

Panamerican Environmental, Inc.
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Buffalo, New York 14227
Tel: (716) 821-1650
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PANAMERICAN

April 7, 2015

Mr. Duane Manth
Manth Manufacturing, Inc.
131 Fillmore Avenue
Tonawanda, New York 14150

Re: Periodic Review Report/Annual Compliance Statement Report – Reporting Period Feb. 15, 2012 to February 15, 2015 - Compliance With Soils Management Plan, Groundwater Monitoring Plan, and Soil Cover Maintenance provisions - 153 Fillmore Avenue

Dear Mr. Manth:

Panamerican Environmental, Inc. (PEI) is pleased to submit this Periodic Review Report/Annual Compliance Statement Report and the completed Institutional and Engineering Controls Certification Form (IC/EC form – refer to Attachment A) for the reporting period of February 15, 2012 to February 15, 2015. **This report has been completed in compliance and in accordance with the requirements stipulated in the Site Management Plan completed by NYSDEC in 2009 (ENVIROTEK I SITE, SITE NO. V00379 APRIL 3, 2009 SITE MANAGEMENT PLAN, NYSDEC)** and generally follows pages 10 and 11 of that plan. Additionally, this report follows the Periodic Review Report (PPR) General Guidance which was attached to the New York State Department of Environmental Conservation (NYSDEC) 45-Day Reminder Notice: Site Management Periodic Review letter of February 23, 2015 and follow-up email correspondence which extended the due date (due to weather conditions), as it applies to this property and the agreement and guidance contained in the Site Management Plan.

This report consists of a letter report summarizing the annual compliance as required by the Site Management Plan and the agreement. Please note, after 2011 NYSDEC changed the annual requirement to March 2015. Periodic certifications, indicating that all Institutional and Engineering Controls (IC/ECs) at the Site are in-place and effective, is mandated by various statutory and/or regulatory authorities under the New York Environmental Conservation Law and its implementing regulations. These regulations require that an IC/EC Certification, prepared by the Site owner and/or professional engineer, be submitted annually (or at a frequency approved by the NYSDEC). This IC/EC Certification will certify that the Institutional and Engineering Controls put in place are unchanged from the previous certification, and that nothing has occurred at the Site that will impair the ability of the controls to protect public health or the environment. This report constitutes the periodic review and includes the IC/EC review and certification and groundwater monitoring reporting requirements.

1.0 Introduction

1.1 Site Summary, Nature and Extent of Contamination, and Remedial History

The Envirotek I Site (the Site), located at 153 Fillmore Avenue in the City of Tonawanda, Erie County, New York (Figures 1 and 2), was remediated in 2001 and 2002 by the City of Tonawanda and Erie County under a Voluntary



Figure 1. Project area on a topographic map. (USGS 7.5' Quadrangle, Tonawanda, NY, 1989 [1965]).



Figure 2. 2009 Aerial Photograph of subject property

Cleanup (VC) Agreement (Site No. V00379, Index No. B9-0583-00-08) with the New York State Department of Environmental Conservation (NYSDEC). The property was subsequently sold to Manth Manufacturing, Inc. by the City of Tonawanda on October 24, 2003. At the time the Site was remediated, environmental easements and Site Management Plans were not required by the NYSDEC. As a result, a Site Management Plan was never drafted for the Envirotek I Site. The components of such a plan, however, were contained in the March 18, 2003 report entitled "*Final Report For 153 Fillmore Avenue, City of Tonawanda*" (Final Report), and in the Sales Agreement between Manth Manufacturing and the City of Tonawanda. In April 2009, the NYSDEC issued a Site Management Plan for the property ("*Site Management Plan - The Envirotek I Site, 153 Fillmore Avenue, Tonawanda, Erie County, New York. New York State Department of Environmental Conservation, 2009*").

The Site Management Plan and NYSDEC requires Manth Manufacturing, Inc., to complete and submit an annual statement to the NYSDEC that provides information on compliance with the soil management plan, groundwater monitoring plan, and soil cover maintenance provisions. This letter report constitutes the 2011-2014 annual statement.

The remedial activities completed at the Envirotek I Site were separated into two phases. Phase I, completed in 2001, consisted of the demolition and removal of various structures, the removal of three underground storage tanks, backfilling with clean material, and the stockpiling of approximately 2,000 cubic yards of contaminated soil and debris from the UST removal in the northeastern portion of the Site. This stockpile was located over an area of the Site that was most significantly impacted by PAHs, metals and PCBs. To address this contamination, the approved remedial action work plan specified that 6 to 12 inches of soil below the original ground surface would be excavated during removal of the stockpile. This additional soil would be sent off-site for disposal. Phase II of the remedial action, completed in October 2002, consisted of the following:

- Excavation, removal, and disposal of contaminated soils from Phase I;
- Decontamination and removal of four above ground storage tanks;
- Removal and disposal of coatings on tanks containing asbestos;
- Removal of piping, supports and associated structures;
- Sampling, analysis, and characterization of various Site materials;
- Removal and off-site disposal of 11.6 tons of hazardous materials;
- Crushing of 200 cubic yards of concrete with on-site placement as fill material;
- Installation of a one foot thick clean soil cover over the entire Site; and
- Asphalt paving for two parking areas and building access.

The clean soil cover was placed over the entire property to minimize the potential for future contaminant exposure. To complete this task, perimeter soils were excavated to a depth of one foot so that the subsequent placement of the soil cover would match the existing grade of the adjacent properties and roadways. The excavated soils were placed over the northeastern portion of the Site where the soil stockpile from Phase I had been located. It is important to note that when the soil stockpile was removed during Phase II of the remedial action the area was not over-excavated as originally proposed. By letter dated May 22, 2002 the NYSDEC approved a modification to the remedial action work plan. This modification stipulated that, in lieu of the over excavation of soils under the stockpile, existing soils from "clean" areas of the Site could be used as supplementary cover material over this portion of the Site. This modification was intended to provide a thicker soil cover over the impacted soils and to allow for more positive drainage from the area, thus limiting precipitation infiltration into the subsurface soils.

Occurrences over this Period

During reporting period the following changes were made to the property (these occurred in 2014):

- A cement parking area was added on grade to the property between 153 Fillmore and the pole barn. This included a chain link fence and a wooden fence along Fillmore
- A restroom was added to the building south of the pole barn and a sanitary and water line was installed from in front of the main building across the parking lot and lawn to the building.

Manth staff indicated to PEI that any soil removed was placed back and the cap replaced (refer to attached permit for water/sewer).

1.2 Effectiveness of the Remedial Program and Compliance

The long term requirements for the Site include the following:

Institutional Controls: Institutional controls consist primarily of deed restrictions specifically prohibiting the use of the property for anything other than commercial/industrial activities without a waiver from the NYSDEC. The property cannot be used for any type of residential, agricultural, or school/day care purposes, and the use of groundwater as a source of potable or industrial water is prohibited without prior NYSDEC approval and proper treatment;

The current site use meets the institutional controls.

Soils Management Plan: The remediation of the property included the placement of a one foot thick clean soil cover over most of the Site. Asphalt was placed over the Site in some locations for use as parking and access to Site Buildings. The Soils Management Plan requires that the cover system be maintained. Any disturbance of the cover must follow specific soil management procedures for disturbed soils with restoration of the cover system to its original, pre-disturbance conditions; and

The cover appears to remain in place. Based on a view of the property current conditions (refer to attached photos) and verbal information provided by representatives of ownership, it appears that the changes to the property identified above which occurred in 2014 were completed in compliance with the soils management plan other than cover maintenance.

Groundwater Monitoring Plan: Eight groundwater monitoring wells (MW-1 thru MW-8) were installed along the perimeter of the Envirotek I Site during the voluntary clean-up program. The Groundwater Monitoring Plan requires the sampling of these wells with analysis to ensure that no significant offsite migration of residual contamination occurs. In accordance with the Sales Agreement, the City of Tonawanda is responsible for implementing the Groundwater Monitoring Plan, while Manth Manufacturing is responsible for complying with a five-page document entitled "*Deed Restriction*" that was prepared by the NYSDEC and attached to the Sales Agreement. This Deed Restriction contained the long term provisions for the Site as outlined above.

During 2009, the City installed replacement wells for out-of-service wells and completed the routine sampling as required by the agreement. In March 2009 the NYSDEC requested that the City of Tonawanda replace wells MW-1 and MW-2, and incorporate them into the groundwater monitoring program beginning with the 2009 sampling event. Due to the inconsistencies described above and the alteration of the monitoring well network, the NYSDEC determined that modification to the existing long term plans was required. These modifications are

included in the formal Site Management Plan (SMP) completed for the property, which complies with 6 NYCRR Part 375-1.8. This SMP provides a detailed description of all procedures required to manage remaining contamination at the Site, including: (1) management of all Institutional and Engineering Controls with certification of those controls; (2) soils management; (3) groundwater monitoring; (4) completion of annual inspections; and (5) submittal of Periodic Review Reports.

Attached is a copy of portions of the 2014 groundwater sampling report completed by GHD Consulting Services, Inc. for the City of Tonawanda. This includes the text and figures. For the laboratory documentation please refer to the complete report. The report provides a summary of results from the past annual sampling. The conclusion from the 2014 report is that in general the existing volatile organic compounds (VOCs) plume has increased in size but decreased in concentration – refer to the report for detailed summary on other groundwater constituents. Results indicate that the area groundwater is still impacted.

The SMP includes three plans: (1) an Institutional and Engineering Control Plan; (2) a Soils Management Plan; and (3) a Groundwater Monitoring Plan. These individual plans are consistent with the long term requirements for the Envirotek I Site that are contained in the Final Report and Deed Restriction, but are also consistent with the requirements of the Part 375 regulations.

Cover Maintenance Provisions: Information provided by the site owner, Manth, as well as the information provided in the 2014 groundwater report for the property **suggests that the soil cover was only disturbed in the areas noted above to install a small parking area and to install water and sewer line to the building. Other than those disturbances the cover was maintained.** Based on verbal description of disturbance activities and visual observations made in March 2015 for this report, it appears that the cover has been maintained.

1.3 Recommendations

There are no changes recommended to the SMP. Future cap disturbances should be documented for compliance as required.

2.0 Site Overview - Site Description and History

The Envirotek I Site is located at the 153 Fillmore Avenue in the City of Tonawanda, Erie County, New York. The total area of the Site is approximately 1.7 acres. The Site is located in a mixed industrial, commercial and residential setting, and is bordered to the east by an active railroad line, to the north and south by small commercial/industrial facilities, and to the west by Fillmore Avenue. Ellicott Creek is located approximately 350 feet west of Fillmore Avenue.

Between 1946 and 1957, the property was occupied by the National Manufacturing Corporation, while the Tonawanda Roofing and Paint Company was located adjacent to 153 Fillmore Avenue to the north. Local workers report that roofing materials were produced at the National Manufacturing Corporation and were installed by the Tonawanda Roofing and Paint Company. In 1957, National Manufacturing Corporation added paint manufacturing facilities at the subject property. Raw materials for paint production were shipped to the facility in bulk and stored in both above-ground (ASTs) and underground storage tanks (USTs). National Manufacturing Corporation closed the facility in 1981.

In 1981, Envirotek Ltd, a solvent recycling company, reopened the facility as a Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal facility (TSDF). Containers of RCRA hazardous wastes were transported to the facility where they were stored pending reshipment to RCRA disposal facilities. Containers

of RCRA characteristic ignitable, corrosive, and toxic hazardous wastes were stored at the facility from 1981 to 1986. A number of containers were left at the facility when Envirotek Ltd abandoned the property in 1988. The NYSDEC contacted the United States Environmental Protection Agency (USEPA) concerning the Envirotek I property on June 29, 1987. The USEPA conducted a Preliminary Assessment (PA) under the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) on November 29-30, 1988. The PA disclosed that an estimated 770, 55-gallon drums and 1,000 smaller containers of RCRA flammable, combustible, and corrosive hazardous wastes were present at the Site. Several process vessels, four large ASTs, two UST's, and six transformers were also present on the property. On July 18, 1989 the USEPA initiated remedial action activities at the Site. These activities were completed on October 15, 1990, and included:

- The identification and categorization of all RCRA hazardous wastes;
- The repackaging of 31,165 gallons of liquids and 11,655 pounds of solids for off-site incineration;
- The repackaging of 204 cubic yards of solids for off-site disposal in a landfill; and
- The repackaging of 61,975 pounds of solids for off-site recycling.

A summary of the remedial action activities completed by the USEPA are presented in a 1990 report entitled "*Federal On-Scene Coordinator's Report – Envirotek I, Tonawanda, Erie County, New York.*" In 1997, the NYSDEC conducted a limited site investigation to determine if the Site posed a significant threat to human health or the environment. This investigation consisted of the collection of five surface water/sediment samples from Ellicott Creek and eight surface soil samples from the Site with analysis for Target Compound List (TCL) volatile organic compounds (VOCs), TCL semivolatile organic compounds (SVOCs), TCL pesticides, TCL polychlorinated biphenyls (PCBs), Target Analyte List (TAL) metals and cyanide. The results of this investigation indicated that there was no impairment to creek sediment or surface water related to the Site. Surface soil at the Site, however, contained polycyclic aromatic hydrocarbons (PAHs), PCBs, and numerous metals at concentrations that exceeded the NYSDEC soil cleanup objectives. The highest concentrations were observed in the northeastern portion of the Site. In 2001, a Site Investigation was completed at the Site by the URS Corporation as part of the Voluntary Cleanup Agreement. The primary contaminants detected at the Site included VOCs and SVOCs in surface soils, subsurface soils, and groundwater. Metals and PCBs were also detected in surface soils and groundwater. The results of this investigation are presented in a 2002 report entitled "*Site Investigation/ Remedial Alternatives Report*", and summarized in more detail in the property Soils Management Plan.

Remedial activities completed at 153 Fillmore Avenue were separated into two phases. Phase I, completed in 2001, consisted of the demolition and removal of various structures, the removal of three (3) underground storage tanks, backfilling with clean material, and the stockpiling of contaminated soil. Phase II, completed in October 2002, consisted of the following:

- Excavation, removal, and disposal of contaminated soils from Phase I
- Decontamination and removal of four (4) above ground storage tanks
- Removal and disposal of ACM coating on tanks
- Removal of piping, supports and associated structures
- Sampling, analysis, and characterization of site materials
- Removal and off-site disposal of 11.6 tons of hazardous materials
- 200 CY of concrete crushed and placed as fill material
- Installation of 1-foot of clean cover material over the entire site of clay and topsoil
- Asphalt paving for two (2) parking areas

The clean soil cover was placed over the entire property to minimize the potential for future contaminant exposure. To complete this task, perimeter soils were excavated to a depth of one foot so that the subsequent placement of the soil cover would match the existing grade of the adjacent properties and roadways. Remediation photos suggest that wells MW-1 and MW-2 were destroyed at this time. The excavated soils were placed over the northeastern portion of the Site where the soil stockpile from Phase I had been located. It is important to note that when the soil stockpile was removed during Phase II of the remedial action the area was not over-excavated as originally proposed. By letter dated May 22, 2002 the NYSDEC approved a modification to the remedial action work plan. This modification stipulated that, in lieu of the over excavation of soils under the stockpile, existing soils from "clean" areas of the Site could be used as supplementary cover material over this portion of the Site. This modification was intended to provide a thicker soil cover over the impacted soils and to allow for more positive drainage from the area, thus limiting precipitation infiltration into the subsurface soils.

