RECORD OF DECISION

Interceram
Operable Unit Number 02: Groundwater and Soil Vapor
State Superfund Project
Wallkill, Orange County
Site No. 336045
March 2015

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

DECLARATION STATEMENT - RECORD OF DECISION

Interceram
Operable Unit Number: 02
State Superfund Project
Wallkill, Orange County
Site No. 336045
March 2015

Statement of Purpose and Basis

This document presents the remedy for Operable Unit Number: 02: Groundwater and Soil Vapor of the Interceram site, a Class 2 inactive hazardous waste disposal 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, 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 Operable Unit Number: 02 of the Interceram 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 feasibility study (FS). 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.

March 31, 2015

Date

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

RECORD OF DECISION

Interceram
Wallkill, Orange County
Site No. 336045
March 2015

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 hazardous wastes 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.

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. The IRM(s) 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 site management, which will 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(s) conducted and discusses the basis for No Further Action.

The New York State Inactive Hazardous Waste Disposal Site Remedial Program (also known as the State Superfund Program) is an enforcement program, the mission of which is to identify and characterize suspected inactive hazardous waste disposal sites and to investigate and remediate those sites found to pose a significant threat to public health and environment.

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 repositories:

NYSDEC Region 3 Office
21 South Putt Corners Road
New Paltz, NY 12561
Phone: (845) 256-3018

Thrall Library
11-19 Depot Street
Middletown, NY 10940
Phone: (845)-341-5454

A public meeting was also conducted. At the meeting, the findings of the remedial investigation (RI) and the feasibility study (FS) 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 Interceram site is located north of Fortune Road near its intersection with Rock Hill Road, in the Town of Wallkill, Orange County.

Site Features: The main site feature consists of a large (20,430 square foot), occupied, single story building and a parking lot that cover most of the site.

Current Zoning and Land Use: The site is currently zoned for commercial use and is now being used to warehouse auto and medical supplies.

Past Use of the Site: From 1971 to 1991, CeramTec Corporation assembled, cleaned, plated (nickel and gold), and reworked fused metal and ceramic parts. Chemicals such as trichloroethylene (TCE), potassium gold cyanide, sodium cyanide, freon (vapor degreaser), and others, including various acids, were used on-site. Contamination of the soil and groundwater occurred during the storage and handling of wastes and products.

Operable Units: The site was divided into two operable units. An operable unit represents a portion of a remedial program for a site that for technical or administrative reasons can be addressed separately to investigate, eliminate or mitigate a release, threat of release or exposure pathway resulting from the site contamination.
Operable Unit 1 (OU1) consists of soil associated with the site. OU2 comprises groundwater and soil vapor both on-site and off-site.

Site Geology and Hydrogeology: Overburden soils on-site consist of sand and clay till. Bedrock on-site is made up mostly of shale and greywacke. Groundwater flows to the southwest from the site. Groundwater can be found from 10 to 25 feet below grade surface across the site.

Operable Unit (OU) Number 02 is the subject of this document.

A Record of Decision was issued previously for OU 01. This document includes a modification to the institutional control for the entire site (OU 01 and OU 02) from that which is stated in the Record of Decision for OU 01.

Operable Unit (OU) Number 02 is the subject of this document.

A Record of Decision was issued previously for OU 01.

A site location map is attached as Figure 1.

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.

The PRPs for the site, documented to date, include:

CeramTec North America Corporation

The Department and CeramTec North America Corporation entered into a Consent Order on

March 3, 1997. The Order (Index No. W3-0781-96-06) obligates the responsible party to implement a full remedial program.

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
- soil vapor

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 hazardous

waste 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 contaminant(s) of concern identified for this Operable Unit at this site is/are:

cis-1,2-Dichloroethene	1,1,2-TRICHLORO-1,2,2-
TRICHLOROETHENE (TCE)	TRIFLOUROETHANE
1,1,1-TRICHLOROETHANE	

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.

