab Log No: 9306338

Report Date: Sampling Date: 07/28/93 06/23/93 D. Shearer

Sampled By: Date Received: Analyzed by:

06/23/93 PAI, 07/07/93

## Sample ID: Soil Pile

## **VOLATILES BY METHOD EPA 8021**

Sumple 12.1 Sum a me				
ANALYTE	CAS#	UNITS	DL	RESULT
Benzene	71-43-2	ug/kg	125	nd
Bromobenzene	108 <b>-8</b> 6-1	ug/kg	125	nd
Bromochloromethane	74-97-5	ug/kg	125	nd
Bromodichloromethane	75-27-4	ug/kg	125	nd
Bromoform	75-25-2	ug/kg	125	nd
Bromomethane	74-83-9	ug/kg	125	nd
n-Butylbenzene	104-51-8	ug/kg	125	nd
sec-Butylbenzene	135-98-8	ug/kg	125	*144*
tert-Butylbenzene	98-06-6	ug/kg	125	*148*
Carbon Tetrachloride	56-23-5	ug/kg	125	nd
Chlorobenzene	108-90-7	ug/kg	125	nd
Chloroethane	75-00-3	ug/kg	125	nd
Chloroform	67-66-3	ug/kg	125	nd
Chloromethane	74-87-3	ug/kg	125	nd
2-Chlorotoluene	95-49-8	ug/kg	125	nd
4-Chlorotoluene	106-43-4	ug/kg	125	nd
Dibromochloromethane	124-48-1	ug/kg	125	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	125	nd
1,2-Dibromoethane	106-93-4	ug/kg	125	nd
Dibromomethane	74-95-3	ug/kg	125	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	125	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	125	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	125	nd
Dichlorodifluoromethane	75-71-8	ug/kg	125	nd
1,1-Dichloroethane	75-34-3	ug/kg	125	nd
1,2-Dichloroethane	107-06-2	ug/kg	125	nd
1,1-Dichloroethene	75-35-4	ug/kg	125	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	125	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	125	nd
1,2-Dichloropropane	78-87-5	ug/kg	125	nd
1,3-Dichloropropane	142-28-9	ug/kg	125	nd
2,2-Dichloropropane	590-20-7	ug/kg	125	nd
1,1-Dichloropropene	563-58-6	ug/kg	125	nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	125	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	125	nd
Ethylbenzene	100-41-4	ug/kg	125	nd
Hexachlorobutadiene	87-68-3	ug/kg	125	nd
Isopropylbenzene	98-82-8	ug/kg	125	nd
p-Isopropyltoluene	99-87-6	ug/kg	125	nd
Methylene Chloride	75-09-2	ug/kg	125	nd
Naphthalene	91-20-3	ug/kg	125	nd
Propylbenzene	103-65-1	ug/kg	125	nd
Styrene	100-42-5	ug/kg	125	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	125	nd
1,1,2,2-Tetrachloroethane	79-34-5	ug/kg	125	nd
Tetrachloroethene	127-18-4	ug/kg	125	nd
Toluene	108-88-3	ug/kg	125	nd
1,2,3-Trichlorobenzene	87-61-6	ug/kg	125	nd
1,2,4-Trichlorobenzene	120-82-1	ug/kg	125 125	nd
1,1,1-Trichloroethane	71-55-6 70.00.5	ug/kg		nd
1,1,2-Trichloroethane Trichloroethene	79-00-5 79-01-6	ug/kg	125 125	nd nd
Trichlorofluoromethane	79-01-6 75-69-4	ug/kg	125	na nd
1,2,3-Trichloropropane	75-69-4 96-18-4	ug/kg	125	na nd
1,2,4-Trimethylbenzene	90-18-4 95-63-6	ug/kg	125	na nd
1,3,5-Trimethylbenzene	93-63-6 108-67-8	ug/kg	125	
Vinvl Chloride	75-01-4	ug/kg	125 125	nd nd
	75-01-4 95-47-6	ug/kg	125 125	na nd
o-Xylene	95-47-0 108-38-3/1	ug/kg	125	na nd
m,p-Xylenes	100-30-3/1	ug/kg	123	na

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

**Laboratory Director ELAP ID - 10795** 



P.O. BOX 5150 607-753-3403

#### AIR SAMPLE LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Report Date: 7/28/93
Site: Badger Avenue

Date Sampled: 6/18/93
Date of Analysis: 7/02/93
Sample: Air

Sampled By: E.S., D.D.

Purgeable Halocarbons By EPA 601 and NYSDOH 311-2

Sample Description	4" Sparging Vent*	MW-6**
bromodichloromethane	ND	ND
bromoform	ND	ND
bromomethane	ND	ND
carbon tetrachloride	ND	ND
chlorobenzene	ND	ND
chloroethane	ND	ND
2-chloroethylvinylether	ND	ND
chloroform	ND	ND
chloromethane	ND	ND
dibromochloromethane	ND	ND
1,2-dichlorobenzene	ND	ND
1,3-dichlorobenzene	ND	ND
1,4-dichlorobenzene	ND	ND
dichlorodifluoromethane	ND	ND
1,1-dichloroethane	ND	ND
1,2-dichloroethane	ND	ND
1,1-dichloroethene	ND	ND
trans-1,2-dichloroethene	ND	ND
1,2-dichloropropane	ND	ND
cis-1,3-dichloropropene	ND	ND
trans-1,3-dichloropropene	ND	ND
methylene chloride	ND	ND
1,1,2,2-tetrachloroethane	ND	ND
tetrachloroethene	58.2	ND
1,1,1-trichloroethane	40.0	ND
1,1,2-trichloroethane	ND	ND
trichloroethene	9,000	ND
trichlorofluoromethane	ND	ND
vinyl chloride	ND	ND
Additional Compounds: cis 1,2-dichloroethene	140.	ND

<sup>\* -</sup> Detection limit for this sample is 40 ug/m3.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director

NYS ELAP CERT 10795

<sup>\*\* -</sup> Detection limit for this sample is 20 ug/m3.

All concentrations are reported as ug/m3.



