Department of Environmental Conservation

**Division of Environmental Remediation**

# Record of Decision
## FORMER SCOLITE
## Environmental Restoration Project
## Troy, Rensselaer County, New York
## Site No. E442037

**March 2011**

New York State Department of Environmental Conservation
ANDREW M. CUOMO, *Governor* JOE MARTENS, *Commissioner*

# DECLARATION STATEMENT - RECORD OF DECISION

## FORMER SCOLITE
## Environmental Restoration Project
## Troy, Rensselaer County, New York
## Site No. E442037

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Former Scolite site, an environmental restoration site. The selected remedial program was chosen in accordance with the New York State Environmental Conservation Law, 6 NYCRR Part 375, and is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300), as amended.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former Scolite site and the public's input to the Proposed Remedial Action Plan (PRAP) presented by the Department. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

**Description of Selected Remedy**

Based on the results of the remedial investigation, alternative analysis (RI/AA) for the Former Scolite site and the criteria identified for evaluation of alternatives, the Department has selected installation of a site cover, institutional controls, and a site management plan. The components of the remedy are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.

2. A cover would be constructed over all exposed soils to prevent exposure to contaminated soils. The site cover would either be a soil cover as described herein or buildings or pavement. The soil cover would be one-foot thick and consist of clean soil underlain by an indicator, such as geotextile fabric, to demarcate the cover soil from the subsurface soil. The top four inches of soil would be of sufficient quality to support vegetation. Clean soil would constitute soil that meets the Division of Environmental Remediation's criteria for backfill as described in Part 375-6.7(d). Alternatively, buildings, roadways, parking lots, etc. could be used; such areas would need to be covered by a paving system or concrete at least 6 inches thick. To implement the cover system describe above, the site will be graded and leveled as indicated in an approved design.

3. Soil vapor intrusion evaluations prior to re-use of existing structure and design of new structures so that vapor intrusion can be prevented or mitigated where appropriate.

4. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including;
   - using renewable energy sources
   - reducing green house gas emissions
   - foster green and healthy communities
   - conserve natural resources
   - increase recycling and reuse of clean materials
   - utilize native species and discourage invasive species establishment during restoration
   - promote recreational use of natural resources
   - design cover systems to be usable for habitat or recreation
   - design storm water management systems to recharge aquifers

5. Imposition of an institutional control in the form of an environmental easement for the controlled property that:

   (a) 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).
   (b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for
   □ residential use □ restricted residential use ⊠ commercial use ⊠industrial use
   (c) prohibits agriculture or vegetable gardens on the controlled property;
   (d) requires compliance with the Department approved Site Management Plan;

6. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

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

   Institutional Controls:
   - The Environmental Easement discussed in Paragraph 5 above.

   Engineering Controls:
   - Soil cover
   - Soil vapor mitigation system

   This plan includes, but may not be limited to:
   (i) Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
   (ii) descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;

(iii) provisions for the management and inspection of the identified engineering controls;
(iv) provision for the evaluation of the potential for soil vapor intrusion and the implementation of actions recommended, based on this evaluation, for any future building construction or renovation of existing structures on the site;
(iv) maintaining site access controls and Department notification; and
(v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

**New York State Department of Health Acceptance**

The New York State Department of Health (NYSDOH) concurs that the remedy selected for this site is protective of human health.

**Declaration**

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

MAR 23 2011

Date

Dale A. Desnoyers, Director
Division of Environmental Remediation

# RECORD OF DECISION
## FORMER SCOLITE
## Environmental Restoration Project
## Troy, Rensselaer County, New York
## Site No. E442037
## March 2011

## SECTION 1: SUMMARY AND PURPOSE OF THE PROPOSED PLAN

The New York State Department of Environmental Conservation (the Department), in consultation with the New York State Department of Health (NYSDOH), has selected a remedy for the above referenced site. The disposal of hazardous waste at the site has resulted in threats to public health and the environment that are addressed by this remedy presented in this Record of Decision (ROD). The disposal of hazardous wastes at this site, as more fully described in Sections 5 of this document, have contaminated various environmental media. The proposed remedy, discussed in detail in Section 8, is intended to attain the remedial action objectives identified for this site in Section 6 for the protection of public health and the environment. This ROD identifies the selected remedy, summarizes the other alternatives considered, and discusses the reasons for the selected remedy. The Department has selected a final remedy for the site after careful consideration of all comments received during the public comment period.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Brownfields are abandoned, idled, or under-used properties where redevelopment is complicated by real or perceived environmental contamination. They typically are former industrial or commercial properties where operations may have resulted in environmental contamination. Brownfields often pose not only environmental, but legal and financial burdens on communities. Under the Environmental Restoration Program, the state provides grants to municipalities to reimburse up to 90 percent of eligible costs for site investigation and remediation activities. Once remediated, the property can then be reused.

The Department has issued this ROD in accordance with the requirements of New York State Environmental Conservation Law and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, 6 NYCRR Part 375.

## SECTION 2: SITE DESCRIPTION AND HISTORY

### 2.1: Location and Description

**Location**

The Former Scolite site (Site) is located at #2 Madison Street in the City of Troy, Rensselaer County, NY. The site is a 5.7-acre parcel situated at the confluence of the Poesten Kill and the Hudson River on the North and West respectively as shown in Figure 1 of this PRAP. The site is bounded by Madison Street to the South and an active railroad to the East.

**Site Features**
The topography of the Site is level on the eastern half and terraced on the western half. Large concrete blocks function to retain fill and preserve flat working surfaces. Concrete or steel bulkheads are present on both the Hudson River and Poesten Kill shores. Concrete slabs, building debris, vegetation, and bare soil or fill are present at the surface of the Site.

The eastern half of the Site is the highest portion of the property and is relatively level. The western half is sloped and terraced, dropping approximately fifteen feet towards the Hudson River and extending to a concrete bulkhead. The north boundary of the Site is also confined by a bulkhead along the Poesten Kill. Nearly all of the eastern half of the Site is occupied by a concrete slab, indicating the location of one of the former manufacturing buildings. A significant portion of the western half is covered with metallic debris left from a metal transfer facility. In 2008, a large fire consumed half of the prominent foundry building on the east side of the Site making all neighboring buildings unsafe and requiring the demolition of the remainder of the foundry building and seven other small buildings. One four-story industrial building remains in disrepair at the southwest corner of the Site.

**Current Zoning**
This area of the City of Troy is largely comprised of industrial-scale facilities between the Hudson River and 1st St. The opposite side of 1st St generally consists of various single and multi-family housing as well as small commercial businesses. The most recent use of the Site was for the transfer of salvaged metal from truck to barge which involved daily use of large excavators, loaders and various sizes of trucks entering and leaving the facility.

**Historical Uses**
It is the site of several industries and industrial uses beginning as early as 1846 with the construction of an iron foundry. The iron and steel industry occupied the site under various companies such as the Rensselaer Iron Works, Ludlow Valve Manufacturing, and Ludlow Rensselaer Valve Foundry. In 1971 the iron and steel industry had disappeared from the Site and the property was purchased by Scolite International where Perlite (a volcanic mineral of low density upon processing) was manufactured.
Two subsequent occupants of the Site of note include a roofing or roofing products company that utilized large quantities of tar and related petroleum products as well as a scrap metal hauler and recycler who operated a salvaged metal transfer facility. Finally, there also appeared to have been some type of automobile maintenance or storage facility.

