New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
Bureau of Hazardous Site Control
Additions/Change to Registry Summary of Approvals

915157

Site Name Mr. C's Dry Cleaners DEC I.D. Number 915514

Current Classification _____

Activity ☑ Add as Class 2 ☐ Reclassify to ___ ☐ Delist Category ___ ☐ Modify ___

Approvals.

Regional Hazardous Waste Engineer	Yes ☑	No ☐
NYSDOH	Yes ☑	No ☐
DEE	Yes ☑	No ☐
BHSC: a. Investigation Section	Yes ☑	No ☐
b. Site Control Section	Robert J Marino	Date 10/26/92
c. Director	W Edemich for E HB	Date 11/24/92
DHWR Assistant Director	Charles Holden	Date 12/1/92

owner letter mailed 12/14/92
Adj Prop owner letters mailed 12/29/92

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

10/23/91

Original-BHSC
Copy-REGION
Copy-DEE
Copy DOH
Copy-PREPARER

REGISTRY SITE CLASSIFICATION DECISION

1. SITE NAME	2. SITE NO	3. TOWN/CITY/VILLAGE	4. COUNTY
Mr. C's Cleaners		Village of East Aurora	Erie

5. REGION: 9
6. CLASSIFICATION: 2 Current Proposed X Modify

7. LOCATION OF SITE (Attach U.S.G.S Topographic Map showing site location)

a. Quadrangle	b. Site Latitude	Longitude	c. Tax Map Number
East Aurora, NY	42 46' 00"	78 38' 00"	164.20-7-24

8. BRIEFLY DESCRIBE THE SITE (Attach site plan showing disposal/sampling locations)
The contaminant source is an operating dry cleaning business. DEC investigation into an organic odor (perchloroethylene-PERC) problem at the East Aurora First Presbyterian Church determined the source to be from Mr. C's Dry Cleaning. Contamination of groundwater is documented by samples taken in May 1992 from monitoring wells. Highest concentrations were found adjacent to the dry cleaners. A soil gas survey completed also shows the highest levels of Perchloroethylene adjacent to Mr. C's dry cleaners.

a. Area __1___ acres b. EPA ID Number _____

c. Completed ( )Phase I ( )Phase II ( )PSA ( )RI/FS ( )PA/SI (X)Other Environmental Site Invest.

9. HAZARDOUS WASTES DISPOSED
Dry cleaning solvents - tetrachloroethylene F001

10. ANALYTICAL DATA AVAILABLE
a. (X)Air (X)Groundwater ( )Surface Water ( )Soil ( )Waste ( )EPTox ( )TCLP
b. Contravention of Standards or Guidance Values
Well ESI-3 Tetrachloroethylene 5600 ppb (Class GA Groundwater Standard = 5 ppb)

11. JUSTIFICATION FOR CLASSIFICATION DECISION
The disposal of hazardous waste has impacted the groundwater quality 3 orders of magnitude over groundwater standards. Further, a neighboring church has experienced strong odors in its day-care facilities requiring venting, and preventing the use of the basement even though it is of relatively new construction. These odors were determined to be tetrachloroethylene traced to Mr. C's Cleaners. Mr. Jack Crawford, owner of the dry cleaners, has told DEC personnel that still bottoms from the operation were disposed of into a dumpster in the parking lot prior to 1985. Condensate from the steam flushing and vacuuming process were disposed of in the sanitary sewers. A sewer sample taken in March of 1992 showed 47 ppb of PCE. Also, the highest levels of groundwater contamination were found in a well closest to the Mr. C's dry cleaning.

12. SITE IMPACT DATA
a. Nearest surface water: Distance _1000_ft. Direction _North__ Classification _unk_____
b. Nearest Groundwater: Depth __10__ft. Flow Direction _SW_____ ( )Sole Source ( )Primary ( )Principal
c. Nearest water supply: Distance __1___mi. Direction _all private wells_ Active (X)Yes ( )No
d. Nearest building: Distance _on site_ Direction _____ Use _Dry Cleaning Business_

e. In State Economic Development Zone?	( )Y (X)N	i. Controlled site access?	( )Y (X)N
f. Crops or livestock on site?	( )Y (X)N	j. Exposed hazardous waste?	( )Y (X)N
g. Documented fish or wildlife mortality?	( )Y (X)N	k. HRS Score	_____
h. Impact on special status fish or wildlife resource?	( )Y (X)N	l. For Class 2: Priority Category	__1__

13. SITE OWNER'S NAME	14. ADDRESS	15. TELEPHONE NUMBER
Jack Crawford	586 Main St., East Aurora, NY 14052	(716) 652-5900

16. PREPARER	17. APPROVED
Signature / Date: 12/1/92	Signature / Date: 12/1/92
Tony Sylvester, SWM Spec. 1, Site Control Name, Title, Organization	_Charles N. Goddard, Asst. Director, DHWR_ Name, Title, Organization

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Center for Environmental Health 2 University Place Albany, New York 12203-3399

Mark R. Chassin, M.D., M.P.P., M.P.H.
Commissioner
Paula Wilson
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH
Sue Kelly
Executive Deputy Director
William N. Stasiuk, P.E., Ph. D.
Center Director

October 21, 1992

Mr. Earl Barcomb, P.E., Director
Bureau of Hazardous Site Control
NYS Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233

RE: Addition to Registry
Mr. C's Dry Cleaner
(V) East Aurora, Erie County

Dear Mr. Barcomb:

A review of the Classification Package for the Mr. C's Dry Cleaner site has been completed. The analytical data indicate that the groundwater and the sanitary sewer system have been impacted with organic compounds associated with the dry cleaning industry. In addition, the results of analysis of indoor air samples collected from a nearby church show elevated levels of tetrachloroethene. Because the groundwater contamination has already impacted the air quality in the church and there is the potential that other residential homes in the area could be impacted, this Department concurs with the proposed Class 2 classification for this site.

If you have any questions, please contact me at (518) 458-6310.