3.0 Evaluation of Remedy Performance, Effectiveness, and Protectiveness – Compliance Statement

The Envirotek I Site was remediated in 2001 and 2002 by the City of Tonawanda and Erie County under a Voluntary Cleanup Agreement with the NYSDEC. Finalization of this agreement required the imposition of Institutional Controls (IC) regarding future use of the property. These Institutional Controls were accomplished through a Deed Restriction, which was filed in the Erie County Clerk's Office on October 31, 2003. The Deed Restriction:

- Prohibits the Site from ever being used for purposes other than the Contemplated Use (commercial or industrial) without a written waiver from the NYSDEC. Under no circumstances is the property to be used for any type of residential, agricultural or school/day care purpose;
- Prohibits the use of groundwater underlying the Site without treatment to render it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the NYSDEC;
- Requires the Volunteer and Volunteer's successors to continue in full force and effect any Institutional and Engineering Controls the NYSDEC requires the Volunteer to put into place and maintain; and
- Provides that the Volunteer, on behalf of itself and its successors, consents to the enforcement by the NYSDEC of the prohibitions and restrictions of the Deed Restriction, and agrees not to contest such enforcement.

The Institutional Controls placed on the Envirotek I property through the Deed Restriction have been incorporated into the Institutional and Engineering Control Plan without modification.

In addition to the Institutional Controls discussed above, the Envirotek I Site also contains an Engineering Control (EC) that is described as follows:

- A cover system consisting of a one foot thick clean soil cover, asphalt pavement, concrete sidewalks, and concrete building slabs.
- Procedures for the inspection of this cover system are provided in this Institutional and Engineering Control Plan, while procedures for the maintenance and repair of the cover system are provided in the Soils Management Plan.

The Institutional and Engineering Controls placed on the Envirotek I Site are designed to:

- Prevent ingestion or direct contact with contaminated soil, fill and groundwater;

- Prevent inhalation of, or exposure to, contaminants volatilizing from contaminated soil, fill and groundwater; and
- Prevent migration of contaminants off-site via groundwater or surface water runoff.

The cover system is maintained and inspected, the deed restrictions remain in place and groundwater is sampled and assessed annually.

Compliance Statement

This compliance statement is based on an interview with Manth Manufacturing personnel, visual observations and review of the groundwater monitoring report. The following covers the major compliance issues as described in the Site Management Plan:

Soils Management Plan (SMP) Compliance/Construction Monitoring

During the reporting period, Manth Manufacturing, Inc., added a small parking area and water/sewer line as described in Section 1.1 which included minor disturbance to the cap. Based on verbal description of the activities and recent site inspection it appears that the cap was replaced and is in compliance.

Groundwater Monitoring Plan Compliance

The City contracted Stern & Wheler, LLC/GHD Consulting Services to complete the 2007-2014, groundwater monitoring program. Report summarizing of the program as described above have been provided to the NYSDEC and directed to Manth Manufacturing, Inc. The recent report titled *2014 Periodic Review Report, Groundwater Monitoring and Sampling Results. 153 Fillmore Avenue Site, City of Tonawanda, November 2014 GHD Project No. 8612199*, was prepared for the City of Tonawanda, by GHD, in November 2014. The report was submitted separately to the NYSDEC and Manth and contains SMP compliance information.

Soil Cover Maintenance Provisions Compliance

PEI visited the property on March 27, 2015 to verify conditions and review/complete the Institutional and Engineering Controls Certification Form. During this visit PEI personnel completed a visual inspection of the property. It should be noted that a small amount of snow did exist in piles which prohibited complete inspection, however, most of the property was available for visual observations (refer to attached Photographs). During the visit, PEI completed the Institutional and Engineering Controls Certification Form (Attachment A) together with Manth Manufacturing, Inc. staff. Other than during construction of the pole barn in 2007 (as documented in the 2007 annual report), and the installation of a small parking area and water/sewer line (summaried above in Section 1.1) Manth Manufacturing, Inc., staff report no site work has been completed on the property since that time.

In general, the area of the property not covered by asphalt has a grass cover which is mowed and maintained. PEI also reviewed the need to maintain the cover with Manth Manufacturing, Inc., staff and especially with regard to any errant vehicle traffic beyond the cement/asphalt areas.

The following is a summary of findings which are based on visual observations information provided by Manth staff:

- Work activities including the construction of the small parking area and installation of the water/sewer

line involved a minor breach of the cap. All material removed were placed back and the soil cover was put back and or new cement/asphalt cover placed. Based on discussions with Manth Staff, no materials were removed from the property and no new soil materials were brought to the property.

- With the exception of the new parking are the property appeared to be the same as the last inspection in 2011. The cap appeared to be intact and maintained– refer to attached Photographs

4.0 CONCLUSIONS

This report constitutes the statement for the reporting of February 15, 2012 to February 15, 2015 and provides information on compliance with the soil management plan, groundwater monitoring plan, and soil cover maintenance provisions as described in the March 18, 2003 report entitled *Final Report for 153 Fillmore Avenue* and those requirements as stipulated in property ownership agreement made October 24, 2003 and the Site Management Plan, April 2009.

In summary, other than the small new parking area and water/sewer line, no significant disturbances to the cap were reported by Manth Manufacturing, Inc., staff, GHD staff or were observed by PEI staff during the site visit. Groundwater sampling results completed for the City of Tonawanda indicate that both volatile and semi-volatile organic compounds and inorganic metal compounds were detected in groundwater at levels both above and below standards and above and below levels detected in previous well sampling events. During the reporting period, the property appears to have been maintained in a manner consistent with the requirements of the Agreement.

PEI recommends that Manth Manufacturing, Inc. discuss the future requirements for groundwater monitoring and soil management with the NYSDEC and the City of Tonawanda.

Thank you for the opportunity to be of assistance to you on this project. Please do not hesitate to contact us if you have any questions or require further assistance.

Sincerely,



Peter J. Gorton, MPH, CHCM
President
Panamerican Environmental, Inc.

Attachments

- Attachment A - NYSDEC Institutional and Engineering Controls Certification Form & Plumbing Permit
- Attachment B – Photographs of property during March 2015 Inspection
- Attachment C – Portion of 2014 GHD Groundwater report

Figures

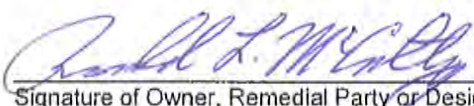
- Figure 1 - Site Location
- Figure 2 – Aerial of property with location of 2014 site work

Attachment A



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1
Site No. V00379		
Site Name Envirotek 1		
Site Address: 153 Fillmore Avenue	Zip Code: 14150	
City/Town: Tonawanda		
County: Erie		
Site Acreage: 1.7		
Reporting Period: February 15, 2012 to February 15, 2015		
		YES NO
1. Is the information above correct?		<input checked="" type="checkbox"/> <input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?		<input type="checkbox"/> <input checked="" type="checkbox"/>
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?		<input type="checkbox"/> <input checked="" type="checkbox"/>
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?		<input checked="" type="checkbox"/> <input type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form. <i>SEE ATTACHED PERMIT FOR WATER/SEWER</i>		
5. Is the site currently undergoing development?		<input type="checkbox"/> <input checked="" type="checkbox"/>
		Box 2
		YES NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial		<input checked="" type="checkbox"/> <input type="checkbox"/>
7. Are all ICs/ECs in place and functioning as designed?		<input checked="" type="checkbox"/> <input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.		
A Corrective Measures Work Plan must be submitted along with this form to address these issues.		
 Signature of Owner, Remedial Party or Designated Representative		<u>3/27/15</u> Date

SITE NO. V00379

Box 3

Description of Institutional Controls

Parcel

39.47-1-1.111

Owner

Duane B. Manth

Institutional Control

Landuse Restriction
Site Management Plan
Ground Water Use Restriction
Soil Management Plan

A Deed Restriction was filed in the Erie County Clerk's Office on October 31, 2003 prohibiting the use of the property for anything other than commercial or industrial activities, and prohibiting the use of groundwater as a source of potable or industrial water without proper treatment. Post-closure maintenance of the cover system and groundwater monitoring are required to ensure the long term effectiveness of the remedy.

Description of Engineering Controls

Box 4

Parcel

39.47-1-1.111

Engineering Control

Cover System

Cover System.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

*MIND SITE CHANGES
SEE ATTACHED
REPORT* YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00379

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

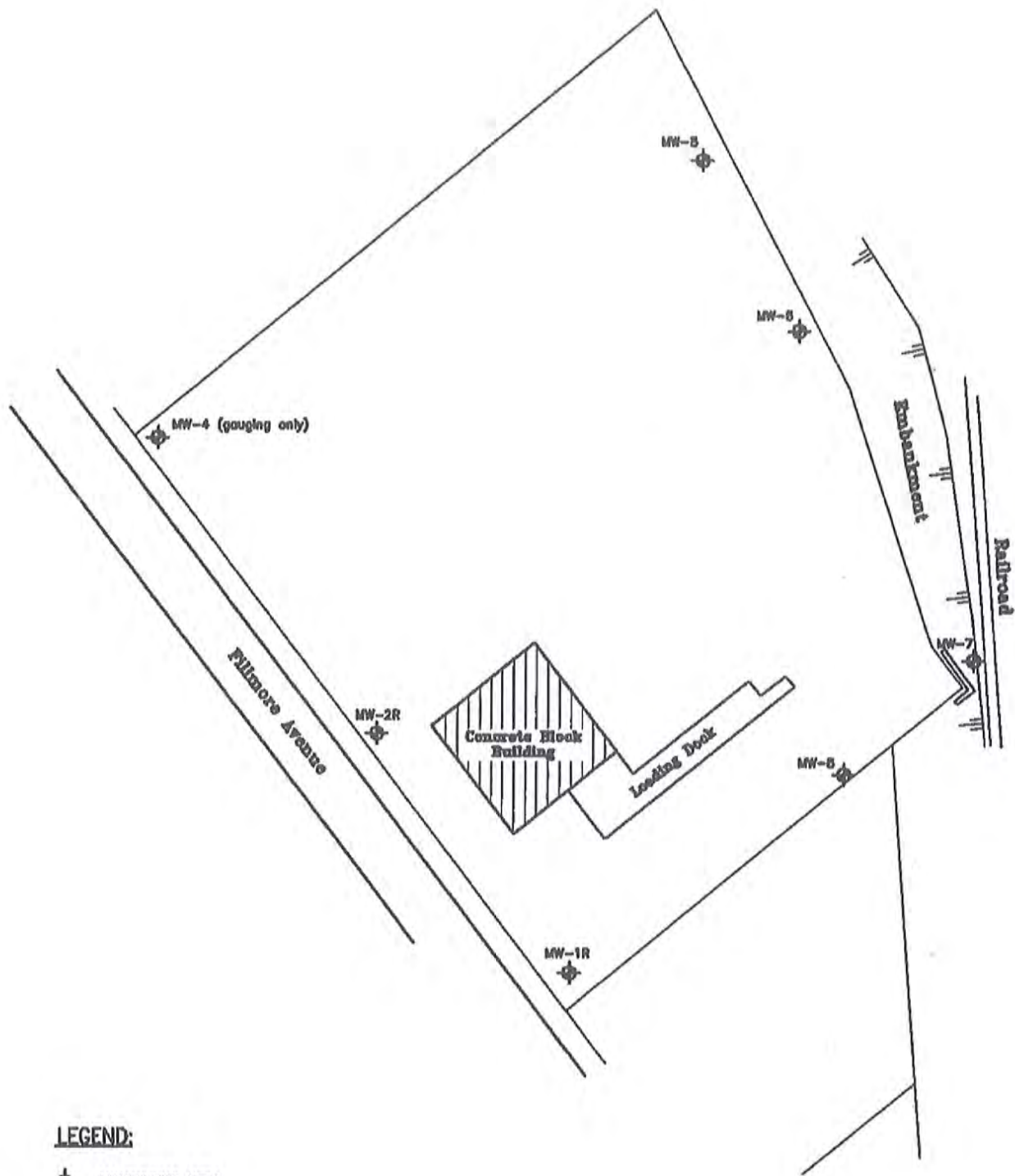
I Ronald H. McCarthy at MANTH MFG., INC.
print name print business address

am certifying as DESIGNATED REPRESENTATIVE (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Ronald H. McCarthy
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

3/27/15
Date



LEGEND:

 MONITORING WELL



153 FILLMORE AVENUE SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT
 MONITORING WELL LOCATIONS

Job Number | 86-12199
 Revision | A
 Date | 09 14
Figure 02

IC/EC CERTIFICATIONS

Box 7

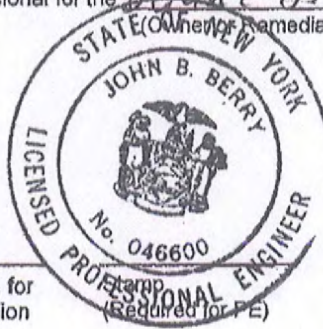
Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I, John B. Berry at 2390 Clinton St. Buffalo, N.Y. 14227
print name print business address

am certifying as a Qualified Environmental Professional for the Diane B. Muntz
OWNER (Owner or Remedial Party)

Peter Gaten
John B. Berry



4/2/15
Date

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification



*The City of Tonawanda will not remove discarded material from curb.
Holder of permit must make provisions for removal under penalty of law.*

PLUMBING PERMIT

This permit must be posted in a conspicuous place on the site

PERMIT NUM: 6538

DATE: 5/12/2014

THIS IS TO CERTIFY THAT PERMISSION IS GRANTED

PLUMBER:

KUBINEC PLUMBING

FOR WORK ON:

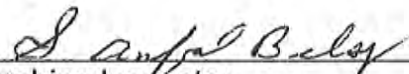
WATER LINE/SANITARY SEWER

AT:

131 FILLMORE AVE

The persons permitted to carry on work under this permit shall conform to the approve plans and specifications, also to the provisions of Law and Ordinances of the City of Tonawanda and The State of New York relating to construction, maintenance and inspections of buildings.

**ALL CONTRACTORS AND SUBCONTRACTORS MUST BE
LICENSED BY THE CITY OF TONAWANDA**


Plumbing Inspector

OWNER: MANTH DUANE B

INSPECTION SCHEDULE

1. ROUGH _____ 2. FINAL _____
FOR INSPECTIONS CALL 695-8627 BETWEEN 8:30 AM AND 10:00 AM

Attachment B



1. New cement pad west side of property between pole barn and building facing east



2. New cement pad facing west and Fillmore Ave



3. Location of where new sewer and water enters building



4. Location of new cement pad from Fillmore Street



5 View of property from southwest corner facing northeast



6. View of southern border from west and Fillmore Street facing east



7 View of groundwater wells 8 and 7 facing west at rail tracks



8. View of eastern half of property from southeast corner



9 View of eastern border from northeast corner facing south



10. View of property from northeast facing southwest



11. View of water line across property



12 View of location of new water line towards parking lot and street utility connect

Attachment C



**2014 Periodic Review Report
Groundwater Monitoring and Sampling Results
153 Fillmore Avenue Site
City of Tonawanda**

November 2014

**2014 PERIODIC REVIEW REPORT
GROUNDWATER MONITORING AND SAMPLING RESULTS**

**153 FILLMORE AVENUE SITE
CITY OF TONAWANDA**

Prepared by:

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SECTION 1 - SITE BACKGROUND

1.1 Site Location

The site is located at the intersection of Fillmore Avenue and Fremont Street in the City of Tonawanda (Figure 1). The 1.7-acre parcel is bounded on the east by an active railroad line, to the north and south by small commercial/industrial operations, and on the west by Fillmore Avenue. The subject property is located in a small industrial area adjacent to a residential neighborhood.