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(s) has/have been completed at this site based on conditions observed during the RI.

Groundwater IRM

In August of 2014, in-situ chemical oxidation (ISCO) was implemented to treat the chlorinated volatile organic compounds (CVOCs) in groundwater. Persulfate was injected into the subsurface to destroy the contaminants in two 2,000-square foot areas located in the parking area of Building 62 and one 4000-square foot area located at the western boundary of the Interceram property. Injection wells are screened from 9 to 20 feet.

Prior to the full implementation of this technology, laboratory and on-site pilot scale studies were conducted to more clearly define design parameters. Between the pilot and the full scale implementations, over 50 injection points were installed. Persulfate was injected over three separate events in August, October and December of 2014. Following the injections, two rounds of groundwater monitoring were conducted to assess performance. Results have shown that significant declines in TCE and cis 1,2 DCE have occurred. The continued reduction of contaminants and the byproducts of reduction is expected to continue.

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 02.

OU 1: Soil

Remediation for OU 1 has been completed. Impacted soils at the site were excavated and treated by thermal desorption. On-site soils meet the commercial soil cleanup objectives. Prior to remediation, the primary contaminants of concern for OU 1 were TCE, 1,1,1-trichloroethane, cis-1,2-dichloroethene and cyanide in soil.

OU 2: Groundwater and Soil Vapor

Impacted sub-slab air was mitigated by the installation of sub-slab depressurization systems (SSDSs) at the former Interceram building and Building 61, Building 62, and Building 65 at Rockwood Gardens Apartments. The SSDSs continue to operate and are inspected annually. Prior to remediation, the primary contaminants of concern for OU 1 were TCE, 1,1,1-trichloroethane, cis-1,2-dichloroethene and freon 113 in soil vapor.

Groundwater sample results indicate that the elevated levels of TCE, cis-1,2-dichloroethene, Freon 113, and 1,1,1-trichloroethane remain in groundwater near the boundary between the former Interceram property and the Rockwood Gardens property. Groundwater contamination does not appear to extend to the south or southwest beyond the parking lot and road west of Building 62, as groundwater wells in these directions did not show detections of contaminants.

Post IRM samples collected on January 13, 2015, show the maximum concentrations of TCE, cis -1,2 dichloroethene, Freon 113, and 1,1,1-trichloroethane in groundwater were 370 ppb, 450 ppb, 2,300 ppb and 12 ppb respectively.

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*.

Drinking contaminated groundwater is not expected because public water serves the area. Contact with contaminated soil is unlikely because contaminated soil was removed, and any residual contamination is at depth. Sub-slab depressurization systems have been installed to prevent exposure to site contaminants entering the buildings via soil vapor intrusion. Additional off-site residential structures will be evaluated for soil vapor intrusion.

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.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.

RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Remove the source of ground or surface water contamination.

Soil Vapor

RAOs for Public Health Protection

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

SECTION 7: SUMMARY OF SELECTED REMEDY

Based on the results of the investigations at the site, the IRM that has been performed, and the evaluation presented here, the Department is selecting No Further Action as the remedy for the site. This No Further Action remedy includes the implementation of institutional controls to address groundwater contamination. The OU 1 ROD required the implementation of an institutional control in the form of a deed restriction. The environmental easement included in this remedy will supersede the OU 1 ROD requirement for the deed restriction. The Department believes that this remedy is protective of human health and the environment and satisfies the remediation objectives described in Section 6.5.

The elements of the IRM already completed are detailed in section 6.2. This remedy also selects the following:

1. Institutional Control

Imposition of an institutional control in the form of an environmental easement for the controlled (i.e., on-site) 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; and
• requires compliance with the Department approved Site Management Plan.