Sincerely,

G. Anders Carlson

G. Anders Carlson, Ph.D.
Director
Bureau of Environmental Exposure
Investigation

tjl/92294PRO0699

cc: Dr. Smith-Blackwell/Mr. C'Connor, WRO
Mr. Doster, DEC
Mr. Buechi, DEC
Mr. Kociela, ECHD

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999

Thomas C. Jorling
Commissioner

AUG

M E M O R A N D U M

TO: Mr. Robert Marino, Hazardous Site Control, Albany

FROM: Mr. Martin Doster, Regional HWR Engineer, Region 9

SUBJECT: Mr. C's Cleaners - Proposed Site Listing
Aurora (T), Erie County

DATE: August 13, 1992

Please find a "listing" package for the above-noted site. This DEC investigation began in January 1992 after odors were reported in a church basement. Due to the proximity of two petroleum related spill cleanups, DEC's Spill Response Section conducted various sampling activities which culminated in the attached report entitled Environmental Site Investigation - First Presbyterian Church by Huntingdon-Empire Soils Investigations, Inc., dated July 28, 1992.

Review of the data indicates the dry-cleaning business as the source. It is theorized the contaminant source was a discharge to the sanitary sewer which leaked to the sewer bedding where communication with the groundwater allowed dissolution to occur.

Region 9 staff met with the owner on August 7, 1992 to ask questions regarding past disposal operations. Mr. Crawford indicated he disposed of Perchloroethylene (PERC) prior to 1985 by sending still bottoms to a dumpster located adjacent to the property. The dumpster was picked up by the municipality. Since 1985, a recycler has been used for all waste PERC. Mr. Crawford claimed no indiscriminate dumping occurred since he has owned the business (purchased from Sweet Klean in 1975). Please refer to attached notes from meeting. It is noted that a changeover of equipment occurred in late 1991 which may have caused a spill/release to occur.

Due to odors and air sampling results confirming PERC contamination at the church, it is recommended the site be listed on the Registry as Class 2 and be referred to DEE for enforcement action. It is requested a priority be placed on the review of this recommendation since the church may likely experience odors once the heating season begins and an IRM would be warranted requiring prompt action by NYSDEC and DOH.

Mr. Kevin Glaser can be reached at 716/851-7220 if there are questions regarding this project.

vam

cc: Mr. John Spagnoli
Mr. Peter Buechi/Mr. Martin Doster/Mr. Kevin Glaser
Mr. Joseph Ryan
Mr. Cameron O'Connor

CLASSIFICATION WORKSHEET

Site: Mr. C's County: Erie Region: 9

1. Hazardous waste disposed? [X] Y (to 2) [ ] N (Stop) [ ] U (Stop)

2. Consequential amount of hazardous waste? Y (to 3) [ ] N (Stop) [X] U (to 3)

3. Part 375-1.4(a)(1) applies? [ ] N (to 4) [ ] U (to 4)

[X] Y (as checked below; Class 2; to 5)

- [ ] a. endangered or threatened species
- [ ] b. streams, wetlands or coastal zone
- [ ] c. bioaccumulation
- [ ] d. fish, shellfish, crustacea or wildlife
- [ ] e. fire, spill, explosion or toxic reaction
- [X] f. proximity to people or water supplies

Odors documented to be tetrachloroethylene in building. NYSDOH concerns regarding air quality.

4. Part 375-1.4(a)(2) applies? [ ] N (Cl 3; Stop) [ ] U (Cl 2a; Stop)

[ ] Y (Class 2; to 5)

5. Factor(s) considered in making this determination:

- Contamination of air in the neighboring building
- Contravention of groundwater standards (5600 ppb vs. 5 ppb std.)
- Violation of sewer use ordinance

SUMMARY

Consequential Hazardous Waste	[ ] Yes	[ ] No	[X] Unknown
Significant Threat	[X] Yes	[ ] No	[ ] Unknown

Proposed Classification 2 Site Number

7/31/92
Date

MH Doster Env. Engineer III
Signature and Title

10/6/92

NEW YORK STATE DEPARTMENTS OF ENVIRONMENTAL CONSERVATION AND HEALTH
INACTIVE HAZARDOUS WASTE DISPOSAL, SITE PRIORITY RANKING WORKSHEET

SITE I.D. _____ SITE NAME MR. C'S CLEANERS

Priority I - Sites for which remediation should supersede all other Class 2 sites. Priority I can be assigned if any one of the following questions can be answered affirmatively.

a) Has a public or private water supply which is currently in use been contaminated or threatened?.... ☐

b) Has human exposure to contaminants (or the potential for exposure) been identified which represents a significant health risk as determined by DOH?..... ☒

c) Has bioaccumulation of site contaminants in flora or fauna resulted in a health advisory?..... ☐

d) Are site contaminants present at levels that are acutely toxic to fish or wildlife or that have caused documented fish or wildlife mortality?..... ☐

☒ (1)

[If 1 or more boxes are checked, check this box]

° **Priority II** - Important Sites. Priority II will be assigned if any of the following questions can be answered affirmatively.

a) Has a Class A or AA surface water body, primary or principal aquifer been contaminated or threatened without affecting an existing water supply?..... ☐

b) Has bioaccumulation of site contaminants in flora or fauna resulted in actionable levels (but not a health advisory)?..... ☐

c) Are contaminants at levels chronically toxic to fish/wildlife?..... ☐

d) Have endangered, threatened or rare species, significant habitats, designated coastal zone or regulated wetlands been impacted by releases from the site?..... ☐

☐ (2)

[If 1 or more boxes are checked, check this box]

° **Priority III** - will be assigned unless one or more of the site prioritization criteria, specified above, apply to a site. After remedial needs for Priority I and II sites have been accommodated, remediation of sites under this category can be considered. If Priority III, check box 3. ☐ (3)

Enter the number of the priority box checked 1, 2, or 3 here..... 1 (4)
This is the site's priority rank.

FACTORS

IJC Factor - If the sites has been identified by the International Joint Commission (IJC) as a component in a remedial action plan, subtract (1) from the value in box 4 and enter the result in box 5..... ☐ (5)

	Yes	No
EDZ Factor - If the site is within a New York State designated Economic Development Zone (EDZ) should this fact cause the site priority to be raised?.....	☐	☐
Community Support Factor - If the site has been targeted for local government-supported development by a developer willing to sign a consent order with DEC to finance investigation and remediation should this fact cause the site priority to be raised?.....	☐	☐

If either "yes" box is checked, subtract 1 from the value in box 4 and enter the result into box 6. If "no" is checked, the value in box 6 equals box 4 (or box 5 if applicable). If both IJC and EDZ/Community Support factors apply, only 1 (not 2) will be subtracted from the value in box 4. The resultant value in box 6 will never be less than 1..... ☐ (6)

	Yes	No
IRM NOTE: Should this site be considered a candidate for an Interim Remedial Measure (IRM) as defined by 6NYCRR Part 375-1.3n?	☒	☐

