



FACT SHEET State Superfund Program

Receive Site Fact Sheets by Email. See "For More Information" to Learn How.

Site Name: Monroe Electronics
DEC Site #: 837013
Address: 100 Housel Avenue Lyndonville, NY 14098

Have questions? See "Who to Contact" Below

Remedy Proposed for State Superfund Site; Public Comment Period and Public Meeting Announced

Public Meeting, Thursday, 1/7/2016 at 6:30 PM
Village Hall, Meeting Room
2 South Main Street, Lyndonville, NY 14098
NYSDEC invites you to a public meeting to discuss the remedy proposed for the site. You are encouraged to provide comments at the meeting, and during the 30-day comment period described in this fact sheet.

The public is invited to comment on a remedy proposed by the New York State Department of Environmental Conservation (NYSDEC) related to the Monroe Electronics site ("site") located at 100 Housel Avenue, Lyndonville, Orleans County. Please see Figure 1 for the site location.

Documents related to the cleanup of this site can be found at the location(s) identified below under "Where to Find Information."

How to Comment

NYSDEC is accepting written comments about the proposed plan for 30 days, from December 22, 2015 through January 22, 2016. The proposed plan is available for review at the location(s) identified below under "Where to Find Information." Please submit comments to the NYSDEC project manager listed under Project Related Questions in the "Who to Contact" area below.

The site is listed as a Class "2" site in the State Registry of Inactive Hazardous Waste Disposal Sites (Registry), a list of State Superfund sites. A Class 2 site represents a significant threat to public health or the environment; action is required.

Proposed Remedial Action Plan

The remedy proposed for the site includes:

- Enhanced In-Situ Bioremediation, involving multiple injections of bioamendments and degrading bacteria into the bedrock aquifer, to treat chlorinated volatile contaminants in groundwater beneath the manufacturing building and immediately downgradient;
In-Situ Chemical Reduction, involving injections of liquid-phase reducing agents (e.g., zero-valent iron) to supplement the bioremediation groundwater remedy and boost the rate of abiotic destruction of organic contaminants in groundwater;

- A vegetated soil cover in areas where surface soil exceeds the applicable soil cleanup objectives for arsenic. The soil cover will be a minimum of one foot of soil placed over a demarcation layer (e.g. a layer of orange snow-fencing), with the upper six inches of soil of sufficient quality to maintain a vegetative layer;
- Indoor air monitoring program to address potential exposures related to soil vapor intrusion during and following the active remediation phase;
- An environmental easement that will restrict use of the site to commercial or industrial purposes in conformance with local zoning laws, prohibit use of any structure on the site for residential purposes, restrict use of groundwater for potable or process water, and require compliance with the approved Site Management Plan; and
- Development of a Site Management Plan, approved by the NSYDEC, to ensure that the institutional and engineering controls are properly implemented and monitoring requirements adhered to.

### *Summary of the Investigation*

The Remedial Investigation (RI) was completed in multiple phases between 2011 and 2014 and included installation of over 30 soil borings and monitoring wells. Figure 2 shows the site layout and previous sampling locations. Several monitoring wells were constructed in "clusters" to monitor groundwater quality in the overburden (shallow and deep) and the upper bedrock zones. The drilling program also included installation of five soil borings inside the active manufacturing building. Field investigations included testing of soil, groundwater, surface water, sediment, soil vapor, and indoor air both on-site and off-site to define the nature (type) and extent (location) of contamination.

The contaminants of concern at the Monroe Electronics site include industrial solvents in groundwater and arsenic in soil. The two specific industrial solvents known to be causing environmental impacts at the site are 1,1,1-trichloroethane (TCA) and trichloroethene (TCE). TCA and TCE are chlorinated volatile organic compound (VOCs) that were used for cleaning and degreasing components in the manufacturing process. These two chemicals, as well as their by-products of degradation, have been detected in groundwater at concentrations above Class GA Groundwater Standards and Guidance Values.