2. Site Management Plan

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

• an Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;
• descriptions of the provisions of the environmental easement including any land use, and groundwater restrictions;
• a provision for evaluation of the potential for soil vapor intrusion for any new buildings developed on the site or affected off-site areas, including provisions for implementing actions recommended to address exposures related to soil vapor intrusion;
• provisions for the management and inspection of the identified engineering controls;
• provisions for additional applications of the ISCO amendments to address a rise or plateauing of contaminant concentrations or to ensure complete degradation of breakdown products;
• maintaining site access controls and Department notification; and
• the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

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

• monitoring of groundwater to assess the performance and effectiveness of the remedy;
• monitoring for vapor intrusion for any new buildings developed on the site or affected off-site areas, as may be required by the Institutional and Engineering Control Plan discussed above; and
• a schedule of monitoring and frequency of submittals to the Department.

c. a SSDS Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting for the SSDSs currently installed and operating on-site and off-site.

Exhibit A

Nature and Extent of Contamination

This section describes the findings of the Remedial Investigation 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 for which contamination was identified, 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 one category; volatile organic compounds. 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 4 and Section 6.1.1 are also presented.

Groundwater

Six permanent off-site groundwater monitoring wells and one sump were sampled to assess the nature and extent of contamination and ascertain groundwater flow direction and depth to groundwater. The assessment determined that chlorinated volatile organic compounds (VOCs) are found in the shallow groundwater exceeding applicable SCGs immediately downgradient (west) of the former Interceram building. Chlorinated VOCs are likely attributable to former site operations. No SVOCs, metals, pesticides or PCBs were identified in groundwater.

Groundwater sample results indicated that the elevated levels of TCE, cis-1,2-dichloroethene, Freon 113, and 1,1,1-trichloroethane remain in groundwater near the boundary between the former Interceram property and the Rockwood Gardens property. Maximum concentrations of TCE and cis-1,2-dichloroethene, Freon 113, and 1,1,1-trichloroethane in groundwater prior to the IRM were 7,300 ppb, 1,400 ppb, 5,600 ppb, and 17 ppb, respectively. The groundwater standard for each of these contaminants is 5 ppb. Groundwater contamination does not appear to extend to the south or southwest beyond the parking lot and road west of Building 62, as groundwater wells in these directions did not show detections of contaminants.

Post-IRM groundwater results show three of the six wells had no detections of VOCs. The sump and three wells located near building 61 and building 62 indicate the presence of site associated VOCs. Trichloroethene (TCE) and cis 1,2-dichloroethene (cis 1,2-DCE) were found in two wells above the groundwater standard at depths of 8-12’ bgs. Freon 113 was found in the sump and a downgradient well above the groundwater standard at depths of 5-10’ bgs. 1,1,1-trichloroethane was found in two wells slightly above the groundwater standard at depths of 8-12’ bgs. Post IRM results showed a decline in TCE, cis 1,2-DCE and Freon 113 concentrations by two orders of magnitude or greater.

Table 1 - Pre-IRM Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
1,1,1 – Trichloroethane	ND – 17	5	1 – 29
Cis – 1,2 – Dichloroethene	ND – 1,800	5	20 – 29
Trichloroethene	ND – 17,000	5	20 – 29
Freon 113	ND – 5,600	5	10 - 29

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).

Table 2 - Post-IRM Groundwater

Detected Constituents	Concentration Range Detected (ppb)[a]	SCG[b] (ppb)	Frequency Exceeding SCG
VOCs			
1,1,1 – Trichloroethane	ND – 24	5	3 – 12
Cis – 1,2 – Dichloroethene	ND – 450	5	6 – 12
Trichloroethene	ND – 810	5	6 – 12
Freon 113	ND – 2.300	5	4 - 12

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).

Groundwater contamination identified during the RI was addressed during the IRM described in Section 6.2.

Soil

During the RI for OU 2 an effort was made to locate source material and determine if it was contributing to the presence of chlorinated VOCs in groundwater, subsurface soil samples were collected during the RI and analyzed for VOCs. Nine soil borings were installed in and around the site in the area of groundwater contamination and upgradient of contaminated groundwater wells. Soil borings were advanced to depths ranging from 12 ft bgs to 22 ft bgs. Soil samples were collected at the groundwater soil interface if encountered or from soils screened with elevated PID readings and analyzed for VOCs by USEPA Method 8260.