If "yes" please explain why: ODORS IN THE CHURCH HAS REQUIRED THEM TO RELOCATE THEIR DAY-CARE FACILITY TO ANOTHER PART OF THE BUILDING AND INSTALL FANS AND VENTS IN THE AREA OF CONCERN

Preparer DENNIS PARKER FOR M. DOSTER Date 11/13/92

APPENDIX 2-1
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 2 REGION: 9 SITE CODE: _____
EPA ID: _____

NAME OF SITE: Mr. C's Dry Cleaning
STREET ADDRESS: 586 Main Street
TOWN/CITY: East Aurora COUNTY: Erie ZIP: 14052

SITE TYPE: Open Dump- Structure-X Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 1 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Jack Crawford
CURRENT OWNER ADDRESS.: 586 Main Street, East Aurora
OWNER(S) DURING USE...:
OPERATOR DURING USE...:
OPERATOR ADDRESS.....:
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From unk To present

SITE DESCRIPTION:

The site is an area adjacent to an operating dry cleaning business on Main Street in the Village of East Aurora. An institutional building located approximately 400 feet southwest of Mr. C's complained of strong odors in part of their building which was documented to be primarily tetrachloroethylene. NYSDEC performed a preliminary site assessment in July 1992 which confirmed groundwater and sanitary sewer contamination adjacent to the dry cleaning business.

The actual disposal method is not known at this time.

HAZARDOUS WASTE DISPOSED: TYPE	CONFIRMED X	SUSPECTED __ QUANTITY (units)
Tetrachloroethylene	F001	unk.

NOTE: This form is currently undergoing revisions for possible use in the 1993 Registry volume.

APPENDIX 2-2

SITE CODE:

ANALYTICAL DATA AVAILABLE:
Air- * Surface Water- Groundwater- * Soil- Sediment-

CONTRAVENTION OF STANDARDS:
Groundwater- * Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..: State- * Federal-
STATUS: Proposed Negotiation in Progress- Order Signed-

REMEDIAL ACTION: RI/FS

Proposed- * Under design- In Progress- Completed-
NATURE OF ACTION:

GEOTECHNICAL INFORMATION:
SOIL TYPE: Palmyra gravely loam
GROUNDWATER DEPTH: 10 feet

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Groundwater and sanitary sewer contamination which has impacted a neighboring building's air quality.

ASSESSMENT OF HEALTH PROBLEMS:

File

New York State Department of Environmental Conservation
270 Michigan Avenue, Buffalo, New York 14203-2999

Thomas C. Jorling
Commissioner

July 27, 1992

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Jack Crawford
586 Main Street
East Aurora, New York 14052

Dear Mr. Crawford:

The Department of Environmental Conservation has been investigating the presence of odors in the First Presbyterian Church on Main Street in the Village of East Aurora. The Department has reason to believe that your business may have contributed to the source of the odors in the church. This belief is based upon the nature of your business and the compounds found thus far in the investigation.

In light of the above, please properly respond to our request for information pursuant to the Environmental Conservation Law (ECL) 27-1307, specifically:

1) A description of the types and annual quantities of wastes generated by your business.

2) The manner of disposal of the wastes generated. If this material was disposed of by an outside contractor, give their name and current address and the location of final disposal.

We have scheduled a meeting with the Departments Divisions of Water and Hazardous Waste Remediation for Friday, August 7, 1992 at 10:00 AM at our office at 270 Michigan Avenue. Your attendance is requested at this meeting to discuss the above questions. If you cannot attend at the scheduled time please contact either Mr. Kevin Glaser or myself at (716) 851-7220 or at the above address.

Sincerely,

Martin L. Doster, P.E.
Regional Engineer - Hazardous Waste Remediation

MLD/ad

KNG —

RECEIVED

AUG 03 1992

ENVIRONMENTAL CONSERVATION

July 30 1992
586 Main St.
E. Aurora N.Y. 14052

N.Y.S.D.E.C.
Mr Martin L Doster P.E.

I dispose of approximately 40 Cartridges per year EPEC#74 Tetrachlorethlene F002 UN1897 and approximately 70 gallons of still bottoms and waste water per year EPEC#74 Tetrachlorethelne F002 UN1897.

The waste is picked up by Safety Klean 75 N Gates Ave, Lackawanna NY 14218.

The waste is taken to a collection point at Avon N.Y. and then to Hebron, Ohio where it is re-cycled.

In 1989 I used 1200 gallons of perchloroethylene In 1990 I used 800 gal, In 1991 I used 430 gals and so far in 1992 I have received 309 gals.

200 gals of the 309 were used for start up of a new machine.

Jack W Crawford
Mr C Cleaners
586 Main St
E Aurora NY 14052

MEETING NOTES 10:00 AM AUGUST 7, 1992

Meeting with Mr. Jack Crawford, owner of Mr. C's Cleaners, 586 Main Street in the Village of East Aurora.

* The Department informed Mr. Crawford of our investigation results. These indicate his business is the most probable source of contamination affecting the nearby First Presbyterian Church.

* We asked Mr. Crawford if he had knowledge of any disposal/spill incident at his business, particularly during November or December 1991. He did not.

* Mr. Crawford has owned the business for 17 years.

* We informed Mr. Crawford of his position as a Potentially Responsible Party (PRP) and that the site was being recommended for listing on the Registry.

* We mentioned possible solutions to existing problems and that the costs for this work would be the responsible party's.

* We asked where present wastes are disposed. Presently, they go to recycling through Safety Kleen.

* Still bottoms used to go into a dumpster in the parking lot behind the locksmith for municipal garbage pickup prior to 1985.

* The parking lot has been paved since Mr. Crawford owned the property. However, Mr. Crawford recalls it always being paved.

* The store was a "Sweet Clean" dry cleaners before Mr. Crawford purchased the property.

* The business has two dry cleaning units. The oldest is a year and a half old, and the new unit was put on line in February 1992. These units are washer and dryers combined and have their own solvent distillation systems enclosed.

* After removal from units, clothes are steam flushed and vacuumed. Formerly, the condensate from this process went to the sanitary sewer. A sample taken in March 1992 showed 47 ppb PCE in this water.

* The old process (before the new machines) used a separate washer and dryer. Then clothes went to the steam flush process. The old dryer on site had a leak which was caught in a bucket which Mr. Crawford emptied every day.

* The old system had an aboveground PCE storage tank in the shop. The capacity of this storage tank was 100 gallons. This tank was filled approximately once a month. The solvent is now placed directly into the cleaning units.