**Site Geology and Hydrogeology**
The Site is entirely comprised of historic fill, the thickness of which varies from approximately 14 feet on the east side to greater than 20 feet trending towards the southwestern corner of the Site. The fill is comprised of stained soils, slag, ash and brick. The fill overlies native soils comprised of clay, sandy clay, or mixtures of clay, sand and pebbles. Literature shows bedrock in the area to be thinly bedded and weathered shale of the Normanskill or Snake Hill formations. No bedrock was encountered during the investigation.

Groundwater at the site can be found between 10 and 20 feet below ground surface. The direction of groundwater flow is generally towards the Hudson River though a divide exists in the northeastern

corner where groundwater flows to the northeast, towards the Poesten Kill.

There are no surface water features on the Site and it appears the majority of on-site water resulting from precipitation infiltrates the ground. However, some potential exists for water to drain from the site into the Hudson River or Poesten Kill as well as to enter the storm sewers on Madison Street which would allow runoff to enter the Hudson River.

## 2.2: Operational/Disposal History

One hundred sixty years of industrial operations provided significant potential for disposal of large quantities of hazardous wastes. Contamination by hazardous wastes such as chlorinated solvents, metals, petroleum and polychlorinated biphenyls (PCBs) is often discovered at sites with a similar history. As mentioned in Section 2.1, the Site is comprised entirely of fill materials, however, no indication of large-scale or widespread hazardous waste disposal was detected during the SI and no documentation of past disposal is known to exist.


After the iron and steel operations ceased and opportunistic industries occupied the Site, SI data indicates there was a greater threat of release of hazardous wastes. Department staff witnessed significant quantities of tar-like petroleum substances stored in various containers around the large foundry building on-site in 2006. The containers ranged in size and type from small buckets to 55 gallon drums to large tanker trucks, all of which were stored haphazardly under leaky roofs in an unsecured manner. The 2008 fire occurred in the building where the majority of the tar wastes were stored causing some to be spilled or burned before they could be removed intact from the building. The fire resulted in large quantities of asbestos contaminated material (ACM) in the form of brick, mortar, roofing and other demolition materials left over from fighting the fire and razing the remaining buildings.

Prior to the fire, Department staff also witnessed stained soil and surface water sheens on puddles in the areas occupied by the scrap metal recycling operations. The observed contamination appeared to be consistent with petroleum related spills such as oily fluids or gasoline.

## 2.3: Remedial History

1. Remedial Parties and Program.

The City of Troy applied to the Environmental Restoration Program (ERP) in February 2006 and again in December 2006. The application for financial assistance for the investigation phase of the project was approved in August 2007. Approval of the application allowed the City to initiate a

removal activity to address the wastes that were described in Section 2.2.

2. Investigation/Actions.
An investigation was performed prior to the parcel entering the ERP. The investigation completed in 2006 was implemented under the South Troy Brownfields Assessment Demonstration Project and was considered a site characterization with results adequate to supplement the ERP application.

## SECTION 3: LAND USE

The Department may consider the current, intended and reasonable anticipated future land use of the site and its surroundings when assessing the nature and extent of contamination. For this site alternatives that may restrict the use of the site to commercial criteria as described in Part 375-1.8 (g) are being evaluated in addition to unrestricted Soil Cleanup Objectives (SCOs). The commercial SCOs are appropriate based on the past industrial use of the Site and the anticipated development of the property by an organization intending to construct scientific and educational facilities relating to the study of the Hudson River. In addition, the State Assistance Contract required under the ERP specifies that the site will be evaluated for a commercial use. Therefore, the Department will utilize the commercial use SCOs found in Part 375-6.8 (b) in evaluating the remedial alternatives.

A comparison of the appropriate SCOs for the identified land use against the unrestricted use SCOs for the site contaminants is included in the Tables for the media being evaluated in section 5.1.2.

## SECTION 4: ENFORCEMENT STATUS

Potentially Responsible parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the state to recover state response costs should PRPs be identified. The City of Troy will assist the state in its efforts by providing all information to the state which identifies PRPs. The City will also not enter into any agreement regarding response costs without the approval of the Department.

## SECTION 5: SITE CONTAMINATION

A remedial investigation has been conducted to determine the nature and extent of contamination and to evaluate the alternatives for addressing the significant threats to human health and the environment.

### 5.1: Summary of the Site Investigation

The purpose of the Site Investigation (SI) was to define the nature and extent of any contamination resulting from previous activities at the site. The SI was conducted between March 2009 and August 2010. The field activities and findings of the investigation are described in the SI Report.

The following general activities are conducted during an SI:

- Research of historical information;
- Interim Remedial Measures to remove hazardous wastes;
- Geophysical survey to detect buried tanks;
- Test pits, soil borings, and monitoring well installations;
- Sampling of waste, surface and subsurface soils, groundwater and soil vapor;
- Human Health Exposure Assessments.

### 5.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate. The selection of a remedy must also take into consideration guidance, as appropriate. Standards, Criteria and Guidance are hereafter called SCGs.

To determine whether the contaminants identified in various media are present at levels of concern, the data from the SI were compared to media specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and surface and subsurface soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in the following Sections list the applicable SCG in the footnotes. For a full listing of all SCGs see:

**http://www.dec.ny.gov/regulations/61794.html**

Based on the SI results, in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized in Section 5.1.2. More complete information can be found in the SI Report.

### 5.1.2: Nature and Extent of Contamination

This section describes the findings of the Site investigation. As described in the SI report, waste/ source materials were identified at the site.

**Waste/Source Areas**

Wastes are defined in 6 NYCRR Part 375-1.2 (aw) and include solid, industrial and/or hazardous wastes. Source Areas are defined in 6 NYCRR Part 375 (au). Source areas are areas of concern at a site were substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and Source areas were identified at the site include:

Tar-like Petroleum Wastes

Containerized viscous petroleum materials had been stored in and around the foundry building prior to the 2008 fire that necessitated its razing. The materials appeared to be confined to the building however after the firefighting efforts were complete, several tons of demolition material on the concrete slab had been impacted by the waste with the potential for the waste to migrate off the slab into the site soils. The petroleum contaminated debris was removed in phases determined by accessibility as an IRM from late summer and continuing through the fall of 2008 preventing future

releases to soil or surface waters.

Asbestos Containing Material (ACM)
The demolition waste resulting from the fire was determined to contain more than 1% asbestos, meeting threshold in the definition of ACM and is, therefore, regulated by the New York State Department of Labor. The ACM was removed as an IRM preventing exposure to the local population via airborne asbestos fibers.

The waste/source areas identified at the site were addressed by the IRM(s) described in Section 5.2.

This section describes the findings for all environmental media that were evaluated. As described in the SI report, groundwater, soil, and soil vapor samples were collected to characterize the nature and extent of contamination.

For each media, a table summarizes the findings of the investigation. The tables present the range of contamination found at the site in the media and compares the data with the applicable SCGs for the site. The contaminants are arranged into four categories; volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals). For comparison purposes the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCG identified in Section 3 are also presented.

## Groundwater

Groundwater samples were collected from eight overburden monitoring wells (Figure 2) that were installed during the SI. No bedrock wells were installed as data from the overburden wells indicates that contamination on the surface has not migrated downward and would not have reached bedrock. Analytical data from the groundwater samples indicate there are no significant impacts to the on-site groundwater. There were minor detections of one VOC, two SVOCs, a pesticide and some metals including aluminum, iron and manganese. The metals and one pesticide were the only constituents to exceed groundwater standards (Figure 3).

