New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway, Albany, New York 12233-7020
Phone: (518) 402-9553 • **FAX:** (518) 402-9577
Website: www.dec.state.ny.us

File

Erin M. Crotty
Commissioner

MEMORANDUM

TO: See Distribution List

FROM: Kelly A. Lewandowski, NYSDEC - DER Bureau of Technical Support Kelly A. Lewandowski

SUBJECT: Brownfield Cleanup Program Application
TCMF Hillcrest Facility, C704045

DATE: JUL 12 2004

The attached Brownfield Cleanup Program Application for remedial work at the subject site has been forwarded to you for your records and/or processing according to the established Brownfield Cleanup Program procedures. If you require additional copies or the complete series of the related application's attachments, please contact me at 518-402-9553.

The Time and Activity Code for the subject site is: N590 (On-Site); N591 (Off-Site)

Attachment(s)

Distribution
Original (with all attachments) to:
James Burke, NYSDEC Region 7
Copy (with all attachments) to:
Gary Litwin, NYSDOH - DEHI Bureau of Environmental Exposure Investigation
Debbie Christian, NYSDEC - DEE
Anne Hohenstein, NYSOSC
Copy (without attachments) to:
Anthony Quartararo, NYSDEC - DEE Superfund and Voluntary Cleanup Bureau
Christina Dowd, NYSDEC - DFWMR Bureau of Habitat
Dave Smith, NYSDEC - Remedial Bureau B

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Erin M. Crotty
Commissioner

JUL - 7 2004

Mr. Joseph C. Morgan
President
Binghamton Realty, Inc.
349 Industrial Park Drive
Binghamton, NY 13904

Re: Brownfield Cleanup Application
TCMF Hillcrest Facility
BCP ID C704045

Dear Mr. Morgan:

The New York State Department of Environmental Conservation (Department) is in receipt of your application for participation in the Brownfield Cleanup Program (BCP) pursuant to ECL Section 27-1400 et seq. As you know, the BCP is a cooperative approach between the Department and lenders, developers, and current and prospective owners. The program fosters private-sector remediation of brownfields and reduces development pressures on "greenfields." We are pleased to advise you that your application has been determined to be complete.

Pursuant to ECL Section 27-1407(5), a thirty-day public comment period is to be commenced upon the Department's determination that an application is complete. The party seeking to participate in the BCP is required under the BCP to notify in writing the chief executive officer and zoning board of each county, city, town and village in which the proposed brownfield site is located, as well as residents of the site, the public water supplier which services the area, any person who has requested to be placed on the brownfield site contact list, and the administrator of any school or day care facility located adjacent to or near the site. Further, the Department will publish a similar notice in the Environmental Notice Bulletin.

In order to facilitate the notifications, the Department has prepared the enclosed Public Notice for you to utilize and the instructions for placing and mailing the notifications as well as the document repository location and contents. As the applicant you are responsible for making available a copy of the application and copies of all other related attached documents such as any assessment and investigation reports and/or investigation or remedial work plans. Also, you must use this Department-approved Public Notice form and cannot provide any other or additional information when fulfilling your obligation to provide notice of the application and comment period. The enclosed form should be provided to a local newspaper servicing the area including the brownfield site for publication no later than July 14, 2004. Additionally, all of the above-mentioned mailings should be completed no later than July 13, 2004. To the extent that the mailings and publications are not completed in accordance

with these time frames, the Department will extend the comment period for a period sufficient to comply with the required thirty-day notice requirement running from the latest of the mailings or publication.

A certificate of mailing, on the enclosed form, is required to be submitted within three days of the mailing. Further, the proof of publication provided by the newspaper must be submitted within three days of your receipt of such document. These documents should be submitted to the Department's project manager at:

New York State Department of Environmental Conservation
Region 7
615 Erie Boulevard West
Syracuse, New York 13204
ATTN: James Burke

The Department will make every effort to determine your eligibility and status under the BCP by August 28, 2004. We look forward to working cooperatively with you to address the environmental conditions at the brownfield site and to return this property back to productive use.