The soil analytical results found TCE and cis 1,2-DCE in three of the nine samples. Concentrations of TCE ranged from 0.012 ppm to 0.12 ppm and concentrations of cis 1,2-DCE ranged from 0.017 ppm to 0.12 ppm. The RI soil results indicate there is no significant remaining source of PCE or TCE in subsurface soils. No SVOCs, metals, pesticides or PCBs were identified in on-site soil.

No site-related soil contamination of concern was identified during the RI. Therefore, no remedial alternatives need to be evaluated for soil.

Table 3 - Soil

Detected Constituents	Concentration Range Detected (ppm)[a]	Unrestricted SCG[b] (ppm)	Frequency Exceeding Unrestricted SCG	Restricted Use SCG[d] (ppm)	Frequency Exceeding Restricted SCG
VOCs					
Cis-1,2 Dichloroethene	ND – 0.15	0.25	0 – 9	0.25	0 - 9
Trichloroethene	ND – 0.12	0.47	0 – 9	0.47	0 - 9

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 Unrestricted Use, unless otherwise noted.
d - SCG: Part 375-6.8(b), Restricted Use Soil Cleanup Objectives for the Protection of Groundwater.

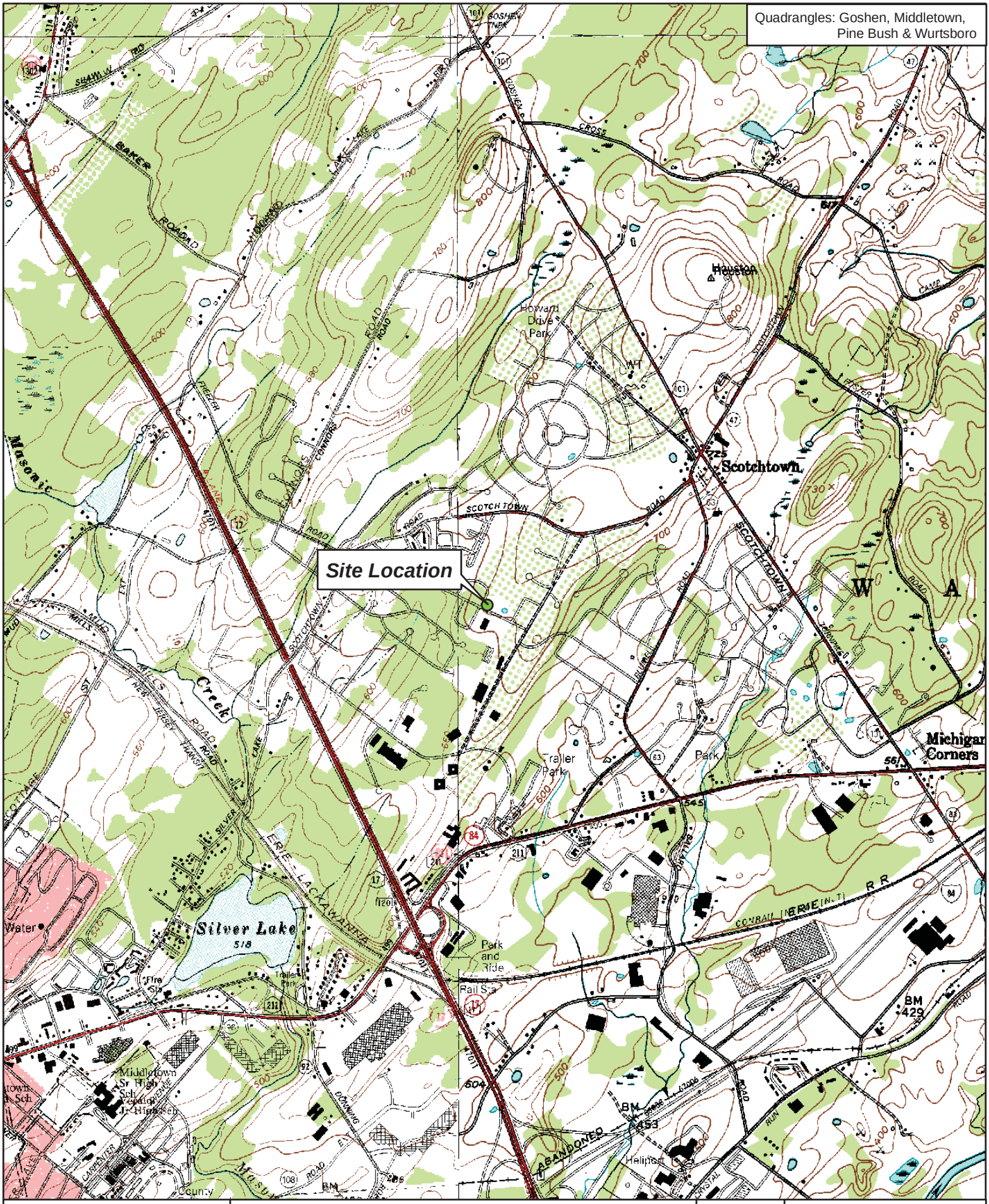
Soil Vapor

The evaluation of the potential for soil vapor intrusion resulting from the presence of site related groundwater contamination was evaluated by the sampling of sub-slab soil vapor under structures and indoor air inside structures. At this site due to the presence of buildings in the impacted area a full suite of samples were collected to evaluate whether actions are needed to address exposures related to soil vapor intrusion.

Sub-slab soil vapor samples were collected from beneath the slab-on-grade building at the site and at several slab-on-grade apartment buildings west of the former Interceram building. Indoor air and outdoor air samples were also collected at this time. 1,1 DCE, carbon tetrachloride, PCE, TCE, cis 1,2-DCE, 1,1,1 TCA, and vinyl chloride were detected in sub-slab vapor and indoor air in the former Interceram building (on-site); and in Building 61, Building 62, and Building 65 of Rockwood Garden Apartments (off-site). Active sub-slab depressurization systems (SSDS) were installed in the former Interceram Building, Building 61, Building 62, and Building 65. The final Site Management Plan for the site will address operation, maintenance, and reporting of all the SSDSs installed.

Based on the concentrations detected, and in comparison with the State's Soil Vapor Intrusion Guidance (NYSDOH 2006) in the State of New York, soil vapor contamination identified during the RI was addressed by the SSDS installations. The SSDSs are currently inspected and reported on annually.

Based on the concentration detected, and in comparison with the State's Soil Vapor Intrusion Guidance (NYSDOH 2006), soil vapor contamination identified during the RI was addressed by the SSDS installations under the OU 1 remedial program.



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III Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
Main: (518)453-4500 • www.cloughharbour.com