* Mr. Crawford said he was present at all times when PCE was being transferred into the old storage tank and that the were no incidents of hose malfunction or other types of spill events.

* Mr. Crawford said he has never put PCE down the sewer.

* Mr. Crawford knows of no work being done on his sewer line in the 17 years he has owned the building.

* The open can of PCE noted in the Division of Water inspection is used to spot check clothes for color fastness. It is not emptied into the drain.

* PCE costs $4.39 per gallon (1992).

* Disposal costs over $2,000/year.

* Mr. Crawford never disposed of PCE by spilling "out of the back door".

Attendees

Martin Doster
Kevin Glaser
Richard Rink
James Vogel
Jack Crawford

II. SITE CONDITIONS

The First Presbyterian Church is located near the southwest corner of Main and Paine Streets in the Village of East Aurora, New York. A site location map is presented as Drawing No. 1 in Appendix A, Volume I. The area surrounding the church is characterized by commercial and residential land use. The study area for this project is generally bounded by Fillmore Avenue to the north, Oakwood Avenue to the south, North and South Grove Streets to the west and the railroad tracks and embankment to the east.

The Delia car dealership borders the church property to the west and includes a showroom, a vehicle repair shop and a detail shop. A Cumberland Farms convenience store and gasoline station is located approximately 700-feet west of the church, beyond the car dealership. An Agway gasoline station is located approximately 200-feet northeast of the church, on the north side of Main Street. Mr. C's Cleaners dry cleaning service is located approximately 350-feet northeast of the church, east of the Agway facility. The East Aurora Village Hall is located east of the church, directly across Paine Street. A public library is located to the north of the church, directly across Main Street. A few other small businesses are located along Main Street. Most of the remaining nearby buildings are residential homes. The Delia car dealership, the Cumberland Farms gasoline station and the Agway gasoline station all contain underground storage tanks (UST's) for fuel. Dry cleaning services such as Mr. C's typically use organic solvents. The Cumberland Farms and Agway gasoline stations have had previous releases (spills and/or leaks) of petroleum products which have been documented and monitored by the NYSDEC, as discussed later in this report. Also according to the NYSDEC, odors from an exhaust fan at Mr. C's Cleaners were very similar to the odors occasionally observed in portions of the First Presbyterian Church.

Topography of the study area is generally flat with ground surface elevations increasing slightly toward the southwest. A local, man-made low area exists approximately 500-feet east of the church where Main Street passes under the railroad tracks. Surface water runoff is collected by catch basins and conducted by the municipal storm sewer system to the East Branch of Cazenovia Creek, which is located to the south of the study area.

The study area is served by municipal or public utilities including water, sanitary sewers, storm sewers, electricity, natural gas and telephone. Many of these utilities are located underground in this area.

III. PREVIOUS INVESTIGATIONS

A. Cumberland Farms Gasoline Station (NYSDEC Spill Number 875612)

The Cumberland Farms gasoline station, located approximately 700-feet west of the First Presbyterian Church, was the site of a previous spill in 1987 when 7,800-gallons of gasoline were inadvertently pumped into an on-site monitoring well by ARG Trucking. Site remediation efforts were initiated by ARG Trucking on the same day of the spill and were assumed by the NYSDEC a few days later. Site investigations were subsequently completed including a soil gas survey, monitoring well installations and ground water sampling and analytical programs.

Current remediation at the Cumberland Farms site is being achieved through the operation a soil vapor extraction system. A ground water recovery well was also installed to recover free product and contaminated ground water. Free product has not been detected in the ground since August of 1989. Use of the recovery well was discontinued in August of 1991. A ventilation system was installed in the basement of a residence adjacent to the Cumberland Farms site soon after the spill to alleviate gasoline fumes. Use of the ventilation system was discontinued in 1991. Borehole logs and well installation diagrams for the Cumberland Farms site are presented in Appendix C, Volume I.

B. Agway Gasoline Station (NYSDEC Spill Number 8703755)

The Agway gasoline station, located approximately 200-feet northeast of the First Presbyterian Church, previously had a leak in an underground fuel tank which was investigated by the NYSDEC Spill Group. The leak was reportedly detected in 1987, and subsequent site investigation work and remediation efforts have been in progress since that date.

The Agway site reportedly contains five (5) ground water monitoring wells and one (1) ground water recovery well. The recovery well is currently being pumped at a rate of two (2) to three (3) gallons per minute (gpm). The site is inspected on a bi-weekly basis and the monitoring wells gauged on a monthly basis for water level and free product thickness. Free

product is regularly observed in the recovery well and monitoring well MW-5. The recovered ground water is processed through an air stripper before being discharged to the storm sewer system. The air stripper water effluent is sampled on a monthly basis and analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX). Recovered petroleum product is temporarily stored on site. Borehole logs and well installation diagrams for the Agway site are presented in Appendix D, Volume II.

C. First Presbyterian Church - Air Sampling and Analysis

After solvent-type odors were reported by church members, air samples were collected by the NYSDEC and the NYSDOH for laboratory analysis. The air samples were collected on three (3) separate occasions and analyzed for volatile compounds according to EPA Method 8240. Tetrachloroethene was detected in all of the air samples collected from inside the church. The first two air sampling events, BTEX were not detected except for a low level of toluene. During the third air sampling event BTEX was detected. It should be noted however, that the rooms in which the sampling was done were closed just prior to the sampling for the first two sampling events and were closed for twenty four (24) hours prior to the third sampling event. Analytical results for the air samples collected are presented in Appendix E, Volume II.

Air quality monitoring was also completed inside the church by the NYSDEC using a photoionization detector (PID)-type organic vapor analyzer. PID measurements were as high as several hundred parts per million (ppm) in some areas of the church basement.

D. Storm and Sanitary Sewers - Water Sampling and Analysis

Water samples were collected for chemical analysis from selected sanitary sewer and storm sewer manholes located along Main Street, Paine Street and Oakwood Avenue in the vicinity of the First Presbyterian Church. The samples were collected during three (3) different events on January 14, February 21 and March 27, 1992. The samples collected on January 14, 1992 were analyzed according to EPA Method 8240 for volatile organic compounds. The samples collected on February 21 and March 27, 1992 were analyzed for volatile organic

compounds according to EPA Method 601. The February 21 and March 27, 1992 events included sanitary sewer manhole numbers 56, 61, 62, 64 and 65. The January 14, 1992 event included storm sewer manhole number 106 and a storm sewer location at the church, in addition to the five (5) sanitary sewer manhole locations listed above. The storm and sanitary sewer manhole locations are shown on Drawing Nos. 2 and 3 in Appendix A, Volume I.