Sincerely,

Kelly A. Lewandowski, P.E.
Chief
Site Control Section

Enclosures

ec: w/enc. J. Burke, Region 7
D. Smith
G. Laccetti, NYSDOH
A. Quartararo
S. Cummins

Instructions to Applicant Regarding Placing and Mailing of Notification Regarding Completeness Determination

1) The enclosed notice must be provided, without modification, by the applicant to a local newspaper of general circulation servicing the area including the brownfield site for publication no later than the date specified in the cover letter. The notice must be located prominently in the community bulletin section or similar local section of the newspaper. The notice must be published in English and in any other language spoken by significant numbers of people within the community.

2) The enclosed notice must be mailed, without modification, by the applicant to the brownfield site contact list as identified in the applicant's application. The mailing must be performed by the date specified in the cover letter. No other materials can be mailed with this notice.

3) The applicant must complete and submit to the Department the attached certificate of mailing within the time frame specified in the cover letter.

4) The applicant must forward to the Department proof of publication by the newspaper of the newspaper notice within the time frame specified in the cover letter.

5) The applicant must make available a copy of the application and all other related documents (i.e., Phase Assessment Reports, Remedial Investigation Work Plans and Reports and Remedial Design Work Plans) at the document repository specified in the public notice.

Instructions to Newspapers Regarding Printing the Public Notice

The enclosed notice announces the receipt of an application by the New York State Department of Environmental Conservation to the Department's Brownfield Cleanup Program. Pursuant to ECL Section 27-1407(5), the notice must be located prominently in the community bulletin section or similar local section of the newspaper. The notice must be published in English and in any other language spoken by significant numbers of people within the community.

Instructions to Individuals Receiving the Public Notice

The enclosed notice announces the receipt of an application by the New York State Department of Environmental Conservation to the Department's Brownfield Cleanup Program (BCP). Pursuant to ECL Section 27-1407(5), upon the Department's determination that a BCP application is complete, the applicant must send notice of the application to individuals on a site contact list. Please read the enclosed notice for further information and instructions.

Brownfield Cleanup Program

TCMF Hillcrest Facility
City of Binghamton, Broome County
State of New York

NOTICE
Pursuant to ECL 27-1407 and 1417

The New York State Department of Environmental Conservation (Department) administers the Brownfield Cleanup Program pursuant to ECL 27-1400 et seq. The Brownfield Cleanup Program is designed to encourage the remediation of contaminated properties known as brownfields for reuse and redevelopment. Mr. Joseph C. Morgan, President of Binghamton Realty, Inc. has submitted an application to participate in the Brownfield Cleanup Program. The application was determined to be complete by the Department on July 7, 2004. The property described in the application is located at 4 Nowlan Road, Binghamton, NY 13904. The application proposes that the applicant will conduct investigation and/or remedial activities at the site. The application proposes that the site will be used for commercial purposes.

The Department will receive public comments concerning the application for thirty days from July 14, 2004 through August 13, 2004. After review of the application and any public comments received, the Department will determine whether to accept the Applicant's request to participate in the Brownfield Cleanup Program. If the Department accepts the Applicant's request to participate, it will execute a Brownfield Cleanup Agreement (BCA) with the Applicant. By executing a BCA, the Applicant would commit to undertake certain remedial activities under the Department's oversight. A copy of the application as well as copies of the Investigation Work Plan dated June 2004 and a draft Investigation Measure at Former Triple Cities Metals Finishing Corporation Facility in Hillcrest, New York are available in the document repository for this site located at the Fenton Free Library, 1062 Chenango Street, Binghamton, NY 13901.

The referenced documents are draft and have not been reviewed by the Department staff prior to their release for public comment. The Department, in conjunction with the New York State Department of Health will review these documents during the public comment period.

