

3/15/2012



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION
PRAP/ROD ROUTING SLIP



TO: Robert W. Schick, P.E., Assistant Division Director
FROM: The attached is submitted for your approval by:

NAME	INITIAL	DATE
Project Manager: Eugene Melnyk	EWM	5/10/2012
Section Chief/RHWRE: Martin Doster	<i>MD</i>	5/11/12
Bureau Director: Michael Cruden		

DATE: 3/15/2012

RE: **Site Name** Former Randolph Foundry Site
City Randolph

Site Code E905030
County Cattaraugus

☐ **PRAP**

- ☐ Draft PRAP
- ☐ Clean copy of the PRAP
- ☐ Redline/Strikeout version of the PRAP
- ☐ Copies of edits to PRAP (Robert

W.'s/Robert's)

- ☐ Site Briefing Report
- ☐ NYSDOH concurrence letter
- ☐ USEPA concurrence letter
- ☐ OGC Referral
 - ☐ Attached
 - ☐ Not Required: Explain:
- ☐ Project Reviews (IGP-13) (if waived, explain why)
 - ☐ Scoping RI date:
 - ☐ Scoping FS date:

PRAP Release Approvals

Ass't Div Director: _____
Robert W. Schick, P.E.

Division Director: _____
Robert Schick, P.E.

☒ **ROD**

- ☒ Draft ROD
- ☐ Signature-ready copy of the ROD
- ☐ Redline/Strikeout version of the ROD
- ☐ Copies of edits to ROD (Robert

W.'s/Robert's)

- ☐ Site Briefing Report
- ☐ NYSDOH concurrence letter

ROD Signoff

Ass't Div Director: *Robert W. Schick*
Robert W. Schick, P.E.

☐ **BRIEFING**

Date: _____ **Time:** _____ **Room:** _____

c: Robert Schick, P.E.
Other reviewers who are invited to Briefing

RECORD OF DECISION

Former Randolph Foundry Site
Environmental Restoration Project
Randolph, Cattaraugus County
Site No. E905030
May 2012



Prepared by
Division of Environmental Remediation
New York State Department of Environmental Conservation

DECLARATION STATEMENT - RECORD OF DECISION

Former Randolph Foundry Site
Environmental Restoration Project
Randolph, Cattaraugus County
Site No. E905030
May 2012

Statement of Purpose and Basis

This document presents the remedy for the Former Randolph Foundry Site (site), an environmental restoration site. The remedial program was chosen in accordance with the 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.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (the Department) for the Former Randolph Foundry Site and the public's input to the proposed remedy 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

During the course of the investigation certain actions, known as interim remedial measures (IRMs), were undertaken at the above referenced site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or alternatives analysis (AA). The IRM(s) undertaken at this site are discussed in Section 6.2.

Based on the implementation of the IRM(s), the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment; therefore No Further Action is the selected remedy. The remedy may include continued operation of a remedial system if one was installed during the IRM and the implementation of any prescribed institutional controls/engineering controls (ICs/ECs) that have been identified as being part of the remedy for the site.

The IRM(s) conducted at the site attained the remediation objectives identified for this site in Section 6.5 for the protection of public health and the environment.

New York State Department of Health Acceptance

The New York State Department of Health (NYSDOH) concurs that the remedy 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.

May 15, 2012

Date



Robert W. Schick, P.E., Acting Director
Division of Environmental Remediation

RECORD OF DECISION

Former Randolph Foundry Site
Randolph, Cattaraugus County
Site No. E905030
May 2012

SECTION 1: SUMMARY AND PURPOSE

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 contaminants at the site resulted in threats to public health and the environment that were addressed by actions known as interim remedial measures (IRMs), which were undertaken at the site. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the remedial investigation (RI) or feasibility study (FS). The IRMs undertaken at this site are discussed in Section 6.2. Contaminants include hazardous wastes and/or petroleum.

Based on the implementation of the IRM, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment. The IRM conducted at the site attained the remediation objectives identified for this site, which are presented in Section 6.5, for the protection of public health and the environment. No Further Action is the remedy selected by this Record of Decision (ROD). A No Further Action remedy may include continued operation of any remedial system installed during the IRM and the implementation of any prescribed controls that have been identified as being part of the remedy for the site. This ROD identifies the IRM conducted and discusses the basis for No Further Action.

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 document in accordance with the requirements of New York State Environmental Conservation Law and 6 NYCRR Part 375. This document is a summary of the information that can be found in the site-related reports and documents.

SECTION 2: CITIZEN PARTICIPATION

The Department seeks input from the community on all remedies. A public comment period was held, during which the public was encouraged to submit comment on the proposed remedy. All comments on the remedy received during the comment period were considered by the Department in selecting a remedy for the site. Site-related reports and documents were made available for review by the public at the following document repository:

Town of Randolph
Attn: Town Clerk
72 Main Street
Randolph, NY 14772
Phone: 716-358-9701 extension 202

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the alternatives analyses (AA) were presented along with a summary of the proposed remedy. After the presentation, a question-and-answer period was held, during which verbal or written comments were accepted on the proposed remedy.

Comments on the remedy received during the comment period are summarized and addressed in the responsiveness summary section of the ROD.

Receive Site Citizen Participation Information By Email

Please note that the Department's Division of Environmental Remediation (DER) is "going paperless" relative to citizen participation information. The ultimate goal is to distribute citizen participation information about contaminated sites electronically by way of county email listservs. Information will be distributed for all sites that are being investigated and cleaned up in a particular county under the State Superfund Program, Environmental Restoration Program, Brownfield Cleanup Program, Voluntary Cleanup Program, and Resource Conservation and Recovery Act Program. We encourage the public to sign up for one or more county listservs at <http://www.dec.ny.gov/chemical/61092.html>

SECTION 3: SITE DESCRIPTION AND HISTORY

Location:

The Randolph Foundry Site is located at 2-8 Sheldon Street in the Village of Randolph, Cattaraugus Co. at the northwest corner of Sheldon and Washington Streets. The site directly abuts residential properties to the west and north, Sheldon St. to the south, and an active rail line to the east.

Site Features:

The site is situated in a mixed residential/commercial/light industrial area on a triangle shaped lot approximately 179 feet by 229 feet. The lot gently slopes to the northeast where it levels off mid-way through the parcel. The site contained a former foundry and machine shop operation situated in a dilapidated complex of concrete block/steel structures. The ERP site consists of two

parcels, the former foundry parcel approximately 0.52 acres in area and an encroachment onto a 0.39 acre section of an adjoining railroad right-of-way (ROW) owned by the Southern Tier Extension Railroad Authority (STERA). The site is situated in the Conewango Creek drainage shed where the creek is located approximately 1800 feet east of the site. A lowland/wetland area and pond are also located east of the site between 800 and 1300 feet in distance. Battle Creek, a tributary to Conewango Creek, is located approximately 950 feet west of the site.

Zoning/Land Use:

The property zoning for the former foundry parcel was changed from Village Residential to Commercial in 2010. There is no current zoning classification for the STERA railroad right-of-way.

Historic Uses:

Historic maps indicate that a foundry and machine shop was located on the property as early as 1902. Local records indicate the last business that occupied the site went out-of-business around 1986. The property and facilities were subsequently abandoned. The site was unsecured and vacant for nearly two decades. Cattaraugus Co. acquired the property in a property tax foreclosure in 2005.

Site Geology and Hydrogeology:

The post IRM SI areal extent and depth of the remaining foundry sand fill is limited to the north-northeast section of the actual foundry parcel and covers most of the adjoining railroad right-of-way between the railroad tracks and property boundary. The foundry sand fill varies in depth where it was observed to be three to five feet thick at the northeast section of the site and diminishes in thickness to the south-southwest. The foundry sand fill at the site is mixed with some construction and demolition (C and D) debris near the surface and contains random pieces of larger C and D debris below the surface. Areas of the former foundry parcel that do not have any appreciable amounts of foundry sand consist of exposed native subsoil. Native soil encountered below the waste fill at the site was mostly a dense glacial till. Bedrock was not encountered nor confirmed during the SI.

Groundwater was encountered at approximately 22 feet below ground surface. The local topography slopes generally in an easterly direction toward Conewango Creek. The groundwater gradient is presumed to be flowing in an easterly direction. The groundwater gradient could not be confirmed.

A site location map is attached as Figure 1 and a site plan is attached as Figure 2.

SECTION 4: LAND USE AND PHYSICAL SETTING

The Department may consider the current, intended, and reasonably anticipated future land use of the site and its surroundings when evaluating a remedy for soil remediation. For this site, alternatives (or an alternative) that restrict(s) the use of the site to commercial use (which allows for industrial use) as described in Part 375-1.8(g) were/was evaluated in addition to an alternative which would allow for unrestricted use of the site.

A comparison of the results of the investigation to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is included in the Tables for the media being evaluated in Exhibit A.

SECTION 5: 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.

No PRPs have been documented to date.

The Randolph Foundry/Aeolin Piano Works and its predecessors operated a manufacturing plant on the property between 1902 and 1986. In 1986, the Aeolin Piano Works filed for bankruptcy, and is not considered a viable PRP for this site. The County of Cattaraugus acquired the parcel through property tax foreclosure in 2005. The County entered into the ERP as a volunteer.

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. Cattaraugus County and CCAS Southern Tier Extension Railroad Authority will assist the state in its efforts by providing all information to the state which identifies PRPs. Cattaraugus County and CCAS Southern Tier Extension Railroad Authority will also not enter into any agreement regarding response costs without the approval of the Department.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A Remedial Investigation (RI) has been conducted. The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site. The field activities and findings of the investigation are described in the RI Report.

The following general activities are conducted during an RI:

- Research of historical information,
- Geophysical survey to determine the lateral extent of wastes,
- Test pits, soil borings, and monitoring well installations,
- Sampling of waste, surface and subsurface soils, groundwater, and soil vapor,
- Sampling of surface water and sediment,
- Ecological and Human Health Exposure Assessments.

The analytical data collected on this site includes data for:

- groundwater
- soil

6.1.1: Standards, Criteria, and Guidance (SCGs)

The remedy must conform to 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 RI were compared to media-specific SCGs. The Department has developed SCGs for groundwater, surface water, sediments, and soil. The NYSDOH has developed SCGs for drinking water and soil vapor intrusion. The tables found in Exhibit A list the applicable SCG in the footnotes. For a full listing of all SCGs see: <http://www.dec.ny.gov/regulations/61794.html>

6.1.2: RI Results

The data have identified contaminants of concern. A "contaminant of concern" is a contaminant that is sufficiently present in frequency and concentration in the environment to require evaluation for remedial action. Not all contaminants identified on the property are contaminants of concern. The nature and extent of contamination and environmental media requiring action are summarized in Exhibit A. Additionally, the RI Report contains a full discussion of the data. The contaminants of concern identified at this site are:

benzo(a)pyrene	copper
benzo(b)fluoranthene	arsenic
dibenz[a,h]anthracene	

Based on the investigation results, comparison to the SCGs, and the potential public health and environmental exposure routes, certain media and areas of the site required remediation. These media were addressed by the IRM(s) described in Section 6.2. More complete information can be found in the RI Report and the IRM Construction Completion Report/Final Engineering Report.

6.2: 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.

The following IRM has been completed at this site based on conditions observed during the RI.

IRM - Demolition, Waste Removal, Fill Removal

An IRM for the site was completed between August 2008 and September 2008. The IRM included the following activities:

- Staging and removal of chemical products and chemical wastes.
- Removal of industrial debris and universal wastes.
- Controlled building demolition to remove asbestos containing building materials, balance of building demolition, and removal of concrete floor slabs and foundation walls,
- Excavation of approximately 333 tons of foundry sand and contaminated fill. Excavated material was transported off-site for disposal as non-hazardous industrial waste, and
- Restoration of the foundry site and railroad right-of-way through regrading to promote positive surface water drainage, placement of 6 inches of cover/topsoil and hydroseeding of the foundry parcel, placement of 6 inches of run-of-bank gravel along the railroad right-of-way. Ground surface restoration was completed November 2009.

6.3: 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.

Based upon the resources and pathways identified and the toxicity of the contaminants of ecological concern at this site, a Fish and Wildlife Resources Impact Analysis (FWRIA) was deemed not necessary for OU 01.

Prior to Remediation:

Prior to the Site Investigation/Remedial Alternatives Report (SI/RAR) and IRM program for the site, a Phase 1 Environmental Site Assessment was conducted at the site in 2005. The assessment identified potential recognized environmental conditions including the following: potential contamination associated with onsite disposal of foundry sand as well as other materials and wastes; various 55-gallon drums and other industrial and chemical product containers which were in poor condition and contained unknown contents; and potential PCBs associated with the elevated transformers.

Post-Remediation:

In 2006, Cattaraugus Co. entered into the State's Environmental Restoration Program (ERP). Under the ERP, Cattaraugus Co. removed the hazards posed by the site and conducted an environmental investigation of the site. An IRM consisting of asbestos abatement and demolition of the on-site structures, removal and proper management of chemical products and

wastes, and limited removal of foundry sand disposed of on-site. During the IRM, PCB contaminated concrete was encountered and was subsequently removed and disposed of in accordance with applicable requirements. The IRM was completed September 2008.

A Site Investigation (SI) was completed December 2008 to further assess environmental concerns at the site. SI results indicated residual levels of semi-volatile compounds are at levels meeting restricted commercial soil cleanup objectives. No other contaminants of concern were revealed during the SI. No groundwater impacts were detected.

6.4: 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*.

Measures are in place to control the potential for coming in contact with contaminated subsurface soil. The area is served by a public water supply.

6.5: 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 action objectives for this site are:

Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the IRM confirmation sampling and post-IRM investigation, the IRM that has been performed, and the evaluation presented here, the Department is proposing No Further Action and the implementation of ICs/ECs Site Management Plan as the proposed remedy for the site. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Exhibit B.

The elements of the IRM already completed and the institutional and engineering controls are listed below:

Green Remediation

Green remediation principals and techniques will be implemented to the extent feasible in the site 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 the long term;
- Reducing direct and indirect greenhouse gas 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 be considered a waste.

Institutional Control

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

- 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 commercial and industrial uses as defined by 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;
- prohibits agriculture or vegetable gardens on the controlled property; and
- requires compliance with the Department approved Site Management Plan.

Site Management Plan

A Site Management Plan (SMP) is required, which includes the following:

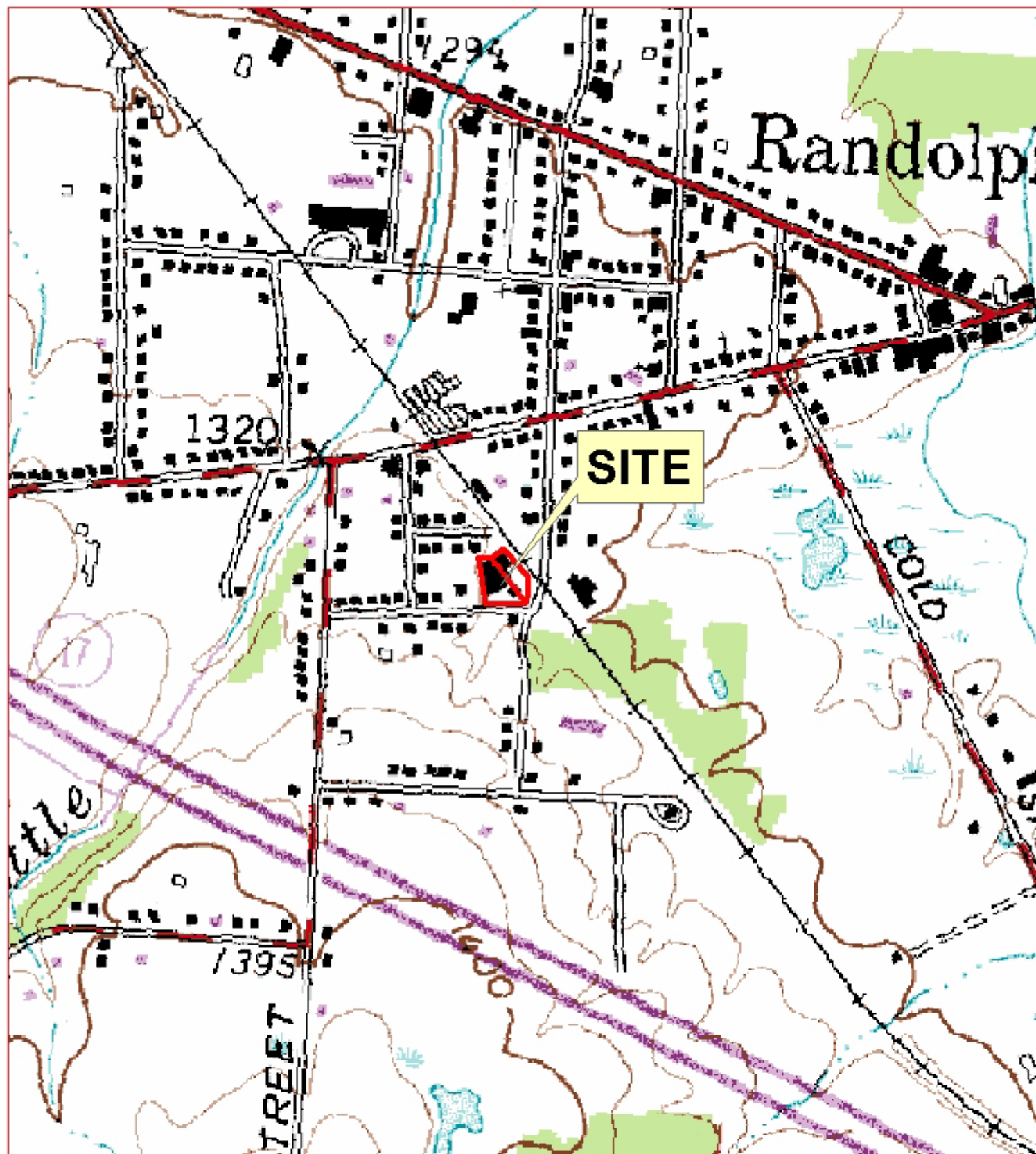
- a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed above.

Engineering Controls: none required for the former foundry parcel if used for restricted commercial or industrial purposes and none for the railroad right-of-way if current use continues or is used for restricted commercial or industrial purposes.

The SMP includes, but may not be limited to:

- an Excavation Plan which details the provisions for management of future excavations in areas of remaining residual contamination and cover over exposed residual contamination;
 - descriptions of the provisions of the environmental easement including any land use and groundwater use restrictions; and
 - the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- b. a Monitoring Plan - none required.



0 410 820 1,230 Feet
1:640



Site Location Map

Randolph Foundry

Village of Randolph, Cattaraugus Co.

Site No. E905030

SBL: 70.071-3-16 Randolph Foundry
70.071-4-6 Railroad ROW



Figure 1



0 50 100 150 200 feet



Site Plan

Randolph Foundry
Village of Randolph, Cattaraugus Co.
Site No. E905030

SBL: 70.071-3-16 Randolph Foundry
70.071-4-6 Railroad ROW



Figure 2

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation (RI) for all environmental media that were evaluated. As described in Section 6.1, samples were collected from various environmental media to characterize the nature and extent of contamination.

For each medium, 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), semi-volatile organic compounds (SVOCs), pesticides/ polychlorinated biphenyls (PCBs), and inorganics (metals and cyanide). For comparison purposes, the SCGs are provided for each medium that allows for unrestricted use. For soil, if applicable, the Restricted Use SCGs identified in Section 6.1.1 are also presented.

Waste/Source Areas

As described in the RI report, waste/source materials were identified at the site and are impacting soil.

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 where substantial quantities of contaminants are found which can migrate and release significant levels of contaminants to another environmental medium. Wastes and source areas identified at the site include drums and containers, as well as fill consisting mostly of foundry sand, with some ash, slag and some construction and demolition debris fragments (concrete, brick and small metal pieces). The post IRM test trenching program indicated the presence of fill material at varied depths across the site. In general, the remaining foundry sand fill is limited to the north-northeast section of the actual foundry parcel and covers most of the adjoining railroad right-of-way between the railroad tracks and property boundary. The foundry sand fill varies in depth and was observed to be three to five feet thick at the northeast section of the site and diminishes in thickness toward the south-southwest. Areas of the former foundry parcel that do not have any appreciable amounts of foundry sand contain some C&D fragments and some minor amounts of scattered foundry sand mixed in at the surface of the exposed subsoil. The foundry sand was also deeper and more pervasive along the STERA railroad right-of-way. The deepest/thickest layer of foundry sand fill was encountered at the northeast end of the study area along the railroad right-of-way. Based upon field observations and conversation with the property owner at 10 Dean Street, the foundry sand fill continues northward beyond the study area along the west side of the railroad right-of-way.

The primary contaminants at the site are in the fill areas and consist of polycyclic aromatic hydrocarbons (PAHs) and metals (e.g., arsenic, and copper). PAHs are a group of over 100 different chemical compounds that are common in the environment. Sources of PAHs include incomplete combustion of coal, oil, gasoline, garbage, wood and other organic matter.

The waste/source areas identified at the site were addressed by the IRM described in Section 6.2.

Groundwater

Groundwater was not encountered in any of the test trenches and was encountered in only one well (MW-02) out of three installed at the site. In MW-02, groundwater was observed at approximately 22 feet bgs (within 8 inches of the bottom of the well). After proper purging the wells did not yield groundwater sufficient for sample aliquots. However, the well was allowed to recharge over time and a sample was taken without the benefits of purging. The regional topography slopes generally in an easterly direction toward Conewango Creek. Groundwater gradients typically mimic surface topographic contours. Therefore, the groundwater gradient is presumed to be flowing in an easterly direction. Although only one mini-well was sufficiently deep enough to intercept groundwater, the groundwater gradient could not be confirmed. Using an assumed easterly groundwater gradient, the mini-well where groundwater samples were collected suggests that this well is a downgradient well, and that any potential offsite migration of groundwater contaminants would be detected in this well. No VOC or SVOC contaminants of concern were detected in the water sample from this mini-well, and it can be reasonably concluded that no groundwater contamination from previous activities at the site exist.

Table 1 - Groundwater

Detected Constituents	Concentration Range Detected (ppb) ^a	SCG ^b (ppb)	Frequency Exceeding SCG
VOCs			
TCL VOCs	None Detected	N/A	N/A
SVOCs			
TCL SVOCs	None Detected	N/A	N/A
Inorganics			
TAL Metals	Not Sampled (c)		
Pesticides/PCBs			
Pest/PCBs	Not Sampled (c)		

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).

c – Metal and Pest/PCB parameters were not evaluated due to insufficient well water volume during sampling.

The contaminants of concern identified in soil at the site are not mobile in groundwater, no site-related groundwater contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for groundwater.

Soil

Surface and subsurface soil samples were collected at the site during the RI and during the IRM. Surface soil samples were collected from a depth of 0-2 inches to assess direct human exposure. Subsurface soil samples were collected from a depth of 2 - 20 feet to assess soil contamination and impacts to groundwater. The results indicate that soils at the site exceed the unrestricted SCG for semi-volatile organics and metals, and nominally above restricted commercial SCGs for several semi-volatile organics and metals.

Table 2 – Surface Soil

Detected Constituents	Concentration Range Detected (ppm) ^a	Unrestricted Residential SCG ^b (ppm)	Frequency Exceeding Unrestricted SCG	Commercial Use SCG ^c (ppm)	Frequency Exceeding Restricted SCG
VOCs					
TCL VOCs	ND above Res SCG				
SVOCs					
Benzo(a)anthracene	0.19 – 5	1	5 of 8	5.6	0 of 8
Benzo(a)pyrene	0.52 – 4.7	1	5 of 8	1	5 of 8
Benzo(b)fluoranthene	0.57 - 6	1	5 of 8	5.6	1 of 8
Benzo(k)fluoranthene	0.23J - 2	1	3 of 8	56	0 of 8
Chrysene	0.44 – 4.2	1	5 of 8	56	0 of 8
Dibenzo(a,h)anthracene	0.31J - 1.1	0.33	2 of 8	0.56	0 of 8
Indeno(1,2,3-cd)pyrene	0.26 – 0.98	0.5	5 of 8	5.6	0 of 8
Inorganics					
Chromium (total)	6.6E to 43.7E (d)	22 (hexavalent),	3 of 8 (d)	400 (hexavalent)	0 of 8 (d)
Copper	31.1EN to 1300EN	270	3 of 8	270	3 of 8
Pesticides/PCBs					
TCL Pesticides/PCBs	ND above Res SCG				

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 Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.

d. – Total Chromium values detected are compared with the hexavalent Chromium SCG for unrestricted residential use.

ND - Not Detected

Qualifiers reported:

E – Results were estimated due to interferences.

J - estimated

N – Indicates presumptive evidence of compounds.

Table 3 – Sub-surface Soil

Detected Constituents	Concentration Range Detected (ppm) ^a	Unrestricted Residential SCG ^b (ppm)	Frequency Exceeding Unrestricted SCG	Commercial Use SCG ^c (ppm)	Frequency Exceeding Restricted SCG
VOCs					
TCL VOCs	ND above Res SCG				
SVOCs					
Benzo(a)anthracene	ND – 8.8	1	1 of 8	5.6	1 of 8
Benzo(a)pyrene	ND – 7	1	1 of 8	1	1 of 8
Benzo(b)fluoranthene	ND - 7	1	1 of 8	5.6	1 of 8
Benzo(k)fluoranthene	ND – 3.3	1	1 of 8	56	0 of 8
Chrysene	ND – 7.5	1	1 of 8	56	0 of 8
Dibenzo(a,h)anthracene	ND - 1.1	0.33	1 of 8	0.56	1 of 8
Indeno(1,2,3-cd)pyrene	ND – 4.1	0.5	1 of 8	5.6	0 of 8
Inorganics					
TCL Inorganics	ND above Res SCG				
Pesticides/PCBs					
TCL Pesticides/PCBs	ND above Res SCG				

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 Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.

ND - Not Detected

Qualifiers reported:

E – Results were estimated due to interferences.

N – Indicates presumptive evidence of compounds.

Table 4 – Confirmation Soil Samples below excavated sumps/pits/bins

Detected Constituents	Concentration Range Detected (ppm) ^a	Unrestricted Residential SCG ^b (ppm)	Frequency Exceeding Unrestricted SCG	Commercial Use SCG ^c (ppm)	Frequency Exceeding Restricted SCG
VOCs					
TCL VOCs	ND above Res SCG				
SVOCs					
TCL SVOCs	ND above Res SCG				
Inorganics					
Arsenic	5.6 to 20.7	16	1 of 4	16	1 of 4
Chromium (total)	8.4 to 48.7 (d)	22 (hexavalent),	1 of 4 (d)	400 (hexavalent)	0 of 4 (d)
Pesticides/PCBs					
TCL Pesticides/PCBs	ND above Res SCG				

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 Use Soil Cleanup Objectives for the Protection of Public Health for Commercial Use, unless otherwise noted.

d. – Total Chromium values detected are compared with the hexavalent Chromium SCG for unrestricted residential use.

ND - Not Detected

Qualifiers reported:

E – Results were estimated due to interferences.

N – Indicates presumptive evidence of compounds.

Soil contamination identified during the RI was addressed during the IRM described in Section 6.2. However, there are several PAHs and two metals in the remaining fill at the site that are nominally above commercial SCGs. No further removal action was pursued or was planned. The site surface was restored by placing six inches of soil and grass cover or gravel to stabilize the surface and prevent direct contact with the residual contaminants in the soil at the site.

APPENDIX A

Responsiveness Summary RESPONSIVENESS SUMMARY

Former Randolph Foundry Environmental Restoration Project Village of Randolph, Cattaraugus County, New York Site No. E905030

The Proposed Remedial Action Plan (PRAP) for the Former Randolph Foundry 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 March 22, 2012. The PRAP outlined the remedial measure proposed for the contaminated soil at the Former Randolph Foundry 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 April 18, 2012, which included a presentation of the remedial investigation and alternative analysis (RI/AA) for the Former Randolph Foundry 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 May 7, 2012.

This responsiveness summary responds to all questions and comments raised during the public comment period. No written comments, by mail or through email, were received by the Department. The following are the comments received, with the Department's responses:

COMMENT 1: What will be done with the site?

RESPONSE 1: The former foundry site is owned by the County. The County will determine the disposition of the former foundry parcel. The railroad right-of-way portion of the site is owned by the Chautauqua, Cattaraugus, Allegheny and Steuben Southern Tier Extension Railroad Authority (STERA), and which will continue to retain ownership.

COMMENT 2: Can the foundry parcel be used as a playground?

RESPONSE 2: The site cannot be used for active recreation use, such as a playground, since in its current state the land use is restricted to commercial use, which does not allow such use. A two foot thick layer of clean cover soil meeting the restricted residential SCO would have to be placed over the site before the site can be used as a playground. Any entity that would consider

developing the parcel into a playground should contact the DEC and DOH for guidance and the requirements.

COMMENT 3: Can road ditch cuttings be used as fill or additional cover at the site?

RESPONSE 3: Ditch cuttings should not be used for fill or cover on the foundry parcel without testing. Doing so would be inconsistent with the Environmental Easement for the site. Only soil from a DEC permitted surface mine, gravel product from a DEC permitted stone pit or quarry, or soil tested to confirm the absence of chemical compounds above the commercial use or protection of groundwater SCOs in 6NYCRR 375-6.8 can be used a fill or cover at the foundry parcel.

COMMENT 4: Can a commercial building be built on the foundry parcel?

RESPONSE 4: Yes, a commercial building can be built on the property. Any excavated soils must be managed in accordance with the site management plan.

COMMENT 5: Can the site be excavated to put a building foundation?

RESPONSE 5: The site can be excavated to install a building foundation. Any excavated soils must be managed in accordance with the site management plan.

COMMENT 6: Can a house be built on the foundry parcel?

RESPONSE 6: The parcel is currently zoned for commercial use and a residential structure is not allowed by ordinance. Residential use is also prohibited by the environmental easement. If a residential structure is to be built on the property, additional remediation of the site to residential use standards would be required. DEC requirements for residential use, and the environmental easement prohibiting residential use of the property would require modification and DEC approval.

APPENDIX B

Administrative Record

**Former Randolph Foundry
Environmental Restoration Project
Village of Randolph, Cattaraugus County, New York
Site No. E905030**

Proposed Remedial Action Plan for the Former Randolph Foundry Site, dated March 2012, prepared by the Department.

1. The Department and the Cattaraugus County and the Chautauqua, Cattaraugus, Allegheny and Steuben Southern Tier Extension Railroad Authority entered into a State Assistance Contract, Contract No. C303382, April 1, 2007.
2. *Phase I Environmental Site Assessment, Former Foundry Building, Village of Randolph, Cattaraugus County, New York*, July 2005, Panamerican Environmental, Inc.
3. *Work Plan, Remedial Investigation/Remedial Alternatives/Interim Remedial Measures, Former Randolph Foundry Site, Village of Randolph, Cattaraugus County, New York*, June 2007, Panamerican Environmental, Inc./TVGA Consultants
4. *Site Investigation/Remedial Alternative Analysis Report, Former Randolph Foundry Site Village of Randolph, Cattaraugus County, New York*, July 2011, Panamerican Environmental, Inc.
5. *Final Engineering Report, Former Randolph Foundry Site Village of Randolph, Cattaraugus County, New York*, July 2011, Panamerican Environmental, Inc.
6. Letter dated November 17, 2008 from John Berry, Panamerican Environmental, Inc. to David Rivet, Cattaraugus County Dept of Public Works, Proposed Limited Site Investigation Work Plan at the Former Randolph Foundry Site