Laboratory analytical results for water samples collected from the storm sewers did not indicate any volatile organic compounds above the method detection limits. Analytical results for water samples collected from the sanitary sewers indicated concentrations of the following volatile compounds:

Analytical Parameter(s)	Concentration (ug/l)	Sample Location & Date
Methylene Chloride	536 522 11.9 110	Sanitary Sewer Manhole 61A, 1/14/92 Sanitary Sewer Manhole 62B, 1/14/92 Sanitary Sewer Manhole 65B, 1/14/92 Sanitary Sewer Manhole 61B, 1/14/92
Trans-1,2-Dichloroethene	12.7 12.6 499	Sanitary Sewer Manhole 61A, 1/14/92 Sanitary Sewer Manhole 62B, 1/14/92 Sanitary Sewer Manhole 61B, 1/14/92
Chloroform	16.8 11.9	Sanitary Sewer Manhole 65A, 1/14/92 Sanitary Sewer Manhole 65B, 1/14/92
1,1,1-Trichloroethane	5.50	Sanitary Sewer Manhole 62A, 1/14/92
Trichloroethene	5.37 142	Sanitary Sewer Manhole 61A, 1/14/92 Sanitary Sewer Manhole 61B, 1/14/92
Toluene	66.1 9.24	Sanitary Sewer Manhole 62A, 1/14/92 Sanitary Sewer Manhole 61A, 1/14/92
Tetrachloroethene	276 106 1910	Sanitary Sewer Manhole 61A, 1/14/92 Sanitary Sewer Manhole 62B, 1/14/92 Sanitary Sewer Manhole 61B, 1/14/92
1,1,2,2-Tetrachloroethene	61.8	Sanitary Sewer Manhole 61B, 1/14/92
M/P-Xylene	9.02	Sanitary Sewer Manhole 62B, 1/14/92

Analytical Parameter(s)	Concentration (ug/l)	Sample Location & Date
1,1-Dichlorethene	1.48 1.59	Sanitary Sewer Manhole 62E, 2/21/92 Sanitary Sewer Manhole 61, 2/21/92
Methylene Chloride	208 23.2 18.7 111	Sanitary Sewer Manhole 64, 2/21/92 Sanitary Sewer Manhole 56, 2/21/92 Sanitary Sewer Manhole 61, 2/21/92 Sanitary Sewer Manhole 62W, 2/21/92
Chloroform	6.96 5.37 5.58 4.74 4.91 6.15	Sanitary Sewer Manhole 65, 2/21/92 Sanitary Sewer Manhole 62W, 2/21/92 Sanitary Sewer Manhole 61, 2/21/92 Sanitary Sewer Manhole 56, 2/21/92 Sanitary Sewer Manhole 64, 2/21/92 Sanitary Sewer Manhole 62E, 2/21/92
1,1,1-Trichlorothane	4.04 6.82 7.78 5.18 8.01 3.52	Sanitary Sewer Manhole 62E, 2/21/92 Sanitary Sewer Manhole 64, 2/21/92 Sanitary Sewer Manhole 56, 2/21/92 Sanitary Sewer Manhole 61, 2/21/92 Sanitary Sewer Manhole 62W, 2/21/92 Sanitary Sewer Manhole 65, 2/21/92
Trichloroethene	1.34 3.43	Sanitary Sewer Manhole 56.1, 2/21/92 Sanitary Sewer Manhole 62, 2/21/92
1,2-Dichloropropane	27.8 972 119 106 381	Sanitary Sewer Manhole 62E, 2/21/92 Sanitary Sewer Manhole 64, 2/21/92 Sanitary Sewer Manhole 56, 2/21/92 Sanitary Sewer Manhole 61, 2/21/92 Sanitary Sewer Manhole 62W, 2/21/92
Bromodichloromethane	3.07 5.95 3.49 3.43 8.16	Sanitary Sewer Manhole 65, 2/21/92 Sanitary Sewer Manhole 62W, 2/21/92 Sanitary Sewer Manhole 61, 2/21/92 Sanitary Sewer Manhole 56, 2/21/92 Sanitary Sewer Manhole 64, 2/21/92

Analytical Parameter(s)	Concentration (ug/l)	Sample Location & Date
Tetrachloroethene	3.11	Sanitary Sewer Manhole 65, 2/21/92
	16.2	Sanitary Sewer Manhole 62W, 2/21/92
	16.8	Sanitary Sewer Manhole 61, 2/21/92
	18.9	Sanitary Sewer Manhole 56, 2/21/92
	7.61	Sanitary Sewer Manhole 64, 2/21/92
	203	Sanitary Sewer Manhole 62E 2/21/92
Dibromochlormethane	1.20	Sanitary Sewer Manhole 56, 2/21/92
	1.30	Sanitary Sewer Manhole 61, 2/21/92
	1.59	Sanitary Sewer Manhole 65, 2/21/92
methylene Chloride	75.0	Sanitary Sewer Manhole 64, 3/27/92
	5.46	Sanitary Sewer Manhole 62, 3/27/92
Chloroform	4.53	Sanitary Sewer Manhole 11, 3/27/92
	15.5	Sanitary Sewer Manhole 65, 3/27/92
	4.18	Sanitary Sewer Manhole 64, 3/27/92
	5.00	Sanitary Sewer Manhole 61, 3/27/92
	8.52	Sanitary Sewer Manhole 62W, 3/27/92
	3.07	Sanitary Sewer Manhole 62E, 3/27/92
1,1,1-Trichloroethane	6.53	Sanitary Sewer Manhole 62W, 3/27/92
Bromodichloromethane	1.66	Sanitary Sewer Manhole 11, 3/27/92
	7.63	Sanitary Sewer Manhole 65, 3/27/92
	1.10	Sanitary Sewer Manhole 64, 3/27/92
	1.11	Sanitary Sewer Manhole 61, 3/27/92
	1.03	Sanitary Sewer Manhole 62W, 3/27/92
Tetrachloroethene	22.4	Sanitary Sewer Manhole 61, 3/27/92
	16.0	Sanitary Sewer Manhole 62W, 3/27/92
	21.6	Sanitary Sewer Manhole 62E, 3/27/92
	46.9	Mr. "C" Cleaner
Dibromochloromethane	1.16	Sanitary Sewer Manhole 62E, 3/27/92
	1.38	Sanitary Sewer Manhole 62W, 3/27/92
	1.48	Sanitary Sewer Manhole 61, 3/27/92
	2.74	Sanitary Sewer Manhole 65, 3/27/92

The detected volatile organic compounds are typically associated with chlorinated solvents and their degradation products. The complete analytical data for the storm sewer and sanitary sewer water samples are presented in Appendix F, Volume II.