All citizens are encouraged to offer comments in writing to and refer questions to:

New York State Department of Environmental Conservation
Region 7
615 Erie Boulevard West
Syracuse, New York 13204
ATTN: James Burke

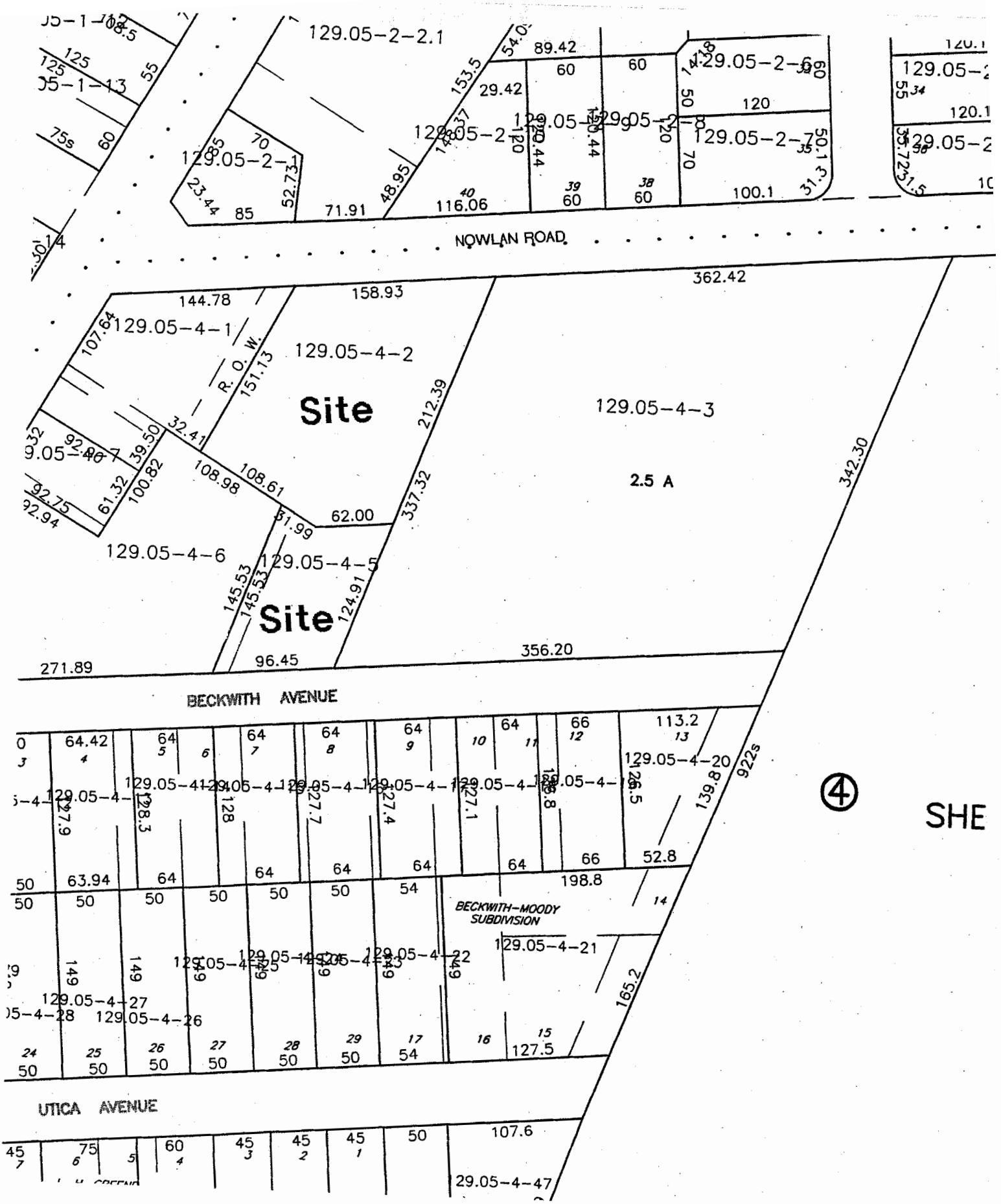
TCMF Hillcrest Facility
BCP ID C704045

CERTIFICATION OF MAILING

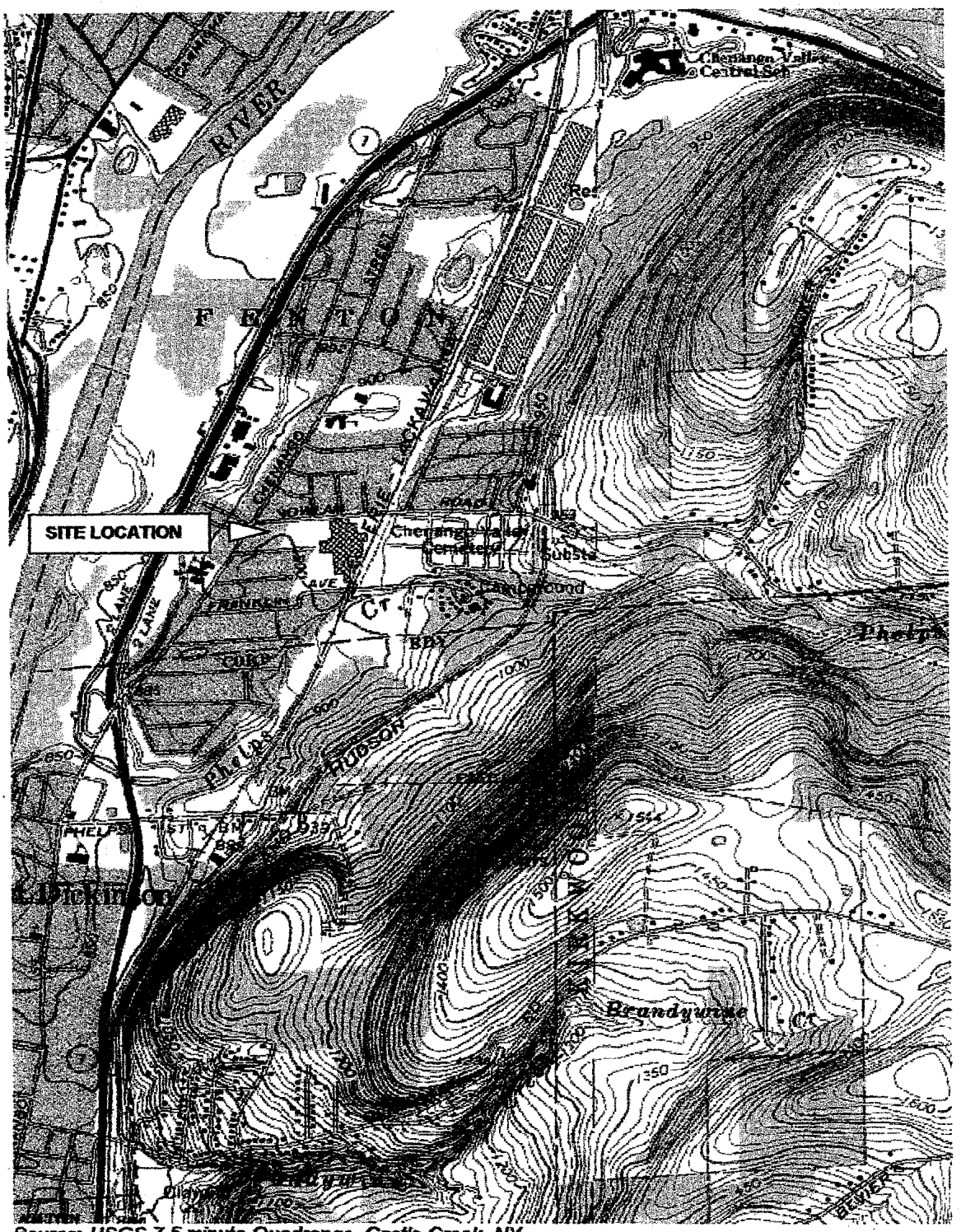
I certify that I mailed on _____ a copy of the attached _____ by first class mail upon the person(s) on the attached mailing list, by depositing a true copy thereof, securely enclosed in a postpaid wrapper, in the Post Office box at _____ in the City of _____, New York, which box is under the exclusive care and custody of the United States Post Office Department:

_____ _____

Signature Date



TAX MAP
FORMER TRIPLE CITIES METAL FINISHING CORPORATION
NOWLAN ROAD
COMMUNITY OF HILLCREST
BROOME COUNTY, NEW YORK



Source: *USGS 7.5 minute Quadrange, Castle Creek, NY*

TOPOGRAPHIC MAP
FORMER TRIPLE CITIES METAL FINISHING CORPORATION
NOWLAN ROAD
COMMUNITY OF HILLCREST
BROOME COUNTY, NEW YORK

D R A F T
Investigation Measure at Former Triple Cities Metals Finishing Corporation Facility in Hillcrest, New York

Introduction:

New York State Department of Environmental Conservation (NYSDEC), in cooperation with New York State Department of Health (NYSDOH) announces the receipt of a Brownfield Cleanup Program Application and Investigation Work Plan from Binghamton Realty, Inc. for the former Triple Cities Metal Finishing Corporation facility located in the community of Hillcrest, Binghamton, New York.