1.2 Site History

City directories for the period between 1946 to 1957, list Tonawanda Roofing and Paint Company at 141 Fillmore Avenue (adjacent property immediately north of site) and National Manufacturing Corporation at 153 Fillmore under Roofing Materials and Supplies. This is consistent with reports from local workers in the area that roofing materials were produced at the National Manufacturing site and installed by Tonawanda Roofing and Paint. This is further supported by the presence of four large ASTs and associated piping on the site that contain heavy, viscous, tar like material.

In 1957, National Manufacturing Corporation added paint manufacturing facilities at the subject property. Raw materials for paint production were shipped to the facility in bulk and were stored in above-ground storage tanks (ASTs) located in the tank rooms or underground storage tanks (USTs). The raw materials were transferred from the tank rooms to the manufacturing room where the paint was produced. The finished paint was then transferred to the warehouse where it was stored prior to shipment. National Manufacturing Corporation closed the facility in 1981.

In 1981, Envirotek Ltd, a solvent recycling company, reopened the facility as a Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal (TSD) facility. Containers of RCRA hazardous wastes were transported to the facility where they were stored pending reshipment to a RCRA disposal facility. Containers of RCRA characteristic ignitable, corrosive, and toxic hazardous wastes were stored at the facility from 1981 to 1986. A number of containers were left at the facility when Envirotek Ltd abandoned the facility in 1988.

NYSDEC contacted the United States Environmental Protection Agency (USEPA) concerning the subject property on June 29, 1987. The USEPA conducted a preliminary assessment (PA) under the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) on November 30, 1988 to determine if the subject property should be included on the National Priority List (NPL). The PA disclosed that an estimated 770 55-gallon drums and 1,000 smaller containers of RCRA flammable, combustible, and corrosive hazardous wastes that were present on the subject property. Several process vessels, four large ASTs, two USTs, and six transformers were also present at the subject property.

On July 18, 1989 the USEPA initiated remedial action activities at the site. These initial remedial action activities were completed on October 15, 1990, and included:

- the identification and categorization of all RCRA hazardous wastes;
- repackaging of 31,165 gallons of liquids and 11,655 pounds of solids and shipping off-site for incineration;
- repackaging 204 cubic yards of solids and shipping off-site for land disposal; and,
- repackaging 61,975 pounds of solids and shipping off-site for recycling.

A summary of remedial action activities are presented in a report entitled, "Federal On-Scene Coordinator's Report - Envirotek 1, Tonawanda, Erie County, New York," prepared by Roy F. Weston, Inc. and dated November 1990.

The NYSDEC conducted a limited site investigation in November 1997. This investigation was intended to determine if the site posed a significant threat to human health or the environment. This investigation consisted of the collection of soil samples from the site and surface water samples from Ellicott Creek.



The results of this investigation indicated no impairment of the Creek sediments or surface waters associated with the site. Analytical results of surface soils detected exceedances of NYSDEC soil cleanup objectives for (polynuclear aromatic hydrocarbons (PAHs), PCBs, and numerous metals. The highest concentrations were observed in the northeast corner of the site.

A Site Investigation/Remedial Alternatives Report was completed by URS Corporation in 2002 indicating that the primary contaminants on-site were volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). These contaminants were present in surface and subsurface soils, and groundwater. Some metals and minor concentrations of PCBs were detected in surface soils.

The remedial activities completed at 153 Fillmore Avenue were separated into two phases. Phase I, completed in 2001, consisted of the demolition and removal of various structures, the removal of three (3) underground storage tanks, backfilling with clean material, and the stockpiling of contaminated soil. Phase II, completed in October 2002, consisted of the following:

1. Excavation, removal, and disposal of contaminated soils from Phase I.
2. Decontamination and removal of four (4) above ground storage tanks.
3. Removal and disposal of ACM coatings on tanks.
4. Removal of piping, supports and associated structures.
5. Sampling, analysis, and characterization of site materials.
6. Removal and off-site disposal of 11.6 tons of hazardous materials
7. 200 CY of concrete crushed and placed as fill material.
8. Installation of 1-foot of clean cover material over the entire site of clay and topsoil.
9. Asphalt paving for two (2) parking areas.

A Site Management Plan as presented in Section 4 was completed after Site Investigation/Remedial Alternatives Report detailing a Groundwater Monitoring Plan.



SECTION 2 - GROUNDWATER MONITORING ACTIVITIES

The 2014 monitoring program at the 153 Fillmore Avenue Site in the City of Tonawanda consisted of one annual sampling event completed on July 15, 2014. Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8, located on the perimeter of the property as presented in Figure 2.

Groundwater samples were collected using low-flow purging and sampling techniques. Prior to sampling, monitoring wells MW-5, MW-6, MW-7 and MW-8 were purged using a peristaltic pump and dedicated tubing. Monitoring wells MW-1 and MW-2 were purged using a dedicated bailer. Groundwater from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7 and MW-8 were tested for field parameters to include: pH, conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP). Groundwater field parameters provided an indication that water drawn from the well is representative of the groundwater in the surrounding formation. The results of these field parameters are presented on Table 1. The groundwater field sampling logs that were used to record field information at each sampling point are provided in Appendix A. After the field parameters stabilized, groundwater samples were collected with a dedicated disposable bailer or dedicated tubing into sample containers provided by the laboratory.

In 2014, groundwater from monitoring well MW-7 was purged collecting only 0.2 gallons of groundwater due to purging to dry conditions in well. Purge water was used for sample water. Volatile sampling was accomplished filling the 40ml vials direct from the pump tubing. In addition, water level indicator cannot pass total depth of well due to obstruction and unable to record water level. If future monitoring, sampling and testing are required from this monitoring well, then possible reinstallation of this well would be necessary. Drilling and installation of a new well near monitoring well MW-7 location would be required.

Purge water generated during the groundwater sampling activities was emptied on-site away from the sampled well. Quality control samples, including a trip blank, a field blank, a matrix spike and matrix spike duplicate, and a field duplicate were collected during the sampling event. Samples were delivered under a chain of custody to ESC Lab Sciences in Mount Juliet, Tennessee for analysis of VOCs, SVOCs and Target Analyte List (TAL) Metals under CLP protocols with ASP Deliverable B test results.



SECTION 3 - GROUNDWATER MONITORING RESULTS

This section includes the results of the 2014 annual groundwater sampling event. Included are descriptions of site-specific hydrogeology, the identification and distribution of constituents present in groundwater, and a comparison of historical data. Constituents were compared to the applicable NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Groundwater Standards and Guidance Values.

3.1 Site Hydrogeology

Groundwater levels were collected at each monitoring well and are presented in Table 2. Figure 3 illustrates the groundwater elevation contours based on the groundwater levels measured on July 15, 2014. The groundwater elevation data indicates that groundwater flows toward the west. The up gradient monitoring well is identified as monitoring well MW-7.

3.2 Groundwater Analytical Results

A summary of the compounds detected in groundwater during the 2014 Groundwater Sampling Event is presented on Tables 3, 4 and 5. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, Class GA was used for the reporting limits. The groundwater samples were analyzed for volatiles, semi-volatiles, and metals on the Target Compound List (TCL). Laboratory analytical data reports are provided in Appendix B. Historical groundwater analytical test data is presented on Tables 3, 4 and 5. Historical groundwater total VOC concentration Figures displaying the lateral extent of the total VOC concentration plume from the sampling events of July 2014, July 2013, July 2012, July 2011, July 2010, July 2009, August 2008, July 2007, and October 2001 are provided in Appendix C.

3.2.1 Volatile Organic Analytical Test Results

The volatile organic analytical test results for the sampling event of 2014 varied depending on the monitoring well and specific compounds detected in groundwater in comparison with previous annual sampling events. Results showed increasing and decreasing volatile organic concentrations when comparing test data from all sampling events with 2012 and 2013 test results. The semi-volatile organic analytical test results are presented in Table 3. Several estimated volatile compounds detected below quantitation limits can be identified as insignificant concentrations for reporting purposes as presented in Table 3.

Exceeding Groundwater Standards: The volatile organic analytical test results detected concentrations of vinyl chloride (MW-2 and MW-8), cis-1,2-dichloroethene (MW-1 and MW-8), benzene (MW-2 and MW-8) exceeding groundwater quality standards as presented in Table 3.

Vinyl chloride: Detected concentrations of vinyl chloride decreased in groundwater sampled from monitoring well MW-2 which represented concentrations exceeding the groundwater quality standard. Detected concentrations of vinyl chloride remained the same at monitoring well MW-1 which represented concentrations below the groundwater quality standard. Detected concentrations of vinyl chloride decreased in groundwater sampled from monitoring well MW-8 when comparing results from 2014 to 2012 which represented concentrations exceeding the groundwater quality standard. The concentrations of vinyl chloride decreased to non-detectable results at monitoring well MW-7. Concentrations of vinyl chloride were not detected in groundwater sampled from monitoring wells MW-7 and MW-8 in 2013.

Acetone: The concentrations of acetone decreased to non-detectable results at monitoring well MW-7. The concentrations of acetone from monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of acetone were not detected in groundwater sampled from monitoring well MW-7 in 2013.

Trans-1,2-dichloroethane: Detected concentrations of trans-1,2-dichloroethene decreased at monitoring well MW-8 which represented concentrations below the groundwater quality standard. The



concentrations of trans-1,2-dichloroethene at monitoring well MW-8 decreased when comparing results from 2014 to 2012. Concentrations of trans-1,2-dichloroethene were not detected in groundwater sampled from monitoring well MW-8 in 2013.

Cis-1,2-dichloroethene: Detected concentrations of cis-1,2-dichloroethene remained the same in groundwater samples from monitoring well MW-1, which represented concentrations exceeding the groundwater quality standard. Detected concentrations of cis-1,2-dichloroethene decreased at monitoring well MW-2 which represented concentrations below the groundwater quality standard. Detected concentrations of cis-1,2-dichloroethene decreased in groundwater sampled from monitoring well MW-8 when comparing results from 2014 to 2012 which represented concentrations exceeding the groundwater quality standard. Concentrations of cis-1,2-dichloroethene were not detected in groundwater sampled at monitoring well MW-8 in 2013.

The concentrations of cis-1,2-dichloroethene decreased at monitoring wells MW-2 and MW-7 which represented concentrations below the groundwater quality standard. The concentrations of cis-1,2-dichloroethene from monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of cis-1,2-dichloroethene were not detected in groundwater sampled from monitoring well MW-7 in 2013.

Benzene: Detected concentrations of benzene decreased in groundwater sampled from monitoring wells MW-2 and MW-8 which represented concentrations exceeding the groundwater quality standard. Detected concentrations of benzene decreased in groundwater sampled from monitoring well MW-8 when comparing results from 2014 to 2012. Concentrations of benzene were not detected in groundwater sampled at monitoring well MW-8 in 2013.

Trichloroethene: Detected concentrations of trichloroethene decreased at monitoring well MW-7 which represented concentrations below the groundwater quality standard. The concentrations of trichloroethene at monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of trichloroethene were not detected in groundwater sampled at monitoring well MW-7 in 2013.

Tetrachloroethene: Detected concentrations of tetrachloroethene decreased to non-detectable results at monitoring well MW-7. The concentrations of tetrachloroethene from monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of tetrachloroethene were not detected in groundwater sampled at monitoring well MW-7 in 2013.

As presented in Appendix C, historical total VOC concentration groundwater plume figures show the total VOC plume has migrated in a westward direction over time in a similar direction as groundwater flow. The following observations have been made in regard to VOC plume migration and movement.

2001 - The October 2001 figure shows a total VOC concentration plume that is centered on the east side of the site with total VOC concentrations of approximately 2,681 ppb detected in groundwater from monitoring well MW-7.

2007 - The total VOC concentration plume from the 2007 sampling event indicates decreasing total VOC concentration centered on monitoring well MW-7.

2008 - The center of the total VOC concentration plume migrated in a westward direction due to higher VOC concentrations detected in groundwater from monitoring wells MW-6 and MW-8.

2009 - The total VOC concentration plume expanded westward with the addition of sampling and test results from monitoring wells MW-1 and MW-2.

2010 - The total VOC concentration plume remained similar to the 2009 total VOC concentration plume, however, shows decreased VOC concentrations from monitoring well MW-6.



2011 - The total VOC plume migrated further west with test results from sampling detecting increased total VOC concentrations at monitoring well MW-1. Total VOC concentrations continued to decrease to non-detectable results from monitoring well MW-6.

2012 - The total VOC plume increased in VOC concentrations groundwater from monitoring well MW-1 for the third year. Plume migration appears to have moved southwest since total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 as presented below:

- 2009 - 5.5 ug/l
- 2010 - 16.0 ug/l
- 2011 - 26.0 ug/l
- 2012 - 73.0 ug/l

2013 - The total VOC plume decreased in size and VOC concentrations in monitoring wells MW-1 and MW-2. VOC concentrations were not detected in monitoring well MW-8 in 2013. Plume migration should be migrating to the southwest with the direction of groundwater flow. Total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 with a decrease in concentration in 2013 as presented below:

- 2009 - 5.5 ug/l
- 2010 - 16.0 ug/l
- 2011 - 26.0 ug/l
- 2012 - 73.0 ug/l
- 2013 - 14.3 ug/l

2014 - The total VOC plume increased in size and decreased total VOC concentrations. Total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 with a decrease in VOC concentration in 2013. In 2014, VOC concentrations slightly increased in comparing 2013 results as presented below:

- 2009 - 5.5 ug/l
- 2010 - 16.0 ug/l
- 2011 - 26.0 ug/l
- 2012 - 73.0 ug/l
- 2013 - 14.3 ug/l
- 2014 - 14.8 ug/l

The following observations have been made regarding total VOC concentrations:

- **2007 and 2008** - There was no VOC test data from monitoring wells MW-1 and MW-2 since the wells were nonfunctional until being re-drilled/installed in 2009.
- **2001 to 2009** - Total VOC concentrations increased consistently in groundwater monitoring well MW-8.
- **2010, 2011, 2012** Total VOC concentrations in monitoring well MW-8 decreased.
- **2010, 2011, 2012** - Total VOC concentrations in monitoring well MW-2 decreased.
- **2012** - Total VOC concentrations in monitoring wells MW-1 and MW-7 increased.
- **2013** - Total VOC concentrations in monitoring wells MW-1, MW-2 and MW-8 decreased.
- **2014** - Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 decreased from total VOC concentrations detected in 2013 of 107.2 ug/l to 73.5 ug/l as reported in 2014.



3.2.2 Semi-Volatile Organic Analytical Test Results

The semi-volatile organic analytical test results for the sampling event of 2014 varied depending on the monitoring well location and specific compounds detected in groundwater in comparison with previous annual sampling events. Results showed increasing and decreasing semi-volatile organic concentrations when comparing data with 2013 test results. The semi-volatile organic analytical test results are presented in Table 4.

Acenaphthene: Detected concentrations of acenaphthene increased in groundwater sampled from monitoring wells MW-2, MW-6 and MW-8. Concentrations of acenaphthene were below the groundwater quality standard. Detected concentrations of acenaphthene decreased in groundwater sampled from monitoring wells MW-1 and MW-5 to non-detectable results.

Bis(2-ethylhexyl)phthalate: Detected concentrations of bis(2-ethylhexyl)phthalate decreased in groundwater sampled from monitoring well MW-1 to an estimated concentration detected below quantification limits.

The detected concentrations as reported in 2012 of acenaphthene, fluoranthene, pyrene, benz(a)anthracene, chrysene, bis(2-ethylhexyl) phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene were not detected in groundwater sampled in 2014 from monitoring well MW-7. Concentrations of semi-volatile organics as listed were not detected in groundwater sampled at monitoring well MW-7 in 2013 due to no groundwater available. Test results from 2014 were compared to 2012 test results.