**Table 1 – Groundwater**

| Detected Constituents | Concentration Range Detected (ppb)[a] | SCG[b] (ppb) | Frequency Exceeding SCG |
|---|---|---|---|
| **VOCs** | | | |
| Methyl Tert Butyl Ether | 0.9-1.2 | 10 | 0 of 16 |
| **SVOCs** | | | |
| 2-Pentanone, 4-hydroxy-4-methyl- | 3.4 – 5.4 | 50 | 0 of 16 |
| Butane, 2-methoxy-2-methyl | 8.8 – 14 | 50 | 0 of 16 |
| **Metals** | | | |
| Aluminum | 0.0125 – 1.79 | 0.1 | 6 of 16 |

| | | | |
|---|---|---|---|
| Barium | 0.047 – 0.272 | 2 | 0 of 16 |
| Iron | 0.135 – 42.3 | 0.3 | 14 of 16 |
| Calcium | 58 - 116 | - | |
| Chromium | 0.003 | 0.05 | 0 of 16 |
| Copper | 0.008 | 0.2 | 0 of 16 |
| Lead | 0.005 – 0.013 | 0.025 | 0 of 16 |
| Manganese | 0.661 – 4.28 | 0.3 | 16 of 16 |
| Potassium | 2.6 – 14 | - | |
| Sodium | 11.7 – 86 | - | |
| **Pesticides** | | | |
| Heptachlor Epoxide | 0.062 | 0.03 | 1 of 16 |

a - ppb: parts per billion, which is equivalent to micrograms per liter, ug/L, in water.
b- SCG: Standard Criteria or Guidance - Ambient Water Quality Standards and Guidance Values (TOGs 1.1.1), 6 NYCRR Part 703, Surface water and Groundwater Quality Standards, and Part 5 of the New York State Sanitary Code (10 NYCRR Part 5).

The metals that exceed groundwater standards are likely due to the surrounding geology and the historic fill present at the site. They do not create a concern because their effects tend to be asthetic and groundwater in the area is not utilized.

The pesticide that was detected during sampling, heptachlor epoxide, is not present consistently. It was found in only one of the sampling events and the sample was collected from the monitoring well on the extreme east edge of the Site, the location most hydraulically upgradient on the Site. This indicates that the contaminant is not likely to be site-related.

No site-related groundwater contamination of concern was identified during the SI. Therefore, no remedial alternatives need to be evaluated for groundwater and the protection of groundwater SCGs will not be applicable.

## Soil

Surface Soil

Surface soil samples were collected from the top 2 inches of the Site to assess the potential for direct human exposure. The results of the analyses indicate there is a broad range of contaminants present at highly variable concentrations that are consistent with the activities known to have taken place. The most prominent types of contaminants that exceed unrestricted and commercial SCGs include SVOCs, metals and PCBs (Table 2). Figure 3 shows the locations on the Site where the samples were collected and which contaminants exceeding SCGs were present at each location.

Subsurface Soil

Subsurface soil samples were collected at the site from soil borings installed with a direct push drill rig and during the performance of test pitting. Samples were collected from the depth interval deemed to be the most likely to be contaminated or the depth corresponding to the groundwater table at each location. The most likely contaminated depth was determined using field instrumentation or through observations by the field staff.

The range of contaminants narrows dramatically from that exhibited by the surface soil samples.

Arsenic is the only contaminant that consistently exceeds SCGs in the subsurface (Table 3). Figure 4 shows the locations on the Site where the samples were collected and which contaminants exceeding SCGs were present at each location.

**Table 2 - Surface Soil**

| Detected Constituents | Concentration Range Detected (ppm)[a] | Unrestricted SCG[b] (ppm) | Frequency Exceeding Unrestricted SCG | Commercial SCG[c] (ppm) | Frequency Exceeding Restricted SCG |
|---|---|---|---|---|---|
| **VOCs** | | | | | |
| Ethybenzene | 0.003 | 1 | 0 of 14 | 390 | 0 of 14 |
| m/p xylenes | 0.003 | 0.26 | 0 of 14 | 500 | 0 of 14 |
| Toluene | 0.004 - 0.075 | 0.7 | 0 of 14 | 500 | 0 of 14 |
| **SVOCs** | | | | | |
| Acenaphthene | 0.43 – 1.1 | 100 | 0 of 14 | 100 | 0 of 14 |
| Anthracene | 0.24 – 7.1 | 100 | 0 of 14 | 100 | 0 of 14 |
| Benzo(a)anthracene | 0.04 – 16 | 1 | 9 of 14 | 5.6 | 2 of 14 |
| Benzo(a)pyrene | 0.28 – 13 | 1 | 9 of 14 | 1 | 9 of 14 |
| Benzo(b)fluoranthene | 0.05 – 19 | 1 | 10 of 14 | 5.6 | 3 of 14 |
| Benzo(g,h,i)perylene | 0.2 – 9.1 | 100 | 0 of 14 | 500 | 0 of 14 |
| Benzo(k)fluoranthene | 0.1 – 5.6 | 1 | 8 of 14 | 56 | 0 of 14 |
| bis(2-Ethylhexyl)phthalate | 0.240 | 50[(d)] | 0 of 14 | - | |
| Chrysene | 0.04 – 15 | 1 | 9 of 14 | 56 | 0 of 14 |
| Dibenz(a,h)anthracene | 0.05 – 2.6 | 0.33 | 5 of 14 | 0.56 | 3 of 14 |
| Dimethylphthalate | 0.35 – 2.0 | 100[(d)] | 0 of 14 | - | |
| Fluoranthene | 0.075 – 38 | 100 | 0 of 14 | 500 | 0 of 14 |
| Fluorene | 0.7 – 2.8 | 100 | 0 of 14 | 500 | 0 of 14 |
| Indeno(1,2,3-cd)pyrene | 0.19 – 6.5 | 0.5 | 9 of 14 | 5.6 | 1 of 14 |
| Naphthalene | 0.55 – 0.87 | 100 | 0 of 14 | 500 | 0 of 14 |
| Phenanthrene | 0.63 – 3.4 | 100 | 0 of 14 | 500 | 0 of 14 |
| Pyrene | 0.72 - 30 | 100 | 0 of 14 | 500 | 0 of 14 |
| **Metals** | | | | | |
| Aluminum | 2460 – 10600 | 5560[(e)] | 2 of 14 | - | |
| Antimony | 3.37 – 16.5 | 1.92[(e)] | 4 of 14 | - | |
| Asenic | 2.76 – 3.2 | 13 | 8 of 14 | 16 | 7 of 14 |
| Barium | 38 – 168 | 350 | 0 of 14 | 400 | 0 of 14 |
| Beryllium | 0.56 – 1.02 | 7.2 | 0 of 14 | 590 | 0 of 14 |
| Cadmium | 0.57 – 57 | 2.5 | 10 of 14 | 9.3 | 7 of 14 |
| Calcium | 3270 – 26400 | 13383[(e)] | 2 of 14 | - | |
| Chromium, total | 17.9 – 6812 | 30 | 12 of 14 | 1,500 | 1 of 14 |
| Cobalt | 4.3-40.9 | 30[(d)] | 1 of 14 | - | |