P.O. BOX 5150 607-753-3403

#### AIR SAMPLE LABORATORY REPORT

Client: TOUHEY ASSOCIATES Report Date: 8/30/93 Sampling Date:

8/20/93

Site:

2 Badger Avenue

Sampled By: Analysis Date: E.Spencer 8/20/93

Sample: Air Lab Log No:

9308285

## Purgeable Halocarbons By EPA 601 and NYSDOH 311-2

Sample Description	Infl 15 liters	Effl 15 liters
bromodichloromethane	ND	ND
bromoform	ND	ND
bromomethane	ND	ND
carbon tetrachloride	ND	ND
chlorobenzene	ND	ND
chloroethane	ND	ND
2-chloroethylvinylether	ND	ND
chloroform	ND	ND
chloromethane	ND	ND
dibromochloromethane	ND	ND
1,2-dichlorobenzene	ND	ND
1,3-dichlorobenzene	ND	ND
1,4-dichlorobenzene	ND	ND
dichlorodifluoromethane	ND	ND
1,1-dichloroethane	ND	ND
1,2-dichloroethane	ND	ND
1,1-dichloroethene	ND	ND
trans-1,2-dichloroethene	20.3	ND
1,2-dichloropropane	ND	ND
cis-1,3-dichloropropene	ND	ND
trans-1,3-dichloropropene	ND	ND
methylene chloride	ND	ND
1,1,2,2-tetrachloroethane	ND	ND
tetrachloroethene	41.7	ND
1,1,1-trichloroethane	88.4	ND
1,1,2-trichloroethane	ND	ND
trichloroethene	13,200	ND
trichlorofluoromethane	ND	ND
vinyl chloride	ND	ND
Additional Compound:		
cis-1,2 dichloroethene	272.	ND

All concentrations are reported as ug/m3.

ND - None detected greater than detection limit of 20 ug/m3.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program



P.O. BOX 5150 607-753-3403

#### AIR SAMPLE LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Report Date: Sampling Date:

8/30/93 8/20/93

Site:

2 Badger Avenue

Sampled By:

E.Spencer

Sample: Air - Field Blank

Analysis Date:

8/20/93

Lab Log No:

9308285

# Purgeable Halocarbons By EPA 601 and NYSDOH 311-2

All concentrations are reported as ug/m3.

ND - None detected greater than detection limit of 20 ug/m3.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.//

# BUCK ENVIRONMENTAL

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045 P.O. BOX 5150 607-753-3403

Client: Touhey Associates

Pine West Plaza, Building 2
Washington Avenue Extension

Site: Badger Avenue

Report Date: Sampling Date:

Sampled By:

08/12/93 07/19/93 E. Spencer 07/19/93

Date Received: Analyzed by:

PAI, 07/30/93

# Sample ID: Piping Trench by NW Window

## **VOLATILES BY METHOD EPA 8021**

LABORATORY REPORT Lab Log No: 9307278

ANALYTE	CAS#	UNITS	$\mathbf{DL}$	RESULT
Benzene	71-43-2	ug/kg	10.	nd
Bromobenzene	108-86-1	ug/kg	10.	nd
Bromochloromethane	74-97-5	ug/kg	10.	nd
Bromodichloromethane	75-27-4	ug/kg	10.	nd
Bromoform	75-25-2	ug/kg	10.	nd
Bromomethane	74-83-9	ug/kg	10.	nd
n-Butylbenzene	104-51-8	ug/kg	10.	*1860*
sec-Butylbenzene	135-98-8	ug/kg	10.	nd
tert-Butylbenzene	98-06-6	ug/kg	10.	nd
Carbon Tetrachloride	56-23-5	ug/kg	10.	nd
Chlorobenzene	108-90-7	ug/kg	10. 10.	nd
Chloroethane Chloroform	75-00-3 67-66-3	ug/kg	10. 10.	nd
Chloromethane	74-87-3	ug/kg	10. 10.	nd nd
2-Chlorotoluene	95-49-8	ug/kg ug/kg	10.	nd
4-Chlorotoluene	106-43-4	ug/kg	10.	nd
Dibromochloromethane	124-48-1	ug/kg	10.	nd
1,2-Dibromo-3-chloropropan	96-12-8	ug/kg	10.	nd
1,2-Dibromoethane	106-93-4	ug/kg	10.	nd
Dibromomethane	74-95-3	ug/kg	10.	nd
1,2-Dichlorobenzene	95-50-1	ug/kg	10.	nd
1,3-Dichlorobenzene	541-73-1	ug/kg	10.	nd
1,4-Dichlorobenzene	106-46-7	ug/kg	10.	nd
Dichlorodifluoromethane	75-71-8	ug/kg	10.	nd
1,1-Dichloroethane	75-34-3	ug/kg	10.	nd
1,2-Dichloroethane	107-06-2	ug/kg	10.	nd
1,1-Dichloroethene	75-35-4	ug/kg	10.	nd
cis-1,2-Dichloroethene	156-59-4	ug/kg	10.	nd
trans-1,2-Dichloroethene	156-60-5	ug/kg	10.	*10.3*
1,2-Dichloropropane	78-87-5	ug/kg	10.	nd
1,3-Dichloropropane 2,2-Dichloropropane	142-28-9 590-20-7	ug/kg ug/kg	10. 10.	nd
1,1-Dichloropropene	563-58-6	ug/kg ug/kg	10.	nd nd
cis-1,3-Dichloropropene	10061-01-5	ug/kg	10.	nd
trans-1,3-Dichloropropene	10061-02-6	ug/kg	10.	nd
Ethylbenzene	100-41-4	ug/kg	10.	*374*
Hexachlorobutadiene	87-68-3	ug/kg	10.	nd
Isopropylbenzene	98-82-8	ug/kg	10.	nd
p-Isopropyltoluene	99-87-6	ug/kg	10.	*211*
Methylene Chloride	75-09-2	ug/kg	10.	nd
Naphthalene	91-20-3	ug/kg	10.	*276
Propylbenzene	103-65-1	ug/kg	10.	*219*
Styrene	100-42-5	ug/kg	10.	nd
1,1,1,2-Tetrachloroethane	630-20-6	ug/kg	10.	nd
1,1,2,2-Tetrachloroethane Tetrachloroethene	79-34-5	ug/kg	10.	nd
Toluene	127-18-4 108-88-3	ug/kg	10. 10.	nd *18.5*
1.2.3-Trichlorobenzene	87-61-6	ug/kg ug/kg	10.	*18.5* nd
1.2.4-Trichlorobenzene	120-82-1	ug/kg	10.	nd
1,1,1-Trichloroethane	71-55-6	ug/kg	10.	nd
1,1,2-Trichloroethane	79-00-5	ug/kg	10.	nd
Trichloroethene	79-01-6	ug/kg	10.	nd
Trichlorofluoromethane	75-69-4	ug/kg	10.	nd
1,2,3-Trichloropropane	96-18-4	ug/kg	10.	nd
1,2,4-Trimethylbenzene	95-63-6	ug/kg	10.	*380*
1,3,5-Trimethylbenzene	108-67-8	ug/kg	10.	*266*
Vinyl Chloride	75-01-4	ug/kg	10.	nd
o-Xylene	95-47-6	ug/kg	10.	*200*
m,p-Xylenes	108-38-3/1	ug/kg	10.	*36.1*