Several estimated semi-volatile compounds detected below quantification limits can be identified as insignificant concentrations for reporting purposes as presented in Table 4. The following compounds were reported as estimated values: dimethyl phthalate, bis(2-ethylhexyl)phthalate, di-n-butyl phthalate, acenaphthylene, diethyl phthalate, fluorine, and anthracene.

3.2.3 Inorganic Metals Analytical Test Results

Detected concentrations of inorganic metals for the 2014 sampling event that exceeded groundwater quality standards and increased in concentrations when compared with 2013 analytical test results include the following. The inorganic metals analytical test results detected concentrations cadmium (MW-1), chromium (MW-2), iron (MW-2 and MW-5), lead (MW-7), magnesium (MW-5), manganese (MW-7), and selenium (MW-5 and MW-6) exceeding groundwater quality standards as presented in Table 5.

Aluminum: Detected concentrations of aluminum decreased in groundwater sampled from monitoring well MW-1, MW-8 and remained the same in monitoring well MW-2. Test results exceeded the groundwater quality standard from both monitoring wells MW-1 and MW-2.

Antimony: Detected concentrations of antimony decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8 and reported below the groundwater quality standard.

Arsenic: Detected concentrations of arsenic decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8 and reported below the groundwater quality standard.

Barium: Detected concentrations of barium decreased or remained the same in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8 and reported below the groundwater quality standard.

Beryllium: Detected concentrations of beryllium decreased in groundwater sampled from monitoring well MW-1 and exceeded the groundwater quality standard. Beryllium concentrations in groundwater sampled from all other wells were non-detectable results.

Cadmium: Detected concentrations increased in groundwater sampled from monitoring well MW-1 and exceeded the groundwater quality standard. Cadmium concentrations in groundwater sampled from



monitoring wells MW-5 and MW-7 were estimated concentrations below quantification limits. Cadmium concentrations in groundwater sampled from monitoring wells MW-2, MW-6, and MW-8 were non-detectable results.

Chromium: Detected concentrations of chromium increased in groundwater sampled from monitoring well MW-2 and exceeded the groundwater quality standard. Detected concentrations of chromium decreased in groundwater sampled from monitoring well MW-1 and exceeded the groundwater quality standard. Chromium concentrations in groundwater sampled from monitoring well MW-7 were estimated concentrations below quantification limits. Groundwater sampled from monitoring wells MW-5, MW-6, and MW-8 were reported at non-detectable results for chromium concentrations.

Copper: Detected concentrations of copper decreased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-7 and reported below the groundwater quality standard. Copper concentrations in groundwater sampled from monitoring well MW-5 were estimated concentrations below quantification limits. Groundwater sampled from monitoring wells MW-5 and MW-8 were reported at non-detectable results for copper concentrations.

Iron: Detected concentrations of iron increased in groundwater sampled from monitoring wells MW-2 and MW-5 and exceeded the groundwater quality standard. Detected concentrations of iron decreased in groundwater sampled from monitoring wells MW-1, MW-6, MW-7, and MW-8. Detected concentrations of iron exceeded the groundwater quality standard in all monitoring wells.

Lead: Detected concentrations of lead decreased in groundwater sampled from monitoring well MW-7 and exceeded the groundwater quality standard. Detected concentrations of lead increased in groundwater sampled from monitoring wells MW-5 and MW-6 and reported below the groundwater quality standard. Detected concentrations of lead decreased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-8 and reported below the groundwater quality standard.

Magnesium: Detected concentration of magnesium increased in groundwater sampled from monitoring well MW-5 and exceeded the groundwater quality standard. Detected concentrations of magnesium decreased in groundwater sampled from monitoring wells MW-1 and MW-2 and exceeded the groundwater quality standard. Detected concentration of magnesium decreased in groundwater sampled from monitoring well MW-7 and reported below the groundwater quality standard. Detected concentration of magnesium increased in groundwater sampled from monitoring wells MW-6 and MW-8 and reported below the groundwater quality standard.

Manganese: Detected concentration of manganese increased in groundwater sampled from monitoring well MW-7 and exceeded the groundwater quality standard. Detected concentrations of manganese decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-6 and MW-8 and exceeded the groundwater quality standard. Detected concentration of manganese increased in groundwater sampled from monitoring well MW-5 and reported below the groundwater quality standard.

Mercury: Detected concentrations of mercury decreased in groundwater sampled from monitoring wells MW-1 and MW-2 and reported below the groundwater quality standard.

Nickel: Detected concentrations of nickel decreased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-7 and reported below the groundwater quality standard.

Selenium: Detected concentrations of selenium increased in groundwater sampled from monitoring wells MW-5 and MW-6 and exceeded the groundwater quality standard. Selenium concentrations in groundwater sampled from monitoring wells MW-2, MW-7, and MW-8 were estimated concentrations below quantification limits. Groundwater sampled from monitoring well MW-1 were reported at non-detectable results for selenium concentrations.



Thallium: Detected concentrations of thallium decreased in groundwater sampled from monitoring wells MW-1, MW-2 and MW-8 to non-detectable results. Groundwater sampled from all wells were reported at non-detectable results for thallium concentrations.

Zinc: Detected concentrations of zinc decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8 and reported below the groundwater quality standard. Zinc concentrations in groundwater sampled from monitoring well MW-6 were estimated concentrations below quantification limits.

3.3 Quality Assurance/Quality Control Analytical Results

Groundwater samples were analyzed for VOCs by USEPA SW-846 Method 8260, SVOCs by USEPA SW-846 Method 8270 and TAL Metals at ESC Lab Sciences in Mount Juliet, Tennessee. The laboratory data were independently reviewed in accordance with USEPA National Functional Guidelines of October 1999. The data package includes a summary of the analytical results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a field duplicate, method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis.

Data Usability Summary Reporting completed by Vali-Data of WNY, LLC October 31, 2014 is presented in Appendix D. The QA/QC measurements examined for the data were within method-specified or laboratory-derived limits. No data were rejected as a result of the data validation.



SECTION 4 - SOILS MANAGEMENT PLAN

4.1 Objective

The objective of this Soils Management Plan (SMP) is to set guidelines for the maintenance and repair of the cover system at the Site, and for the management of soil and fill disturbed during any future intrusive work that breaches this cover system. This SMP addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC).

4.2 Nature and Extent of Contamination

The data obtained during the investigation and remediation of the Site reveal that the contaminants of concern at this Site for surface soil consist primarily of semivolatile organic compounds (SVOCs) and metals. The primary SVOCs of concern include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene. These contaminants belong to a class of SVOCs known as polycyclic aromatic hydrocarbons (PAHs). PAHs are a group of over 100 different chemicals that are ubiquitous in the environment. Sources of PAHs include incomplete combustion of coal, oil, gasoline, garbage, wood and incinerators. PAHs are also found in coal tar, crude oil, creosote, roofing tar, medicines, dyes, plastics and pesticides. The primary metals of concern in surface soil include barium, cadmium, chromium, lead and mercury.

The contaminants of concern at the Site for subsurface soil consist primarily of volatile organic compounds and semivolatile organic compounds. The primary VOCs of concern includes acetone, benzene, ethylbenzene and xylene, while the primary SVOCs of concern include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene.

The contaminants of concern at the Site for groundwater consist primarily of volatile organic compounds and metals. The primary VOCs of concern includes dichloroethene and vinyl chloride, although historic groundwater samples also contained benzene, ethylbenzene, toluene, trichloroethene and xylene. The primary metals of concern in groundwater include aluminum, cadmium, iron, lead and manganese.

4.3 Contemplated Use

Following the remediation of the Site, the property was purchased by Manth Manufacturing for use as parking and warehousing for the company's existing manufacturing operations at 131 Fillmore Avenue. The Deed Restriction specifically prohibits the use of the Site for any type of residential, agricultural or school/day care purposes.

4.4 Purpose and Description of the Cover System

The purpose of the cover system is to prevent public exposures with contaminated soil, fill and groundwater, and to prevent the migration of contaminants off-site via groundwater or surface water runoff. The cover system at the Site consists of the following:

- A 1-foot thick clean soil cover without a demarcation layer;
- A 1-foot thick asphalt and sub base cover at two areas used for parking and access;
- A concrete and sub base cover consisting of sidewalks and the floors of Site buildings. Vapor barriers are not present under any of the concrete buildings slabs.

4.5 Cover System Maintenance and Repair

The cover system will be periodically inspected and maintained. Maintenance includes controlling surface erosion and run-off from the Site, and includes proper maintenance of the vegetative cover. In the event that damage to the cover system is observed (e.g., ruts, erosion, cracked or broken asphalt, etc.), repairs will be made to restore the cover system to its pre-damaged condition. These repairs are required to maintain the integrity of the cover system.

Future use of the Site should preclude as described in the Deed Restriction, whenever possible, excavation or disturbance of the cover system. Should any future intrusive work breach the cover system, the



requirements of Sections 4.6 thru 4.9 of this SMP must be followed. Once the intrusive activities are complete, the cover system must be restored in a manner that is consistent with the original construction. If the type of cover system changes from that which existed prior to the intrusive activities (i.e., a soil cover is replaced by asphalt, concrete or a building), a figure showing the modified surface should be included in the appropriate annually submitted Periodic Review Report, and in any updates to the Site Management Plan. The Periodic Review Report should also certify that all intrusive and cover system repair activities were conducted in conformance with this Soil Management Plan.

4.6 Management of Subsurface Soil and Fill

The purpose of this section is to provide environmental guidelines for the management of soil and fill encountered during any future intrusive work that breaches the cover system. This SMP includes the following conditions:

- Any breach of the cover system, including for the purposes of construction or utilities work, must be replaced or repaired using an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The repaired area must be covered with clean soil and reseeded, or covered with impervious product such as concrete or asphalt to prevent future erosion;
- During any intrusive activities that breach the cover system, the Contingency Plan of Section 4.7 must be implemented, if conditions so warrant. Dust monitoring and control techniques (e.g., wetting road surfaces, covering soil stockpiles, stopping intrusive activities during windy conditions, etc) must also be implemented;
- Soil and fill excavated at the Site that is intended to be removed from the property must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations as referenced in Section 4.8;
- Soil and fill excavated at the Site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination, and is placed beneath a cover system component as referenced in Section 4.4;
- Any off-site material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. Off-site borrow sources will be subject to the collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide by a NYSDOH ELAP-certified laboratory. The soil will be acceptable for use as cover material provided that all parameters meet the 6 NYCRR Part 375 residential soil cleanup objectives (Appendix E);
- Prior to any construction activities, workers are to be notified of Site conditions with clear instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety, including all applicable personal protective equipment.

4.7 Contingency Plan

If underground storage tanks or other previously unidentified contaminant sources are encountered during future intrusive work, excavation activities will be suspended until sufficient equipment is mobilized to address the situation. Such findings will be promptly communicated to the NYSDEC Region 9 Office in Buffalo, New York. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. Representative samples of product, soil and fill will be collected for chemical analysis to determine the nature of the material and proper disposal method. The samples should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide by a NYSDOH ELAP certified laboratory. Disposal of this material should take place as referenced in Section 4.8.



4.8 Disposal of Subsurface Soil and Fill

Soil and fill that is excavated at the Site but cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil and fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and one duplicate sample will be collected for every 100 cubic yards of material. For excavated soil and fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and one duplicate sample will be collected for every 2,000 cubic yards of material. A minimum of one composite sample and one duplicate sample will be collected for volumes less than 2,000 cubic yards.

The composite sample will be collected from five locations within each stockpile. A duplicate composite sample will also be collected. PID measurements will be recorded for each of the five individual locations. If elevated PID measurements are documented, one grab sample will be collected from the individual location with the highest PID measurement. If none of the individual samples exhibit PID readings, one grab sample will be selected at random. The composite sample will be analyzed for pH (EPA Method 9045C), TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide by a NYSDOH ELAP certified laboratory. The grab sample will be analyzed for TCL VOCs.

Samples will be composited by placing equal portions of soil and fill from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil and fill will be thoroughly homogenized using a stainless steel trowel or disposable scoop, and transferred to pre-cleaned sample bottles provided by the laboratory. The sample bottles will be labeled and a chain-of-custody form will be prepared.

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually.

If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received from the laboratory.

4.9 Subgrade Material

Subgrade material used to backfill excavations or placed to increase surface grades must meet the following criteria.

- Excavated on-site soil and fill that appears to be visually impacted shall be sampled and analyzed as described in Section 4.8. If analytical results indicate that contaminants are present at concentrations below the 6 NYCRR Part 375 commercial soil cleanup objectives (Appendix E), the soil and fill can be used as backfill on-site;
- Any off-site material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination, and cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a);
- If the contractor designates a source as "virgin" soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use;
- Virgin soil will be subject to the collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver and cyanide by a NYSDOH ELAP certified laboratory. The soil



will be acceptable for use as backfill provided that all parameters meet the 6 NYCRR Part 375 commercial soil cleanup objectives as referenced in Appendix E;

• Non-virgin soil will be tested via collection of one composite sample per 500 cubic yards of material from each source. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin source, and both samples of the first 1,000 cubic yards meet the 6 NYCRR Part 375 commercial soil cleanup objectives as referenced in Appendix E, the sample collection frequency will be reduced to one composite for every 2,500 cubic yards of additional soils from the same source, up to 5,000 cubic yards. For borrow sources greater than 5,000 cubic yards, sampling frequency may be reduced to one sample per 5,000 cubic yards, provided all earlier samples met the 6 NYCRR Part 375 commercial soil cleanup objectives.

4.10 – 2014 Site Usage

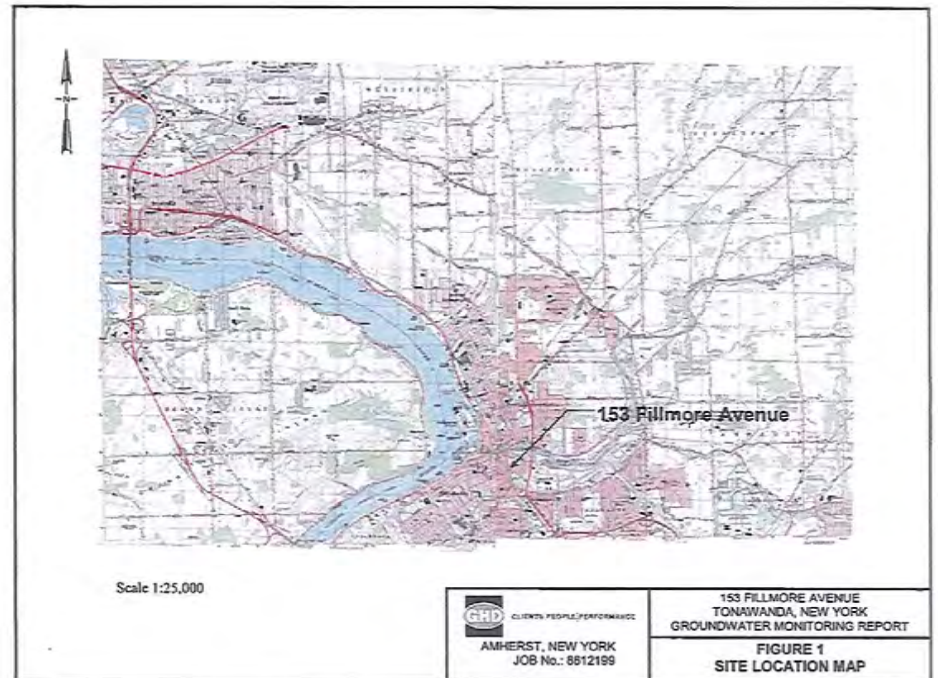
No excavation took place on-site in 2014.