Based on the results of groundwater sampling conducted to date, it is clear that the overburden and bedrock aquifers beneath the site are contaminated by chlorinated VOCs originating from one of two subsurface sources: 1) a source of TCE near the gravel parking area at the east end of the building, and 2) a source of TCA located at the west end of the building. These dissolved contaminant plumes are thought to be co-mingled at some point beyond the northern property boundary and undergoing limited reductive dechlorination. As a result, the extent of VOC contamination in groundwater off-site appears to be limited to the area near the site and does not extend far beyond West Avenue to the north.

NYSDEC, in consultation with the New York State Department of Health (NYSDOH), developed the proposed remedy after reviewing the detailed investigation of the site and evaluating the remedial options in the "feasibility study" submitted under New York's State Superfund Program.

NYSDEC will consider public comments as it finalizes the remedy for the site. The selected remedy will be described in a document called a "Record of Decision" that will explain why the remedy was selected and respond to public comments. A detailed design of the selected remedy will then be prepared, and the cleanup will be performed.

NYSDEC, together with NYSDOH, will keep the public informed throughout the investigation and cleanup of the site.

### **Background**

The Monroe Electronics site is located at 100 Housel Avenue in Lyndonville, a small village in rural Orleans County approximately 4 miles south of Lake Ontario. The site is situated on a 10.1-acre parcel (Orleans County Tax Map ID 24.16-1-2) at the end of Housel Avenue. The developed portion of the property contains two structures, a one-story manufacturing building occupied by Monroe Electronics and a small house just south of the manufacturing building. Gravel parking areas surround these structures and a gravel access driveway extends south to Housel Avenue. The on-site area along either side of the driveway is vacant, cleared land. Along the northern property boundary (between Monroe Electronics and the Bowman Apple facility) there is a drainage swale, oriented east-west. Refer to Figure 2 showing the relation of these physical features.

The site is zoned Light Industrial, consistent with the current use of the property which is manufacturing (machining, component assembly, and testing). The small house on the property is currently rented to a tenant and used as a residence. Land use surrounding the site consists of apple processing and storage operations to the north (Bowman Apple and H.H. Dobbins, Inc.), agricultural land to the east and west, and L.A. Webber Middle-High School to the south. Lynhaven Cemetery is located further east of the site.

Monroe Electronics has been at this location since 1972 and has been involved in the manufacture of electrostatic measuring instruments and other electronic devices. Before Monroe Electronics operated here, the property was the site of the former DuPont/Barre Lime and Sulfur Company where various pesticide sprays and dust mixtures were manufactured. Based on historic photographs, a significant portion of the property and surrounding land was once an apple orchard.

In September 1986, Monroe Electronics submitted a Hazardous Waste Disposal Questionnaire as a requirement of the Community Right-to-Know survey. In the survey, Monroe Electronics indicated that they dumped 1 to 4 tons of TCA at their Housel Avenue facility. The dumping area and resulting contamination source were not indicated on the survey form, however, conversations with the owner/plant manager during the RI indicate that dumping occurred outside a former door on the west end of the building in the early 1970s. The owner also indicated that TCA and waste oil was spread along the driveway on the east side of the building.

Overburden deposits beneath the study area from the surface down to bedrock include a medium-fine sand (5 to 15 ft thick), lacustrine clay (8 to 9 ft thick), glacial till (3 to 4 ft thick), and weathered red shale (5 ft thick). Bedrock (Queenston shale) was encountered 22 to 32 feet below ground surface.

Three distinct water-bearing units were observed. A perched water-bearing zone was observed above the clay unit. Water was also encountered within the weathered shale and bedrock units. Based on water level measurements the predominant groundwater flow direction in the shallow overburden and bedrock is toward the north.