| | | | | | |
|---|---|---|---|---|---|
| Copper | 149 - 891 | 50 | 5 of 14 | 270 | 3 of 14 |
| Iron | 32700 - 192360 | 2000[(d)] | 5 of 14 | - | |
| Lead | 19.8 – 1410 | 63 | 11 of 14 | 1,000 | 2 of 14 |
| Magnesium | 1050 – 6270 | 3267[(e)] | 1 of 14 | - | |
| Manganese | 420 - 1950 | 2,000 | 1 of 14 | 10,000 | 0 of 14 |
| Total Mercury | 0.05 – 2.1 | 0.81 | 7 of 14 | 2.8 | 1 of 14 |
| Nickel | 32.8 – 843 | 30 | 5 of 14 | 310 | 1 of 14 |
| Potassium | 324 – 378 | 634[(e)] | 1 of 14 | - | |
| Selenium | 0.92 – 12.5 | 3.9 | 2 of 14 | 1,500 | 0 of 14 |
| Silver | 3.42 – 21.1 | 2 | 2 of 14 | 1,500 | 0 of 14 |
| Sodium | 146 – 351 | 246[(e)] | 3 of 14 | - | |
| Vanadium | 36.3 - 198 | 100[(d)] | 1 of 14 | - | |
| Zinc | 325 - 1230 | 109 | 5 of 14 | 10,000 | 0 of 14 |
| **Pesticides/PCBs** | | | | | |
| PCBs (Total) | 0.04 – 7.3 | 0.1 | 9 of 14 | 1 | 5 of 14 |

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Commercial Soil Cleanup Objectives.
d - CP-51: Commissioner Policy on Soil Cleanup Guidance
e - Average area background values from the Site Investigation Report

**Table 3 - Subsurface Soil**

| Detected Constituents | Concentration Range Detected (ppm)[a] | Unrestricted SCG[b] (ppm) | Frequency Exceeding Unrestricted SCG | Commercial SCG[c] (ppm) | Frequency Exceeding Restricted SCG |
|---|---|---|---|---|---|
| **VOCs** | | | | | |
| 1,2,4 trimethyl benzene | 6.6 | 3.6 | 1 of 26 | 190 | 0 of 26 |
| toluene | 0.776 | 0.7 | 1 of 26 | 500 | 0 of 26 |
| **SVOCs** | | | | | |
| Benzo(a)anthracene | 7.3 | 1 | 1 of 26 | 1 | 1 of 26 |
| Benzo(a)pyrene | 1 – 7.3 | 1 | 4 of 26 | 1 | 4 of 26 |
| **Metals** | | | | | |
| Arsenic | 16.6 – 44.3 | 13 | 10 of 26 | 16 | 10 of 26 |
| Cadmium | 10.9 – 12.2 | 2.5 | 2 of 26 | 9.3 | 2 of 26 |
| Chromium, total | 716 | 36 | 1 of 26 | 1,500 | 0 of 26 |
| Copper | 747 - 2760 | 50 | 19 of 26 | 270 | 3 of 26 |
| **Pesticides/PCBs** | | | | | |
| PCBs (Total) | 3.8 | 0.1 | 1 of 26 | 10[(d)] | 0 of 26 |

a - ppm: parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil;
b - SCG: Part 375-6.8(a), Unrestricted Soil Cleanup Objectives.
c - SCG: Part 375-6.8(b), Restricted Commercial Soil Cleanup Objectives.
d - CP-51: Commissioner Policy on Soil Cleanup Guidance (10 ppm in subsurface soil)

Contaminants in the soils that exceed unrestricted and commercial SCGs primarily include SVOCs, metals and PCBs and are concentrated in the surface soils. Arsenic is the only contaminant found consistently in the subsurface and can be assumed to be a component of the historic fill material present. The contaminants present at the surface are consistent with the Site's history of industrial and commercial uses. The pattern of detections of PCBs indicate the contamination is likely a result of discrete spills or localized deposition of contaminated soil and not a single, large release that has contaminated a large and contiguous volume of soil. SVOCs, mostly in the form of benzo(a)pyrene, are found in nearly all of the surface soil samples and are likely related to the long history of disturbed fill at the site as well as poor housekeeping during the various activities that have occurred at the Site. The metal contaminants are likely due to operations at the surface and are not a component of the fill. Cadmium is the most frequently occurring metal. Though the source is unknown, it is possible the contamination is due to historical processes related to the iron and steel industry at the Site including the combustion of coal.

Based on the findings of the Remedial Investigation, the disposal of hazardous waste has resulted in the contamination of soil. The site contaminants identified in soil which are considered to be the primary contaminants of concern, to be addressed by the remedy selection process are, SVOCs, metals and PCBs.

## Soil Vapor Intrusion

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related soil or groundwater contamination was evaluated by the sampling of soil vapor. At this site one building remains. Soil vapor was collected and analyzed as a field screening method to determine the location of areas with sources of contamination in addition to documenting the potential for soil vapor intrusion.

Soil vapor samples were collected from nine locations, including several locations below former building slabs located on-site. Since no buildings are immediately available for occupation, no indoor air samples were collected. Soil vapor sample results indicate significant impacts to on-site soil vapor from VOC contamination; which would be expected on a property utilized for scrap metal processing including air conditioning refrigerants, such as trichloromonoflouromethane (Freon 11), and petroleum related compounds such as benzene, toluene, ethylbenzene and xylenes (BTEX). Other likely petroleum related compounds that were detected frequently in the soil vapor include heptane and hexane hydrocarbons. While these compounds were commonly found in the soil vapor, there was no discernable correlation with contamination found in the other environmental media. Because there are no SCGs for contamination in soil vapor except in the context of vapor intrusion, there is no table provided to illustrate exceedances. Figure 5 was developed to provide a qualitative evaluation of the presence of soil vapor contamination and shows the contaminants with values that are relatively high compared to surrounding sample points. It is not intended to be a comprehensive depiction of all VOCs detected in the soil vapor but does show the higher concentrations of contaminants.

Petroleum related hydrocarbons and other compounds commonly expected to be present at a scrap metal salvage facility were the primary contaminants in soil vapor. There is no significant correlation with the soil vapor and contamination found in other media including soil and

groundwater. Therefore, the potential for vapor intrusion in future on-site structures should be evaluated as appropriate.

## 5.2: Interim Remedial Measures

An interim remedial measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before issuance of the Record of Decision.

An IRM was completed to address the petroleum wastes described in section 2.2 after the main foundry building burned. Containers and materials impacted by spilled petroleum wastes were consolidated and removed from the site for proper disposal. In areas where the liquid waste had spilled to the concrete pad, absorbent materials such as Speedy Dri were used to collect those wastes and were then containerized and disposed. The IRM was intended to remove pure product and site materials that were in the immediate vicinity. Approximately 200 cubic yards of petroleum-impacted waste were removed from the site and properly disposed of off-site. The removal task was very effective at preventing additional impacts to on-site soils and groundwater.

A second IRM was initiated to address ACM (comprised of demolition debris) resulting from the destruction of the main foundry building that was not impacted by the petroleum wastes. The ACM was first covered with heavy duty tarps to prevent it from becoming airborn and migrating off-site. The owner is still in the process of removing the ACM from the site. All ACM that has been removed has been disposed of in a solidwaste facility permitted to accept such waste.

## 5.3: Summary of Human Exposure Pathways:

This human exposure assessment identifies ways in which people may be exposed to site-related contaminants. Chemicals can enter the body through three major pathways (breathing, touching or swallowing). This is referred to as *exposure.*

Persons who enter the site may come into contact with contaminants in the soil by walking on the dirt, digging on or below the ground surface, and otherwise disturbing the soil. Volatile organic compounds in the soil 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 occupied on-site building, contact with contaminants due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for inhalation of site contaminants from soil vapor intrusion for any future on-site construction.