In May 2004, this site was proposed by NYSDEC as a candidate for NYSDEC Brownfield Cleanup Program.

Site Description and Information:

The former Triple Cities Metals Finishing Corporation (Triple Cities Metals), designated as Site No. BCP ID C704045 is located at 4 Nowlan Road in the community of Hillcrest, Binghamton, New York. The site consists of two adjacent parcels, encompassing 0.88 acres, and is bordered on the south by Beckwith Avenue, on the east by the B. W. Elliot Manufacturing Company (former CAE Electronics facility), on the west by two commercial properties and a residence and on the north by Nowlan Road. Further south, west and north are residential properties.

The 27,000-square foot industrial building is located on a 0.62-acre parcel and the office building (former residential structure) is located on a 0.26-acre parcel. The industrial building was used primarily for production work with offices in the northern portion of the building. The former residential structure housed the corporate offices.

Triple Cities Metal manufactured products with decorative, functional and corrosion-resistant finishes that included zinc, chrome and nickel for the military, aerospace and automotive industries since 1953. Historical sources identify that the property has been used by plating businesses since the 1930's. All facility processes were terminated in 1999; the buildings are currently vacant. Binghamton Realty has owned the property since 1998.

Investigation Information:

An environmental investigation completed by NYSDEC in May 2004 detected chlorinated solvents in the soil vapor underlying the Triple Cities Metal industrial building. No samples were collected below the former office building structure in the property. Previous investigations completed by Triple Cities Metals also identified chlorinated solvent compounds in groundwater both hydraulically upgradient, downgradient and underlying the site at relatively low levels, but in excess of state groundwater standards.

The site is served by public water, therefore groundwater at the site is not being used for drinking water.

Investigations and studies that have been completed at Triple Cities Metal have primarily been conducted as part of a corrective action program and have included the following:

- A facility assessment for the USEPA to gather information on, and evaluate the potential for releases to the environment from, solid and hazardous waste handling practices, "Preliminary RCRA Facility Assessment" (November 1993, ERM);
- Air emissions testing assessing the 1998 emissions levels at Triple Cities Metal, "Air Emission Study" (September 1999, ERM and NYSDEC);
- Surface soil sampling at Triple Cities Metal and within the Hillcrest community, and catch basin sediment sampling, "RCRA Phase I Sampling" (August 1999, GeoLogic);
- Evaluation of subsurface soil and groundwater at the site that included analyses of interior concrete flooring and underlying soils, "RCRA Phase II Subsurface Investigation" (May 2000, GeoLogic);
- Evaluation of groundwater and subsurface soils under the building, at site boundaries and off-site, "Continuing Phase II Subsurface Investigation" (May 2002, GeoLogic);
- Corrective Action Study (May 2003, GeoLogic).

These reports and reports prepared by NYSDEC are available for review at the locations listed below.

Summary of Proposed Work Plan:

Additional investigation of soil, soil vapors and groundwater to better evaluate conditions at the property is being proposed. The components of the BCP Work Plan are as follows:

Obtain sub-slab soil vapor samples under the Triple Cities Metal buildings and at three buildings adjacent to Triple Cities Metal;

Install permanent sub-slab and subsurface soil vapor monitoring points below Triple Cities Metal building;

Install permanent soil vapor sampling points at property boundaries to evaluate contaminant soil gas migration on the site;

Install a soil vapor extraction system inside the Triple Cities Metal industrial building to reduce contaminants in the underlying soil vapors;

Analyze groundwater samples for volatile organics after the installation of the soil vapor extraction system.

For More Information:

You can review the proposed BCP Investigation Work Plan and other site-related documents at the following location:

Fenton Free Library
1062 Chenango Street
Binghamton, NY 13901
(607) 724-8649

NYSDEC Region 7 Headquarters
635 Erie Boulevard West
Syracuse, NY 13204-2400
(800) 388-8223

NYSDEC Region 7 Sub-office
1679 NY Route 11
Kirkwood, NY 13795
(607) 775-2545

GeoLogic

GeoLogic NY, Inc. P.O. Box 5080 • Cortland, NY 13045 • 607.836.4400 • Fax: 607.836.4403

June 29, 2004

New York State Department of Environmental Conservation
ATTN: Chief, Site Control Section
Bureau of Technical Support – 11th Floor, 625 Broadway
Albany, NY 12233

Reference: Brownfield Cleanup Application
TCMF Hillcrest Facility
BCP ID C704045

Dear Ms. Lewandowski:

With regards to a letter dated June 17, 2004 received by Binghamton Realty, Inc. on June 22, 2004, NYSDEC identifies four deficiencies in the Brownfield Cleanup Program Application submitted by Binghamton Realty on June 2, 2004.

- County tax map with identifier numbers;
- USGS 7.5 minutes quad map;
- An estimated project schedule;
- Phase I ESA.

A copy of a Tax Map with the identifier numbers and a copy of a portion of the USGS 7.5 minute topographic map that encompasses the Brownfield Cleanup Site ("Site") are attached.

The estimated project schedule to complete all the tasks presented in the Investigation Work Plan is six to seven months from commencement of fieldwork.

There is no Phase I Environmental Site Assessment report for the Site. The Site has been subject to corrective action under the hazardous waste regulations.

If you require any additional information, please contact the undersigned.

Sincerely,

GeoLogic NY, Inc.

Susan M. Cummins

Susan M. Cummins
Project Manager

Enclosure
cc: Tom Suozzo, NYSDEC

DOC. Repository
per S. Cummins, Proj Mgr.
Fenton Free Library
1062 Chenango St
Binghamton, NY
13901
(607) 724-8649

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
625 Broadway, Albany, New York 12233-7020
Phone: (518) 402-9553 • **FAX:** (518) 402-9577
Website: www.dec.state.ny.us

Erin M. Crotty
Commissioner

JUN 17 2004

Mr. Joseph C. Morgan
President
Binghamton Realty, Inc.
349 Industrial Park Drive
Binghamton, New York 13904

Re: Brownfield Cleanup Application
TCMF Hillcrest Facility
BCP ID C704045

Dear Mr. Morgan:

The New York State Department of Environmental Conservation (DEC) is in receipt of your application dated June 2, 2004 for participation in the Brownfield Cleanup Program pursuant to ECL § 27-1400 et seq. This letter is to advise you that your application has been determined to be incomplete. Upon review of your application, it has been determined that the following information is missing:

- County tax map with identifier numbers ✓
- USGS 7.5 minutes quad map ✓
- an estimated project schedule ✓
- Phase I Report ✓

Please send the missing information within five (5) business days to the following address:

New York State Department of Environmental Conservation
ATTN: Chief, Site Control Section
Bureau of Technical Support - 11th Floor
625 Broadway
Albany, New York 12233

You will be notified when your application is considered complete. If you have any questions, please call this office at (518) 402-9553.

Sincerely,

Kelly A. Lewandowski

Kelly A. Lewandowski, P.E.
Chief
Site Control Section

Enclosure

file

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Technical Support, 11th Floor
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Erin M. Crotty
Commissioner

JUN 17 2004

Mr. Joseph C. Morgan
President
Binghamton Realty, Inc.
349 Industrial Park Drive
Binghamton, New York 13904

Re: Brownfield Cleanup Application
TCMF Hillcrest Facility
BCP ID C704045

Dear Mr. Morgan:

The New York State Department of Environmental Conservation (DEC) is in receipt of your application dated June 2, 2004 for participation in the Brownfield Cleanup Program pursuant to ECL § 27-1400 et seq. This letter is to advise you that your application has been determined to be incomplete. Upon review of your application, it has been determined that the following information is missing:

- County tax map with identifier numbers
- USGS 7.5 minutes quad map
- an estimated project schedule
- Phase I Report

Please send the missing information within five (5) business days to the following address:

New York State Department of Environmental Conservation
ATTN: Chief, Site Control Section
Bureau of Technical Support - 11th Floor
625 Broadway
Albany, New York 12233

You will be notified when your application is considered complete. If you have any questions, please call this office at (518) 402-9553.