Additional site details, including environmental and health assessment summaries, are available on NYSDEC's website at:

<http://www.dec.ny.gov/cfm/externalapps/derexternal/haz/details.cfm?pageid=3&progno=837013>

**State Superfund Program:** New York's State Superfund Program (SSF) identifies and characterizes suspected inactive hazardous waste disposal sites. Sites that pose a significant threat to public health and/or the environment go through a process of investigation, evaluation, cleanup and monitoring.

NYSDEC attempts to identify parties responsible for site contamination and require cleanup before committing State funds.

For more information about the SSF, visit: <http://www.dec.ny.gov/chemical/8439.html>

## FOR MORE INFORMATION

### Where to Find Information

Project documents are available at the following location(s) to help the public stay informed.

Yates Community Library  
Attn: Emily Cebula  
15 North Main Street  
PO Box 485  
Lyndonville, NY 14098  
phone: 585-765-9041  
([eccebula@nioga.org](mailto:eccebula@nioga.org))

### Who to Contact

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

#### Project Related Questions

Eric Hausamann  
Division of Environmental Remediation  
625 Broadway  
Albany, NY 12233-7017  
518-402-9813  
[eric.hausamann@dec.ny.gov](mailto:eric.hausamann@dec.ny.gov)

#### Site-Related Health Questions

Julia Kenney  
New York State Department of Health  
Empire State Plaza Corning Tower Room #1787  
Albany, NY 12237  
518-402-7860  
[BEEI@health.ny.gov](mailto:BEEI@health.ny.gov)

**We encourage you to share this fact sheet with neighbors and tenants, and/or post this fact sheet in a prominent area of your building for others to see.**