## 5.4: Summary of Environmental Assessment

This section summarizes the assessment of existing and potential future environmental impacts presented by the site. Environmental impacts may include existing and potential future exposure pathways to fish and wildlife receptors, wetlands, groundwater resources, and surface water.

The Former Scolite Site is located at the confluence of the Poesten Kill and Hudson River. Because

of the proximity to these two water bodies, the potential exists for the contamination in the surface soils (including SVOCs, metals, PCBs) to migrate from the Site via storm water runoff into one, or both, surface waters.

The remedy must address the potential impact of the site to the neighboring surface water resource.

Groundwater resources at the site include groundwater at depths approximately fifteen feet below the ground surface. The groundwater flows to the north and to the west in the direction of the two surface water bodies; the Poesten Kill and the Hudson River. The groundwater table is within the historic fill at the Site. Since the Site is located in an urban setting and a public water supply is available and there are no known private wells used for drinking water or processes water, groundwater is not utilized by the local population. Groundwater analyses indicate elevated levels of some metals including aluminum, iron, and manganese though these do not appear to be site related as there is not a correlation between contaminants in the soil and those in the groundwater.

No site-related groundwater contamination has been identified. Therefore, no remediation of groundwater is required.

## SECTION 6: SUMMARY OF THE REMEDIATION OBJECTIVES

The objectives for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375. The goal for the remedial program is to restore the site to pre-disposal conditions to the extent feasible. At a minimum, the remedy shall eliminate or mitigate all significant threats to public health and the environment presented by the contamination identified at the site through the proper application of scientific and engineering principles.

The remedial objectives for this site are:

### Public Health Protection

*Soil*

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of contaminants volatilizing from the soil.

*Surface water*

- Prevent surface water contamination which may result in fish advisories.

*Soil Vapor*

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into the indoor air of buildings at or near a site.

### Environmental Protection

*Soil*

- Prevent migration of contaminants that would result in groundwater or surface water contamination.

## SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

To be selected the remedy must be protective of human health and the environment, be cost-effective, comply with other statutory requirements, and utilize permanent solutions, alternative technologies or resource recovery technologies to the maximum extent practicable. Potential remedial alternatives for the Site were identified, screened and evaluated in alternative analysis report which is available at the document repositories established for this site.

A summary of the remedial alternatives that were considered for this site is presented below. Cost information is presented in the form of present worth, which represents the amount of money invested in the current year that would be sufficient to cover all present and future costs associated with the alternative. This enables the costs of remedial alternatives to be compared on a common basis. As a convention, a time frame of 30 years is used to evaluate present worth costs for alternatives with an indefinite duration. This does not imply that operation, maintenance, or monitoring would cease after 30 years if remediation goals are not achieved.

### 7.1: Description of Remedial Alternatives

The following alternatives were considered to address the contaminated media identified at the site as describe in Section 5:

**Alternative 1: No Further Action**

The No Further Action Alternative recognizes the remediation of the site completed by the IRM(s) described in Section 5.2. This alternative leaves the site in its present condition and does not provide any additional protection of the environment and/or public health. Under this alternative the monitoring wells installed on the site for the investigation would be decommissioned.

*Present Worth: .....$11,000*
*Capital Cost:.....$11,000*
*Annual Costs:.....$0*

**Alternative 2: Restoration to Pre-Disposal or Unrestricted Conditions**

This alternative achieves all of the SCGs discussed in Section 5.1.1 and soil meets the unrestricted soil clean objectives listed in Part 375-6.8 (a). This alternative would include: excavation and off-site disposal of all historic fill material, approximately 147,000 cubic yards, with the importation of the same amount of clean fill to return the site to a similar elevation. The on-site building and foundations would be demolished and disposed of off-site. Groundwater would likely be encountered and have to managed. This alternative addresses the frequent occurrence of arsenic in the subsurface soil by removing the fill. It requires the transport of approximately 300,000 cubic yards of material or 10,000 truckloads at a cost likely to exceed $100 per cubic yard of material removed and $20 per yard of material placed. No site management plan, institutional or engineering controls would be required under this alternative.

*Present Worth:*.....*$18,000,000*
*Capital Cost:*.....*$18,000,000*
*Annual Costs:*.....*$0*

**Alternative 3: Installation of a Site Cover, Institutional Controls, and a Site Management Plan**

Alternative 3 includes installation of a site cover, the imposition of institutional controls and development of a Site Management Plan (SMP). The controls include a land use restriction to Commercial or Industiral and required notification to a potential purchaser of Site contamination upon a change of property ownership. Access to the site would be restricted to prevent trespassers to limit the public's exposure to the contaminants at the site. These controls would be codified in an environmental easement granted to the New York State Department of Environmental Conservation.

Alternative 3 includes all of the components of the Site Management Plan and institutional controls described above in addition to placement of a site cover. A site cover will be installed to allow for the commercial use of the site. The cover will consist either of the structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the commercial use soil cleanup objectives (SCOs). Where the soil cover is required it will be a minimum of one foot of soil, meeting the SCOs for cover material as set forth in 6 NYCRR Part 375-6.7(d). The soil cover will be placed over a demarcation layer. The excavation will be backfilled with soil meeting the backfill material requirements as set forth in 6 NYCRR Part 375-6.7(d) with the upper four inches of the soil of sufficient quality to maintain a vegetation layer.

The SMP provides guidance on the use of the Site to ensure protection of future occupants and workers at the Site and must be approved by the Department. The SMP includes provisions for managing soils and historic fill during excavation and site work and it specifies procedures for characterization, disposal and acceptable use of excavated material. The specification, maintenance requirements and repair procedures for the cover would be included in the SMP and it also requires evaluation of the potential for vapor intrusion into buildings to be constructed and may require the implementation of actions recommended to address exposures to soil vapor intrusion..

The timeframe required to implement this remedy would be approximately one year. The remedy design would consist of a grading plan to accommodate the grades of existing foundation material. Construction of the remedy once designed could be accomplished within a single construction season.

*Present Worth:*.....*$663,000*
*Capital Cost:*.....*$651,000*
*Annual Costs:*.....*$750*

**Alternative 4: Off-Site Disposal of Contaminated Media/Installation of a Cover System, Institutional Controls, and a Site Management Plan**

Alternative 4 includes removal and off-site disposal of the surface soils where contamination is present at concentrations exceeding commercial SCGs and a installation of a cover to return the site

to appropriate grades. It also includes the imposition of institutional and engineering controls as well as development of a SMP as described above. Portions of the Site to be excavated include the areas of exceedances illustrated in Figure 3 where no intact foundations or buildings are present, as determined during the SI; approximately 3.94 acres of surface to a minimum depth of one foot.

Confirmation sampling would be required at all locations of soil/fill excavation to assure adequate removal of contaminated media. Sampling would be performed at the bottom and sidewalls of each excavation site.

Similar to the SMP for Alternative 3, the SMP would specify the procedures necessary to maintain the site remedy and protect the future occupants of the site. .

*Present Worth:*.....*$3,188,000*
*Capital Cost:*.....*$3,176,000*
*Annual Costs:*.....*$750*

## 7.2 Evaluation of Remedial Alternatives

The criteria to which potential remedial alternatives are compared are defined in 6 NYCRR Part 375, which sets forth the requirements for the remediation of inactive hazardous waste disposal sites in New York. A detailed discussion of the evaluation criteria and comparative analysis is included in the alternative analysis report.