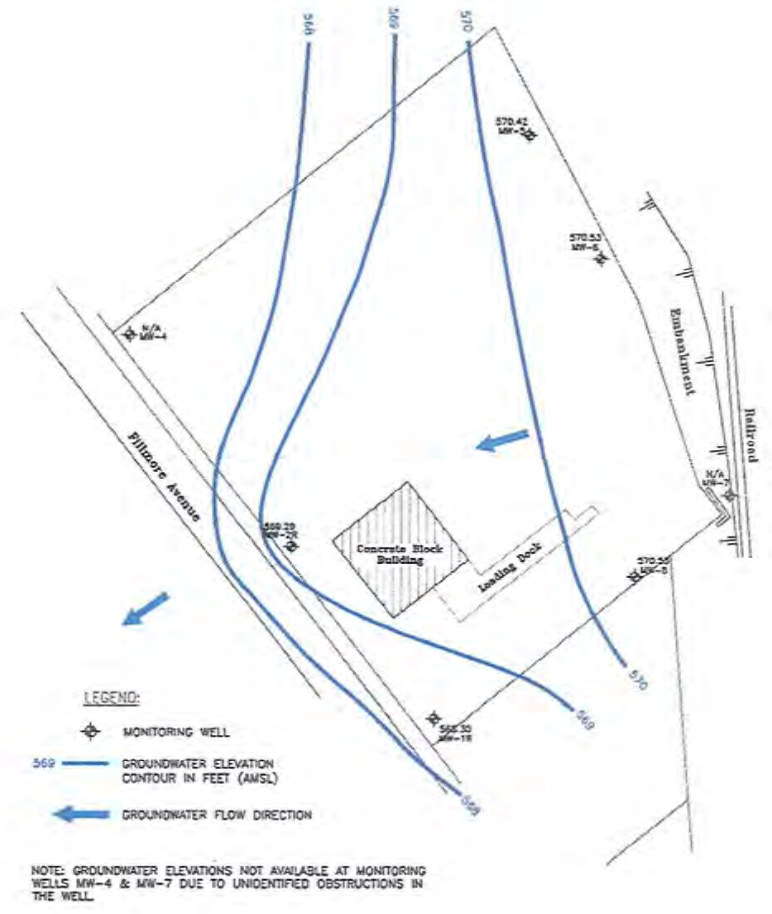
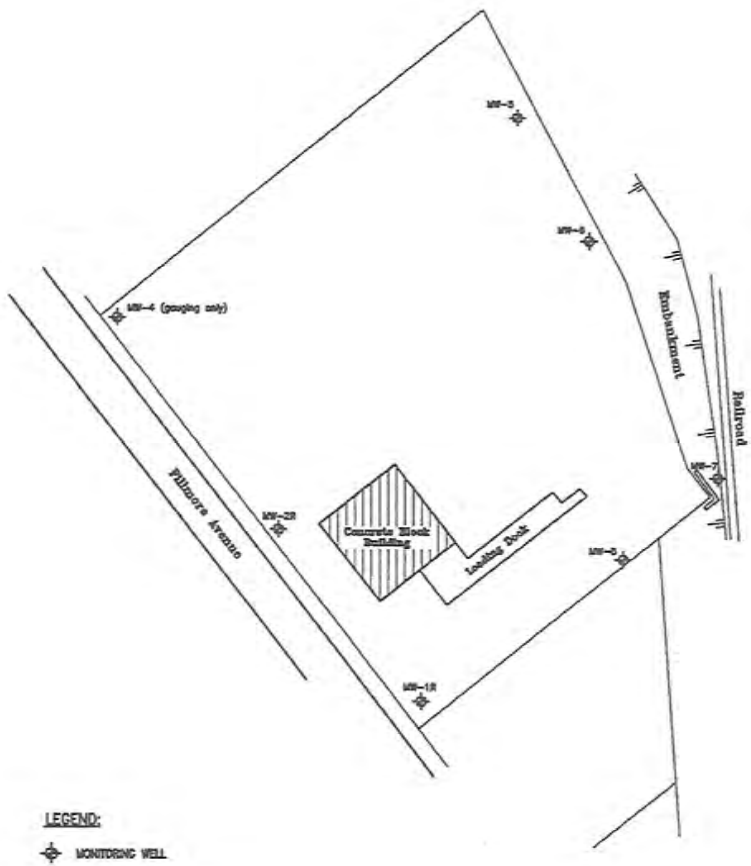


SECTION 5 - CONCLUSIONS

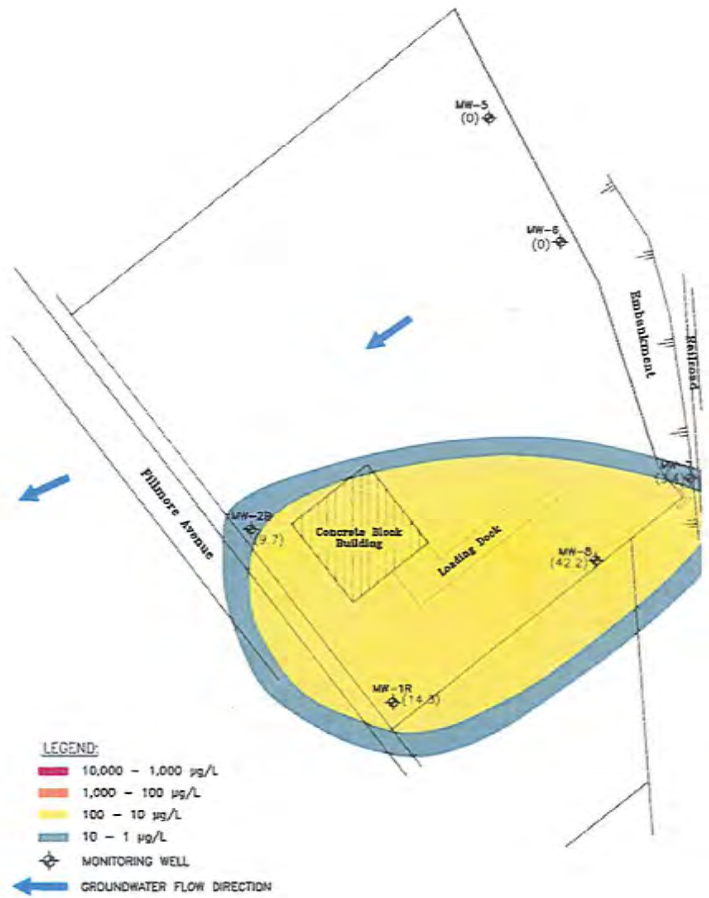
1. Volatile organic compound concentrations detected in 2014 analytical test results exceeded groundwater standards. Analytical testing detected the following volatiles: vinyl chloride (MW-2 and MW-8), cis-1,2-dichloroethene (MW-1 and MW-8), benzene (MW-2 and MW-8) at concentrations exceeding groundwater quality standards. Volatile organic compound concentrations detected in 2014 groundwater samples decreased from reported 2013 test results.
2. Semi-volatiles organic concentrations detected in 2014 analytical test results did not exceed groundwater quality standards in groundwater. Only acenaphthene was detected in 2014 groundwater samples.
3. The inorganic metals analytical test results detected the following concentrations of aluminum, beryllium, cadmium, chromium, iron, lead, magnesium, manganese, and selenium exceeding groundwater quality standards.
4. Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 decreased from total VOC concentrations detected in 2013 of 107.2 ug/l to 73.5 ug/l as reported in 2014.
5. Trend analysis of volatile parameters indicates the total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 from 5.5 ug/l in 2009 to 73.0 ug/l in 2012. In 2013, however, trending of total VOC concentrations decreased to 14.3 ug/l. In 2014, total VOC concentrations slightly increased at 14.8 ug/l.
6. Trend analysis of volatile parameters indicates the total VOC concentrations in monitoring well MW-2 have decreased every year from 2010 to 2013 from 118.0 ug/l in 2010 to 10.1 ug/l in 2014.
7. Trend analysis of semi-volatile parameters indicated increasing and decreasing semi-volatile organic concentrations when comparing data with 2013 test results, which remained below groundwater quality standards.
8. Based on 2014 analytical test results, the total VOC concentration plume appears to be migrating in a southwestward direction with groundwater flow. Total VOC concentrations decreased in groundwater from monitoring wells MW-2, MW-7 and MW-8. Total VOC concentrations remained the same in groundwater at monitoring well MW-1. Monitoring wells MW-5 and MW-6 remained at non-detectable results.

FIGURES





TABLES



153 FILLMORE AVENUE SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT
 TOTAL GROUNDWATER VOC
 CONCENTRATION MAP - 07/15/14

Job Number: 86-42199
 Revision: A
 Date: 09/14

Figure 04

100 John Jay Avenue, Suite 101, Astoria, NY 14221 USA T 716 743 8822 F 716 743 8271 E astoria@ghd.com W www.ghd.com



TABLE 2E
Monitoring Well MW-7
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

Property	Units	10/17/01	07/26/07	08/17/08	07/23/09	07/15/10	07/23/11	07/24/12	07/24/13	07/15/14
Well Depth Top PVC	feet	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Well Depth Elevation	feet	562.76	562.76	562.76	562.76	562.76	562.76	562.76	562.76	562.76
Depth to Static Water	feet	4.86	16.50	14.70	(1)	(1)	(1)	(1)	(1)	(1)
Height of Water	feet	18.64	7.00	8.80	(1)	(1)	(1)	(1)	(1)	(1)
Top PVC Elevation	feet	586.26	586.26	586.26	586.26	586.26	586.26	586.26	586.26	586.26
Static Water Level Elevation	feet	581.4	569.76	571.56	(1)	(1)	(1)	(1)	(1)	(1)
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	1.68	0.62	0.79	(1)	(1)	(1)	(1)	(1)	(1)
Water Purged	gallon	5.03	1.89	1.50	1.25	1.25	1.25	0.00	0.00	0.00
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

TABLE 2F
Monitoring Well MW-8
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

Property	Units	10/17/01	07/26/07	08/27/08	07/23/09	07/15/10	07/23/11	07/24/12	07/24/13	07/15/14
Well Depth Top PVC	feet	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Well Depth Elevation	feet	560.93	560.93	560.93	560.93	560.93	560.93	560.93	560.93	560.93
Depth to Static Water	feet	8.16	8.50	6.90	7.8	8.4	8.9	10.6	5.1	7.9
Height of Water	feet	9.34	9.90	10.60	9.70	9.10	8.60	6.90	12.40	9.60
Top PVC Elevation	feet	578.43	578.43	578.43	578.43	578.43	578.43	578.43	578.43	578.43
Static Water Level Elevation	feet	570.27	569.93	571.53	570.63	570.03	569.53	567.53	573.33	570.53
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.84	0.81	0.95	0.87	0.82	0.77	0.62	0.62	0.86
Water Purged	gallon	2.52	2.43	3.00	2.62	2.46	2.32	1.86	1.86	2.60
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

Note: 1. There was an obstruction in the well at a depth of 6.8 feet in which the water level indicator could not proceed further down the well. The initial static water level from 2007 and 2008 were used to determine the amount of water to be purged.

TABLE 3A
Monitoring Well MW-1
Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	3 J	3 J	16	1.3	1.3
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	2.3 J	ND	0.46 J
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	47	5.5	13	23	55	13	13
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	47.0	5.5	16.0	26.0	73.3	14.3	14.8
Total VOCs		mg/L	0.047	0.006	0.016	0.026	0.073	0.014	0.015

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06-98 Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 * Dilution factor of 5 used
 ND = Not detected for at or above reporting limit
 J = Analyte detected estimated value below quantitation limits
 - = The analyte was not sampled for.

TABLE 3B
Monitoring Well MW-2
Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	ND	64	28	21	7.8
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	11	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	4 J	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	54	12	2.7 J	1.4	1.3
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	6.7	ND	5 J	2.5 J	2.3	1.9
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	0.36 J
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	0	92.7	118.0	56.0	26.6	11.5	10.1
Total VOCs		mg/L	0.000	0.093	0.118	0.056	0.027	0.012	0.010

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06-98 Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 * Dilution factor of 5 used
 ND = Not detected for at or above reporting limit
 J = Analyte detected estimated value below quantitation limits
 - = The analyte was not sampled for.

TABLE 3C
Monitoring Well MW-5
Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	Date											
			08/07/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14			
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	32.0	0	0	0	0	0	0	0	0	0	0	0
Total VOCs		mg/L	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06-98 Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 * Dilution factor of 5 used.
 ND - Not detected for at or above reporting limit.
 J - Analyte detected estimated value below quantitation limits.
 - - The analyte was not sampled for.

TABLE 3D
Monitoring Well MW-6
Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	Date											
			08/07/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14			
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	99	42	5	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	3 J	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	240	51	2 J	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	5.0	0	339.0	98.0	7.1	0	0	0	0	0	0	0
Total VOCs		mg/L	0.005	0.000	0.339	0.098	0.007	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06-98 Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 * Dilution factor of 5 used.
 ND - Not detected for at or above reporting limit.
 J - Analyte detected estimated value below quantitation limits.
 - - The analyte was not sampled for.

TABLE 3E
Monitoring Well MW-7
Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Vinyl chloride	2.0	µg/L	10	40 J	ND	2 J	ND	ND	17	*NA	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	27	29	*NA	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Methylene Chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
trans-1,2-Dichloroethane	5.0	µg/L	ND	10 J	ND	ND	ND	ND	ND	*NA	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
cis-1,2-Dichloroethane	5.0	µg/L	150	270	ND	14	45	9.4	29	*NA	2.0
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Benzene	1.0	µg/L	36	ND	ND	1 J	ND	ND	ND	*NA	0.72 J
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Trichloroethane	5.0	µg/L	19	10 J	ND	5.2	ND	3 J	3.9 J	*NA	1.4
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Toluene	5.0	µg/L	660	ND	ND	ND	ND	ND	ND	*NA	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Tetrachloroethene	5.0	µg/L	ND	10 J	ND	ND	ND	2.5 J	*NA	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Ethylbenzene	5.0	µg/L	690	ND	ND	2 J	ND	ND	ND	*NA	0.5 J
m,p-Xylene	5.0	µg/L	660	ND	ND	ND	ND	ND	ND	*NA	ND
o-Xylene	5.0	µg/L	440	ND	ND	ND	ND	ND	ND	*NA	1.4 J
Styrene	5.0	µg/L	16	ND	ND	ND	ND	ND	ND	*NA	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Total VOCs		µg/L	2,681.0	340.0	0	24.2	45.0	39.4	81.4	0.0	6.4
Total VOCs		mg/L	2.681	0.340	0.000	0.024	0.045	0.039	0.081	0.000	0.006

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06-98 Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 * Dilution factor of 5 used
 ND - Not detected for at or above reporting limit
 J - Analyte detected estimated value below quantitation limits
 - = The analyte was not sampled for.
 *NA - Unable to purge or sample due to equipment failure or no water was able to be removed from well. No water was retrievable.

TABLE 3F
Monitoring Well MW-8
Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/26/07	08/27/08	07/23/09*	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	54	190	160	190	240	120	10.0	ND	30
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethane	5.0	µg/L	7	15	20 J	20 J	10 J	11	4.9	ND	1.5
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethane	5.0	µg/L	31	160	230	370	260	52	22	ND	8.6
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	4	ND	ND	ND	ND	3 J	2.4 J	ND	2.1
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	2 J	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	6	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	102.0	367.0	410.0	580.0	510.0	186.0	144.2	0.0	42.2
Total VOCs		mg/L	0.102	0.367	0.410	0.580	0.510	0.186	0.144	0.000	0.042

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06-98 Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 * Dilution factor of 5 used
 ND - Not detected for at or above reporting limit
 J - Analyte detected estimated value below quantitation limits
 - = The analyte was not sampled for.