### Receive Site Fact Sheets by Email

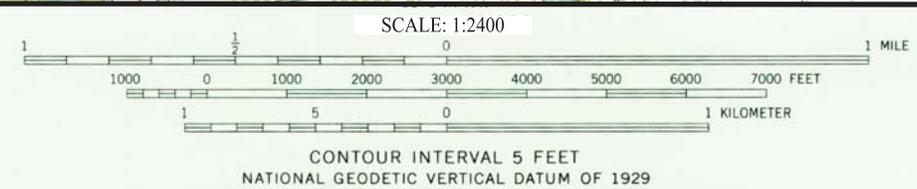
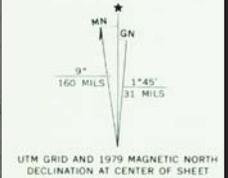
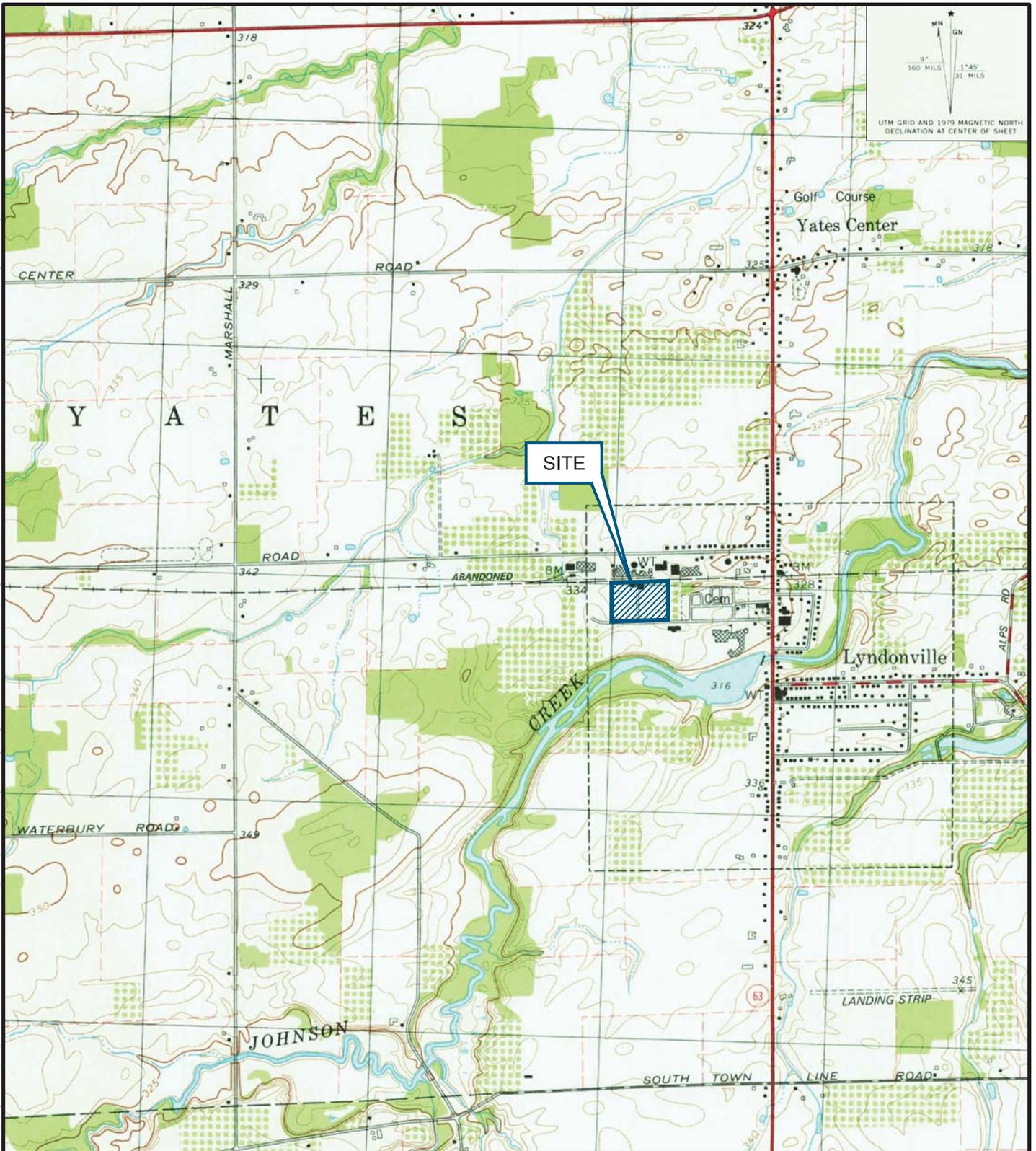
Have site information such as this fact sheet sent right to your email inbox. NYSDEC invites you to sign up with one or more contaminated sites county email listservs available at the following web page: <http://www.dec.ny.gov/chemical/61092.html>. It's quick, it's free, and it will help keep you *better 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 already have signed up and received this fact sheet electronically.

Path\Name: \\NTPA-NYC\environmental\Shared\Projects\NYSDEC\Assignments\WA #19 - Monroe Electronics\Feeability Study\TRC Working Drawings\Figure 1 - Site Location Map.dwg - User Name: HDeigado - Layout Tab: 8.5X11



LYNDONVILLE, N. Y.  
SW/4 RIDGEWAY 15' QUADRANGLE  
N4315—W7822.5/7.5  
1979  
DMA 5370 IV SW—SERIES V821

QUADRANGLE LOCATION

MAP OBTAINED THROUGH USE OF THE NATIONAL MAP ONLINE VIEWER FROM USGS

1430 BROADWAY, 10TH FLOOR  
NEW YORK, NEW YORK 10018  
212-221-7822

DESIGNED BY: JM
DRAWN BY: HD
CHECKED BY: DSG/LM
DATE: MAY 2015
SCALE: AS SHOWN
PROJECT NUMBER: 219075.0000.0000

PROJECT NAME: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION FEASIBILITY STUDY MONROE ELECTRONICS - SITE NO. 837013 100 HOUSEL AVENUE LYNDONVILLE, NEW YORK 14098
DRAWING TITLE: SITE LOCATION MAP

FIGURE  
1