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

**Laboratory Director ELAP ID - 10795** 

REPORT OF DRY WELL **EXCAVATION** 2 BADGER AVENUE ENDICOTT, NY

OCTOBER 1992

PREPARED FOR:

MR. CARL TOUHEY TOUHEY ASSOCIATES PINE WEST PLAZA WASHINGTON AVENUE EXTENSION ALBANY, NEW YORK 12205

PREPARED BY:

BUCK ENGINEERING P.O. BOX 5150 3845 ROUTE 11 SOUTH CORTLAND, NEW YORK 13045

DRY WELL EXCAVATION REPORT 2 BADGER AVE, ENDICOTT, NY

#### APPENDIX A

#### LABORATORY REPORTS

The laboratory report resulting from the analysis of composite soil samples from the bottom of the dry well excavations are provided on the following pages. Copies of the laboratory reports from the analysis of dry well sludge samples are also included.



3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045 P.O. BOX 5150 607-753-3403 LABORATORY REPORT Lab Log No: 9209260

Client: Touhey Associates

Pine West Plaza, Building 2

Washington Avenue Extension

Albany, NY 12205

Site: 7 Badger Avenue

Report Date: 10/13/92 Sampling Date: 09/28/92

Sampled By: Dan Dockstate

Date Received: 09/28/92

Analyzed by: MMV, 10/02/92

Sample ID: soil - East Drywell

**VOLATILES BY METHOD 8240** 

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/Kg	5.0	ND
Bromodichloromethane	75-27-4	ug/Kg	5.0	ND
Bromoform	75-25-2	ug/Kg	5.0	ND
Bromomethane	74-83-9	ug/Kg	10	ND
Carbon tetrachloride	56-23-5	ug/Kg	5.0	ND
Chlorobenzene	108-90-7	ug/Kg	5.0	ND
Chloroethane	75-00-3	ug/Kg	10	ND
2-Chloroethylvinyl ether	110-75-8	ug/Kg	10	ND
Chloroform	67-66-3	ug/Kg	5.0	ND
Chloromethane	74-87-3	ug/Kg	10	ND
Dibromochloromethane	124-48-1	ug/Kg	5.0	ND
1,1-Dichloroethane	75-34-3	ug/Kg	5.0	ND
1,1-Dichloroethene	75-35-4	ug/Kg	5.0	ND
trans-1,2-Dichloroethene	156-60-5	ug/Kg	5.0	ND
1,2-Dichloropropane	78-87-5	ug/Kg	5.0	ND
cis-1,3-Dichloropropene	10061-01-5	ug/Kg	5.0	ND
trans-1,3-Dichloropropene	10061-02-6	ug/Kg	5.0	ND
thyl benzene	100-41-4	ug/Kg	5.0	ND
Methylene chloride	75-09-2	ug/Kg	5.0	ND
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg	5.0	ND
Tetrachloroethene	127-18-4	ug/Kg	5.0	ND
Toluene	108-88-3	ug/Kg	5.0	ND
1,1,1-Trichloroethane	71-55-6	ug/Kg	5.0	ND
1,1,2-Trichloroethane	79-00-5	ug/Kg	5.0	ND
richloroethene	79-01-6	ug/Kg	5.0	14.2
richlorofluoromethane	75-69-4	ug/Kg	5.0	ND
inyl Chloride	75-01-4	ug/Kg ug/Kg	10	
,2-Dichlorobenzene	95-50-1	ug/Kg	5.0	ND ND
,3-Dichlorobenzene	541-73-1	ug/Kg	5.0	ND ND
,4-Dichlorobenzene	106-46-7	ug/Kg	5.0	ND
ichlorodifluoromethane	75-71-8	ug/Kg	5.0	ND ND
ylenes (m,o,p)	1330-20-7	ug/Kg ug/Kg	5.0	
cetone	67-64-1	ug/kg ug/Kg	100	ND ND
arbon Disulfide	75-15-0	ug/Kg ug/Kg	100	
Butanone	78-93-3	ug/kg ug/Kg	100	ND
inyl Acetate	108-05-4		50	ND
-Methyl-2-pentanone	108-03-4	ug/Kg	50 50	ND
- Hexanone	91-78-6	ug/Kg	50 50	ND
tyrene	100-42-5	ug/Kg ug/Kg	5.0	ND
,2-dichloroethane	107-42-5		5.0	ND
TBE	167-08-2	ug/Kg		ND
IDE	1034*04*4	ug/Kg	10	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