TABLE 4A
Monitoring Well MW-1
Semi-Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	06/09/01	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-ylstyryl ether	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-o-propylamine	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ppb/L	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4-Diaminophenol	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-ylstyryl ether	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenol	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	0.5	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Methylisobutylene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Nitroanisole	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	ppb/L	ND	ND	ND	ND	B, L, J	ND	ND
Acrylonitrile	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,6-Diaminobenzene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
3-Nitroanisole	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	20.0	ppb/L	ND	ND	ND	ND	L, J	ND	ND
2,6-Diaminophenol	10.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Nitrothian	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4-Diaminobenzene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Nitroanisole	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4,6-Diisopropyl-2-methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Dimethylphenyl phenyl ether	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	20.0	ppb/L	ND	J	ND	ND	ND	ND	ND
Fluorene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,3'-Dichlorobenzidine	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.001	ppb/L	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-ethylstyryl phthalate	5.0	ppb/L	ND	J	J	4.2 B	2.3 J	4.4	1.7 J
Di-n-butyl phthalate	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.002	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	0.002	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.002	ppb/L	ND	ND	ND	ND	ND	ND	ND
Dibenz[a,h]anthracene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[a,h,i]perylene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,1'-Methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-chlorostyryl ether	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND

J - NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Ground-water Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE - NYSDEC TOGS 1.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit
 J - Analyte detected estimated value below quantitation limit
 B - Analyte detected in the associated Method Blank
 - - The analyte was not sampled for.

TABLE 4B
Monitoring Well MW-2
Semi-Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	06/09/01	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-ylstyryl ether	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-o-propylamine	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ppb/L	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4-Diaminophenol	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-ylstyryl ether	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenol	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	0.5	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Methylisobutylene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Nitroanisole	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	ppb/L	ND	ND	ND	ND	ND	ND	L, J
Acrylonitrile	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,6-Diaminobenzene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
3-Nitroanisole	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	20.0	ppb/L	ND	J	ND	ND	L, J	ND	L, J
2,4-Diaminophenol	10.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
2-Nitrothian	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
2,4-Diaminobenzene	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Nitroanisole	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4,6-Diisopropyl-2-methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
4-Dimethylphenyl phenyl ether	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	ppb/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	1.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	20.0	ppb/L	ND	J	ND	ND	ND	L, J	ND
Fluorene	50.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	ppb/L	ND	ND	ND	ND	L, J	ND	ND
Di-n-butyl phthalate	20.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,3'-Dichlorobenzidine	5.0	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.001	ppb/L	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-ethylstyryl phthalate	5.0	ppb/L	ND	J	J	30 J	6.5 B	25	ND
Di-n-butyl phthalate	20.0	ppb/L	ND	ND	ND	ND	ND	ND	L, J
Benzo[b]fluoranthene	0.001	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	0.001	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.001	ppb/L	ND	ND	ND	ND	ND	ND	ND
Dibenz[a,h]anthracene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
Benzo[a,h,i]perylene	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
1,1'-Methylphenol	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND
but-2-chlorostyryl ether	NE	ppb/L	ND	ND	ND	ND	ND	ND	ND

J - NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Ground-water Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE - NYSDEC TOGS 1.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit
 J - Analyte detected estimated value below quantitation limit
 B - Analyte detected in the associated Method Blank
 - - The analyte was not sampled for.

TABLE 4C
Monitoring Well MW-5
Semi-Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	Date													
			08/06/01	07/24/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14					
Phenol	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
but-2- chloroethyl ether	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
but-2- chloroethyl methyl ether	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenol	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methoxyanthracene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phenol	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	2.5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dinitrophenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Nitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	ND	ND	ND	ND	ND	1.1	1.5 J	2.1	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dinitrophenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	1.2 J	ND	0.51 J	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.64	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Perachlorophenol	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	20.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cathacnic	NE	µg/L	ND	ND	ND	ND	ND	2.4	3.2 J	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	ND	ND	ND	3.4	2.4	ND	ND	ND	ND	6.45 J	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl hexyl phthalate	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
but-2- ethylhexyl phthalate	5.0	µg/L	ND	4.1	7.2	7.2	3.1	4.2	ND	ND	1.8 J	ND	ND	ND	ND	ND
Di-sec-butyl phthalate	50.0	µg/L	ND	7.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[e]pyrene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz[a,h]anthracene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11-4-Methylphenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
but-2- chloroethyl methyl ether	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 66-98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE - NYSDEC TOGS 1.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit
 J - Analyte detected estimated value below quantitation limits
 B - Analyte detected in the associated Method Blank
 - - The analyte was not sampled for.

TABLE 4D
Monitoring Well MW-6
Semi-Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	Date													
			08/06/01	07/25/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14					
Phenol	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
but-2- chloroethyl ether	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodipropylamine	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
but-2- chloroethyl methyl ether	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenol	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phenol	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	2.5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dinitrophenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Nitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	ND	ND	ND	ND	ND	1.1	1.5 J	2.1	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitroaniline	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dinitrophenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	ND	ND	ND	ND										

TABLE 5A
Monitoring Well MW-1
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	4,760	48,000	37,500	215,000	170,000	62,000
Antimony	6	µg/L	-	ND	ND	ND	ND	1.1	1.4
Arsenic	50	µg/L	11	ND	22	24	184	150	22
Barium	2,000	µg/L	301	265	590	543	1,920	1,400	840
Beryllium	3	µg/L	-	ND	ND	ND	7.62	7.56	5.40
Cadmium	10	µg/L	ND	ND	10.4	ND	151	ND	28
Calcium	NE	µg/L	-	188,000	635,000	400,000	1,130,000	830,000	540,000
Chromium	50	µg/L	ND	ND	67.7	58.2	287	210	100
Cobalt	NE	µg/L	-	ND	49	35.5	160	200	77
Copper	1,000	µg/L	-	16.6	77.7	89.5	437	579	220
Iron	600	µg/L	-	22,200	112,000	81,800	311,000	420,000	110,000
Lead	50	µg/L	7	3.78	30	62	518	200	38
Magnesium	35,000	µg/L	-	35,800	127,000	61,600	226,000	210,000	130,000
Manganese	600	µg/L	-	1,250	7,410	5,100	9,570	16,000	9,200
Mercury	0.7	µg/L	ND	ND	0.22	ND	0.52	0.54	0.23
Nickel	200	µg/L	-	ND	121	78.2	436	410	150
Perchlorate	NE	µg/L	-	4,650	12,600	12,400	51,100	26,000	16,000
Selenium	10	µg/L	-	ND	3.9	ND	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	7.2 J
Sodium	NE	µg/L	-	79,500	71,500	81,900	84,000	48,000	77,000
Titanium	0.5	µg/L	-	ND	ND	ND	ND	2.8	ND
Vanadium	NE	µg/L	-	ND	102	87	343	360	130
Zinc	5,000	µg/L	-	28.1	402	397	1,310	1,500	920

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 ND = Not detected for at or above reporting limit
 J = Analyte detected estimated value below quantitation limits
 - = The analyte was not sampled for.

TABLE 5B
Monitoring Well MW-2
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	2,250	98,500	35,600	265,000	34,000	34,000
Antimony	6	µg/L	-	ND	ND	ND	ND	1.5	0.84 J
Arsenic	50	µg/L	5	ND	17	32	297	44	16
Barium	2,000	µg/L	23	264	2,320	724	3,890	1,000	880
Beryllium	3	µg/L	-	ND	5	ND	0.35	ND	1.4 J
Cadmium	10	µg/L	ND	ND	20	6.32	223	10	ND
Calcium	NE	µg/L	-	213,000	1,240,000	417,000	1,550,000	460,000	370,000
Chromium	50	µg/L	ND	ND	146	56.2	356	50	62
Cobalt	NE	µg/L	-	ND	90	36.6	190	32	32
Copper	1,000	µg/L	-	29.1	611	199	1,510	560	220
Iron	600	µg/L	-	11,300	105,000	71,900	273,000	85,000	110,000
Lead	50	µg/L	2	13.1	410	140	1,150	100	40
Magnesium	35,000	µg/L	-	53,400	315,000	179,000	706,000	200,000	160,000
Manganese	600	µg/L	-	490	5,250	2,110	8,930	2,100	1,600
Mercury	0.7	µg/L	ND	ND	2.8	0.542	2.04	0.67	0.21
Nickel	200	µg/L	-	ND	222	71.6	834	89	87
Perchlorate	NE	µg/L	-	3,580	20,900	11,000	554,000	8,500	8,100
Selenium	10	µg/L	-	ND	5.6	ND	ND	32	11 J
Silver	50	µg/L	-	ND	ND	ND	ND	ND	6.1 J
Sodium	NE	µg/L	-	56,900	66,500	58,700	514,000	30,000	44,000
Titanium	0.5	µg/L	-	ND	ND	ND	ND	1.1	ND
Vanadium	NE	µg/L	-	ND	153	78	356	73	64
Zinc	5,000	µg/L	-	79.8	2,800	606	4,190	1,200	760

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.
 ND = Not detected for at or above reporting limit
 J = Analyte detected estimated value below quantitation limits
 - = The analyte was not sampled for.

TABLE 5C
Monitoring Well MW-5
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS I.1.1 Water Quality Standards ¹	Units	06/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	1,440	5,740	6,990	2,640	1,480	161	149	120
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	2.3	0.98 J	
Arsenic	50	µg/L	11	ND	ND	ND	ND	ND	1.6	0.86 J	
Barium	2,000	µg/L	2,396	160	666	532	176	239	172	118	110
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	22	ND	7	ND	ND	ND	ND	ND	0.72 J
Calcium	NE	µg/L	-	164,000	163,000	193,000	172,000	158,000	140,000	130,000	100,000
Chromium	50	µg/L	ND	ND	13.9	22.1	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	20.8	45.9	76.1	11.9	22	ND	ND	6.8 J
Iron	600	µg/L	-	2,800	12,400	17,200	7,090	4,970	3,450	260	2,100
Lead	50	µg/L	50	64.5	231	527	170	91	ND	4.8	13.0
Magnesium	35,000	µg/L	-	31,700	28,500	59,600	39,200	34,600	31,400	24,000	25,000
Manganese	600	µg/L	-	530	509	591	569	437	225	190	480
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	0.689	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	ND	4,270	2,630	ND	ND	ND	1,200	680 J
Selenium	10	µg/L	-	8.1	ND	ND	ND	ND	47.7	ND	22.0
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	24,200	18,400	17,200	20,100	19,000	11,000	19,000	25,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	1,690	2,310	1,670	2,740	984	165	850	340

1. NYSDEC TOGS (I.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS I.1.1 criteria.
 NE - NYSDEC TOGS I.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit.
 J - Analyte detected estimated value below quantitation limits
 - - The analyte was not sampled for.

TABLE 5D
Monitoring Well MW-6
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS I.1.1 Water Quality Standards ¹	Units	06/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	148	1,630	843	941	202	ND	120	180
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	0.84 J
Arsenic	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	1.0
Barium	2,000	µg/L	1,660	234	242	230	213	191	207	180	180
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	156,000	132,000	146,000	137,000	130,000	149,000	140,000	140,000
Chromium	50	µg/L	22	ND	ND	ND	ND	ND	ND	11	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Iron	600	µg/L	-	7,270	10,700	6,890	9,530	7,090	6,220	9,890	8,000
Lead	50	µg/L	84	ND	8.91	3.81	9.5	ND	ND	1.7	3.8
Magnesium	35,000	µg/L	-	27,900	24,300	27,900	24,600	24,800	29,100	27,800	29,000
Manganese	600	µg/L	-	1,200	2,720	1,690	1,860	1,400	1,280	2,500	1,700
Mercury	0.7	µg/L	0.2	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	2,190	3,190	3,260	ND	ND	ND	3,140	2,900
Selenium	10	µg/L	-	13.5	ND	ND	ND	ND	ND	ND	23.0
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	21,600	21,400	20,600	16,900	16,000	14,700	14,000	12,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	83.2	47.6	29.4	39.7	51.6	18.7	ND	40 J

1. NYSDEC TOGS (I.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS I.1.1 criteria.
 NE - NYSDEC TOGS I.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit.
 J - Analyte detected estimated value below quantitation limits
 - - The analyte was not sampled for.

TABLE 5E
Monitoring Well MW-7
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	--	33.96	22,790	4,050	25120	5,369	4,970	*NA	1,300
Antimony	9	µg/L	--	ND	ND	ND	ND	ND	35.5	*NA	3.2
Arsenic	50	µg/L	4.0	ND	ND	ND	5.7	ND	115	*NA	3.3
Barium	2,000	µg/L	163	76.3	173	96	64	34.4	102	*NA	72.0
Beryllium	3	µg/L	--	ND	ND	ND	ND	ND	ND	*NA	ND
Cadmium	10	µg/L	ND	31.7	40.2	ND	ND	15.7	50.3	*NA	2.2 J
Chlorine	NE	µg/L	--	145,000	299,000	166,000	135,000	185,000	149,000	*NA	160,000
Chromium	50	µg/L	ND	7.3	36.6	ND	ND	10.8	10.9	*NA	1.9 J
Cobalt	NE	µg/L	--	ND	30.0	ND	ND	ND	ND	*NA	8.6 J
Copper	1,000	µg/L	--	106	293	162	63	134	250	*NA	40
Iron	600	µg/L	--	11,200	38,000	15,200	9,950	17,000	13,500	*NA	10,000
Lead	50	µg/L	36	96.6	451	231	170	180	329	*NA	82
Magnesium	35,000	µg/L	--	36,100	60,500	30,600	29,500	43,500	30,700	*NA	27,000
Manganese	600	µg/L	--	902	2,210	1,398	503	1,640	949	*NA	1,200
Mercury	0.7	µg/L	ND	ND	0.211	ND	ND	ND	0.541	*NA	ND
Nickel	250	µg/L	--	ND	112.0	36.8	ND	36.2	32.7	*NA	21.0
Potassium	NE	µg/L	--	17,500	15,000	13,900	9,940	11,100	11,100	*NA	7,100
Selenium	10	µg/L	--	17.1	ND	ND	ND	ND	119	*NA	14 J
Silver	50	µg/L	--	ND	ND	ND	ND	ND	ND	*NA	ND
Sodium	NE	µg/L	--	72,000	34,500	88,600	72,100	65,100	58,600	*NA	39,000
Thallium	0.5	µg/L	--	ND	ND	ND	ND	ND	ND	*NA	ND
Vanadium	NE	µg/L	--	ND	46.0	ND	ND	ND	ND	*NA	3 J
Zinc	5,000	µg/L	--	2,540	21,000	7,010	2,470	6,270	7,000	*NA	3,500

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE - NYSDEC TOGS 1.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit.
 J - Analyte detected estimated value below quantitation limits
 -- The analyte was not sampled for.
 *NA - Unable to purge or sample due to equipment failure or no water was able to be removed from well. No water was retrievable.