The following procedure was used for developing the ground water monitoring wells:

(1) The water level in the well to be developed was measured and the volume of water in the well was determined. "Food Grade" polyethylene (PE) tubing was then lowered to the bottom of the well and the peristaltic pump was started.

(2) The well was pumped continuously and the evacuated water was emptied into a 5 gallon pail to measure the volume evacuated. Ground water evacuated from the wells was emptied into the nearest storm water catch receiver.

(3) Generally, a ground water sample was collected and measured after approximately two (2) to three (3) well volumes had been purged. Pumping was continued for a minimum of ten (10) well volumes, the well went dry twice or until measured parameters stabilized.

Ground water samples for laboratory analysis were collected by NYSDEC with the aide of ESI on May 21, 1992. Ground water samples were collected using dedicated, disposable polyethylene bailers.

D. Ground Water Analytical Testing and Results

Ground water samples collected from the six (6) monitoring wells installed by ESI and the five (5) existing monitoring wells at the nearby Agway gasoline station were subjected to laboratory analysis for volatile compounds according to the 1991 New York State Analytical Services Protocol. Ground water samples were also collected from twelve (12) monitoring wells on May 21, 1992 by Marcor at the Cumberland Farms site and analyzed by Lozier Laboratories, Inc. for Purgeable Aromatics (NYSDOH Method 310-19) and Purgeable Halocarbons (EPA Method 601). Analytical Test Results are summarized on Table VII-2 presented on the following pages. The analytical data for these ground water sampling events are presented in Appendix J, Volume II.

No concentrations of Purgeable Halocarbon compounds (solvent-type compounds) were detected above the method detection limits in any of the ground water samples collected from the twelve (12) monitoring wells at the Cumberland Farms site. BTEX compounds were detected in some of the wells at the Cumberland Farms Site.

TABLE VII-2
ANALTYICAL TEST RESULTS
GROUND WATER MONITORING WELLS (WATER SAMPLES COLLECTED ON MAY 21, 1992)
CONCENTRATION UNITS (UG/L) PARTS PER BILLION

Parameter	ESI-1 Church	ESI-2 Church	ESI-3 Church	ESI-4 Church	ESI-5 Church	ESI-6 Church	MW-1 Agway	MW-2 Agway	MW-3 Agway	MW-4 Agway	MW-5 Agway	Stripper Influent Agway	Stripper Effluent Agway
Chloromethene	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethene	U	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	6J	U	U	U	U	810E	U	U
Chlorethane	U	U	U	U	U	U	U	U	U	U	U	U	U
Methylene Chloride	U	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	U	U	U	U	U	U	U	U	U	U	76	U	U
Carbon Disulfide	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	U	U	2J	U	U	U	U	U	U	U	45	U	U
1,1-Dichlorethene	U	U	2J	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorethene(total)	2J	U	2J	16	14	44J	U	2J	3J	16J	6700E	U	U
Chloroform	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichlorethane	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,1-Trichlorethene	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichlormethane	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U	U	U	U	U	U	U

KEY:
U = Not Detected
J = Estimated Value
D = Identified Compound (Secondary Dilation Factor)
E = Identified Compound (Exceed Calibration Range of Instrument)
BQL = Below Quantifiable Limit
NA = Parameter Not Analyzed

TABLE VII-2 Continued
ANALYTICAL TEST RESULTS
GROUND WATER MONITORING WELLS (WATER SAMPLES COLLECTED ON MAY 21, 1992)
CONCENTRATION UNITS (UG/L) PARTS PER BILLION

Parameter	ESI-1 Church	ESI-2 Church	ESI-3 Church	ESI-4 Church	ESI-5 Church	ESI-6 Church	MW-1 Agway	MW-2 Agway	MW-3 Agway	MW-4 Agway	MW-5 Agway	Stripper Influent Agway	Stripper Effluent Agway
cis-1,3-dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	2J	U	6J	6J	28	14J	150J	5J	U	34DJ	1100E	U	U
Dibromochioromethene	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloropropene	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichlopethene	U	U	U	U	U	U	U	U	U	U	U	U	U
Dityomochioromethane	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-trichloroetane	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	U	U	U	U	U	U	U	4DJ	290	34DJ	700E	U	U
trans-1,3-dichloropropene	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	U	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	2J	1J	5600E	91	15	570	3200	270D	2J	4400E	450E	U	U
1,1,2,2-Tetrachloroethene	U	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	U	U	0.8J	U	U	U	U	U	160	U	8J	U	U
Chlorobenzene	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	U	U	4J	U	U	U	U	0.9DJ	12J	U	870E	U	U
Styrene	U	U	U	U	U	U	U	U	U	U	U	U	U
Total Xylenes	U	U	20	U	U	U	U	0.7DJ	360	21D	1300E	U	U

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BQL= Below Quantifiable Limit
NA = Parameter Not Analyzed

TABLE VII-2 Continued
ANALTYICAL TEST RESULTS
GROUND WATER MONITORING WELLS (WATER SAMPLES COLLECTED ON MAY 21, 1992)
CONCENTRATION UNITS (UG/L) PARTS PER BILLION

Parameter	OW-A Cumberland	OW-B Cumberland	OW-C Cumberland	OW-D Cumberland	OW-E Cumberland	OW-F Cumberland	OW-G Cumberland	OW-H Cumberland	OW-I Cumberland	OW-J Cumberland	OW-JA Cumberland	OW-K Cumberland
Chloromethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromomethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Vinyl Chloride	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Chlorethane	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Methylene Chloride	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Acetone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1-Dichlorethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorethene(total)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichlorethane	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichlorethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Carbon Tetrachloride	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Bromodichloromethane	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,2-Dichloropropane	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL

KEY:

U = Not Detected
J = Estimated Value
D = Identified Compound (Secondary Dilation Factor)
E = Identified Compound (Exceed Calibration Range of Instrument)
BQL= Below Quantifiable Limit
NA = Parameter Not Analyzed