Figure 1 - Site Location

Former Interceram Site
20 Fortune Road West, Middletown, NY 10941

Project No. : 22154
Date : September 2011

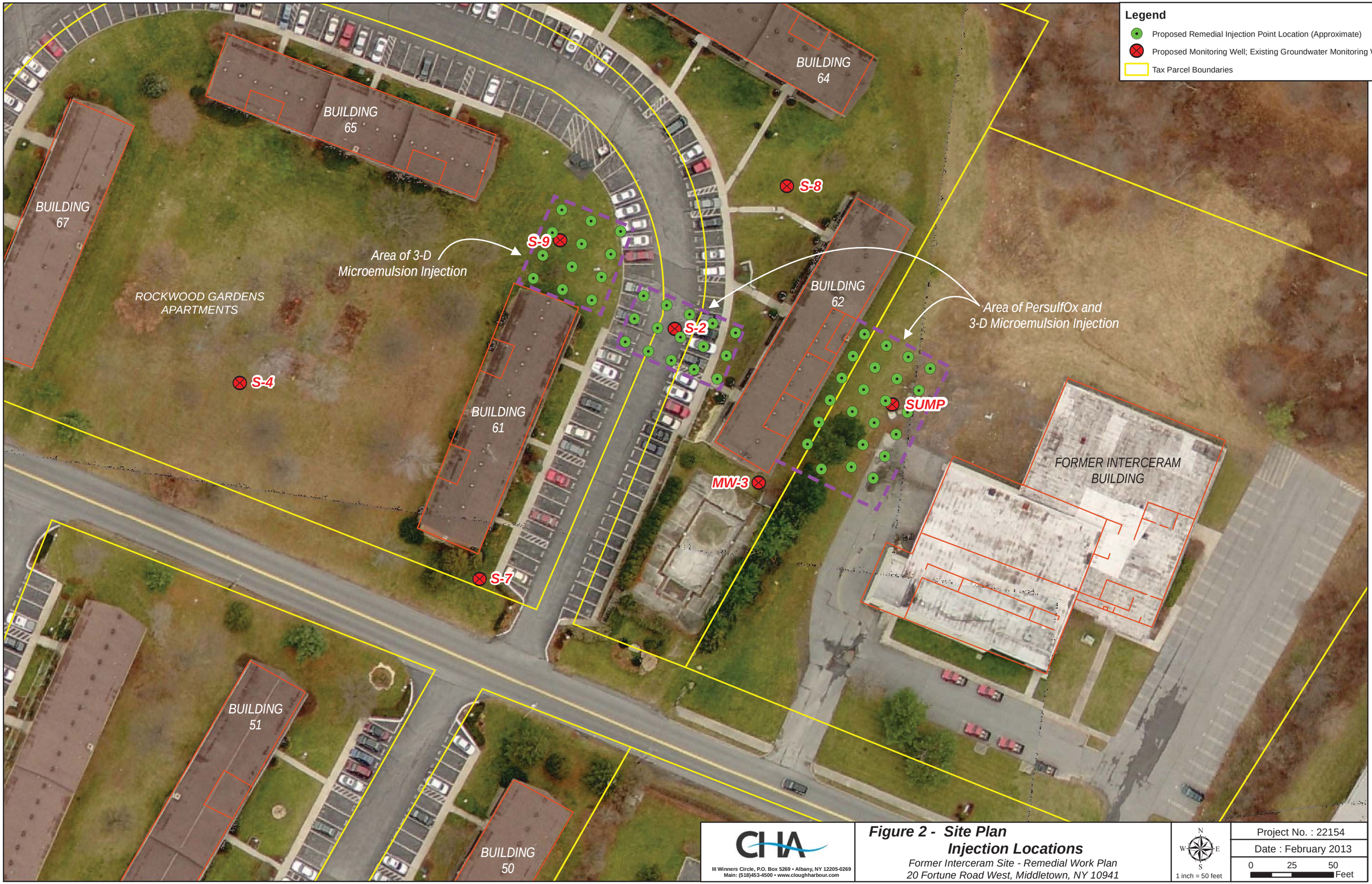

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Figure 2 - Site Plan
Injection Locations
Former Interceram Site - Remedial Work Plan
20 Fortune Road West, Middletown, NY 10941