Laboratory Director ELAP ID - 10795

# BUCK ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045 P.O. BOX 5150 607-753-3403

## LABORATORY REPORT Lab Log No: 9209260

Client: Touhey Associates

Pine West Plaza, Building 2

Washington Avenue Extension

Albany, NY 12205

Site: 7 Badger Avenue

Report Date: 10/13/92

Sampling Date: 09/28/92 Sampled By: Dan Dockstate

Date Received: 09/28/92

Analyzed by: MMV, 10/02/92

Sample ID: soil - West Drywell

**VOLATILES BY METHOD 8240** 

ANALYTE	CAS #	UNITS	DL	RESULT
Benzene	71-43-2	ug/Kg	5.0	ND
Bromodichloromethane	75-27-4	ug/Kg	5.0	ND
Bromoform	75-25-2	ug/Kg	5.0	ND
Bromomethane	74-83-9	ug/Kg	10	ND
Carbon tetrachloride	56-23 <i>-</i> 5	ug/Kg	5.0	ND
Chlorobenzene	108-90-7	ug/Kg	5.0	ND
Chloroethane	75-00-3	ug/Kg	10	ND
2-Chloroethylvinyl ether	110-75-8	ug/Kg	10	ND
Chloroform	67-66-3	ug/Kg	5.0	ND
Chloromethane	74-87-3	ug/Kg	10	ND
Dibromochloromethane	124-48-1	ug/Kg	5.0	ND
1,1-Dichloroethane	75-34-3	ug/Kg	5.0	ND ND
1,1-Dichloroethene	75-35-4	ug/Kg	5.0	ND
trans-1,2-Dichloroethene	156-60-5	ug/Kg	5.0	ND ND
1,2-Dichloropropane	78-87-5	ug/Kg	5.0	ND
cis-1,3-Dichloropropene	10061-01-5	ug/Kg	5.0	ND ND
trans-1,3-Dichloropropene	10061-02-6	ug/Kg	5.0	ND ND
Ethyl benzene	100-41-4	ug/Kg	5.0	ND
Methylene chloride	75-09-2		5.0	
1,1,2,2-Tetrachloroethane	79-34-5	ug/Kg	5.0	ND
Tetrachloroethene	127-18-4	ug/Kg	5.0	ND
Toluene	108-88-3	ug/Kg	5.0	ND
1,1,1-Trichloroethane	71-55-6	ug/Kg	5.0	ND
1,1,2-Trichloroethane	71-33-6 79-00-5	ug/Kg	5.0	ND
Trichloroethene	79-00-3	ug/Kg		ND
Trichlorofluoromethane		ug/Kg	5.0	162
	75-69-4	ug/Kg	5.0	ND
Vinyl Chloride	75-01-4	ug/Kg	_10	ND
1,2-Dichlorobenzene	95-50-1	ug/Kg	5.0	ND
1,3-Dichlorobenzene	541-73-1	ug/Kg	5.0	ND
1,4-Dichlorobenzene	106-46-7	ug/Kg	5.0	ND
Dichlorodifluoromethane	75-71-8	ug/Kg	5.0	ND
Xylenes (m,o,p)	1330-20-7	ug/Kg	5.0	ND
Acetone	67-64-1	ug/Kg	100	ND
Carbon Disulfide	<b>75-15-0</b>	ug/Kg	100	ND
2_Butanone	78-93-3	ug/Kg	100	ND
Vinyl Acetate	108-05-4	ug/Kg	50	ND
4-Methyl-2-pentanone	108-10-1	ug/Kg	50	ND
2-Hexanone	91-78-6	ug/Kg	50	ND
Styrene	100-42-5	ug/Kg	5.0	ND
1,2-dichloroethane	107-06-2	ug/Kg	5.0	ND
MŤBE	1634-04-4	ug/Kg	10	ND

ND - None detected greater than detection limit (DL) noted.

These results are certified as conforming with generally accepted laboratory standards and requirements of the New York State Department of Health ELAP Program.

**Laboratory Director ELAP ID - 10795** 

CORTLAND, N.Y. 13045

P.O. BOX 5150 607-753-3403

Report Date:

10/08/92

Lab Log Number:

9209260

## LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Site:

7 Badger Avenue

Date of Sample:

9/28/92 by D. Dockstater

Sample: Soil

Method:

Total Petroleum Hydrocarbon by EPA Method 418.1

(Modified Infrared Absorbtion)

## TOTAL PETROLEUM HYDROCARBON QUANTITATION

West Drywell

9.0 ug/g

East Drywell

ND (<5.0 ug/g)

ND - None detected greater than detection limits noted.

This analysis is certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

> John H. Buck, P.Ε. Laboratory Director

> NYS ELAP CERT 10795

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045 P.O. BOX 5150 607-753-3403

Report Date:

10/09/92

Lab Log Number:

9209260

### LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Site:

7 Badger Avenue

Sample Date: 9/28/92 by D. Dockstater

Sample: Soil - West Drywell

Method: Total Metals by EPA 3050

#### TOTAL METALS RESULTS

	EPA <u>Method</u>	Results <u>(ug/g)</u>		
Arsenic	200.7	ND (<10.8)		
Cadmium	200.7	ND (<5.40)		
Chromium	200.7	1,350		
Lead	200.7	269		

Dry weight basis.

ND - None detected greater than detection limits noted.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director

NYS ELAP CERT 10795

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045 P.O. BOX 5150 607-753-3403

Report Date:

10/09/92

Lab Log Number:

9209260

## LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Site:

7 Badger Avenue

Sample Date: 9/28/92 by D. Dockstater

Sample: Soil - East Drywell

Method: Total Metals by EPA 3050

## TOTAL METALS RESULTS

	EPA <u>Method</u>	Results (ug/g)	
Arsenic	200.7	ND (<11.2)	
Cadmium	200.7	ND (<5.60)	
Chromium	200.7	13.4	
Lead	200.7	48.1	

Dry weight basis.

ND - None detected greater than detection limits noted.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director

NYS ELAP CERT 10795

# BUCK ENVIRONMENTAL ANALYSIS

3845 ROUTE 11 SOUTH, CORTLAND, N.Y. 13045 P.O. BOX 5150 607-753-3403

#### LABORATORY REPORT

Client: TOUHEY ASSOCIATES

Report Date: 3/26/92

Site: 2 Badger Ave.

Sampling Date: 3/12/92
Sampled By: P. Shaffner

Endicott, NY

Analysis Date: 3/19/92

Samples: Drywell - Sludge

Lab Log Number: 9203078

Purgeable Halocarbons (By EPA 5030 and 8010)

CAS No.	Compound	Drywell-W	Drywell-E*	
75-27-4	bromodichloromethane	ND	ND	
75-25-2	bromoform	ND	ND	
74-83-9	bromomethane	ND	ND	1
56-23-5	carbon tetrachloride	ND	ND	
108-90-7	chlorobenzene	ND	ND	
75-00-3	chloroethane	ND	ND	
100-75-8	2-chloroethylvinylether	ND	ND	[
67-66-3	chloroform	ND	ND	
74-87-3	chloromethane	ND	ND	
124-38-1	dibromochloromethane	ND	ND	
95-50-1	1,2-dichlorobenzene	ND	ND	
541-73-1	1,3-dichlorobenzene	ND	ND	
106-46-7	1,4-dichlorobenzene	ND	ND	
75-71-8	dichlorodifluoromethane	ND	ND	
75-34-3	1,1-dichloroethane	ND	ND	
107-06-2	1,2-dichloroethane	ND	ND	}
75-35-4	1,1-dichloroethene	ND	ND	
156-60-5	trans-1,2-dichloroethene	ND	ND	
78-87-5	1,2-dichloropropane	ND	ND	
10061-01-5	cis-1,3-dichloropropene	<b>N</b> D	ND	
10061-01-6	trans-1,3-dichloropropene	ND	ND	
75-09-2	methylene chloride	ND	ND	
79-34-5	1,1,2,2-tetrachloroethane	ND	ND	ll l
127-18-4	tetrachloroethene	ND	ND	1
71-55-6	1,1,1-trichloroethane	ND	ND	
79-00-5	1,1,2-trichloroethane	ND	, <b>N</b> D	]
79-01-6	trichloroethene	1.4	.02	((
75-69-4	trichlorofluoromethane	ND	ND	)}
75-01-4	vinyl chloride	ND	ND	

All concentrations are reported as ug/g.

ND - None detected greater than detection limit of .04 ug/g.

\* - Detection limit for this sample is .004 ug/g.

These analyses are certified as conforming to generally accepted laboratory practices and requirements of the New York State Health Department ELAP program.

John H. Buck, P.E. Laboratory Director NYS ELAP CERT 10795

## Shaw Environmental & Infrastructure Engineering of New York, P.C.



13 British American Boulevard Latham, NY 12110-1405 Phone: 518.783.1996

Fax: 518.783.8397

# FINAL PHASE II INVESTIGATION REPORT NYSDEC - SOUTH CENTRAL ENDICOTT AREA 1 Endicott, New York

NYSDEC Site No. 704038

December 21, 2005

Submitted to:

Sally W.W. Dewes, P.E. New York Department of Environmental Conservation Bureau of Remedial Action 625 Broadway Albany, NY 12233

Submitted by:

Shaw Environmental and Infrastructure Engineering of New York, P.C. 13 British American Boulevard Latham, NY 12110

Written/Prepared by:

Reviewed/Approved by:

Heather A. Fariello Project Scientist

David C. Stoll, P.G. Senior Project Manager

Heatheut. Fariello

# 3.4 SCE Area 1D Individual Property Summaries

SCE Area 1-D is bordered to the north by Maple Avenue, Union Avenue to the south, Dehart Avenue to the east, and Liberty Avenue to the west (**Figures 4D** and **5D**). The following properties were included in this investigation:

7 Nanticoke Avenue (SCE-22) is currently the location of LTJ Auto and Sensible Car Rental. Review of Sanborn map coverage for the site show it as a dwelling, a garage, and co-op in 1918. The site remained as a dwelling and a garage in the 1927 and 1948 Sanborn maps. The 1963 Sanborn map show the site occupied by a used auto sales, repair, and filling station/shop. When researched in Shaw's database the site was identified as the location of a former auto painting, repair, gas, and sales shop.

One soil gas sample (DEC-02-SG-10) was collected on the western property boundary; DEC-02-SG-9 was collected in the northeastern corner of the property. Acetone, 1,1-DCA, MTBE, MEK, cis-1,2-DCE, 1,1,1-TCA, benzene, TCE, toluene, PCE and m,p-xylenes were detected in both samples. Chloroform was only detected in DEC-02-SG-9 where vinyl acetate was only detected in DEC-02-SG-10.

Two groundwater samples were proposed at this property. Only DEC-02-GW-30 was collected because no water was encountered at DEC-02-GW-29. 1,1-DCE, 1,1,-DCA, cis-1,2-DCE, trans-1,2-DCE, PCE, 1,1,1-TCA and TCE were detected in DEC-02-GW-29; however, only cis-1,2-DCE and TCE exceeded the applicable groundwater quality standards.

11 and 13 Nanticoke Avenue (SCE-23) is currently the location of Just-in-Time Inc, a used car dealership. Review of Sanborn map coverage for the site show that it was a dwelling in 1918 and a dwelling with a garage in 1927. The 1948 and 1963 Sanborn maps show that the site was occupied by a filling station and an auto repair shop. When researched in Shaw's database the site was identified as the location of a former auto repair, gas, sales shop, and a construction company.

Two soil gas samples, DEC-02-SG-25 and DEC-02-SG-26, were collected on the western boundary of the property. Acetone, carbon disulfide, MEK, MTBE, 1,1,1-TCA, BTEX, TCE and PCE were detected in both samples. Freon 113, Freon 11, chloroform and cis-1,2-DCE were also detected in DEC-02-SG-25.

One groundwater sample, DEC-02-GW-31, was collected at this property. Chloroform, 1,1-DCA, cis-1,2-DCE, trans-1,2-DCE, 1,1,1-TCA, TCE and vinyl chloride were detected at this location, however, only cis-1,2-DCE and TCE exceeded the applicable groundwater standards.

107 North Street (SCE-27) is currently the location of Carp Corner Bait and Tackle Shop. Review of Sanborn map coverage for the site showed that the property did not exist prior to 1927. Sanborn maps for 1948 and 1963 indicate the site was occupied by a dry cleaning business. When researched in Shaw's database the site was identified as the location of former dry cleaning business and auto repair and sales shop.

Three soil gas samples (DEC-02-SG-6 through DEC-02-SG-8) were collected along the northern property boundary. Acetone, MEK, MTBE, benzene, toluene, and m,p-xylenes were detected in all of the samples. TCE, PCE, Freon 11 and o-xylene were detected in samples DEC-02-SG7 and DEC-02-SG8. DEC-02-SG-8 also had a detection for 1,1,1-TCA.

One groundwater sample, DEC-02-GW-26 was collected upgradient (northeast) of the property and two groundwater samples (DEC-02-GW-27 and DEC-02-GW-28) were collected on the property. PCE was detected twice and m,p-xylenes and TCE were each detected once. All detections were well below the applicable groundwater standards except for PCE in DEC-02-GW-27. PCE in this sample was detected at 9.4  $\mu$ g/L and the groundwater standard for PCE is 5  $\mu$ g/L.

The address 9 Badger Avenue (SCE-1) does not currently exist on a current street map but is assumed to be a part of 7 Badger Avenue. Three dwellings are in the vicinity of 9 Badger Avenue on the 1918 Sanborn Map. The property is vacant on the 1927 Sanborn Map. A beverage company exists at this address on the 1948 Sanborn Map. Canada Dry Bottling Company is present at this address on the 1963 Sanborn Map. According to Shaw's database and/or information provided by the NYSDEC to Shaw, there was a tetrachloroethene (PCE) spill on or near this property. This property was chosen for further investigation because PCE is a compound of concern.

Five soil gas samples (DEC-02-SG-17 through DEC-02-SG-22) were collected from the southern portion of the property and three soil gas samples (DEC-02-SG-11, DEC-02-SG-12 and DEC-02-SG20) were collected in the northwest corner of the property.

TCE and toluene were detected in the southern property samples DEC-02-SG-18 through DEC-02-SG-22. DEC-02-SG-18, DEC-02-SG-19, DEC-02-SG-21 and DEC-02-SG-22 had detections for acetone, MTBE, MEK, PCE and m,p-xylenes. DEC-02-SG-19, DEC-02-SG-21 and DEC-02-SG-22 had detections for carbon disulfide and benzene. Ethylbenzene and o-xylene were detected in DEC-02-SG-19 and DEC-02-SG-21. 1,1,1-TCA was detected in DEC-02-SG-20 through DEC-02-SG-22. There was one detection for 1,1,-DCE (DEC-02-SG-22), Freon 113 (DEC-02-SG-22) and cis-1,2-DCE (DEC-02-SG20).

Cis-1,2-DCE, and TCE were detected in all three northwest corner samples (DEC-02-SG11, 12 and 20). Toluene and 1,1,1-TCA were both detected in DEC-02-SG11 and DEC-02-SG22. DEC-02-SG-11 had additional detections for vinyl chloride, methylene chloride, trans-1,2-DCE and PCE.

Four groundwater samples (DEC-02-GW-32 through DEC-02-GW-35) were collected at this property. Two samples, DEC-02-GW-36 and DEC-02-GW-37 were collected northwest of the property. TCE and cis-1,2-DCE were detected in all five samples. There were three detections for toluene and two detections for trans-1,2-DCE, 1,1,1-TCA and vinyl chloride. Both carbon disulfide and chloroform were each detected once in DEC-02-GW-34. All detections were below pertinent groundwater quality standards or guidance values except for the following: trans-1,2-DCE (19 μg/L) and TCE (260 μg/L) in DEC-02-GW-37; cis-1,2-DCE (26 μg/L) and TCE (180 μg/L) in DEC-02-GW-35 and TCE (5.3 μg/L) in DEC-02-GW-34.

The address 4 and 8 Badger Avenue (SCE-61) does not appear on a current street map. A large industrial building is present near 8 Badger Avenue. A 1918 Sanborn Map was not available for this property. This location does not exist on the 1927 Sanborn Map; however Deyo Oil Co., Inc is located in the general area. The location also does not exist on the 1948 Sanborn Map; however, Mission Beverage Company and Endicott Block and Supply Company are located in the general area. On the 1963 Sanborn Map this address still does not exist; however Canada Dry Bottling Company is present in the general area.

4 Badger Avenue was investigated because according to the Shaw database, a dry well was removed from site and there were detections of TCE (a compound of concern) in the water samples. 8 Badger Avenue was investigated at the request of the NYSDEC because it has a documented history of environmental impairment.

Three soil gas samples, DEC-02-SG-13, DEC-02-SG-14 and DEC-020SG16 were collected from the property. Soil gas sample DEC-02-SG-12 was collected northeast of the property and DEC-02-SG-15 (and its duplicate, DEC-02-Dupe1) was collected northwest of the property. DEC-02-SG-11 and DEC-02-SG-20 were collected further north.

TCE was detected in DEC-02-SG-11 through DEC-02-SG-14 and DEC-02-SG-20. Cis-1,2-DCE was detected in both DEC-02-SG-12 and DEC-02-SG-14. 1,1,1-TCA and PCE were detected in Samples DEC-02-SG-13 and DEC-02-SG-14. In addition to the other compounds detected, DEC-02-SG-13 also had detections for acetone, MTBE, MEK and BTEX compounds. Cis-1,2-DCE, toluene and 1,1,1-TCA were detected in both DEC-02-SG-11 and DEC-02-SG-20 samples. Vinyl chloride, methylene chloride, trans-1,2-DCE and PCE were also detected in DEC-02-SG-11.

MTBE, MEK, benzene, TCE, toluene, PCE, and m,p-xylenes were detected in both DEC-02-SG-15, DEC-02-SG-Dupe1 and DEC-02-SG-16. Carbon disulfide and 1,1,1-TCA were detected in DEC-02-SG-15 and the duplicate sample. Acetone, ethylbenzene and o-xylene were detected in DEC-02-SG-16.

One groundwater sample, DEC-02-GW-38, was collected at this property. Cis-1,2-DCE and TCE were detected in the sample and only TCE (13  $\mu$ g/L) exceeded the applicable groundwater quality standard of 5  $\mu$ g/L.

312 Maple Street (SCE-100) has a warehouse, office space, and a building present on it. It appeared to be abandoned during site reconnaissance. The address does not exist on the 1918, 1927, or 1948 Sanborn Maps. However, the Collingwood Shoe Factory is present in the area on the 1927 and 1948 Maps. A large building (use unknown) is present at this address on the 1963 Sanborn Map. According to the Shaw database, a Brownfield grant was received to investigate the property. The property contained up to three buildings that had been used for a variety of commercial and industrial purposes. Groundwater samples collected in the area indicated a detection of TCE at 250  $\mu$ g/L. This property was investigated at the request of the NYSDEC because it has a documented history of environmental impairment.

Three soil gas samples were collected to the north (DEC-02-SG-23 and DEC-02-SG-24) and south (DEC-02-SG-104) of the property. DEC-02-SG105 was also collected south of the property but was not analyzed because of a faulty seal with the summa canister. Acetone, MEK,

toluene, PCE, ethylbenzene and m,p-xylenes were detected in all three samples. Carbon disulfide and MTBE were also detected in DEC-02-SG-23. Chloroform, benzene, 1,1,1-TCA, TCE and o-xylene were detected in DEC-02-SG-24. DEC-02-SG-104 also had detections for Freon 11, Freon 113, vinyl acetate, TCE, 4-methyl-2-pentanone, styrene, o-xylene, carbon disulfide and benzene.

Two groundwater samples, DEC-02-GW-39 and DEC-02-GW-40 were collected in the vicinity of this property. DEC-02-GW-39 was collected north of the property and had no analyte detections. DEC-02-GW-40 was collected southwest of the property and had detections for chloroform, cis-1,2-DCE, 1,1,1-TCA and TCE. Only TCE (11  $\mu$ g/L) exceeded the applicable groundwater quality standard of 5  $\mu$ g/L.

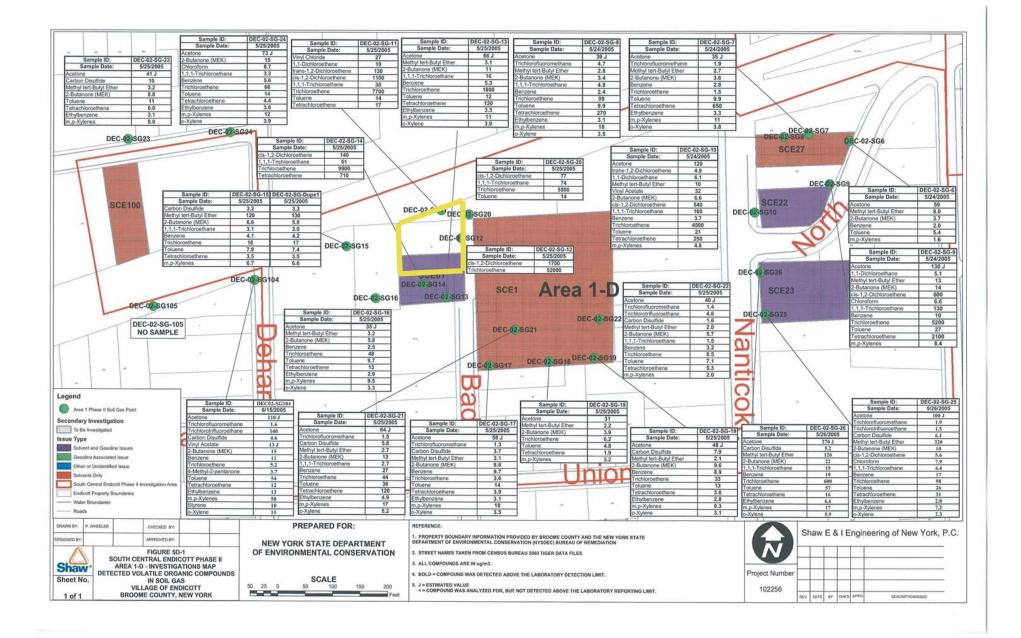
## Summary

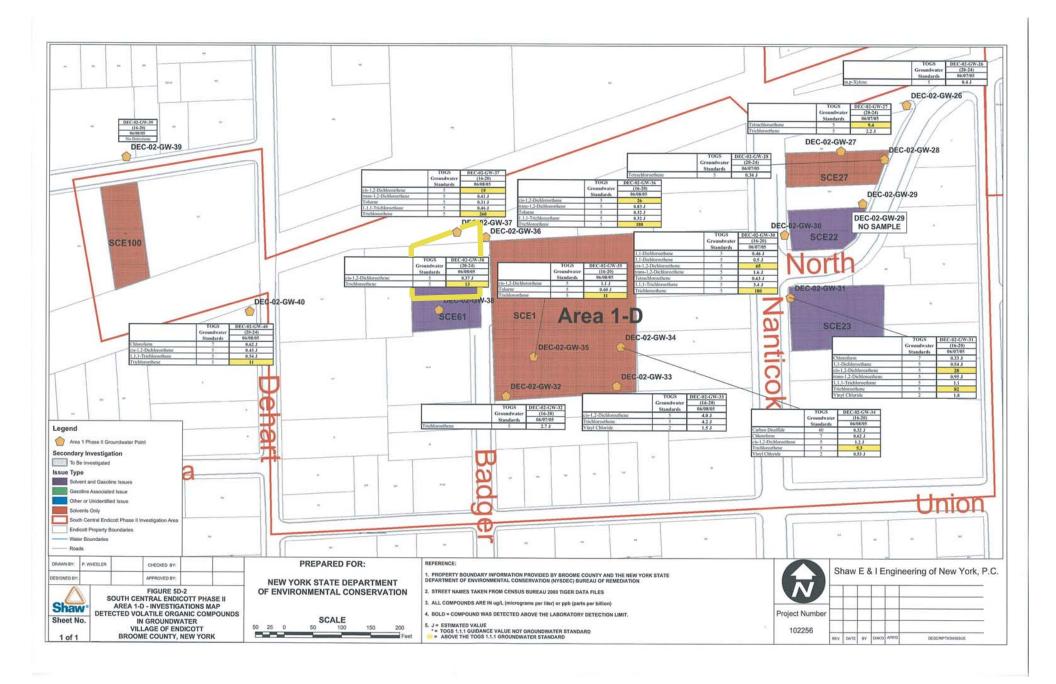
Properties SCE-22 and SCE23 are located in the eastern part of Area 1-D. Property SCE-22, had the highest detections for 1,1-DCA, vinyl acetate, 1,1,1-TCA and PCE in the area while property SCE-23 had the highest detections for acetone, MEK, toluene and MTBE. Property SCE-1 located in the center of this area had the highest detection for benzene. Sample DEC-02-SG-12 located north of property SCE-61 and west of property SCE-1 had the highest detection of TCE at 52,000 ug/m³. Located further north of SCE-61, sample DEC-02-SG-11 had the highest detection for cis,1-2-DCE. The two samples collected north of property SCE-100 which is located in the western portion of Area 1D, had the highest detections for carbon disulfide and chloroform.

