NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Remedial Bureau E 625 Broadway, 12th Floor, Albany, NY 12233-7017 P: (518) 402-9813 I F: (518) 402-9819 www.dec.ny.gov

July 24, 2015

Mr. David Chiazza Iskalo Ellicottville Holdings, LLC 5166 Main Street Williamsville, New York 14221

RE: Former Signore, Inc., Site ID No. C905034

Ellicottville, Cattaraugus County

Remedial Work Plan & Decision Document

Dear Mr. Chiazza:

The New York State Department of Environmental Conservation (Department) and the New York State Department of Health (NYSDOH) have reviewed the Remedial Work Plan (RWP) for the Former Signore, Inc., site dated April 2015 and prepared by GZA GeoEnvironmental of New York on behalf of Iskalo Ellicottville Holdings, LLC. The RWP is hereby approved. Please ensure that a copy of the approved RWP is placed in the document repository(ies). The draft plan should be removed.

Enclosed is a copy of the Department's Decision Document for the site. The remedy is to be implemented in accordance with this Decision Document. Please ensure that a copy of the Decision Document is placed in the document repository(ies).

Please contact the Department's Project Manager, Chad Stanizewski, at (716) 851-7220 or chad.staniszewski@dec.ny.gov at your earliest convenience to discuss next steps. Please recall the Department requires seven (7) days' notice prior to the start of field work.

Sincerely,

Michael Cruden, P.E.

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Director, Remedial Bureau E

Division of Environmental Remediation

Enclosure

ec: R. Schick/M. Ryan, NYSDEC

C. Staniszewski/J. Dougherty, Region 9

K. Anders/C. Bethoney/S. McLaughlin, NYSDOH

J. Richert, GZA

C. Slater, Slater Law



DECISION DOCUMENT

Former Signore, Inc.
Brownfield Cleanup Program
Ellicottville, Cattaraugus County
Site No. C905034
July 2015



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

DECLARATION STATEMENT - DECISION DOCUMENT

Former Signore, Inc.
Brownfield Cleanup Program
Ellicottville, Cattaraugus County
Site No. C905034
July 2015

Statement of Purpose and Basis

This document presents the remedy for the Former Signore, Inc. site, a brownfield cleanup 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 Signore, Inc. site and the public's input to the proposed remedy presented by the Department.

Description of Selected Remedy

The elements of the selected remedy are as follows:

1. Remedial Design:

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and 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 gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

2. Enhanced Bioremediation:

In-situ enhanced biodegradation will be employed to treat chlorinated volatile organic

compounds in groundwater in the area depicted on Figure 2. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting a solution consisting of lactose sugar, inactive yeast, inorganic nutrients and vitamins into the subsurface to promote microbe growth via an infiltration gallery.

3. Institutional Control:

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

- require 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);
- allow the use and development of the controlled property for restricted residential, commercial or industrial use(s) as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH; and
- require compliance with the Department approved Site Management Plan.

4. Site Management Plan:

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

an Institutional and Engineering Control Plan that identifies all use restrictions and 1. 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 in Paragraph 3 above.

Engineering Controls: Future on-site sub-slab depressurization system(s) if deemed necessary as discussed below.

This plan includes, but may not be limited to:

- 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/or groundwater and/or surface water use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion should any of the onsite buildings become occupied and for any future buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion:
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

DECISION DOCUMENT July 2015 Former Signore, Inc., Site No. C905034 Page 2

- monitoring of groundwater to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;
- monitoring for vapor intrusion for any occupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- 3. Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s), if required. The plan includes, but is not limited to: include all that apply as appropriate
- procedures for operating and maintaining the system(s); and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

Declaration

The remedy conforms with promulgated standards and criteria that are directly applicable, or that are relevant and appropriate and takes into consideration Department guidance, as appropriate. The remedy is protective of public health and the environment.

Michael J Cruden DN: cn=Michael J Cruden, o=DER, ou= email=mjcruden@gw.dec.state.ny.us,

Digitally signed by Michael J Cruden DN: cn=Michael J Cruden, o=DER, ou=RBE, email=mjcruden@gw.dec.state.ny.us, c=US

Date: 2015.07.24 08:46:57 -04'00'

Date Michael Cruden, Director Remedial Bureau E

DECISION DOCUMENT

Former Signore, Inc.
Ellicottville, Cattaraugus County
Site No. C905034
July 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 contaminants at the site has resulted in threats to public health and the environment that would be addressed by the remedy. The disposal or release of contaminants at this site, as more fully described in this document, has contaminated various environmental media. Contaminants include hazardous waste and/or petroleum.

The New York State Brownfield Cleanup Program (BCP) is a voluntary program. The goal of the BCP is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.

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:

Ellicottville Memorial Library 6499 Maples Road Ellicottville, NY 14731 Phone: (716) 699-2842

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 Signore site is located at 43 Jefferson Street in the Village of Ellicottville, Cattaraugus County. This BCP site is 8.43 acres in size and is located within a larger 13 acre site that is listed as Class 4 on the NYS Registry of Inactive Hazardous Waste Disposal Sites (as site #905023).