TABLE VII-2 Continued
ANALTYICAL TEST RESULTS
GROUND WATER MONITORING WELLS (WATER SAMPLES COLLECTED ON MAY 21, 1992)
CONCENTRATION UNITS (UG/L) PARTS PER BILLION

Parameter	OW-A Cumberland	OW-B Cumberland	OW-C Cumberland	OW-D Cumberland	OW-E Cumberland	OW-F Cumberland	OW-G Cumberland	OW-H Cumberland	OW-I Cumberland	OW-1 Cumberland	OW-1A Cumberland	OW-2 Cumberland
cis-1,3-dichloropropene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
trichloroethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Dibromochloromethane	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2-trichloroethene	BQL	BQL	BQL	BQL	BQL	BQL	13QL	BQL	BQL	13QL	BQL	BQL
Benzene	BQL	49.2	BQL	BQL	BQL	BQL	17.7	56,700	15.9	2970	BQL	2300
Trans-1,3-dichlorpropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromoform	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
4,Methyl-2-Pentanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Hexanone	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachlorethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
1,1,2,2-Tetrachlorethene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Toluene	BQL	12.3	BQL	BQL	BQL	BQL	BQL	16,500	BQL	565	BQL	5150
Chlorobenzene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL	BQL
Ethylbenzene	BQL	BQL	BQL	BQL	BQL	BQL	BQL	1,500	BQL	BQL	BQL	BQL
Styrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	BQL	BQL	BQL	BQL	BQL	BQL	BQL	7,700	BQL	1841	BQL	10,600

KEY:

U = Not Detected
J = Estimated Value
D = Identified Compound (Secondary Dilation Factor)
E = Identified Compound (Exceed Calibration Range of Instrument)
BQL = Below Quantifiable Limit
NA = Parameter Not Analyzed

No significant concentrations of volatile compounds were detected in ground water samples collected from monitoring wells ESI-1 or ESI-2. For wells ESI-3 through ESI-6, one (1) or more of the following compounds were detected at levels near or above the method detection limits: tetrachloroethene, trichloroethene, 1,1-dichloroethane, 1,2-dichloroethene, 1,1,1-trichloroethane and vinyl chloride. The most prevalent of these compounds was tetrachloroethene with a concentration of 5600 ppb in well ESI-3. These compounds are typically associated with chlorinated solvents and their degradation products.

One (1) or more of the compounds listed above were detected near or above the method detection limits in ground water samples collected from the five (5) monitoring wells at the Agway site. Tetrachloroethene was again the most prevalent compound with a concentration of 4400 ppb in Agway well MW-4. BTEX compounds (fuel-type compounds) were also detected at levels near or above the method detection limits in Agway wells MW-2 through MW-5.

E. Hydraulic Conductivity Testing

Empire completed hydraulic conductivity testing on June 2, 1992 in each of the six (6) monitoring wells installed by Empire using a rising head slug test according to the Bouwer and Rice method. The slug used was a solid PVC bar, five (5)-feet in length, which was decontaminated between wells with Alconox soap and deionized water.

Empire reduced the slug test data according to the Bouwer and Rice method for monitoring wells partially penetrating an unconfined aquifer. The base of the overburden aquifer was assumed to be top of bedrock, which was estimated to be 30-feet below ground surface for calculation purposes.

Hydraulic conductivities measured in wells ESI-1 and ESI-5 were 0.00039 cm/sec and 0.00079 cm/sec respectively. The water levels in wells ESI-2, ESI-3, ESI-4 and ESI-6 recovered too quickly during the rising head tests to produce meaningful results (virtually complete recovery to the pre-test static water level in less than one minute). It can therefore be assumed that the hydraulic conductivity in each of these wells is greater than the hydraulic conductivities measured in wells ESI-1 and ESI-5. Hydraulic conductivity test data for wells ESI-1 and ESI-5 are presented in Appendix I, Volume II.

VIII. SUMMARY AND CONCLUSIONS

The summary and conclusions presented below are subject to the limitations presented in Appendix B, Volume I. The Environmental Site Investigation was completed for the NYSDEC at the First Presbyterian Church, 9 Paine Street, East Aurora, New York (NYSDEC Spill No. 9109437) to determine the possible source(s) of the chemical-like odors which were detected in the basement of the First Presbyterian Church. This study was limited to the scope of services presented in this report. Direct project oversite for ESI activities was provided by the NYSDEC. Relevant findings, based on the data obtained during this study, are provided below:

- The Environmental Site Investigation was completed within several blocks of the First Presbyterian Church located on the southwest corner of Paine Street and Main Street (U.S. Route 20A) in East Aurora, Erie County, New York. The site is occupied by numerous residential houses and small businesses. Small businesses included on the site are two (2) bulk petroleum product storage and distribution facilities (Agway Facility and Cumberland Farms), a dry cleaner (Mr. C's) and an automobile dealership and detail shop (Delia Buick, Cadillac Pontiac, GMC Truck, Inc.). The site is divided into numerous parcels, each privately owned.

- Previous reports completed for the Agway Facility and the Cumberland Farms Mini-Mart, have documented petroleum product contamination in the shallow ground water aquifer beneath both sites.

- Laboratory analysis has detected minor toluene contamination in the sanitary sewer (MH #62) near the Agway Facility. However, no other petroleum type product contamination appears in the sanitary or storm sewers near the First Presbyterian Church.

- Laboratory analysis has detected minor concentrations of several dry cleaning type solvents in the sanitary sewer sewers (MH #65, MH #62, MH #64 and MH #61) near the intersection of Main and Paine Streets. It is likely that these concentrations will vary depending on the flow in the sewers.

- Air sampling analytical test results from air samples collected inside the church have detected minor concentrations of dry cleaning type solvents in the closet and Room 113 in the basement of the church.

- The soil gas survey completed by C.T. Male Associates, P.C. (refer to Drawings Nos. 6 & 7 presented in Appendix A) detected the highest concentration of 1,1,2,2-tetrachloroethylene (Tetrachloroethylene) in the area of Mr. C's dry cleaner located approximately 280-feet northeast of the church.

- The soil gas survey results also indicated minor concentrations of toluene (9-10 ug/l) in the area of the Agway Facility and Mr. C's dry cleaner which may be a result of the petroleum product spill at the Agway Facility. It should be noted that toluene is also used in dry cleaning as a solvent for paints, lacquers, gums and resins.

- Organic vapor concentrations were detected during the subsurface explorations, completed by ESI, near the dry cleaners (monitoring well ESI-3).