TCE was detected in 11 samples and exceeded the groundwater standard (5  $\mu$ g/L) in eight samples. Cis-1,2-DCE was detected in nine samples and exceeded the applicable groundwater standard (5  $\mu$ g/L) in four samples. There was one exceedence for PCE (9.4  $\mu$ g/L) in DEC-02-GW-27. All other compounds detected were below the applicable groundwater quality standard or guidance value.

# 3.5 SCE Area 1E Individual Property Summaries

SCE Area 1-E is bordered to the north by the railroad, Chestnut Avenue to the south, Liberty Avenue to the east, and Mechanic Avenue to the west (**Figures 4E** and **5E**). The following properties were included in this investigation:





# DRAFT Phase IIB Investigation Report South Central Endicott Area (Area 1) Endicott Area-wide Study Endicott, New York

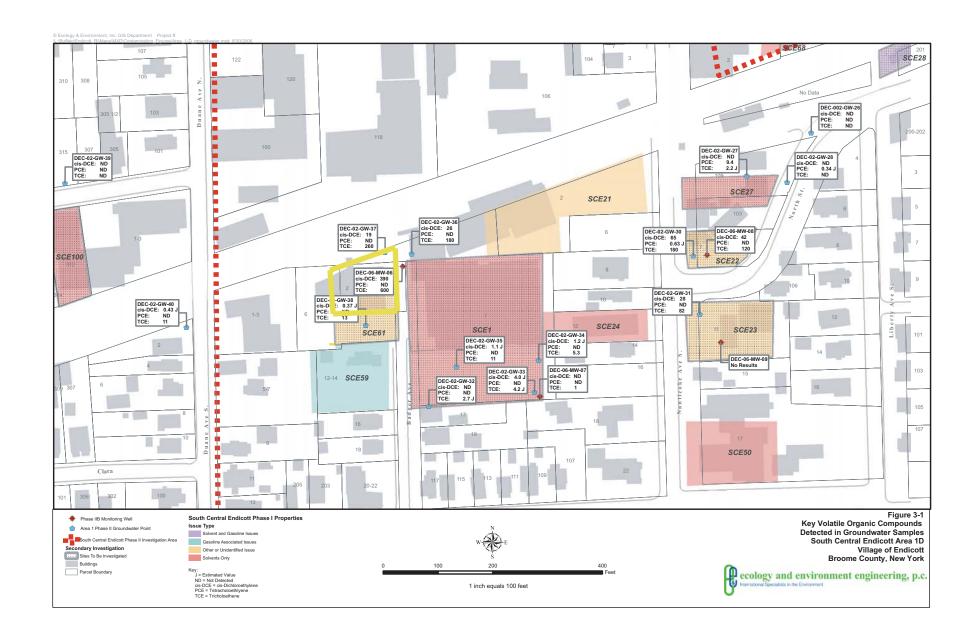
Site Number: 7-04-038

November 2006

**Prepared for:** 

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

625 Broadway Albany, New York 12233



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Orlando J Ciotoli	8 Nanticoke Ave	Endicott	NY	13760	
Orlando Ciotoli	8 Nanticoke Ave	Endicott	NY	13760	
Orlando J Ciotoli	8 Nanticoke Ave	Endicott	NY	13760	
Roger Bell	12 Nanticoke Ave	Endicott	NY	13760	
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Sharon L Stratton	17 Badger Ave	Endicott	NY	137604	
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		Endicott		13760	
Richard A. Materese	1425 Campville Road	Endicott	NY	13760	
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The Honorable Clifford Crouch	1 Kattelville Road, Suite 1	Binghamton	NY	13901	
The Honorable Maurice D. Hinchey	100A Federal Building	Binghamton	NY	13901	
T	James M. Hanley Federal Building		<b>.</b>	10001	
The Honorable Hillary Rodham Clinton	100 S. Clinton St, PO Box 7378	Syracuse	NY	13261	
The Honorable Charles Schumer	15 Henry Street, Room B6	Binghamton	NY	13901	
Press Sun Bulletin	PO Box 1270	Binghatmon	NY	13902-1270	
The County Courier	1035 Conklin Road	Conklin	NY	13748-1102	
The Vestal Town Crier	1035 Conklin Road	Conklin	NY	13748-1102	
WAAL Radio 99.1 FM	59 Court Street	Binghamton	NY	13901	
WCDW-FM Radio	495 Court Street	Binghamton	NY	13901	
WHWK 98.1 FM	59 Curt Street	Binghamton	NY	13901	
WNBF-AM 1290	59 Court Street	Binghamton	NY	13902	
WOOS 1360 Radio	59 Court Street	Binghamton	NY	13901	
WWYL 104.1 FM	59 Court Street	Binghamton	NY	13901	
WBOH-TV	203 Ingraham Road	Binghamton	NY	13903	
WIVT-TV 34	203 Ingraham Hill Road	Binghamton	NY	13903-5511	

Union Endicott High School c/o Pamela Sellitto	1200 East Main Street	Endicott	NY	13760
Charles F. Johnson Elementary School c/o William Tomic	715 Paden Street	Endicott	NY	13760
George F. Johnson Elementary School c/o James Fountaine	999 Taft Avenue	Endicott	NY	13760
Thomas J. Watson Elementary School c/o Jo Gilbert	263 Ridgefield Road	Endicott	NY	13760
L.W. West Primary School c/o Vickie Wychock	1201 Union CtrMaine Hwy.	Endicott	NY	13760
A.G. McGuiness School c/o Timothy Lowie	1301 Union CtrMaine Hwy.	Endicott	NY	13760
Jennie F. Snapp Middle School c/o Ann marie Foley	101 Loder Avenue	Endicott	NY	13760
Planning & Zoning Director Paul A. Nelson	3111 E. Main St.	Endwell	NY	13760-5990
Rita M. Petkash, Broome County Planning Commisioner	Fifth Floor, Broome County Office Building, 44 Hawley Street, PO Box 1766	Binghamton	NY	13902-1766
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