Sincerely,

Kelly A. Lewandowski

Kelly A. Lewandowski, P.E.
Chief
Site Control Section

Enclosure

ec: D. Smith
K. Lewandowski
D. Moloughney
M.J. Peachey, Region 7
J. Burke, Region 7

DM/srh

GeoLogic

GeoLogic NY, Inc. P.O. Box 5080 • Cortland, NY 13045 • 607.836.4400 • Fax: 607.836.4403

June 28, 2004

Ms. Kelly Bologna
Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7020

Reference: Brownfield Cleanup Application Work Plan
Binghamton Realty, Inc.
TCMF Hillcrest Facility
BCP ID C704045

Dear Ms. Bologna:

Enclosed is the Investigation Work Plan for the Brownfield Cleanup Program (BCP) application submitted by Binghamton Realty, Inc. on June 2, 2004. Also attached is a Draft Fact Sheet for the BCP application.

If you require any additional information, please contact the undersigned.

Sincerely,

GeoLogic NY, Inc.

Susan M. Cummins

Susan M. Cummins
Project Manager

Enc: Work Plan, Fact Sheet
cc: T. Suozzo, NYSDEC - Region 7
File: ..99011A\IRM 2004\transmtl for Work Plan

C 704045

BINGHAMTON REALTY INC.

349 Industrial Park Drive
Binghamton, N.Y. 13904

Phone: 607-722-3431
Fax: 607-771-0968

June 2, 2004

Ms. Kelly Bologna
Chief, Site Control Section
New York State Department of
Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7020

Re: Brownfield Cleanup Program (BCP) Application
Binghamton Realty, Inc.

Dear Ms. Bologna:

Enclosed is the Brownfield Cleanup Program (BCP) Application for the "TCMF Hillcrest Facility" at 4 Nowlan Road, Binghamton, NY. The BCP Application is submitted by the current owner, Binghamton Realty, Inc. as a Volunteer. Binghamton Realty took title to the property in 1997 during a corporate reorganization. The TCMF facility currently is in partial use as a warehouse. The former owner, Triple Cities Metal Finishing, Inc., moved its manufacturing operations from the Nowlan Road facility to the Kirkwood Industrial Park in 1999.

Triple Cities Metal Finishing has been working with the Department to investigate and address the presence of metal constituents remaining on-site from prior manufacturing activities. Recently, the Department informed Triple Cities Metal Finishing that subsurface vapor extraction tests in the facility revealed the presence of trichloroethylene (TCE) and trichloroethane (TCA) in samples collected under an intact slab. When Triple Cities Metal Finishing operated the site, it used TCA, but available information going back through the 1980s suggests that TCE was never used onsite. Adjacent sites, however, are believed to have used both solvents.

Binghamton Realty under the BCP proposes to complete the investigation and any necessary remedial measures to address hazardous constituents detected

onsite. It will also conduct an investigation to determine the source of the elevated levels of the TCA and TCE in soil vapor below its building. A proposed work plan for the investigation will be developed to determine whether the soil vapor levels under the building are the result of off-site conditions or are due to a currently unidentified source under the structure. If the source is under the structure, a remediation plan will be developed.

Ultimately, we would plan to redevelop the property as a high value commercial site.

Please contact me directly if you have any questions or require any further information regarding the BCP application.

Thank you for your assistance.

Sincerely,

Joseph C. Morgan
President

Enc.