- Ground water level measurements taken in the monitoring wells installed of the Agway Facility, the First Presbyterian Church and at the Cumberland Farm Mini-Mart indicated that the ground water beneath the site is relatively flat with a slight downward gradient in a southwest direction across the site towards East Branch of Cazenovia Creek located approximately 4000-feet south west of the site.

- Sanitary Sewer invert elevations taken at Manhole #62 (located at the intersection of Main and Paine Streets) and Manhole #61 (located on Paine Street about half way between Main Street and Oakwood Avenue) show that sewer inverts in the area of these two manholes are within several tenths of a foot of the groundwater level elevations taken in the monitoring wells (ESI-3, ESI-4 and ESI-5) located near the sewer manholes. Seasonal ground water level fluctuations could intersect the sanitary sewer bedding and sewer pipe creating a path for contaminate migration.

- Chemical analytical test results report concentrations of benzene, toluene, ethyl benzene and xylene (BTEX) were detected in the water samples collected from the monitoring wells near both the Agway Facility and the Cumberland Farm Mini-Mart which are locations of previously investigated NYSDEC spills. It should be noted that remediation is ongoing at these NYSDEC spill sites. Refer to the BTEX concentrations plan presented on Drawing No. 9 in Appendix A, Volume I. It should also be noted that BTEX compounds were not detected in ground water samples collected from monitoring wells MW-1, ESI-1 & ESI-2 located upgradient from the site.

- Chemical analytical test results also report that concentrations of tetrachloroethene were detected in water samples collected from monitoring wells near the church, Mr. C's (dry cleaner) and the Agway Facility. It appears that the contamination plume for tetrachloroethene has advanced around the Agway Facility and the church with the area of highest concentrations (possible source) in the monitoring well (ESI-3) installed nearest to the Mr. C's dry cleaner. Refer to the tetrachlorethene concentration plan presented on Drawing No. 8 in Appendix A, Volume I.

- Based on the data collected two (2) "plumes" of petroleum (hydrocarbon) contamination are present within the study area. One plume is in the area of the Agway Facility and the other plume is in the area of the Cumberland Farm Mini-Mart Facility. The greatest concentration of contamination appears to be in the area of the Cumberland Farm Facility. Both petroleum contaminations plumes are presently being remediated under other NYSDEC contracts. It should be noted that there does not appear to be petroleum product contamination near the church.

Based on the results of our Environmental Investigations, it is our opinion that the source chemical like odors detected in the basement of the First Presbyterian Church appears to be from the dry cleaner (Mr. C's) which is located about 250-300 feet northeast of the church. Although dry cleaning solvent type compounds were detected (in relatively low concentrations) near the church during the soil gas survey, it appears that the major method of contaminant transport is via the ground water. It is possible that the organic vapors are entering the church through the relatively permeable utility trenches entering the church basement beneath the floor slab and entering the rooms and closet along the foundation walls and cracks in the floor slab.

Based on the results of the chemical analytical testing of the ground water samples collected from the ground water monitoring wells it appears that the plume of dry cleaning solvent contamination needs to be better defined in the area north/northwest of the Agway Facility and to a lesser extent southwest of the church. ESI recommends that several new monitoring wells be installed at locations to better define the limits of the contamination plume. After the ground water monitoring wells are installed each should be developed and the ground water sampled and analyzed for the parameters previously tested.

ESI recommends that the present ground water monitoring and chemical testing program be continued quarterly with the sampling of the same monitoring wells in which dry cleaning solvents were previously detected.

We trust that this report satisfies your current requirements. Should you have any questions please call our office.

Respectfully Submitted,
HUNTINGDON-EMPIRE SOILS INVESTIGATIONS, INC.

Donald B. Abrams
Senior Environmental Geologist

David R. Steiner
Senior Environmental Geologist

cab

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

CLASSIFICATION CODE: 2 REGION: 9 SITE CODE: 915157
EPA ID:

NAME OF SITE : Mr. C's Dry Cleaners
STREET ADDRESS: 586 Main Street

TOWN/CITY:	COUNTY:	ZIP:
East Aurora	Erie	14052

SITE TYPE: Open Dump- Structure-X Lagoon- Landfill- Treatment Pond-
ESTIMATED SIZE: 1 Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Jack Crawford
CURRENT OWNER ADDRESS.: 586 Main Street, East Aurora, NY
OWNER(S) DURING USE...: Jack Craford
OPERATOR DURING USE...: Mr. C's Dry Cleaners
OPERATOR ADDRESS.....: 586 Main Street, East Aurora, NY
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From Unknown To Present

SITE DESCRIPTION:
The site is an area adjacent to an operating dry cleaning buisness on Main Street in the Village of East Aurora. A neighboring church located approximately 400 feet south west of Mr. C's Dry Cleaners complained of strong odors in its day-care facilities requiring venting, and preventing use of the basement even though it is of relatively new construction. These odors were determined to be tetrachloroethylene (PCE) traced to Mr. C's. The owner of the Dry Cleaners has told DEC personnel that still bottoms from the operation were disposed of into a dumpster in the parking lot prior to 1985. Condensate from the steam flushing and vacuuming process were disposed of in the saniatry sewers.
The NYSDEC completed a Preliminary Site Assessment in July 1992 which confirmed groundwater and sanitary sewer contamination.
A sewer sample taken in March 1992 revealed 47 ppb tetrachloroethylene. Also, levels of groundwater contamination exceeding Class GA Groundwater Standards were found in a well closest to Mr. C's Dry Cleaners.

HAZARDOUS WASTE DISPOSED: Confirmed-X TYPE	Suspected- QUANTITY (units)
tetrachloroethylene (F001 Waste)	unknown

SITE CODE: 915157

ANALYTICAL DATA AVAILABLE:
Air-X Surface Water- Groundwater-X Soil- Sediment-

CONTRAVENTION OF STANDARDS:
Groundwater-X Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..: State- X Federal-
STATUS: Negotiation in Progress- Order Signed-

REMEDIAL ACTION:

Proposed-X Under design- In Progress- Completed-
NATURE OF ACTION: RI-FS

GEOTECHNICAL INFORMATION:
SOIL TYPE: Palmyrav gravely loam
GROUNDWATER DEPTH: 10 feet

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Groundwater and sanitary sewer contamination has been confirmed. Contamination has impacted a neighboring building's air quality.

ASSESSMENT OF HEALTH PROBLEMS: