NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 8/16/2017

Site Code: 808032 **Site Name:** Former Matt Brewer Oil Site
City: Elmira **Town:** Elmira (c)
Region: 8 **County:** Chemung
Current Classification: P **Proposed Classification:** 02
Estimated Size (acres): 1.10 **Disposal Area:**
Significant Threat: Yes **Site Type:**
Priority ranking Score: **Project Manager:** Sarah Saucier

Summary of Approvals

Originator/Supervisor: Michael Cruden	**06/09/2017**
RHWRE: Bernette Schilling:	**06/12/2017**
BEEI of NYSDOH:	**07/11/2017**
CO Bureau Director: Michael Cruden, Director, Remedial Bureau	**07/11/2017**
Assistant Division Director: Michael J. Ryan, P.E.:	**07/26/2017**

Basis for Classification Change

A ROD has been issued for this former ERP site that requires remedial excavation of a VOC soil sourc area, site cover, SVI monitoring off-site and future SVI evaluation on-site. The owner, Chemung Cour not undertake the remedial activities.

Site Description - Last Review:

Location: The Former Matt Brewer Oil site is located at 915 East Market, in the City of Elmira, an urban area of Chemung County, New York and occupies Tax Parcels 89.16-7-21 and 89.16-7-22.

Site Features: The 1.1-acre former petroleum bulk storage facility site is vacant, all above ground buildings and structures have been demolished and 33 PBS AST tanks have been removed or closed in place. Concrete floors, partial basement and asphalt cover the majority of site. Two USTs are known to exist on-site and drywells facilitate surface drainage.

Current Zoning and Land Use: The property is bounded by East Market Street to the south, Ring Place (unimproved city street) to the north, residential properties to the west and a former elevated rail road siding to the east. The site is currently zoned RC (residential) 1 to 4 Family use and the surrounding parcels are currently zoned residential, commercial, or industrial. The nearest residential areas are immediately to the west of the site along East Market and Judson Street. The area is serviced by a public water supply.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
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Site Code: 808032 **Site Name:** Former Matt Brewer Oil Site

Past Use of the Site: The site was used prior to the 1950's for lumber / coal storage and distribution. In the early 1950's there is evidence to suggest the property was used as a dump prior to being purchased by Matt Brewer in 1954. Matt Brewer operated the site for bulk storage of lubricants, petroleum and solvents until the 1990s. Thirty-three petroleum bulk storage tanks were registered with NYSDEC and documented removed or closed in place. No chemical bulk storage tanks were registered however, testimony and environmental evidence document that dry cleaning solvent PCE and other solvent TCE were distributed from this facility.

Site Geology and Hydrogeology: The site is located in the Appalachian Uplands Physiographic Province where local topographic features result from glacial and fluvial processes with a complex erosional history and deposited accumulations of till. Overburden soils at the site are greater than 45 feet thick according to data collected during the field investigations. Bedrock was not encountered. The aquifer under this site is considered a primary aquifer that are capable of producing well yields greater than 1,000 gallons per minute. Groundwater was encountered at 12 to 19 ft bgs and flows in a southerly to a southwesterly direction toward the Chemung River. Shallow groundwater flow direction and gradients appear to be affected by the varying silt layers encountered beneath the site. The site is primarily covered with low permeable concrete or asphalt and surface runoff is collected in drywell structures and infiltrates into the subsurface soils.

Contaminants of Concern (Including Materials Disposed) **Quantity Disposed**

OU 01
tetrachloroethene (PCE)
trichloroethene (TCE)
cis-1,2-dichloroethene
methylene chloride
1,1,1-TCA
xylene (mixed)
toluene
benzo(a)pyrene
lead

Analytical Data Available for : Groundwater, Soil, Soil Vapor, Indoor Air

Applicable Standards Exceeded for: Groundwater, Soil, Soil Vapor

Site Environmental Assessment- Last Review:

Soil: On-site - Tetrachloroethene concentrations in soil ranged from non-detect to 230 parts per million [ppm] (Protection of Groundwater (PGW) SCO - 1.3 ppm). Trichloroethene concentrations in soil ranged from non-detect to 1.6 ppm (PGW SCO – 0.47 ppm). Cis-1,2-dichloroethene concentrations in soil ranged from non-detect to 0.97 ppm (PGW SCO – 0.25 ppm). Methylene chloride concentrations in soil ranged from non-detect to 0.14 ppm (PGW SCO – 0.05 ppm). The concentration of PAHs ranged from non-detect to 3.3 ppm (Restricted Residential SCO - 1 ppm). The concentration of lead concentrations ranged from non-detect to 672 ppm (Restricted Residential SCO - 400 ppm). Based on the analytical data to date, soil contamination does not extend off-site from the on-site source area. One upgradient off-site soil boring had concentrations of trichloroethene, cis-1,2-dichloroethene, methylene chloride and xylene slightly above the PGW SCOs; howeve Groundwater SCOs are not exceeded at that location.

Drywell Source Material: On-site - Tetrachloroethene concentrations in source material ranged from non-detect to 91 ppm (PGW SCO - 1.3 ppm). Cis-1,2-dichloroethene concentrations in source material ranged from non-detect to 0.8 ppm (PGW SCO – 0.25 ppm). The concentration of PAHs ranged from non-detect to 18 ppm (Restricted Residential SCO - 1 ppm). Adjacent to the impacted drywells, soil borings were advanced to 15 to 18' below ground surface without documenting contaminant impacts above SCOs.

Groundwater Shallow: On-site - Tetrachloroethene concentrations ranged from non-detect to 61,000 parts per billion [ppb]; trichloroethene concentrations ranged from non-detect to 12,000 ppb; cis-1,2-dichloroethene concentrations ranged from non-detect to 16,000 ppb; and 1,1,1-trichloroethane concentrations ranged from non-detect to 11,000 ppb (groundwater standard for each of the above - 5 ppb). Based on the analytical data to date, groundwater contamination extends off-site from the on-site source area.

Groundwater Shallow: Off-site - Tetrachloroethene concentrations ranged from non-detect to 8,000 ppb; trichloroethene concentrations ranged from non-detect to 740 ppb (groundwater standard - 5 ppb); cis-1,2-dichloroethene concentrations ranged from non-detect to 830 ppb (groundwater standard - 5 ppb); and 1,1,1-trichloroethane concentrations ranged from non-detect to 520 ppb (groundwater standard - 5 ppb). Based on the analytical data to date, concentrations of groundwater contamination decrease significantly and to below groundwater standards with distance from the on-site source area.

Groundwater Deep: On-site and Off-site - Tetrachloroethene concentrations ranged from 6 to 72 ppb(groundwater standard - 5 ppb); trichloroethene concentrations ranged from 2 to 5 ppb (groundwater standard - 5 ppb); cis-1,2-dichloroethene concentrations ranged from 0.9 to 3.0 ppb (groundwater standard - 5 ppb); and 1,1,1-trichloroethane concentrations ranged from 0.6 to 2.0 ppb (groundwater standard - 5 ppb). Based on the analytical data to date, vertical migration of shallow groundwater contamination limited decreases significantly and to below groundwater standards within a short distance from the on-site source area.

Sub-slab Vapor and Indoor Air: On-site and Off-site – No buildings remain at the site; therefore, no on-site soil vapor sampling was conducted. Soil vapor sampling was conducted at multiple residences off-site. Soil vapor tetrachloroethene concentrations ranged from 1.4 to 48.0 micrograms per cubic meter (ug/m3) in the sub-slab vapor and from 0.76 to 41.4 ug/m3 in the indoor air. trichloroethene concentrations ranged from 0.66 to 79.0 ug/m3 in the sub-slab vapor and from 0.27 to 16.0 ug/m3 in the indoor air. The NYSDOH air guideline value of 2 ug/m3 for trichloroethene was exceeded in three off-site buildings for indoor air. 1,1,1-trichloroethane concentrations ranged from 0.61 to 4.71 ug/m3 in the sub-slab vapor and from 0.72 to 550 ug/m3 in the indoor air. Based on the analytical data to date, it's anticipated that soil vapor contamination exists on-site and off-site. Soil vapor intrusion mitigation was recommended for three off-site properties and monitoring was recommended for five. At one of the three properties with an exceedance of NYSDOH's air guideline for TCE, soil vapor intrusion was mitigated with the installation of a sub-slab depressurization system. The second property refused the offer for mitigation, the building is currently vacant and there is a City of Elmira notice posted on the door indicating "use and occupancy of this building is prohibited; no person shall enter this building." One of the off-site buildings where mitigation actions were recommended, has been demolished to accommodate parking for a metal finishing business.

DATE: 8/16/2017

Site Code: 808032 **Site Name:** Former Matt Brewer Oil Site

Site Health Assessment - Last Update: 06/22/2017

People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. People may come into contact with contaminants in soils if they contact surface soils or dig below surface materials (i.e., pavement, concrete). Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlyir buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern fc the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Environmental sampling indicates soil vapor intrusion is a concern for off-site buildings and actions are needed to minimize potential exposures.

	Start		End	
OU 01				
Reclass Pkg.	6/9/17	ACT	8/10/17	PLN

Remedy Description and Cost

Remedy Description for Operable Unit 01

1). Remedial Design
A remedial design program will be implemented to provide the details necessary for the constructior operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, a management of the remedy as per DER-31. The major green remediation components are as follows

- Considering the environmental impacts of treatment technologies and remedy stewardship over t long term;
- Reducing direct and indirect greenhouse gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise b considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, ecc and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2.) Excavation
Excavation and off-site disposal of contaminant source areas, including:

- grossly contaminated soil, as defined in 6 NYCRR Part 375-1.2(u);
- removal of any underground storage tanks (USTs), fuel dispensers, underground piping, drywell other structures associated with a source of contamination; and
- approx. 3,000 cy. of soils which exceed the protection of groundwater soil cleanup objectives (PGWSCOs), as defined by 6 NYCRR Part 375-6.8 for those contaminants found in site groundwat above standards; and
- All on-site surface soils (0-2") which exceed restricted residential SCOs, as defined by 6 NYCR Part 375-6.8, will be excavated to accommodate acceptable cover systems (e.g. for grading purpose and transported off-site for disposal.

Clean fill meeting the requirements of 6 NYCRR Part 375-6.7(d) will be brought in to complete the backfilling of the excavation and establish the designed grades at the site. All remaining concrete la be removed and the site will be re-graded to accommodate installation of a cover system as describe remedy element 3. Additional testing may be necessary where existing soil cover systems are anticip

3.) Cover System
A site cover will be required to allow for restricted residential use of the site. The cover will consist of the structures such as buildings, pavement, sidewalks comprising the site development or a soil c areas where the upper two feet of exposed surface soil will exceed the applicable soil cleanup object (SCOs). Where the soil cover is required it will be a minimum of two feet of soil, meeting the SCOs cover material as set forth in 6 NYCRR Part 375-6.7(d) for restricted residential use. The soil cover be placed over a demarcation layer, with the upper six inches of the soil of sufficient quality to main vegetation layer. Any fill material brought to the site will meet the requirements for the identified si set forth in 6 NYCRR Part 375-6.7(d).

4.) Enhanced Bioremediation
In-situ enhanced biodegradation will be employed as a polishing step to treat contaminants in groun in an area to be determined following the removal of the source areas as described in remedy eleme number 2. The biological breakdown of contaminants through anaerobic reductive dechlorination w enhanced by the placement of a hydrogen release compound (HRC), or similar material into the sub in the open excavation or method determined during the remedial design. A groundwater monitorin will be instituted after the source removal and Enhanced Bioremediation polishing to monitor the effectiveness of the remedy.

5.) Vapor Mitigation
Appropriate actions, such as the installation of a sub-slab depressurization system, or a similar engi system, will be implemented to mitigate the migration of vapors into a building from the subsurface

off-site buildings where mitigation is recommended to address soil vapor intrusion due to contamina vapor migrating from the site. Furthermore, at the residence adjacent to the site, additional inspections/evaluations will be completed to improve the system or seal the basement to reduce TCI concentrations further in indoor air to below background levels.

6.) Institutional Control
Imposition of an institutional control in the form of an environmental easement for the controlled pr that:

- the remedy will achieve a Track 4 restricted residential cleanup at a minimum;

- requires the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);

- allows the use and development of the controlled property for restricted residential use as define Part 375-1.8(g), although land use is subject to local zoning laws;

- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH;

- requires compliance with the Department approved Site Management Plan.

7.) Site Management Plan
A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls:
- The Environmental Easement discussed above.

Engineering Controls: The soil cover, groundwater monitoring and the sub-slab depressurization sys above.

This plan includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas c remaining contamination;
- descriptions of the provisions of the environmental easement including any land use, and/or groundwater and/or surface water use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion for any buildings developed or site, for any buildings developed or re-occupied in off-site areas impacted by site-related contaminat in any off-site buildings impacted by the site, including provision for implementing actions recomm address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineeri controls.

b. A Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes may not be limited to:

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;
- monitoring for vapor intrusion for any buildings developed on the site and offsite subslab depressurization systems, as may be required by the Institutional and Engineering Control Plan disc above.

Total Cost $1,418,637

OU	Site Management Plan Approval:	Status:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Form
8/16/2017

SITE DESCRIPTION

SITE NO. 808032

SITE NAMEFormer Matt Brewer Oil Site

SITE ADDRESS: 915 EAST MARKET STREET ZIP CODE: 14901

CITY/TOWN: Elmira

COUNTY: Chemung

ALLOWABLE USE:

SITE MANAGEMENT DESCRIPTION

SITE MANAGEMENT PLAN INCLUDES:

IC/EC Certification Plan	YES
Monitoring Plan	YES
Operation and Maintenance (O&M) Plan	YES

Periodic Review Frequency:

Periodic Review Report Submittal Date:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 8/16/2017

Site Code: 808032 **Site Name:** Former Matt Brewer Oil Site

Description of Institutional Control

Chemung County
P.O. Box 588
906 - 908 Rings Pl
Environmental Easement
Block: 7
Lot: 21
Sublot:
Section: 89
Subsection: 16
S_B_L Image: 89.16-7-21
Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
Soil Management Plan

915 Market St E
Environmental Easement
Block: 7
Lot: 22
Sublot:
Section: 89
Subsection: 16
S_B_L Image: 89 16-7-22
Ground Water Use Restriction
IC/EC Plan
Landuse Restriction
Monitoring Plan
Site Management Plan
Soil Management Plan

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Site Classification Report

DATE: 8/16/2017

Site Code: 808032 **Site Name:** Former Matt Brewer Oil Site

Description of Engineering Control

Chemung County
P.O. Box 588
906 - 908 Rings Pl
Environmental Easement - Institutional Control Instrument
Block: 7
Lot: 21
Sublot:
Section: 89
Subsection: 16
S_B_L Image: 89.16-7-21
Vapor Mitigation
Cover System
Monitoring Wells
915 Market St E
Environmental Easement - Institutional Control Instrument
Block: 7
Lot: 22
Sublot:
Section: 89
Subsection: 16
S B L Image: 89 16-7-22
Vapor Mitigation
Cover System
Monitoring Wells

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

PUBLIC NOTICE

State Superfund Program

Receive Site Information by Email. See next page to Learn How.

Site Name: Former Matt Brewer Oil Site **August, 2017**
Site No. 808032 **Tax Map No.** 89.16-7-21 and 89.16-7-22
Site Location: 915 East Market Street, City of Elmira, 14901

Inactive Hazardous Waste Disposal Site Classification Notice

The Inactive Hazardous Waste Disposal Site Program (the State Superfund Program) is the State's program for identifying, investigating, and cleaning up sites where the disposal of hazardous waste may present a threat to public health and/or the environment. The New York State Department of Environmental Conservation (DEC) maintains a list of these sites in the Registry of Inactive Hazardous Waste Disposal Sites (Registry). The site identified above, and located on a map on the reverse side of this page, has been added to the Registry as a Class 2 site that presents a significant threat to public health and/or the environment for the following reason(s):

Previous investigations conducted at the site by Chemung County, the site's owner, under the Environmental Restoration Program (ERP) indicate that historic operations have resulted in volatile organic compound contamination of soil, groundwater, and soil vapor at levels exceeding applicable standards, criteria and guidance values. There is a potential for people to be exposed to site-related contamination via direct contact with soil and groundwater and there is also a potential for exposure resulting from soil vapor intrusion. A *Record of Decision*, which identifies the appropriate actions needed to address significant threats to public health and the environment, was finalized in 2016.

DEC will keep you informed throughout the investigation and cleanup of the site.

If you own property adjacent to this site and are renting or leasing your property to someone else, please share this information with them. If you no longer wish to be on the contact list for this site or otherwise need to correct our records, please contact DEC's Project Manager listed below.

FOR MORE SITE INFORMATION

Additional information about this site can be found using DEC's "Environmental Site Remediation Database Search" engine which is located on the internet at:
www.dec.ny.gov/cfmx/extapps/derexternal/index.cfm?pageid=3

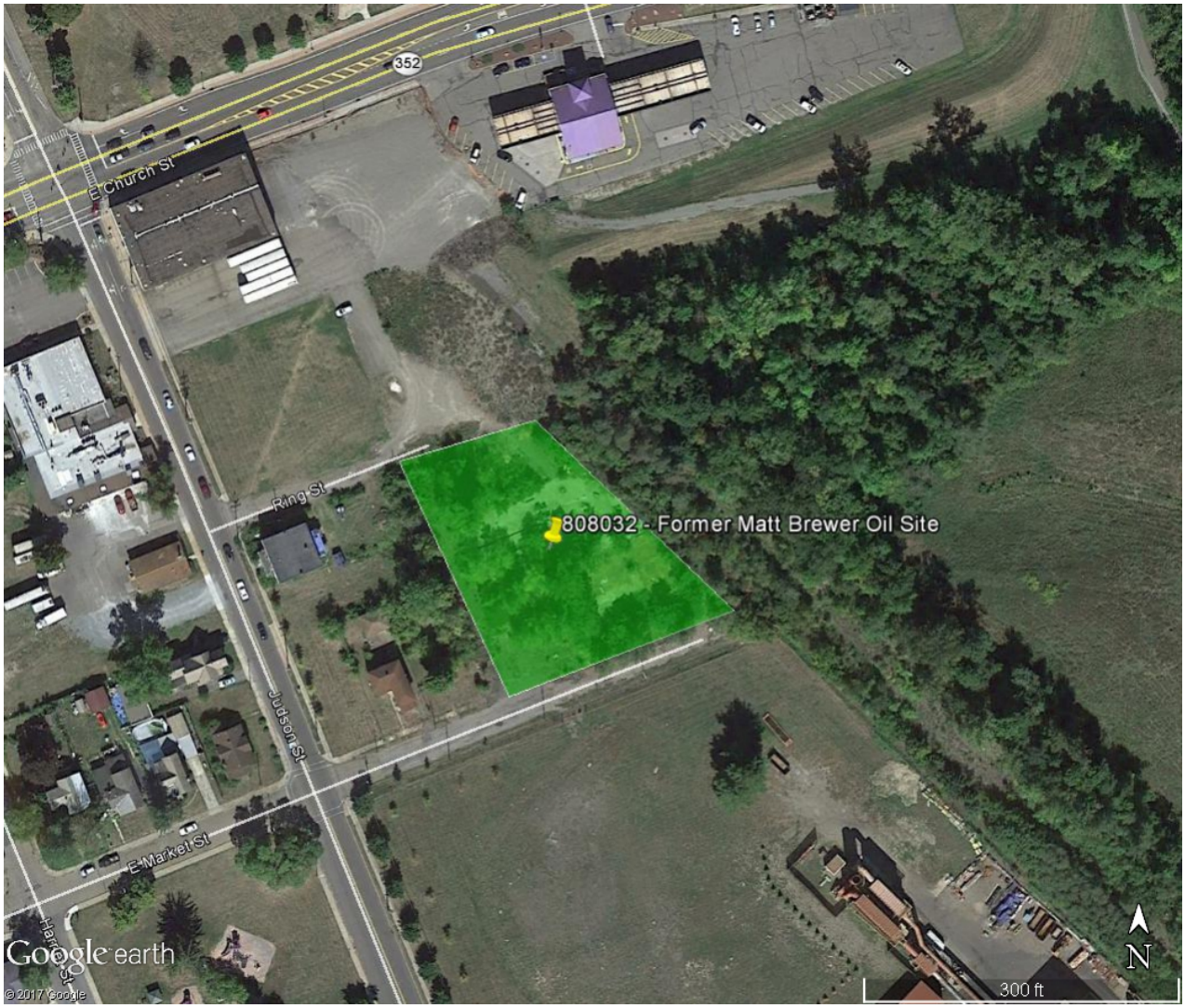
Project documents are available at the following location to help the public stay informed: Steel Memorial Public Library, Attn: Reference Section, 101 East Church Street, Elmira, NY 14901; Phone: (607) 733-9176

Comments and questions are always welcome and should be directed as follows:

Project Related Questions
Sarah Saucier, NYSDEC Project Manager
NYS Department of Environmental Conservation
Division of Environmental Remediation – Bureau E
625 Broadway, 12th Floor
Albany, NY 12233-7017
sarah.saucier@dec.ny.gov
518-402-9675

Site Related Health Questions
Mark Sergott, NYSDOH Project Manager
NYS Department of Health
Bureau of Environmental Exposure Investigations
Empire State Plaza – Corning Tower, Rm 1787
Albany, NY 12237
BEEI@health.ny.gov
518-402-7860

Approximate Site Location
Former Matt Brewer Oil Site
Site ID 808032
915 East Market Street
Elmira, Chemung County, 14901



Receive Site Updates by Email
Have site information such as this public notice sent right to your email inbox. DEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: www.dec.ny.gov/chemical/61092.html . It's *quick*, it's *free*, and it will help keep you *better informed*.

As a listserv member, you will periodically receive site-related information/announcements for all contaminated sites in the county(ies) you select.

Note: Please disregard if you received this notice by way of a county email listserv.

DEC is sending you this notice in accordance with Environmental Conservation Law Article 27, Title 13 and its companion regulation (6 NYCRR 375-2.7(b)(6)(ii)) which requires DEC to notify all parties on the contact list for this site of this recent action.

Electronic copies:

R. Schick, Director, Division of Environmental Remediation
J. Quinn, Director, Bureau of Technical Support
K. Lewandowski, Chief, Site Control Section
M. Cruden, Director, Remedial Bureau E
B. Schilling, RHWRE, Region 8
S. Sheeley, Regional Permit Administrator, Region 8
L. Vera, Regional CPS, Region 8
K. Anders, NYSDOH
J. Deming, NYSDOH Regional Chief
M. Sergott, NYSDOH Project Manager
L. Ennist, DER, Bureau of Program Management
S. Saucier, Project Manager
B. Anderson, Site Control Section

Thomas J. Santulli, County Executive
P.O. Box 588
Elmira, NY 14902

Candy Keebler
576 Pine Acres Road
Pine City, NY 14871

Just Dandy LLC
Suite 1
101 N Main Street
Athens, PA 18810

Orin & Adunni Greene
246 Berger Street
Somerset, NJ 08873

Kennedy Valve
1021 E Water Street
Elmira, NY 14901

Mcwane, Inc
1021 E Water Street
Elmira, NY 14902

City of Elmira
317 E Church Street
Elmira, NY 14901

Randy J. Olthof, Commissioner of Planning
Chemung County Commerce Center
PO Box 588
400 East Church Street
Elmira, NY 14902

Daniel J. Mandell, Mayor
City Hall Third Floor
317 East Church Street
Elmira, NY 14901

City Planning Commission
101 W. Second Street
Elmira, NY 14901

Mark Ladouce
Elmira Water Board
261 West Water Street
Elmira, NY 14901

Director
Chemung County Health Dept
103 Washington Street
Elmira, NY 14901

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Bureau of Technical Support
625 Broadway, 11th Floor, Albany, NY 12233-7020
P: (518) 402-9543 I F: (518) 402-9547
www.dec.ny.gov

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

July 27, 2017

The Honorable Thomas J. Santulli
Chemung County Executive
PO Box 588
Elmira, NY 14902

Dear County Executive Santulli:

As mandated by Section 27-1305 of the Environmental Conservation Law (ECL), the New York State Department of Environmental Conservation (DEC) must maintain a registry of all inactive disposal sites suspected or known to contain hazardous wastes. The ECL also mandates that DEC notify, by certified mail, the owner of all or any part of each site or area included in the Registry of Inactive Hazardous Waste Disposal Sites.

Our records indicate that you are the owner or part owner of the site listed below. Therefore, this letter constitutes notification of the inclusion of such site in the Registry of Inactive Hazardous Waste Disposal Sites in New York State (Registry). Once listed in the Registry, the site becomes subject to certain restrictions prescribed by provisions of 6 NYCRR Part 375.

DEC Site No.: 808032
Site Name: Former Matt Brewer Oil Site
Site Address: 915 East Market Street, Elmira, 14901
Site Classification: Class 2

Enclosed is a copy of DEC's Inactive Hazardous Waste Disposal Site Report form as it appears in the Registry. An explanation of the site classification is available at http://www.dec.ny.gov/chemical/8663.html.

For additional information, please contact Sarah Saucier, the Project Manager, at 518-402-9675.

Sincerely,

Kelly A. Lewandowski

Kelly A. Lewandowski, P.E.
Chief, Site Control Section

Enclosures
ec: S. Saucier, Project Manager

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
Inactive Hazardous Waste Disposal Report

Site Code	808032				
Site Name	Former Matt Brewer Oil Site	**Address**	915 East Market Street		
Classificati	2	**City**	Elmira	**Zip**	14901
Region	8	**County**	Chemung	**Town**	Elmira (c)
Latitude	42 degrees, 5 minutes, 37.90 seconds		**Estimated Size**	1.1000	
Longitude	-76 degrees, 47 minutes, 16.48 seconds				
Site Type					

Site Description

Location: The Former Matt Brewer Oil site is located at 915 East Market, in the City of Elmira, an urban area of Chemung County, New York and occupies Tax Parcels 89.16-7-21 and 89.16-7-22.

Site Features: The 1.1-acre former petroleum bulk storage facility site is vacant, all above ground buildings and structures have been demolished and 33 PBS AST tanks have been removed or closed in place. Concrete floors, partial basement and asphalt cover the majority of site. Two USTs are known to exist on-site and drywells facilitate surface drainage.

Current Zoning and Land Use: The property is bounded by East Market Street to the south, Ring Place (unimproved city street) to the north, residential properties to the west and a former elevated rail road siding to the east. The site is currently zoned RC (residential) 1 to 4 Family use and the surrounding parcels are currently zoned residential, commercial, or industrial. The nearest residential areas are immediately to the west of the site along East Market and Judson Street. The area is serviced by a public water supply.

Past Use of the Site: The site was used prior to the 1950's for lumber / coal storage and distribution. In the early 1950's there is evidence to suggest the property was used as a dump prior to being purchased by Matt Brewer in 1954. Matt Brewer operated the site for bulk storage of lubricants, petroleum and solvents until the 1990s. Thirty-three petroleum bulk storage tanks were registered with NYSDEC and documented removed or closed in place. No chemical bulk storage tanks were registered however, testimony and environmental evidence document that dry cleaning solvent PCE and other solvent TCE were distributed from this facility.

Site Geology and Hydrogeology: The site is located in the Appalachian Uplands Physiographic Province where local topographic features result from glacial and fluvial processes with a complex erosional history and deposited accumulations of till. Overburden soils at the site are greater than 45 feet thick according to data collected during the field investigations. Bedrock was not encountered. The aquifer under this site is considered a primary aquifer that are capable of producing well yields greater than 1,000 gallons per minute. Groundwater was encountered at 12 to 19 ft bgs and flows in a southerly to a southwesterly direction toward the Chemung River. Shallow groundwater flow direction and gradients appear to be affected by the varying silt layers encountered beneath the site. The site is primarily covered with low permeable concrete or asphalt and surface runoff is collected in drywell structures and infiltrates into the subsurface soils.

Materials Disposed at Site

OU 01

tetrachloroethene (PCE)	UNKNOWN
trichloroethene (TCE)	UNKNOWN
cis-1,2-dichloroethene	UNKNOWN
methylene chloride	UNKNOWN
1,1,1-TCA	UNKNOWN
xylene (mixed)	UNKNOWN
toluene	UNKNOWN

benzo(a)pyrene	UNKNOWN
lead	UNKNOWN

Analytical Data Available	Groundwater, Soil, Soil Vapor, Indoor Air
Applicable Standards	Groundwater, Soil, Soil Vapor

Assessment of Environmental Problems

Soil: On-site - Tetrachloroethene concentrations in soil ranged from non-detect to 230 parts per million [ppm] (Protection of Groundwater (PGW) SCO - 1.3 ppm). Trichloroethene concentrations in soil ranged from non-detect to 1.6 ppm (PGW SCO – 0.47 ppm). Cis-1,2-dichloroethene concentrations in soil ranged from non-detect to 0.97 ppm (PGW SCO – 0.25 ppm). Methylene chloride concentrations in soil ranged from non-detect to 0.14 ppm (PGW SCO – 0.05 ppm). The concentration of PAHs ranged from non-detect to 3.3 ppm (Restricted Residential SCO - 1 ppm). The concentration of lead concentrations ranged from non-detect to 672 ppm (Restricted Residential SCO - 400 ppm). Based on the analytical data to date, soil contamination does not extend off-site from the on-site source area. One upgradient off-site soil boring had concentrations of trichloroethene, cis-1,2-dichloroethene, methylene chloride and xylene slightly above the PGW SCOs however Groundwater SCOs are not exceeded at that location.

Drywell Source Material: On-site - Tetrachloroethene concentrations in source material ranged from non-detect to 91 ppm (PGW SCO - 1.3 ppm). Cis-1,2-dichloroethene concentrations in source material ranged from non-detect to 0.8 ppm (PGW SCO – 0.25 ppm). The concentration of PAHs ranged from non-detect to 18 ppm (Restricted Residential SCO - 1 ppm). Adjacent to the impacted drywells, soil borings were advanced to 15 to 18' below ground surface without documenting contaminant impacts above SCOs.

Groundwater Shallow: On-site - Tetrachloroethene concentrations ranged from non-detect to 61,000 parts per billion [ppb]; trichloroethene concentrations ranged from non-detect to 12,000 ppb; cis-1,2-dichloroethene concentrations ranged from non-detect to 16,000 ppb; and 1,1,1-trichloroethane concentrations ranged from non-detect to 11,000 ppb (groundwater standard for each of the above - 5 ppb). Based on the analytical data to date, groundwater contamination extends off-site from the on-site source area.

Groundwater Shallow: Off-site - Tetrachloroethene concentrations ranged from non-detect to 8,000 ppb; trichloroethene concentrations ranged from non-detect to 740 ppb (groundwater standard - 5 ppb); cis-1,2-dichloroethene concentrations ranged from non-detect to 830 ppb (groundwater standard - 5 ppb); and 1,1,1-trichloroethane concentrations ranged from non-detect to 520 ppb (groundwater standard - 5 ppb). Based on the analytical data to date, concentrations of groundwater contamination decrease significantly and to below groundwater standards with distance from the on-site source area.

Groundwater Deep: On-site and Off-site - Tetrachloroethene concentrations ranged from 6 to 72 ppb(groundwater standard - 5 ppb); trichloroethene concentrations ranged from 2 to 5 ppb (groundwater standard - 5 ppb); cis-1,2-dichloroethene concentrations ranged from 0.9 to 3.0 ppb (groundwater standard - 5 ppb); and 1,1,1-trichloroethane concentrations ranged from 0.6 to 2.0 ppb (groundwater standard - 5 ppb). Based on the analytical data to date, vertical migration of shallow groundwater contamination limited decreases significantly and to below groundwater standards within a short distance from the on-site source area.

Sub-slab Vapor and Indoor Air: On-site and Off-site – No buildings remain at the site; therefore, no on-site soil vapor sampling was conducted. Soil vapor sampling was conducted at multiple residences off-site. Soil vapor tetrachloroethene concentrations ranged from 1.4 to 48.0 micrograms per cubic meter (ug/m3) in the sub-slab vapor and from 0.76 to 41.4 ug/m3 in the indoor air. trichloroethene concentrations ranged from 0.66 to 79.0 ug/m3 in the sub-slab vapor and from 0.27 to 16.0 ug/m3 in the indoor air. The NYSDOH air guideline value of 2 ug/m3 for trichloroethene was exceeded in three off-site buildings for indoor air. 1,1,1-trichloroethane concentrations ranged from 0.61 to 4.71 ug/m3 in the sub-slab vapor and from 0.72 to 550 ug/m3 in the indoor air. Based on the analytical data to date, it's anticipated that soil vapor contamination exists on-site and off-site. Soil vapor intrusion mitigation was recommended for three off-site properties and monitoring was recommended for five. At one of the three properties with an exceedance of NYSDOH's air guideline for TCE, soil vapor intrusion was mitigated with the installation of a sub-slab depressurization system. The second property refused the offer for mitigation, the building is currently vacant and there is a City of Elmira notice posted on the door indicating "use and occupancy of this building is prohibited; no person shall enter this building." One of the off-site buildings where mitigation actions were recommended, has been demolished to accommodate parking for a metal finishing business.

Assessment of Health Problems

People are not drinking contaminated groundwater because the area is served by a public water supply that is not affected by site-related contamination. People may come into contact with contaminants in soils if they contact surface soils or dig below surface materials (i.e., pavement, concrete). Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site redevelopment and occupancy. Environmental sampling indicates soil vapor intrusion is a concern for off-site buildings and actions are needed to minimize potential exposures.

Owners

Current Owner(s)

Thomas J Santulli, County Executive
Chemung County
PO Box 588
Elmira, NY 14902

Operators

UNITED STATES POSTAL SERVICE

Date: August 28, 2017

Courtney Curcurito:

The following is in response to your August 28, 2017 request for delivery information on your Certified Mail™/RRE item number 92148901178572000420 84. The delivery record shows that this item was delivered on August 25, 2017 at 11:14 am in ELMIRA, NY 14901. The scanned image of the recipient information is provided below.