TABLE 5F
Monitoring Well MW-8
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	--	ND	1,420	722	199	ND	ND	130	46 J
Antimony	9	µg/L	--	ND	ND	ND	ND	ND	ND	6.0	0.61 J
Arsenic	50	µg/L	14.0	ND	ND	ND	ND	ND	ND	22.4	1.7
Barium	2,000	µg/L	300	172	175	125	133	107	110	180	120
Beryllium	3	µg/L	--	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NE	µg/L	--	157,000	149,000	141,000	144,000	141,000	147,000	140,000	160,000
Chromium	50	µg/L	15	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	--	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	--	18.4	15.0	ND	ND	ND	ND	23.0	ND
Iron	600	µg/L	--	3,230	4,640	3,120	2,870	3,960	3,650	3,600	4,100
Lead	50	µg/L	270	ND	15.4	5.4	11.0	ND	16.6	50.0	5.4
Magnesium	35,000	µg/L	--	28,700	27,100	28,100	25,300	26,200	28,300	19,000	34,000
Manganese	600	µg/L	--	802	391	618	665	817	819	1,500	820
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	--	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	--	1,780	4,660	3,080	ND	ND	ND	6,800	2,700
Selenium	10	µg/L	--	9.5	ND	ND	ND	ND	24.1	ND	19 J
Silver	50	µg/L	--	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	--	30,100	24,000	22,600	22,600	22,700	19,800	15,000	19,000
Thallium	0.5	µg/L	--	ND	ND	ND	ND	ND	ND	1.1	ND
Vanadium	NE	µg/L	--	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	--	189.0	630.0	250.0	375.0	33.0	41.3	240.0	80.0

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98, Class GA.
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
 NE - NYSDEC TOGS 1.1.1 water quality standard not established.
 ND - Not detected for at or above reporting limit.
 J - Analyte detected estimated value below quantitation limits
 -- The analyte was not sampled for.

APPENDICES

APPENDIX A

Groundwater Field Sampling Records



**GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue DATE 07/15/14
 Sampler: Brian Doyle SAMPLE ID MW-01, FD

Depth of well (from top of casing)..... 13.83 ft EL 560.97
 Initial static water level (from top of casing).... 6.5 ft EL 568.30
 Top of PVC Casing Elevation 574.80

Evacuation Method:

Well Volume Calculation

Peristaltic _____ Centrifugal _____ 1 in. casing: _____ ft. of water x .09 = _____ gallons
 Airfall _____ Pos. Displ. _____ 2 in. casing: 7.3 ft. of water x .16 = 1.17 gallons
 Bailor X >>> No. of balls _____ 3 in. casing: _____ ft. of water x .36 = _____ gallons

Volume of water removed 3.52 gals.
 > 3 volumes: YES no
 dry: yes NO

Field Tests: Temp: 64.40 C
 pH 7
 Conductivity 0.883 mS/cm
 DO 13.46 mg/L
 Turbidity NA NTUs
 Oxidation Reduction Potential (ORP) -10 mV

Sampling: Time: 12:00 noon

Sampling Method Peristaltic Pump _____
 Disposable Bailor X
 Disposable Tubing _____

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Brown. No odor.
Surface water from parking lot/flush mount well casing found
holding inside well annular space and above 2" well cap seal.
Well cap seal holding. Water removed from annular space prior
to opening well cap.

Comments: Field equipment unable to record a turbidity reading due to very murky water.

**GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue DATE 07/15/14
 Sampler: Brian Doyle SAMPLE ID MW-02, FD

Depth of well (from top of casing)..... 13.5 ft EL 561.69
 Initial static water level (from top of casing).... 5.9 ft EL 569.29
 Top of PVC Casing Elevation 575.19

Evacuation Method:

Well Volume Calculation

Peristaltic _____ Centrifugal _____ 1 in. casing: _____ ft. of water x .09 = _____ gallons
 Airfall _____ Pos. Displ. _____ 2 in. casing: 7.6 ft. of water x .16 = 1.22 gallons
 Bailor X >>> No. of balls _____ 3 in. casing: _____ ft. of water x .36 = _____ gallons

Volume of water removed 3.65 gals.
 > 3 volumes: YES no
 dry: yes NO

Field Tests: Temp: 59.30 C
 pH 19-Jul
 Conductivity 0.923 mS/cm
 DO 15.37 mg/L
 Turbidity NA NTUs
 Oxidation Reduction Potential (ORP) -21 mV

Sampling: Time: 12:30pm

Sampling Method Peristaltic Pump _____
 Disposable Bailor X
 Disposable Tubing _____

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Clear initially, then brown, very murky and turbid

Comments: Field equipment unable to record a turbidity reading due to very murky water.

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/15/14
 Sampler: Brian Doyle SAMPLE ID MW-05

Depth of well (from top of casing)..... 15.5 ft EL 562.82
 Initial static water level (from top of casing).... 7.9 ft EL 570.42
 Top of PVC Casing Elevation 578.32

Evacuation Method:

Well Volume Calculation

Peristaltic Centrifugal _____
 1 in. casing: 7.6 ft. of water x .09" = 0.68 gallons
 Airlift _____ Pos. Diapl. _____
 2 in. casing: _____ ft. of water x .16" = _____ gallons
 Bailor _____ >>> No. of baits _____
 3 in. casing: _____ ft. of water x .36" = _____ gallons

Volume of water removed 2.00 gals.
 > 3 volumes: YES NO
 dry: YES NO

Field Tests: Temp: 62.20 C
 pH 7.08
 Conductivity 0.995 mS/cm
 DO 12.56 mg/L
 Turbidity 18.6 NTUs
 Oxidation Reduction Potential (ORP) -57 mV

Sampling: Time: 11:00 AM

Sampling Method Peristaltic Pump
 Disposable Bailor _____
 Disposable Tubing

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Clear, slight sulfur odor.

Comments: _____

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/15/14
 Sampler: Brian Doyle SAMPLE ID MW-06, MS & MSD

Depth of well (from top of casing)..... 17.3 ft EL 560.83
 Initial static water level (from top of casing).... 7.6 ft EL 570.53
 Top of PVC Casing Elevation 578.13

Evacuation Method:

Well Volume Calculation

Peristaltic Centrifugal _____
 1 in. casing: 9.7 ft. of water x .09" = 0.87 gallons
 Airlift _____ Pos. Diapl. _____
 2 in. casing: _____ ft. of water x .16" = _____ gallons
 Bailor _____ >>> No. of baits _____
 3 in. casing: _____ ft. of water x .36" = _____ gallons

Volume of water removed 2.60 gals.
 > 3 volumes: YES NO
 dry: YES NO

Field Tests: Temp: 59.1 C
 pH 6.93
 Conductivity 0.708 mS/cm
 DO 11.06 mg/L
 Turbidity 79.8 NTUs
 Oxidation Reduction Potential (ORP) -55.0 mV

Sampling: Time: 10:30 AM

Sampling Method Peristaltic Pump
 Disposable Bailor _____
 Disposable Tubing

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Oil residue, slight odor.

Comments: _____

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/15/14
 Sampler: Brian Doyle SAMPLE ID MW-07

Depth of well (from top of casing)..... 33.5 ft EL 562.76
 Initial static water level (from top of casing).... (See Comments) ft EL EL
 Top of PVC Casing Elevation 586.26

Evacuation Method: Well Volume Calculation

Peristaltic	<u>X</u>	Centrifugal	_____	1 in. casing:	_____ ft. of water x .09 =	_____ gallons
Airlift	_____	Pos. Diapl.	_____	2 in. casing:	_____ ft. of water x .16 =	_____ gallons
Boiler	_____	>>> No. of baits	_____	3 in. casing:	_____ ft. of water x .36 =	_____ gallons

Volume of water removed 0.00 gal.
 > 3 volumes: yes no
 dry: yes no

Field Tests: Temp: 58.9 C
 pH: 7.07
 Conductivity: 0.556 mS/cm
 DO: 12.96 mg/L
 Turbidity: 70 NTUs
 Oxidation Reduction Potential (ORP): 4.0 mV

Sampling: Time: 10:00 AM

Sampling Method: Peristaltic Pump X
 Disposable Boiler _____
 Disposable Tubing X

Observations: Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: no odor

Comments: Well went dry after 0.2 gallons was removed. Due to obstruction, water level indicator can not pass
and unable to tell if water is in well.
There is an obstruction in the well at a depth of 8.8 feet in which the water level indicator could not proceed
further down the well.

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/15/14
 Sampler: Brian Doyle SAMPLE ID MW-08

Depth of well (from top of casing)..... 17.5 ft EL 560.93
 Initial static water level (from top of casing).... 7.9 ft EL 570.53
 Top of PVC Casing Elevation 578.43

Evacuation Method: Well Volume Calculation

Peristaltic	<u>X</u>	Centrifugal	_____	1 in. casing:	<u>9.6</u> ft. of water x .09 =	<u>0.86</u> gallons
Airlift	_____	Pos. Diapl.	_____	2 in. casing:	_____ ft. of water x .16 =	_____ gallons
Boiler	_____	>>> No. of baits	_____	3 in. casing:	_____ ft. of water x .36 =	_____ gallons

Volume of water removed 2.60 gal.
 > 3 volumes: YES no
 dry: yes NO

Field Tests: Temp: 58.8 C
 pH: 6.72
 Conductivity: 0.757 mS/cm
 DO: 12.86 mg/L
 Turbidity: 56 NTUs
 Oxidation Reduction Potential (ORP): -23 mV

Sampling: Time: 9:30 AM

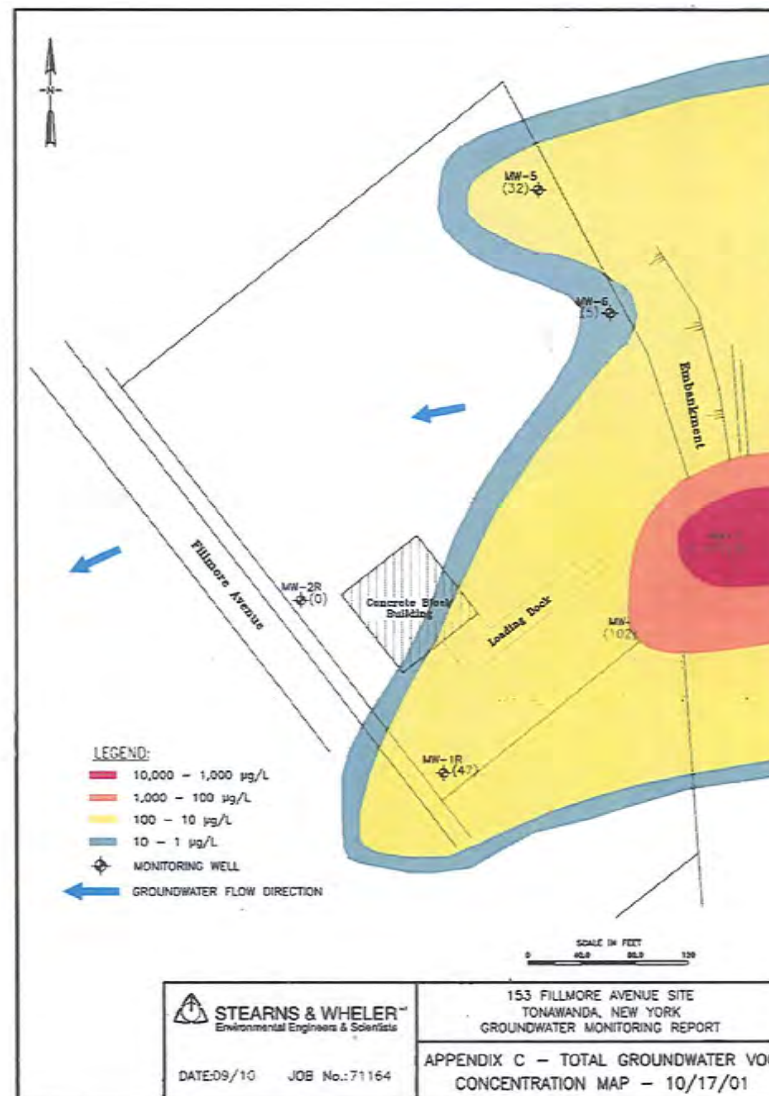
Sampling Method: Peristaltic Pump X
 Disposable Boiler _____
 Disposable Tubing X

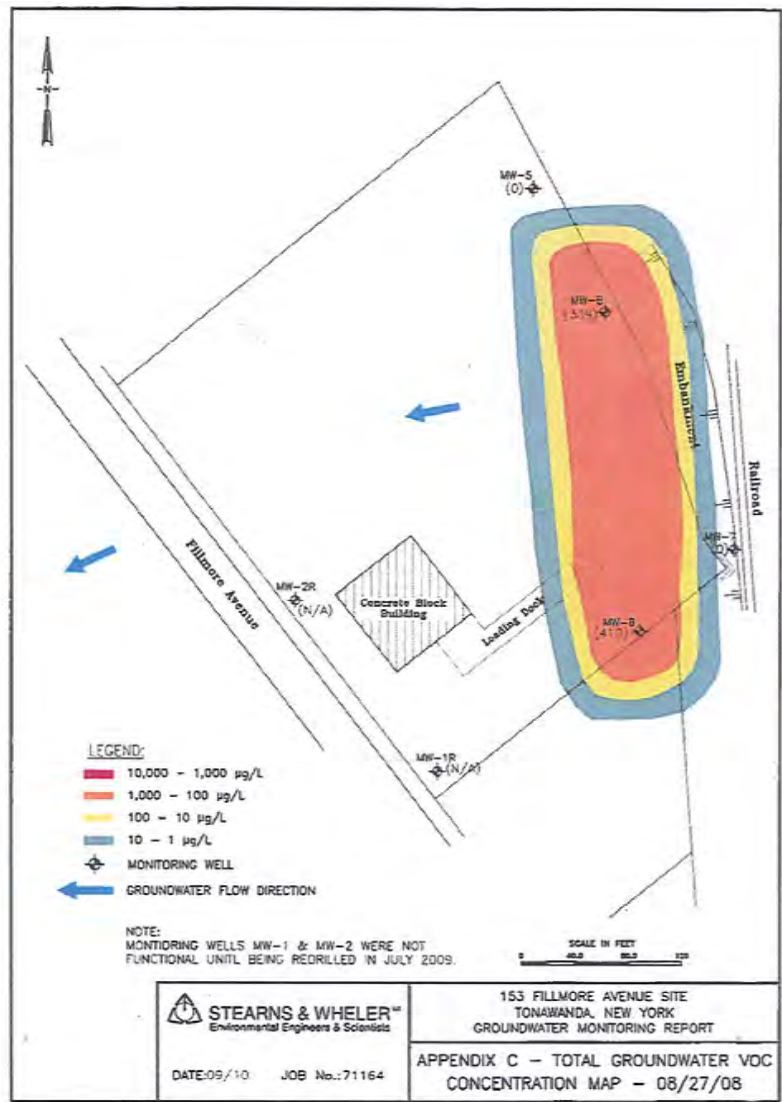
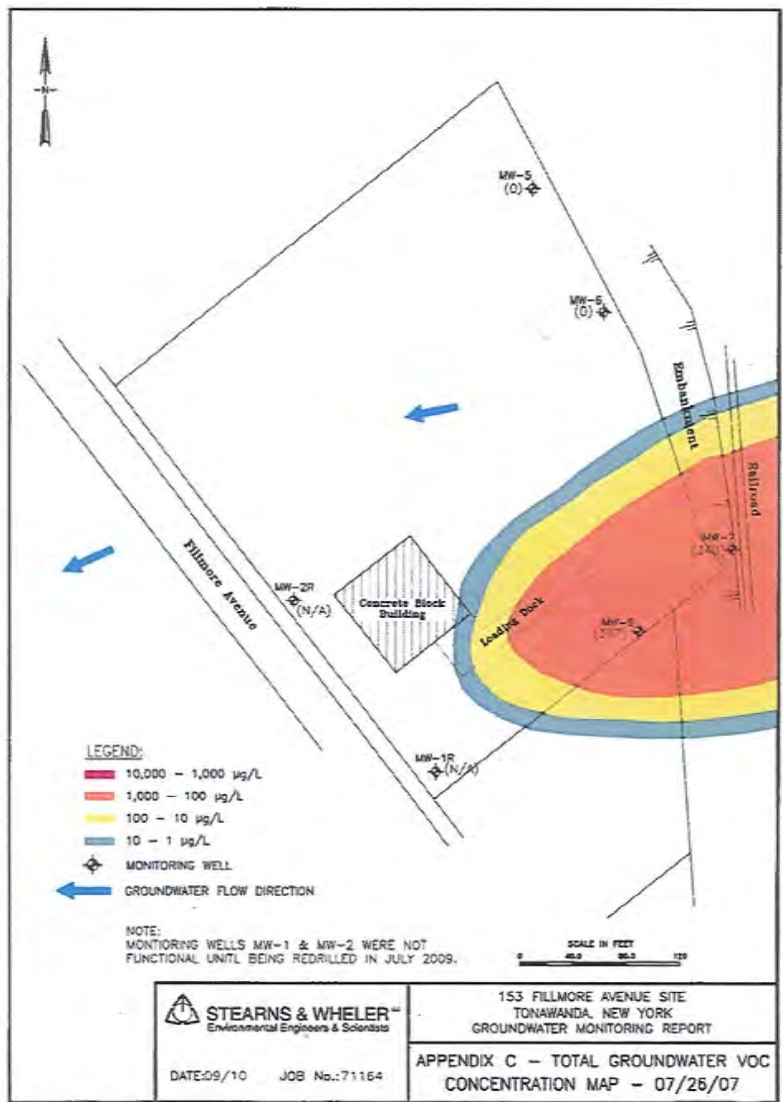
Observations: Weather/Temperature: Partly Cloudy, 70 ° F