The first two evaluation criteria are termed "threshold criteria" and must be satisfied in order for an alternative to be considered for selection.

1. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

2. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether a remedy will meet environmental laws, regulations, and other standards and criteria. In addition, this criterion includes the consideration of guidance which the Department has determined to be applicable on a case-specific basis.

The next six "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

3. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the engineering and/or institutional controls intended to limit the risk, and 3) the reliability of these controls.

4. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.

5. Short-term Impacts and Effectiveness. The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment during the construction and/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction of the remedy and the ability to monitor its effectiveness. For administrative feasibility, the availability of the necessary personnel and materials is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, institutional controls, and so forth.

7. Cost-Effectiveness. Capital costs and annual operation, maintenance, and monitoring costs are estimated for each alternative and compared on a present worth basis. Although cost-effectiveness is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the other criteria, it can be used as the basis for the final decision. The costs for each alternative are presented in the Remedial Alternatives Cost Table 4.

**Table 4 - Remedial Alternative Costs**

| Remedial Alternative | Capital Cost ($) | Annual Costs ($) | Total Present Worth ($) |
|---|---|---|---|
| No Action | 11,000 | 0 | 11,000 |
| Restoration to Pre-Disposal or Unrestricted Conditions | 18,000,000 | 0 | 18,000,000 |
| Installation of a Soil Cover, Institutional Controls, and Site Management Plan | 651,000 | 750 | 663,000 |
| Off-Site Disposal of Contaminated Media, Soil Cover, Institutional Controls, and Site Management Plan | 3,176,000 | 750 | 3,188,000 |

8. Land Use. When cleanup to pre-disposal conditions is determined to be infeasible, the Department may consider the current, intended, and reasonable anticipated future land use of the site and its surroundings in the selection of the soil remedy.

The final criterion, Community Acceptance, is considered a “modifying criterion” and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

9. Community Acceptance. Concerns of the community regarding the investigation, the evaluation of alternatives, and the PRAP have been evaluated. The responsiveness summary (Appendix A) presents the public comments received and the manner in which the Department addressed the concerns raised.

No significant public comments were received.

## SECTION 8: SUMMARY OF THE PROPOSED REMEDY

Based on the Administrative Record (Appendix B) and the discussion presented below, the Department has selected Alternative 3, Institutional Controls, Site Management Plan and Installation of a Site Cover as the remedy for this site. The elements of this remedy are described at the end of this section.

### 8.1 Basis for Selection

The selected remedy is based on the results of the SI and the evaluation of alternatives.

Alternative 3 is selected because, as described below, it satisfies the threshold criteria and provides the best balance of the balancing criterion described in Section 7.2. It would achieve the remediation goals for the site by covering the soil and fill materials that pose a direct exposure threat to public health and the environment. This alternative addresses the five balancing criteria. It will timely address exposure threats to the public. It will be effective in the long term through the implementation of appropriate institutional and engineering controls that would be included in the SMP. Alternative 3 is easily implementable and cost effective. The toxicity, mobility, or volume of the waste on-site will not be significantly improved or altered, however, the current pathway as described above in Section 5.3 would be eliminated through the installation of the cover.

Alternative 1 does not satisfy the remedial goals specified in Section 6 and has been eliminated from consideration.

Alternative 2 addresses the exposure threat through the removal of all historic fill at the site. It is effective in the short and long term and the toxicity, mobility, and volume of the waste on-site is addressed. However, up to 10,000 truck loads would be necessary to remove waste and subsequently import fill to the site resulting in significant short term impacts associated with truck traffic, dewatering and potential air impacts. The cost is dramatically more than other alternatives and does not provide for a significantly more protective remedy than Alternative 3.

Like Alternative 3, effective implementation of Alternative 4 also satisfies all evaluation criteria because contaminated soils exceeding commercial SCGs would be removed from the Site and disposed of within an appropriate facility and a cover would be installed to return the site to appropriate grades. The toxicity, mobility, or volume of the waste on site will be improved through the removal and covering of any undetected, residual waste remaining at the site. However, the threat of exposure to on-site receptors is not significantly improved over Alternative 3 and does not justify the added cost.

The estimated present worth cost to implement the remedy is $663,000. The cost to construct the remedy is estimated to be $651,000 and the estimated average annual costs for 30 years is $750.

## 8.2 **Elements of the Proposed Remedy**

The elements of the selected restricted use remedy are as follows:

1. A remedial design program would be implemented to provide the details necessary for the construction, operation, maintenance, and monitoring of the remedial program.

2. A cover would be constructed over all exposed soils to prevent exposure to contaminated soils. The site cover would either be a soil cover as described herein or buildings or pavement. The soil cover would be one-foot thick and consist of clean soil underlain by an indicator, such as geotextile fabric, to demarcate the cover soil from the subsurface soil. The top four inches of soil would be of sufficient quality to support vegetation. Clean soil would constitute soil that meets the Division of Environmental Remediation's criteria for backfill as described in Part 375-6.7(d). Alternatively, buildings, roadways, parking lots, etc. could be used; such areas would need to be covered by a paving system or concrete at least 6 inches thick. To implement the cover system describe above, the site will be graded and leveled as indicated in an approved design.

3. Soil vapor intrusion evaluations prior to re-use of existing structure and design of new structures so that vapor intrusion can be prevented or mitigated where appropriate.

4. To maximize the net environmental benefit, Green remediation and sustainability efforts are considered in the design and implementation of the remedy to the extent practicable, including;
   - using renewable energy sources
   - reducing green house gas emissions
   - foster green and healthy communities
   - conserve natural resources
   - increase recycling and reuse of clean materials
   - utilize native species and discourage invasive species establishment during restoration
   - promote recreational use of natural resources
   - design cover systems to be usable for habitat or recreation
   - design storm water management systems to recharge aquifers

5. Imposition of an institutional control in the form of an environmental easement for the controlled property that:
   (a) 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).
   (b) land use is subject to local zoning laws, the remedy allows the use and development of the controlled property for
   ☐ residential use ☐ restricted residential use ☒ commercial use ☒industrial use

(c) prohibits agriculture or vegetable gardens on the controlled property;
(d) requires compliance with the Department approved Site Management Plan.

6. Since the remedy results in contamination remaining at the site that does not allow for unrestricted use, a Site Management Plan is required, which includes the following:

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

Institutional Controls:
- The Environmental Easement discussed in Paragraph 5 above.

Engineering Controls:
- Soil cover
- Soil vapor mitigation system

This plan includes, but may not be limited to:
(i) Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
(ii) descriptions of the provisions of the environmental easement including any land use and groundwater restrictions;
(iii) provisions for the management and inspection of the identified engineering controls;
(iv) provision for the evaluation of the potential for soil vapor intrusion and the implementation of actions recommended, based on this evaluation, for any future building construction or renovation of existing structures on the site;
(iv) maintaining site access controls and Department notification; and
(v) the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

## SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- Repositories for documents pertaining to the site were established.
- A public contact list, which included nearby property owners, elected officials, local media and other interested parties, was established.
- A public meeting was held on February 15, 2011 to present and receive comment on the PRAP.
- A responsiveness summary (Appendix A) was prepared to address the comments received during the public comment period for the PRAP.