N W E S
1 inch = 50 feet

Project No. : 22154
Date : February 2013
0 25 50 Feet

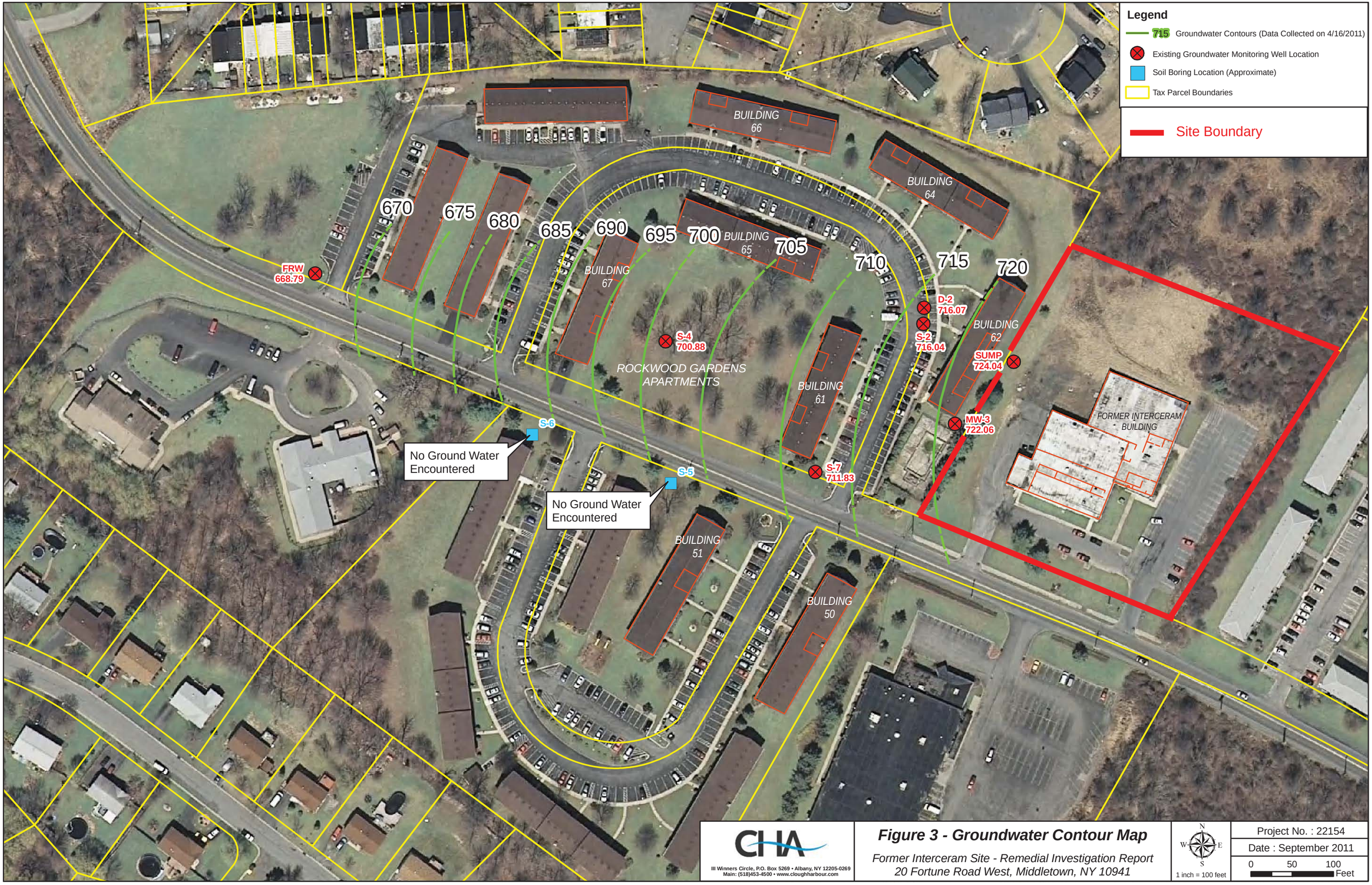

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Figure 3 - Groundwater Contour Map

Former Interceram Site - Remedial Investigation Report
20 Fortune Road West, Middletown, NY 10941