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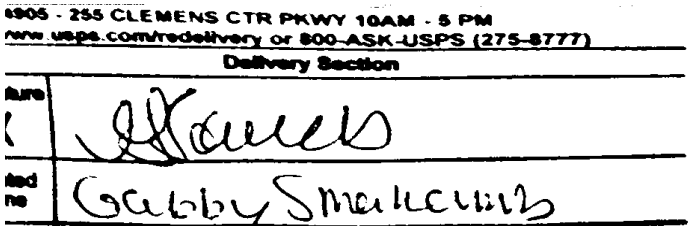

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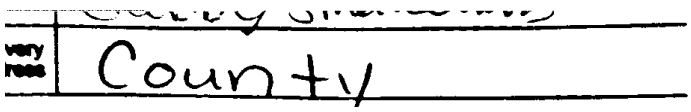

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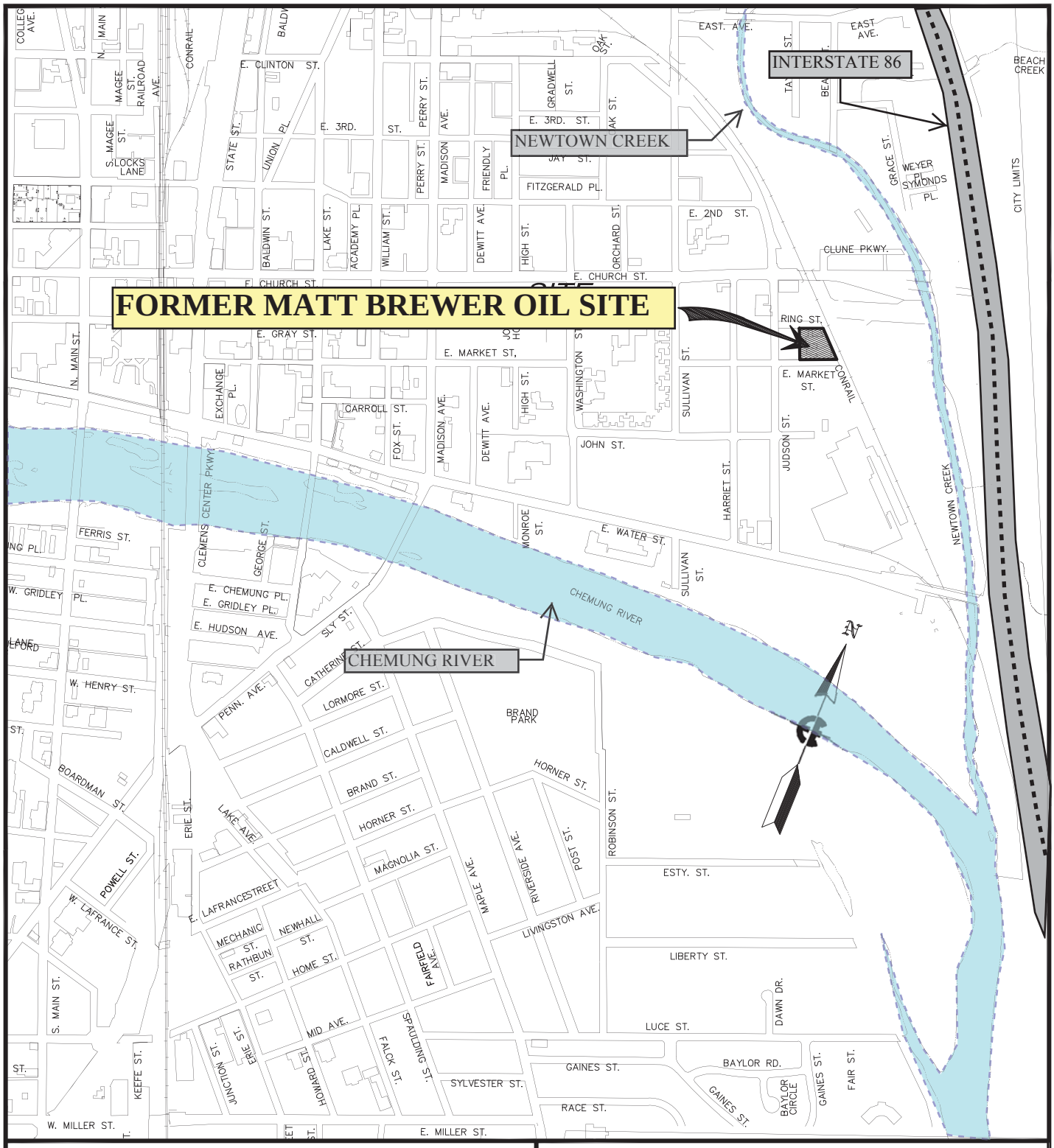