# APPENDIX A

## Responsiveness Summary

# RESPONSIVENESS SUMMARY

**FORMER SCOLITE**
**Environmental Restoration Project**
**Troy, Rensselaer County, New York**
**Site No. E442037**
**March 2011**

The Proposed Remedial Action Plan (PRAP) for the Former Scolite site, was prepared by the New York State Department of Environmental Conservation (the Department) in consultation with the New York State Department of Health (NYSDOH) and was issued to the document repositories on February 2, 2011. The PRAP outlined the remedial measure proposed for the contaminated soil at the Former Scolite site.

The release of the PRAP was announced by sending a notice to the public contact list, informing the public of the opportunity to comment on the proposed remedy.

A public meeting was held on February 15, 2011, which included a presentation of the remedial investigation and alternative analysis (RI/AA) for the Former Scolite site as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. The public comment period for the PRAP ended on March 21, 2011.

This responsiveness summary responds to all questions and comments raised during the public comment period. No comments were recevied regarding the PRAP for the Former Scolite Site.

# APPENDIX B

## Administrative Record

# ADMINSTRATIVE RECORD

**Environmental Restoration Project**
**Troy, Rensselaer County, New York**
**Site No. E442037**
**March 2011**

1. *Proposed Remedial Action Plan for the Former Scolite site*, dated February 2011, prepared by the Department.

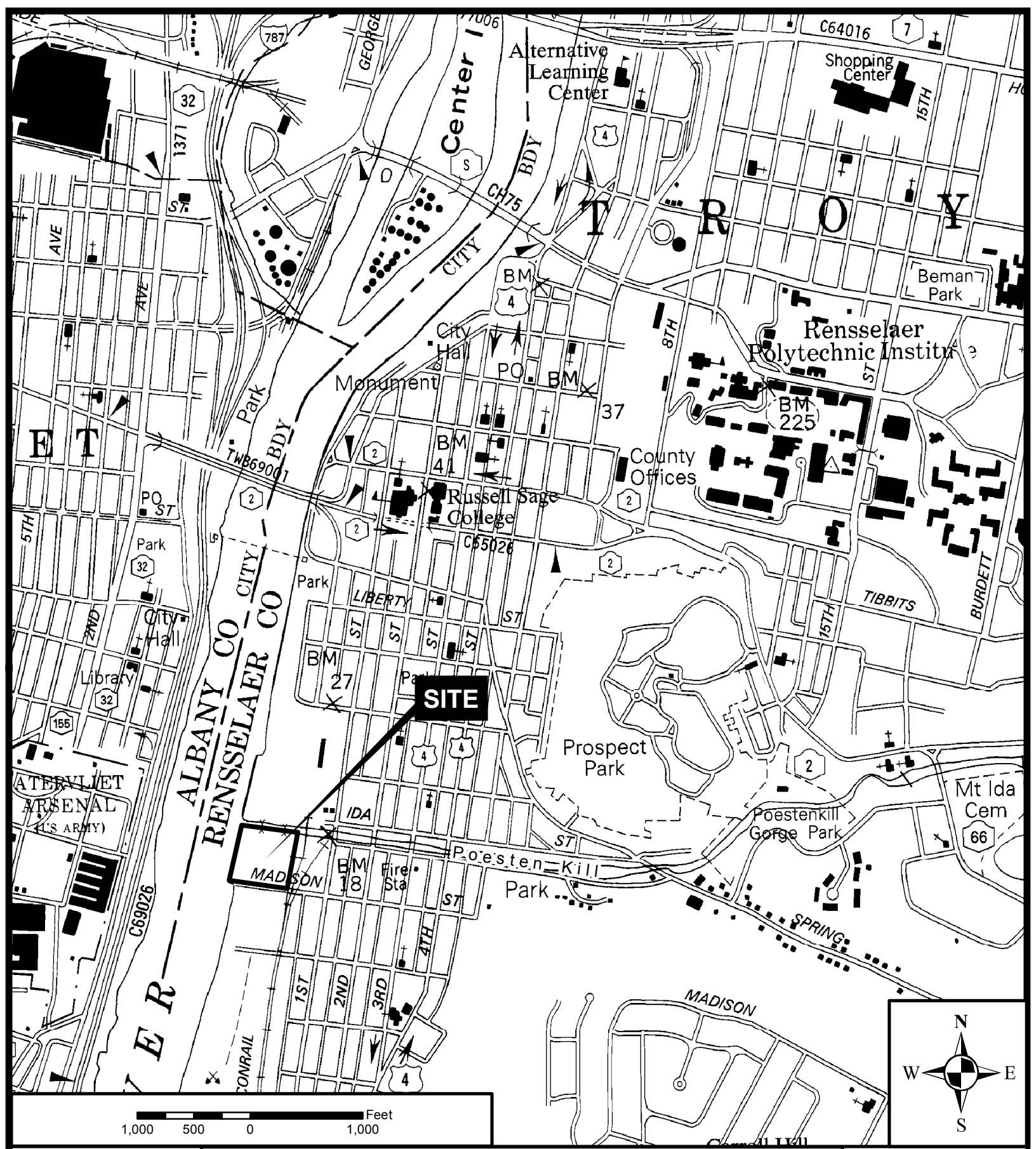
2. The Department and the City of Troy entered into a State Assistance Contract, Contract No. C303736, February 26, 2008

3. Former Scolite Site Investigation Work Plan, March 2009

4. "Site Investigation Report, Former Scolite Property 2 Madison Street Troy, New York, 2011", prepared by HRP Associates, Inc.

5. "Alternatives Analysis Report, Former Scolite Property 2 Madison Street Troy, New York, 2011", prepared by HRP Associates, Inc.