N W E S

1 inch = 100 feet

Project No. : 22154

Date : September 2011

0 50 100 Feet

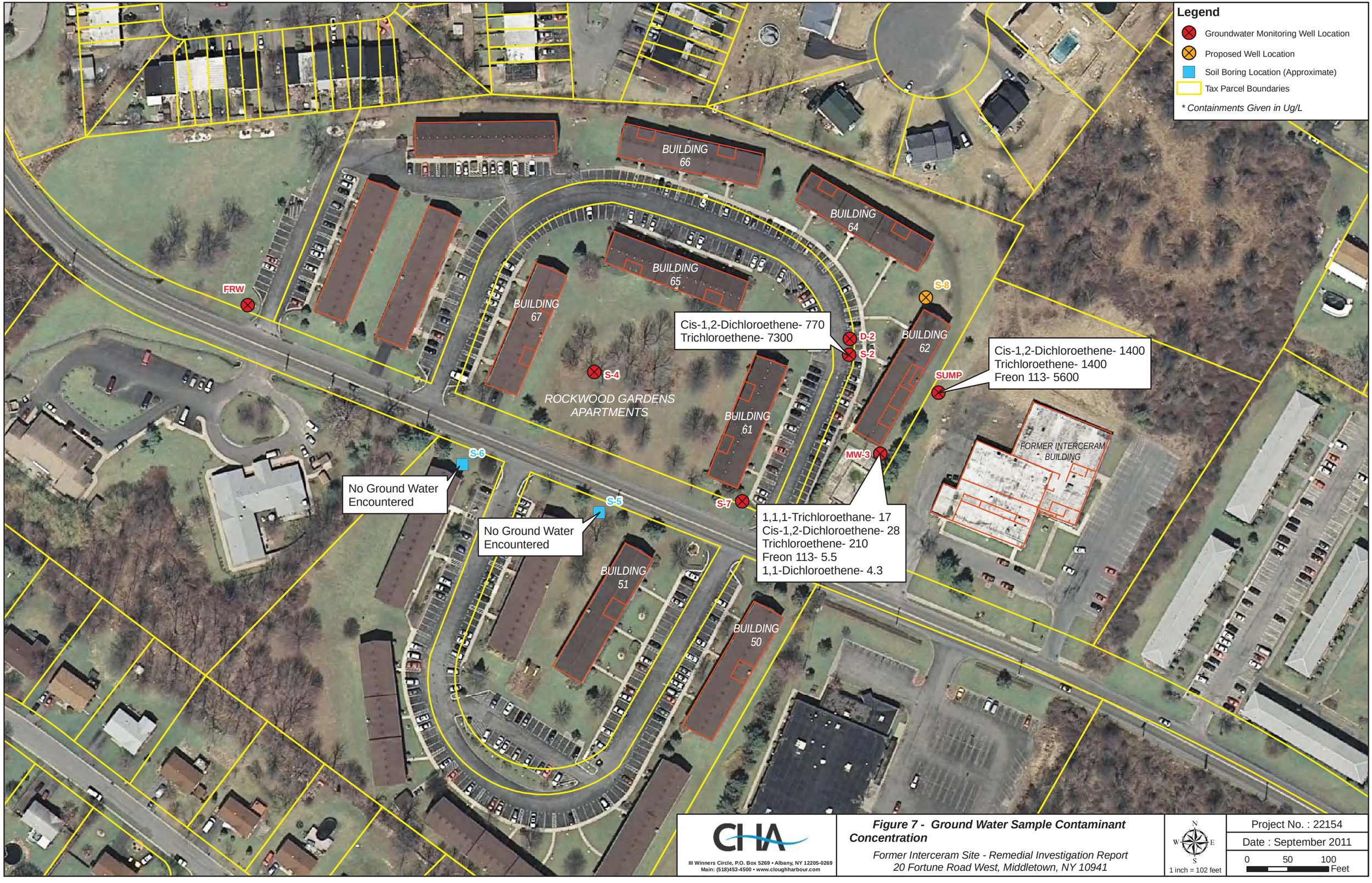

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Figure 7 - Ground Water Sample Contaminant Concentration

Former Interceram Site - Remedial Investigation Report
20 Fortune Road West, Middletown, NY 10941

N W E S

1 inch = 102 feet

Project No. : 22154

Date : September 2011

0 50 100 Feet