FORMER BREWER OIL CO.
SITE INVESTIGATION/REMEDIAL
ALTERNATIVE REPORT

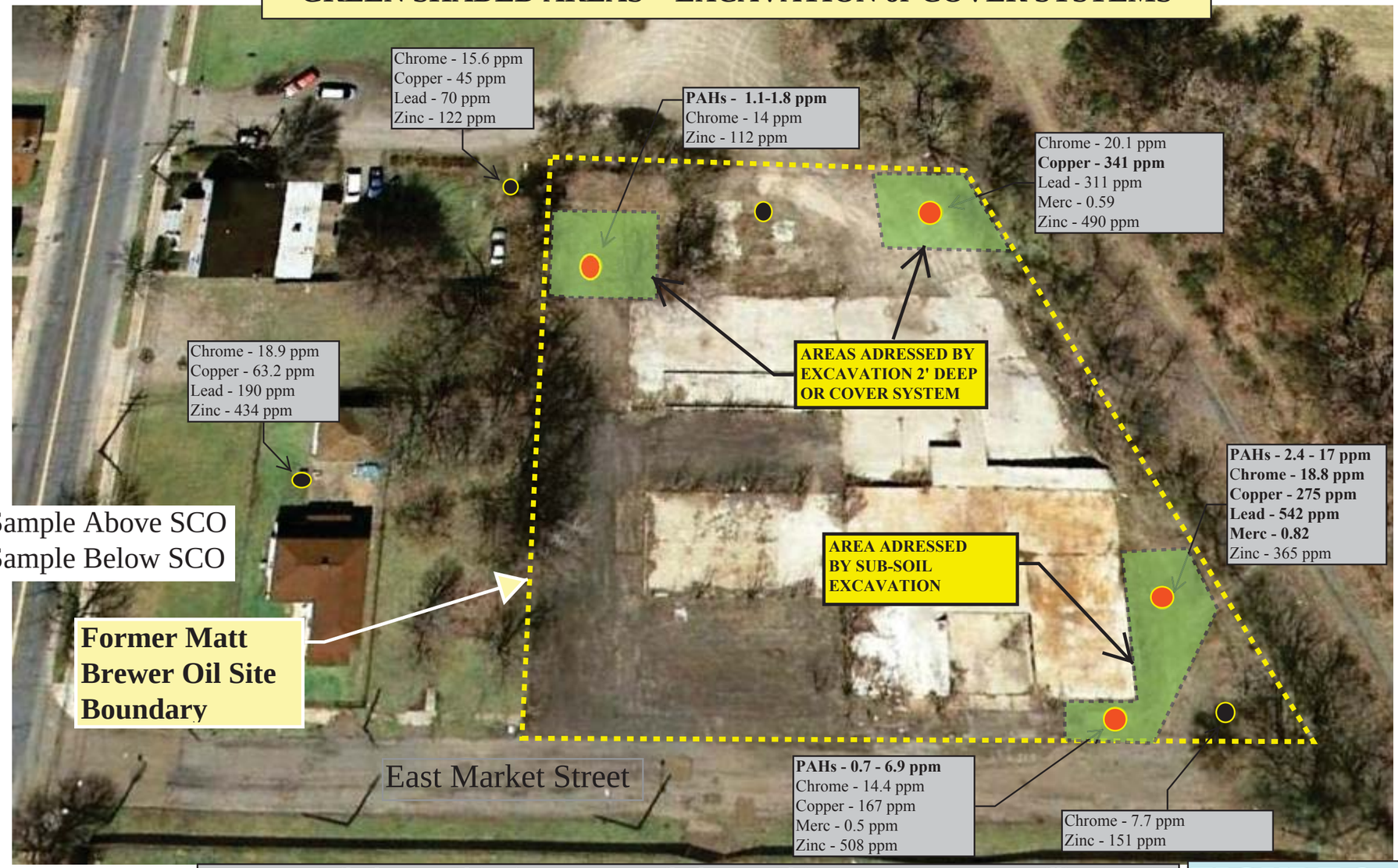
CITY OF ELMIRA
CHEMUNG COUNTY, NEW YORK
NOVEMBER, 2013

FIGURE 1

LOCATION MAP

Base map by Fagan Engineers

ELEMENT OF REMEDY - SURFACE SOILS
GREEN SHADED AREAS = EXCAVATION or COVER SYSTEMS



COC	Soil Cleanup Objective Residential (off-site)	Soil Cleanup Objective Restricted Residential (on-site)	parts per million (ppm)
Chrome	22-36 ppm	110-180 ppm	
Copper	270 ppm	270 ppm	
Lead	400 ppm	400 ppm	
Merc	0.81 ppm	0.81 ppm	
Zinc	2200 ppm	10,000 ppm	
PAHs	1 ppm	1 ppm	

FORMER BREWER OIL CO.
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CITY OF ELMIRA
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NOVEMBER, 2013

FIGURE 2

Elements of Remedy

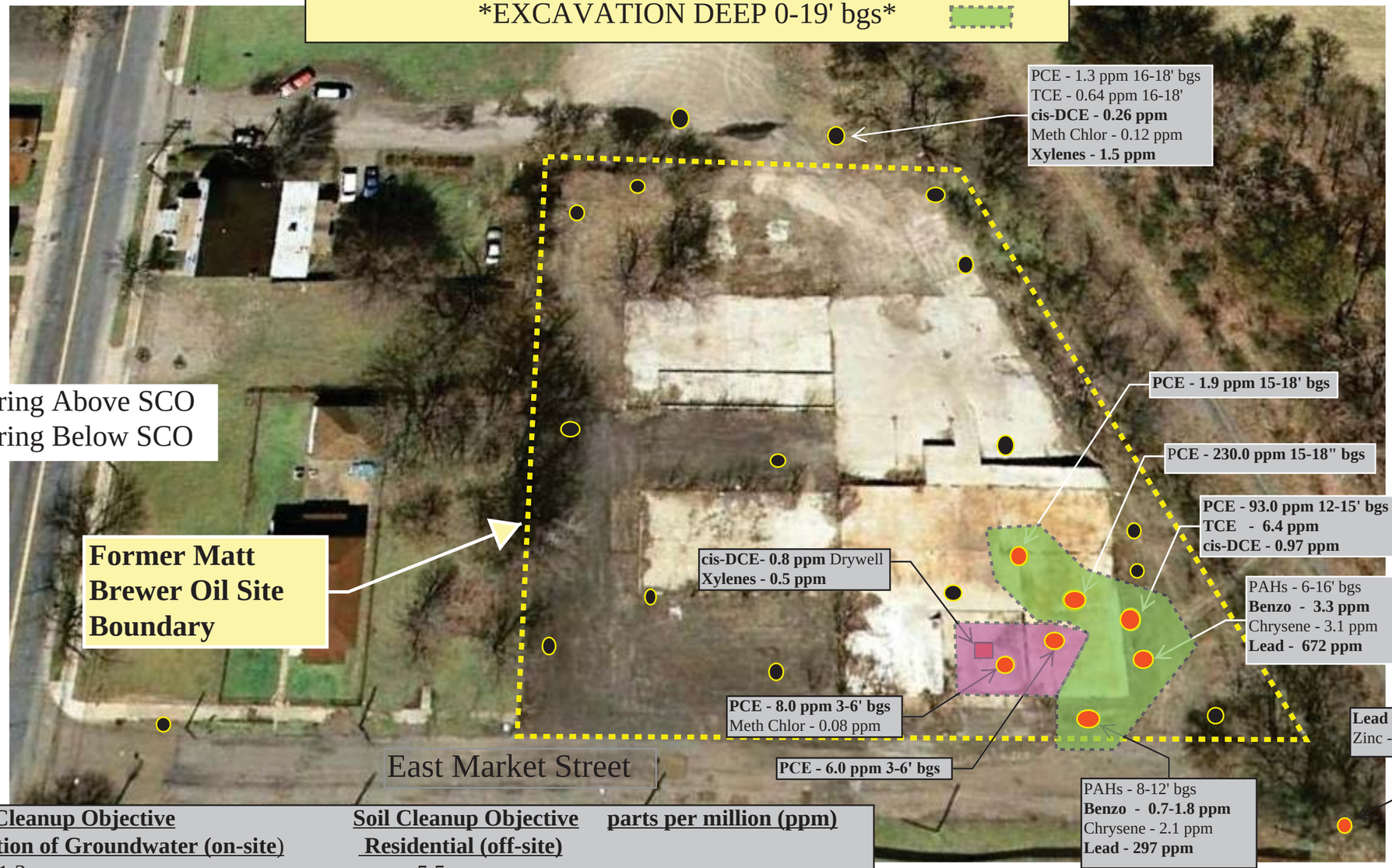
Surface Soils

Base map by Fagan Engineers

ELEMENT OF REMEDY - SOIL REMEDIATION

EXCAVATION SHALLOW 0-7' bgs

EXCAVATION DEEP 0-19' bgs



COC	Soil Cleanup Objective Protection of Groundwater (on-site)	Soil Cleanup Objective Residential (off-site)	parts per million (ppm)
PCE	1.3 ppm	5.5 ppm	
TCE	0.47 ppm	10 ppm	
cis-DCE	0.25 ppm	59 ppm	
Meth Chlor	0.05 ppm	51 ppm	
Xylenes	0.26 ppm	100 ppm	
BENZO	1.0 ppm	1-22 ppm	
Chrysene	1.0 ppm	1.0 ppm	
Lead	63 ppm	400 ppm	