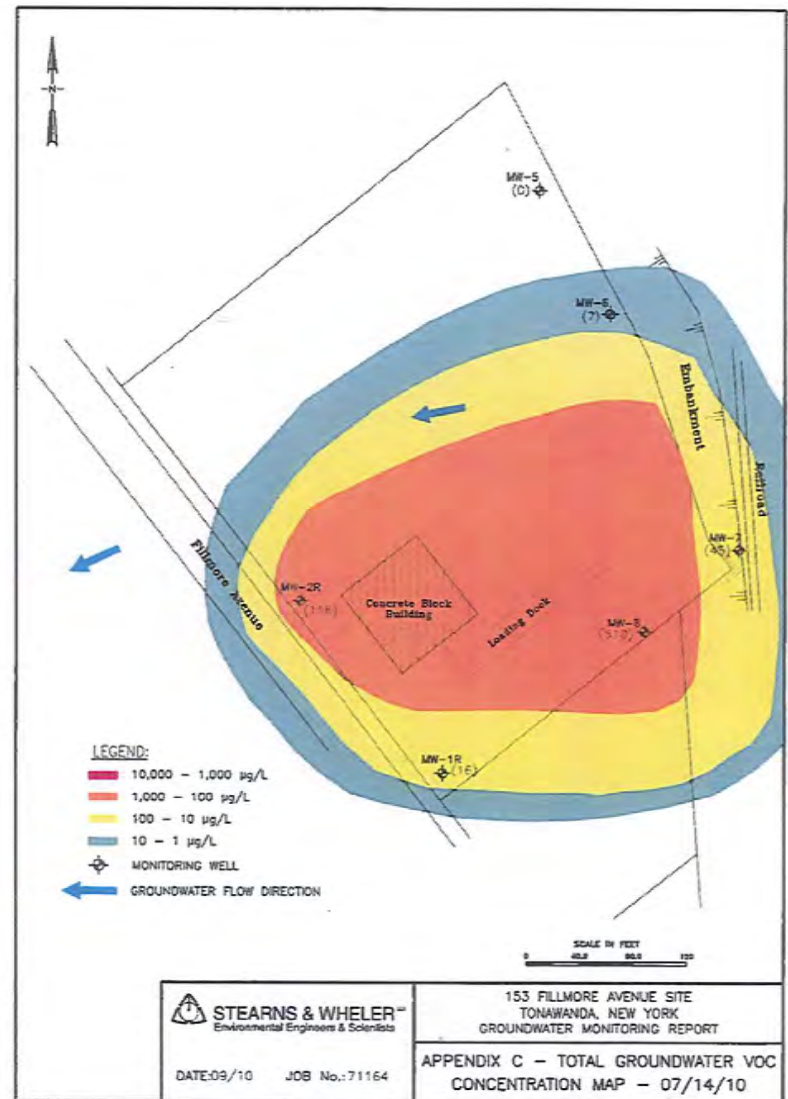
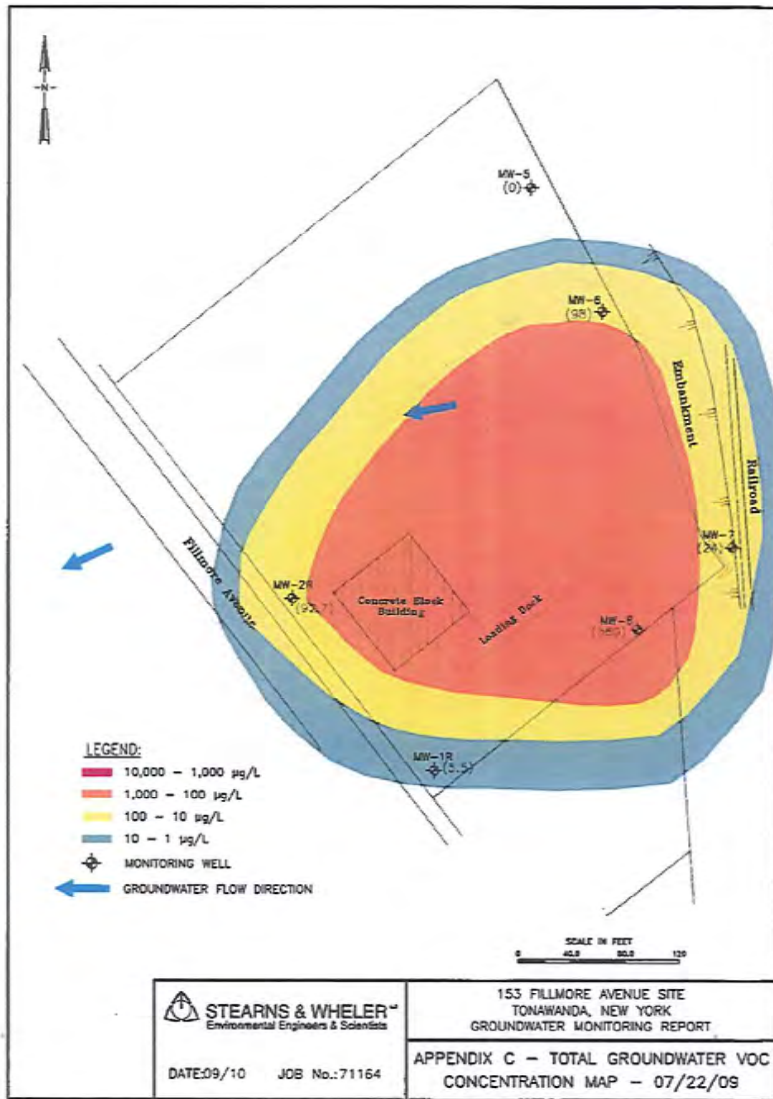
Physical Appearance and Odor of Sample: Fairly clear, some odor

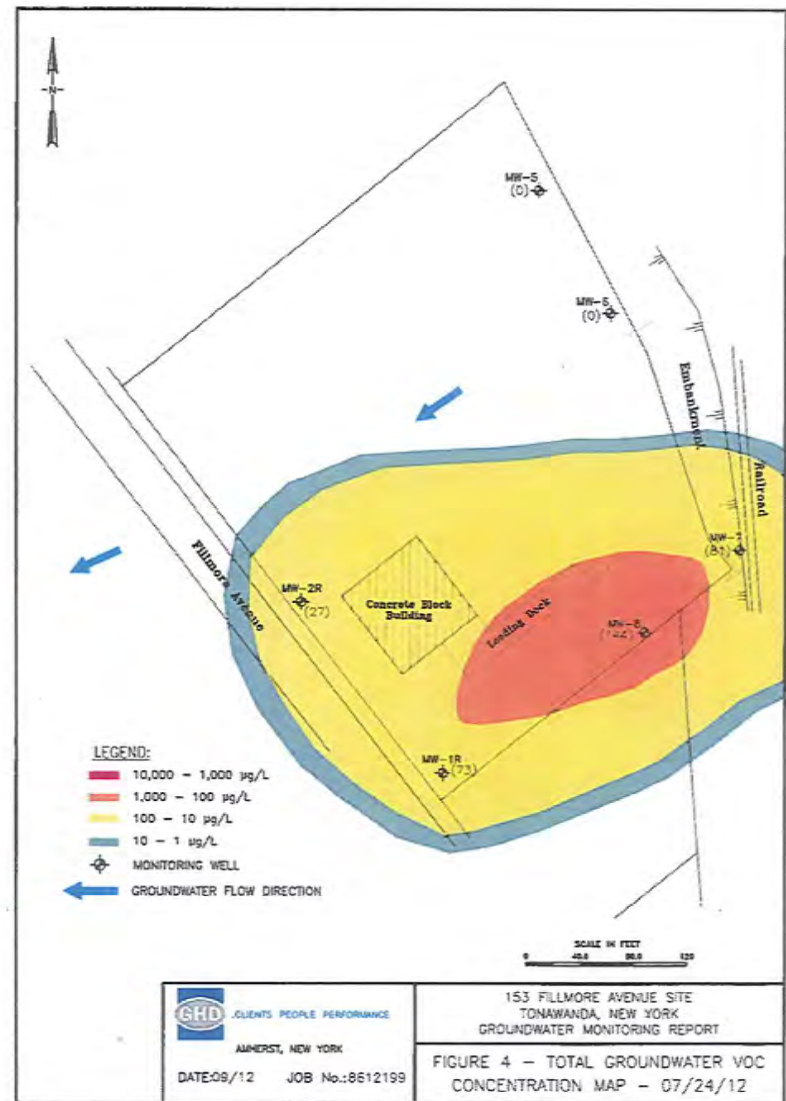
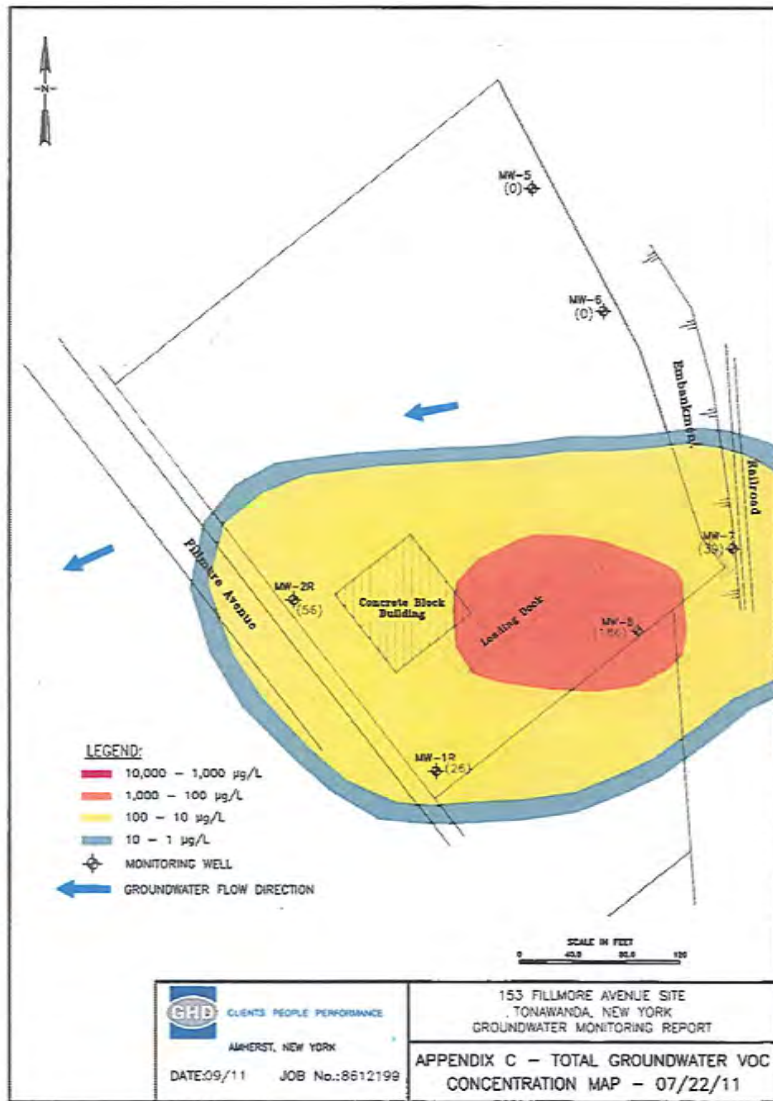
Comments: _____

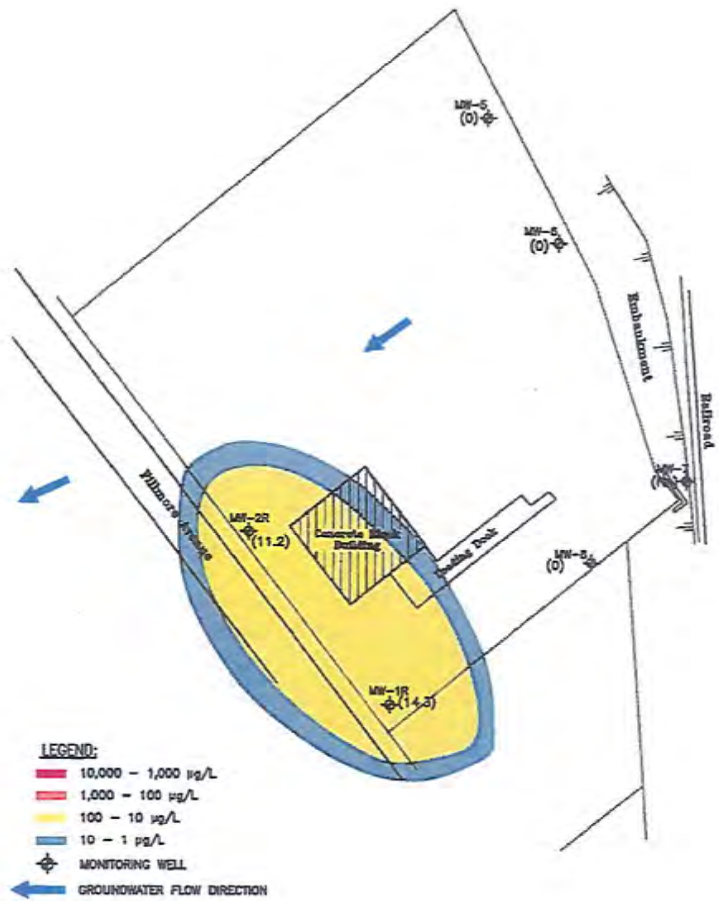
APPENDIX C
HISTORICAL GROUNDWATER TOTAL VOC
CONCENTRATION FIGURES













153 FILLMORE AVENUE SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT
 TOTAL GROUNDWATER VOC
 CONCENTRATION MAP - 07/24/13

Job Number | 85-12189
 Revision | A
 Date | 09 13

Figure 04

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