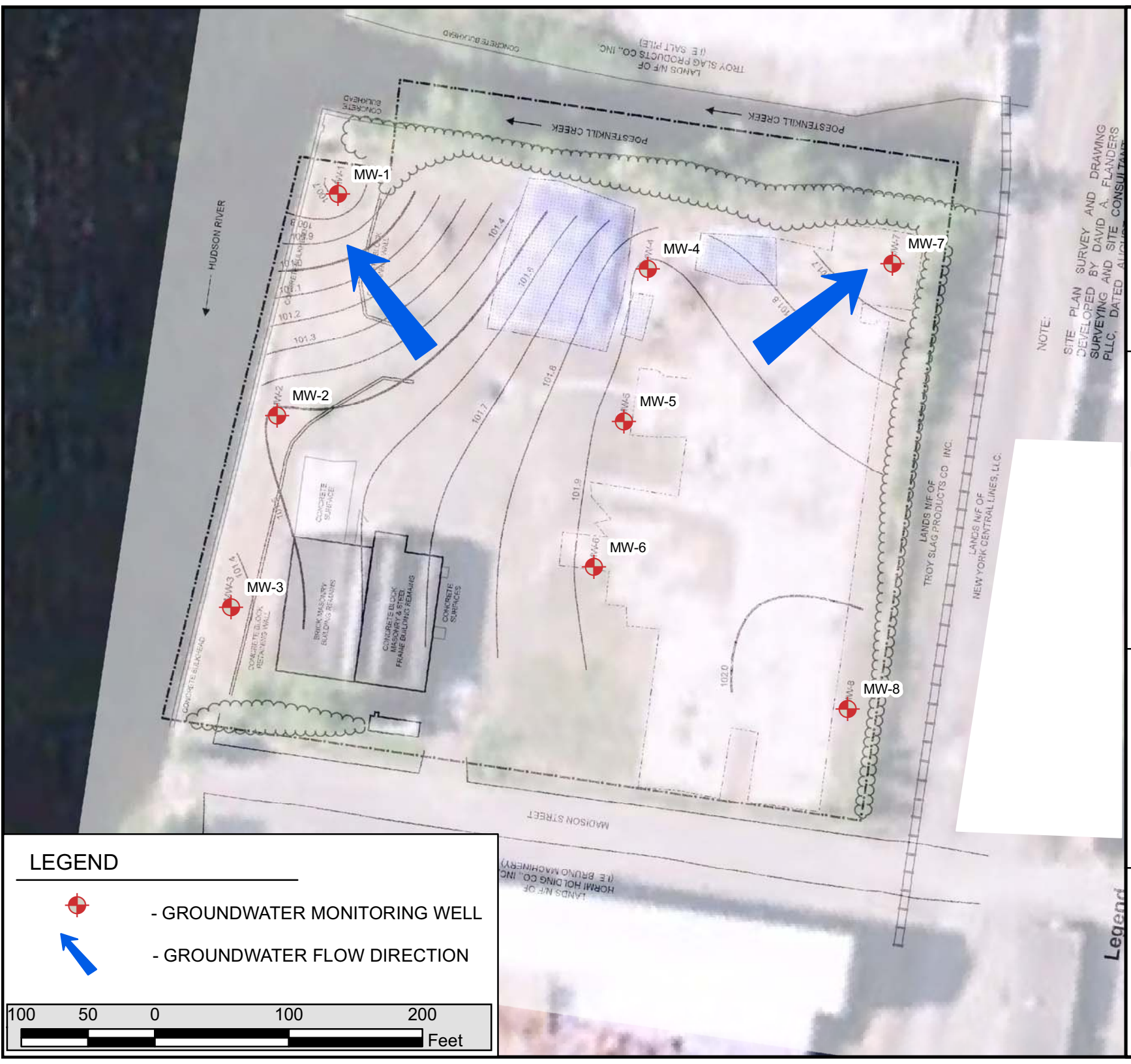
# FIGURES




# SITE LOCATION

Former Scolite
E4-42-037

**FIGURE 1**




## LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER FLOW DIRECTION

100 50 0 100 200 Feet

New York State Department of Environmental Conservation

Division of Environmental Remediation

# Former Scolite, Troy

DEC Site No.: E4-42-037

**FIGURE 2**

**Groundwater Flow August 2009**

## Map Details

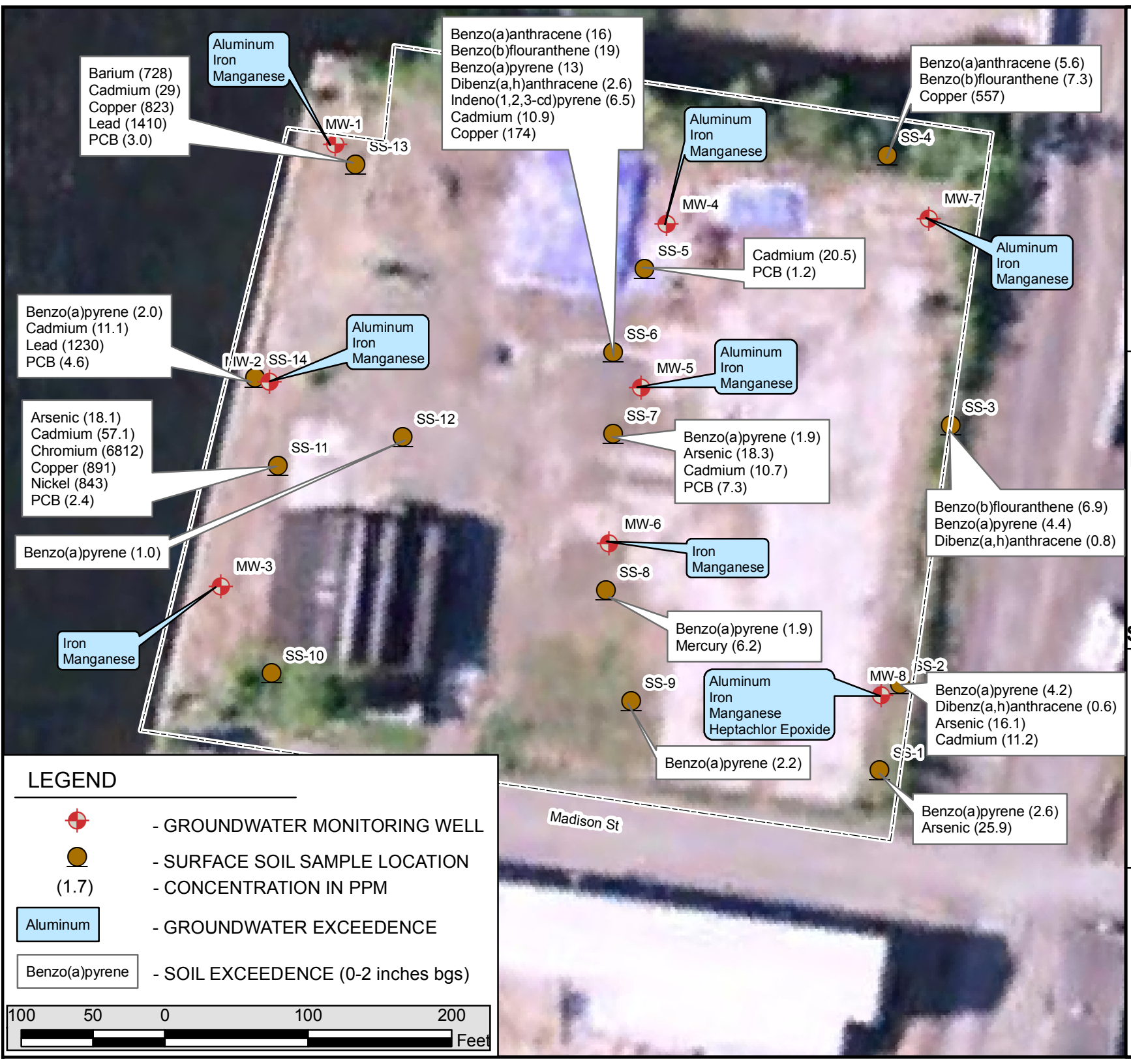
Created in ArcMap 9.3

10.19.2010



N

North American Datum 1983
UTM Zone 18




New York State
Department of Environmental
Conservation

Division of
Environmental Remediation

# Former Scolite, Troy

DEC Site No.: E4-42-037

## FIGURE 3

## Exceedences of all Compounds in Groundwater & Surface Soils(Commercial SCOs)

Map Details

Created in ArcMap 9.3

10.19.2010



N

North American Datum 1983
UTM Zone 18


New York State Department of Environmental Conservation

Division of Environmental Remediation

Former Scolite
Troy

DEC Site No.: E4-42-037

**FIGURE 4**

**Exceedences of all Compounds in Subsurface Soils (Commercial SCOs)**

Map Details

Created in ArcMap 9.3

10.19.2010



N

North American Datum 1983
UTM Zone 18


New York State
Department of Environmental
Conservation

Division of
Environmental Remediation

Former Scolite
Troy

DEC Site No.: E4-42-037

**FIGURE 5**

**Significant Detections of Volatile Organic Compounds in Soil Vapor**

Map Details

Created in ArcMap 9.3

10.19.2010



N

North American Datum 1983
UTM Zone 18