FIGURE 3

Elements of Remedy

Sub-surface Soils

Base map by Fagan Engineers

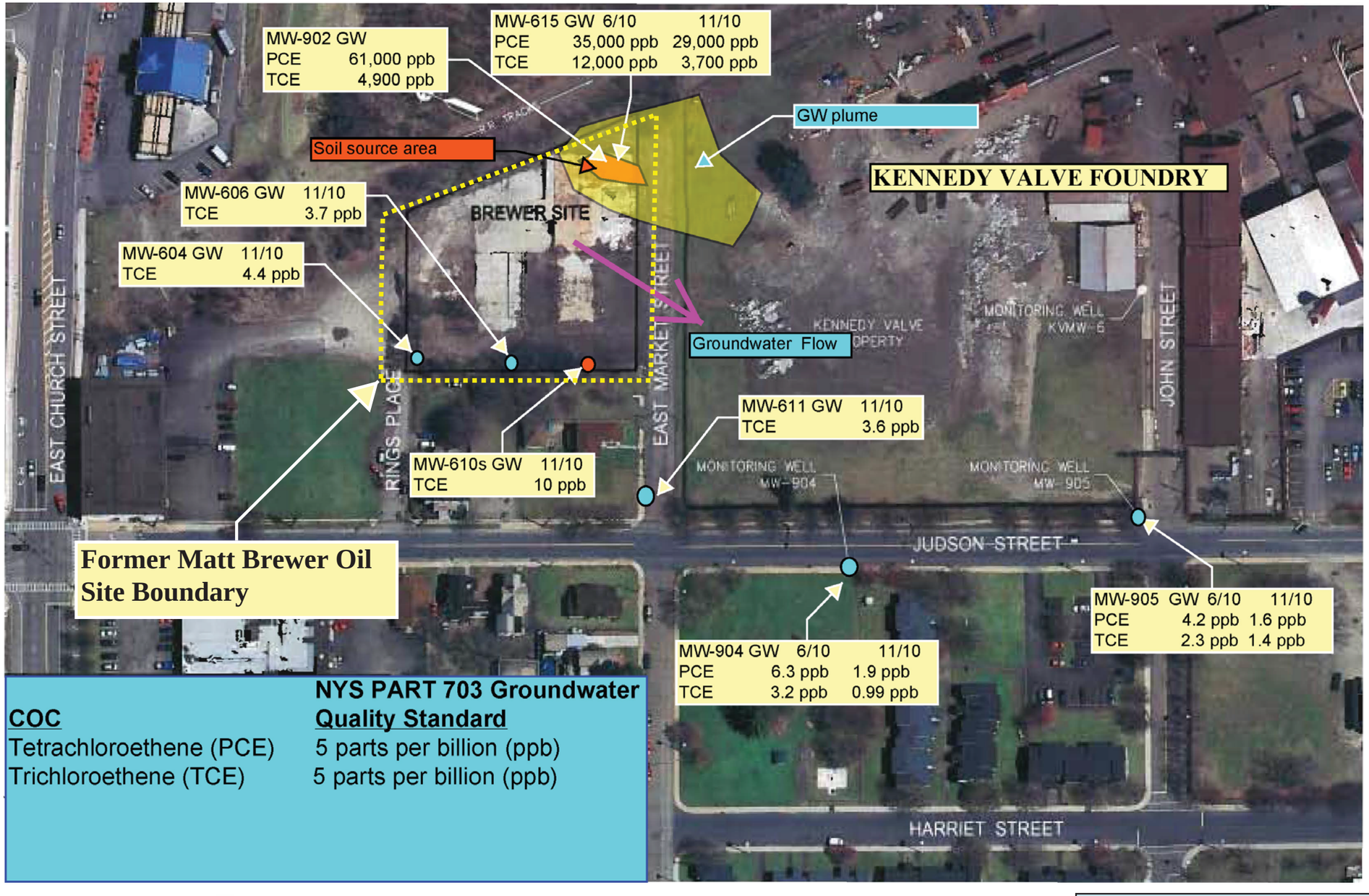
ELEMENT OF REMEDY - DRYWELLS / UNDERGROUND STORAGE TANKS (UST)
GREEN SHADED AREAS = EXCAVATION 0-10' bgs

COC	Soil Cleanup Objective Protection of Groundwater	parts per million (ppm)
PCE	1.3 ppm	
TCE	0.47 ppm	
cis-DCE	0.25 ppm	
Xylenes	1.6 ppm	
PAHs	1.0 ppm	

FORMER BREWER OIL CO.
SITE INVESTIGATION/REMEDIAL ALTERNATIVE REPORT

CITY OF ELMIRA
CHEMUNG COUNTY, NEW YORK
NOVEMBER, 2013

FIGURE 4
Elements of Remedy
Drywells / USTs
Base map by Fagan Engineers



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SITE INVESTIGATION/REMEDIAL ALTERNATIVE REPORT

CITY OF ELMIRA
CHEMUNG COUNTY, NEW YORK
NOVEMBER, 2013

ELEMENTS OF REMEDY - GROUNDWATER
SOIL SOURCE REMOVAL / GROUNDWATER TREATMENT
MONITOR ATTENUATION

FIGURE 5
Elements of Remedy
Groundwater
Base map by Fagan Engineers

NEW YORK STATE OF OPPORTUNITY. Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

July 11, 2017

Robert Schick, Director
Division of Environmental Remediation
NYS Dept. of Environmental Conservation
625 Broadway
Albany, NY 12233

Re: **Site Listing – Class 2**
Former Matt Brewer Oil Site
Site #808032
Elmira, Chemung County

Dear Mr. Schick:

At your Department's request, we have considered your Department's proposal to list the above referenced site as a Class 2 site on NYSDEC's Registry of Inactive Hazardous Waste Disposal Sites. Specifically, we have reviewed the proposal to determine whether the site represents a significant threat to human health. I understand that previous operations at the site have resulted in contamination of soil, groundwater, and soil vapor at levels exceeding applicable standards, criteria and guidance values. There is a potential for people to be exposed to site-related contamination via direct contact with soil and groundwater and there is also a potential for exposure resulting from soil vapor intrusion. A *Record of Decision*, which identifies the appropriate actions needed to minimize and abatement human exposures to site-related contaminants on and off the site, was finalized in 2016. The site's owner has refused to undertake the remedial activities.

Based on the available information, including information presented in NYSDEC's *Site Classification Report* (06/08/17), I believe this site poses a significant threat to human health and concur with your Department's proposal to list it on the Registry. If you have any questions, please contact Mr. Justin Deming at (518) 402-7860.

Sincerely,

Krista M. Anders

Krista M. Anders, Director
Bureau of Environmental Exposure Investigation

ec: J. Deming / M. Sergott / e-File
A. Bonamici – NYSDOH WRO
T. Kump – CCHD
M. Ryan / K. Lewandowski / M. Cruden / S. Saucier – NYSDEC Central Office
B. Schilling – NYSDEC Region 8