Site Features:

Main site features include one large concrete pad in the former location of the manufacturing facility (demolished in 2013) and four smaller unoccupied metal sided storage buildings. Plum Creek traverses the western and southern portion of the site.

Current Zoning and Land Use:

The site is currently zoned for commercial/manufacturing use(s). The site is currently vacant. Proposed redevelopment includes mixed residential/commercial use.

Past Use of the Site:

This site is part of a former manufacturing facility that fabricated metal lockers and cabinets. Principal operations included: stamping, cuffing, notching, bending, degreasing, phosphatizing, painting, and assembly. In 1986, the facility undertook a soil and groundwater sampling program which indicated the presence of volatile organic compounds (VOCs) at the site. Subsequent studies found downgradient private and public drinking water wells were affected. The contamination was attributed to spills, leakage and other plant operations.

In 1989 Signore signed a Consent Order to perform a Remedial Investigation / Feasibility Study (RI/FS) at the registry site (#905023) and implement Interim Remedial Measures (IRMs) to address the contaminated water supplies. The RI field work was completed in 1990. IRMs were completed including connecting 34 residential properties served by private wells to the existing public water supply and the installation of an interceptor well upgradient of the Town's municipal water supply well. The RI was completed and a Record of Decision (ROD) was signed on January 31, 1992. The selected remedial alternative consisted of operating an on-site groundwater extraction and treatment system and long-term groundwater monitoring. Monitoring data indicated a general decrease in site contaminants and off-site migration with time.

In 2002, Signore was allowed to discontinue the on-site groundwater pump and treat system as groundwater concentrations on-site and off-site were at or near groundwater standards. The interceptor well near the public water supply remains in-place, although it has not been operated since 2002. Sampling results from both the interceptor well and the town well indicate groundwater contaminant concentrations are non-detect or below State drinking water standards.

In approximately 2006, Signore Tool and Die ceased operations and abandoned the facility. In 2008, Iskalo Ellicottville Holdings LLC purchased the Signore property and entered the Brownfield Cleanup Program in 2011.

Site Geology and Hydrogeology:

Surface geology at the site consists of a thin surficial layer of topsoil underlain by a 10 to 30 foot thick alluvial unit consisting of brown sandy silt with some clay and gravel. Beneath the alluvial unit is an outwash deposit extending to a depth of approximately 50 feet consisting of a fine to coarse grained sand and gravel with little silt. Below the 50 foot depth the material becomes more sandy with less gravel. Limestone bedrock was encountered at a depth of 89 feet. The onsite groundwater table is approximately 10 feet below ground surface and flows to the south.

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 restricted-residential use (which allows for commercial use and 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 Remedial Investigation (RI) to the appropriate standards, criteria and guidance values (SCGs) for the identified land use and the unrestricted use SCGs for the site contaminants is available in the RI Report.

SECTION 5: ENFORCEMENT STATUS

The Applicant under the Brownfield Cleanup Agreement is a Participant. The Applicant has an obligation to address on-site and off-site contamination. However, the Department has determined that this site does not pose a significant threat to public health or the environment; accordingly, no enforcement actions are necessary.

SECTION 6: SITE CONTAMINATION

6.1: Summary of the Remedial Investigation

A remedial investigation (RI) serves as the mechanism for collecting data to:

- characterize site conditions;
- determine the nature of the contamination; and
- assess risk to human health and the environment.

The RI is intended to identify the nature (or type) of contamination which may be present at a site and the extent of that contamination in the environment on the site, or leaving the site. The

RI reports on data gathered to determine if the soil, groundwater, soil vapor, indoor air, surface water or sediments may have been contaminated. Monitoring wells are installed to assess groundwater and soil borings or test pits are installed to sample soil and/or waste(s) identified. If other natural resources are present, such as surface water bodies or wetlands, the water and sediment may be sampled as well. Based on the presence of contaminants in soil and groundwater, soil vapor will also be sampled for the presence of contamination. Data collected in the RI influence the development of remedial alternatives. The RI report is available for review in the site document repository and the results are summarized in section 6.3.

The analytical data collected on this site includes data for:

- groundwater
- soil
- soil vapor
- indoor air

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. 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 below. Additionally, the RI Report contains a full discussion of the data. The contaminant(s) of concern identified at this site is/are:

TRICHLOROETHENE (TCE)
TETRACHLOROETHYLENE (PCE)
CIS-1,2-DICHLOROETHENE
TOLUENE
ETHYLBENZENE
XYLENE (MIXED)

N-PROPYLBENZENE 1,3,5-TRIMETHYLBENZENE 1,2,4-TRIMETHYLBENZENE ISOPROPYLBENZENE SEC-BUTYLBENZENE The contaminant(s) of concern exceed the applicable SCGs for:

- groundwater
- soil

6.2: <u>Interim Remedial Measures</u>

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 Decision Document.

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

IRM - UST Removal

Based on historic records and the results of the remedial investigation it was determined that six underground storage tanks (USTs) and three former septic tanks were present on-site. Interim Remedial Measures (IRMs) were implemented in 2011 and 2013 to remove the six USTs and three septic tanks. In addition, approximately 5,500 tons of petroleum impacted soil was removed immediately adjacent to the USTs. IRM confirmatory sampling demonstrated that all contamination associated with the USTs and septic tanks was removed below unrestricted soil cleanup objectives.

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. The RI report presents a detailed discussion of any existing and potential impacts from the site to fish and wildlife receptors.

Prior to Completion of Remediation:

Based on the investigations completed to date the primary contaminants of concern are petroleum and chlorinated volatile organic compounds (cVOCs).

Soil: Petroleum impacted soil was associated with multiple underground storage tanks located in various areas on-site. The USTs and petroleum contaminated soil were removed as part of an IRM achieving restricted residential soil cleanup objectives (SCOs).

Groundwater: Petroleum impacted groundwater was identified in the immediate vicinity of soil contaminated with petroleum. Groundwater in the central and southern portion of the site is contaminated with cVOCs. As of October 2014, contaminants of concern in on-site groundwater that exceed groundwater standards include: trichloroethene (TCE) (maximum concentration 54 ug/l), tetrachloroethene (PCE) (max. conc. 260 ug/l) and cis-1,2-dichloroethene (max. conc. 32 ug/l). Off-site groundwater marginally exceeded the standard for trichloroethene (max. conc. 5.4 ug/l).

DECISION DOCUMENT Former Signore, Inc., Site No. C905034 Soil Vapor and Indoor Air: A soil vapor intrusion investigation was not completed on-site but soil vapor is assumed to be impacted. An off-site soil vapor intrusion investigation indicates soil vapor intrusion is not a concern for off-site buildings.

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*.

Access to the site is unrestricted. However, contact with contaminated soil or groundwater is unlikely unless people dig below the ground surface. People are not coming into contact with the contaminated groundwater because the area is served by a public water supply that is not affected by this contamination. Volatile organic compounds in the groundwater may move into the soil vapor (air spaces within the soil), which in turn may move into overlying buildings and affect the indoor air quality. This process, which is similar to the movement of radon gas from the subsurface into the indoor air of buildings, is referred to as soil vapor intrusion. Because there is no occupied on-site building, inhalation of site contaminants in indoor air due to soil vapor intrusion does not represent a concern for the site in its current condition. However, the potential exists for the inhalation of site contaminants due to soil vapor intrusion for any future on-site development and or occupancy. In addition, sampling indicates soil vapor intrusion is not a concern for off-site buildings.

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.

Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation of or exposure from contaminants volatilizing from contaminants in soil.

RAOs for Environmental Protection

Prevent migration of contaminants that would result in groundwater 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: ELEMENTS OF THE SELECTED REMEDY

The alternatives developed for the site and the evaluation of the remedial criteria are presented in the Alternative Analysis. The remedy is selected pursuant to the remedy selection criteria set forth in DER-10, Technical Guidance for Site Investigation and Remediation and 6 NYCRR Part 375.

The selected remedy is a Track 2: Restricted use with generic soil cleanup objectives remedy.

The selected remedy is referred to as the Groundwater Remediation Via Enhanced Biological Treatment remedy.

The elements of the selected remedy, as shown in Figure 2, are as follows:

1. Remedial Design:

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the remedial program. Green remediation principles and techniques will be implemented to the extent feasible in the design, implementation, and 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 gases and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling and increasing reuse of materials which would otherwise be considered a waste;
- Maximizing habitat value and creating habitat when possible;
- Fostering green and healthy communities and working landscapes which balance ecological, economic and social goals; and
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development.

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2. Enhanced Bioremediation:

In-situ enhanced biodegradation will be employed to treat chlorinated volatile organic compounds in groundwater. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by injecting a solution consisting of lactose sugar, inactive yeast, inorganic nutrients and vitamins into the subsurface to promote microbe growth via an infiltration gallery.

3. Institutional Control:

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

- require 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);
- allow the use and development of the controlled property for restricted residential, commercial, and industrial uses as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH; and
- require compliance with the Department approved Site Management Plan.

4. Site Management Plan:

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

1. 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 in Paragraph 3 above.

Engineering Controls: Future on-site sub-slab depressurization system(s) if deemed necessary as discussed below.

This plan includes, but may not be limited to:

- 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/or groundwater and/or surface water use restrictions;
- a provision for evaluation of the potential for soil vapor intrusion should any of the onsite buildings become occupied and for any buildings developed on the site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

- 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;
- a schedule of monitoring and frequency of submittals to the Department;
- monitoring for vapor intrusion for any occupied existing or future buildings developed on the site, as may be required by the Institutional and Engineering Control Plan discussed above.
- 3. Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, inspection, and reporting of any mechanical or physical components of the active vapor mitigation system(s), if required. The plan includes, but is not limited to: include all that apply as appropriate
- procedures for operating and maintaining the system(s); and
- compliance inspection of the system(s) to ensure proper O&M as well as providing the data for any necessary reporting.