JCM/dlz

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

BROWNFIELD CLEANUP PROGRAM (BCP) APPLICATION

ECL ARTICLE 27 / TITLE 14

10/9/03

Applicant Information

NAME BINGHAMTON REALTY INC.		
ADDRESS 349 INDUSTRIAL PARK DRIVE		
CITY/TOWN BINGHAMTON, NEW YORK	ZIP CODE 13904	
PHONE 607-722-3431	FAX 607-771-0968	E-MAIL
NAME OF APPLICANT'S REPRESENTATIVE JOSEPH. C. MORGAN		
ADDRESS 349 INDUSTRIAL PARK DRIVE		
CITY/TOWN BINGHAMTON, NEW YORK	ZIP CODE 13904	
PHONE 607-722-3431	FAX 607-771-0968	E-MAIL JMORGAN@TCMFCORP.COM

THE APPLICANT MUST CERTIFY THAT IT IS EITHER A PARTICIPANT OR VOLUNTEER IN ACCORDANCE WITH ECL § 27-1405 (1) BY CHECKING ONE OF THE BOXES BELOW:

☐ PARTICIPANT

An applicant who either 1) was the owner of the site at the time of the disposal of hazardous waste or discharge of petroleum or 2) is otherwise a person responsible for the contamination, unless the liability arises solely as a result of ownership, operation of, or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

☒ VOLUNTEER

An applicant other than a participant, including an applicant whose liability arises solely as a result of ownership, operation of or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

NOTE: By checking this box, the applicant certifies that he/she has exercised appropriate care with respect to the hazardous waste found at the facility by taking reasonable steps to: i) stop any continuing discharge; ii) prevent any threatened future release; and iii) prevent or limit human, environmental, or natural resource exposure to any previously released hazardous waste.

Applicant Relationship to Property (check one):

☐ Previous Owner ☒ Current Owner ☐ Potential /Future Purchaser ☐ Other_____

Current Owner/Operator Information

OWNER'S NAME (if different from applicant)		
ADDRESS		
CITY/TOWN	ZIP CODE	
PHONE	FAX	E-MAIL
OPERATOR'S NAME (if different from applicant)		
ADDRESS		
CITY/TOWN	ZIP CODE	
PHONE	FAX	E-MAIL

Site Information

SITE NAME TCMF HILLCREST FACILITY

SITE ADDRESS 4 NOWLAN ROAD CITY/TOWN BINGHAMTON, NEW YORK ZIP CODE 13904

COUNTY BROOME COUNTY | SITE SIZE (ACRES) .62 ACRES

LATITUDE 42 / 08 / 50 | LONGITUDE 75 / 53 / 01

PLEASE ATTACH A COUNTY TAX MAP WITH IDENTIFIER NUMBERS, ALONG WITH ANY FIGURES NEEDED TO SHOW THE LOCATION AND BOUNDARIES OF THE SITE. ALSO INCLUDE A USGS 7.5 MINUTE QUAD MAP IN WHICH THE SITE IS LOCATED.

1. DO THE SITE BOUNDARIES CORRESPOND TO TAX MAP METES AND BOUNDS? ☒ YES ☐ NO
   IF NO, PLEASE ATTACH A METES AND BOUNDS DESCRIPTION OF THE SITE.
2. IS THE SITE PART OF A DESIGNATED BROWNFIELD OPPORTUNITY AREA PURSUANT TO GML970-R? IF YES, IDENTIFY AREA (NAME) _____ ☐ YES ☒ NO
3. IS THE SITE PART OF A DESIGNATED EN-Zone PURSUANT TO TL § 21(b)(6). IF YES, IDENTIFY AREA (NAME) _____ ☐ YES ☒ NO

Applicant Eligibility Information (Please refer to ECL § 27-1407)

1. ARE ANY ENFORCEMENT ACTIONS PENDING AGAINST THE APPLICANT REGARDING THIS SITE? ☐ YES ☒ NO
2. IS THE APPLICANT SUBJECT TO AN OUTSTANDING CLAIM BY THE SPILL FUND FOR THIS SITE? ☐ YES ☒ NO
3. HAS THE APPLICANT VIOLATED ANY PROVISION OF ECL ARTICLE 27? ☐ YES ☒ NO
4. HAS THE APPLICANT BEEN PREVIOUSLY DENIED ENTRY TO THE BCP? ☐ YES ☒ NO
5. HAS THE APPLICANT COMMITTED A NEGLIGENT OR INTENTIONALLY TORTIOUS ACT REGARDING HAZARDOUS WASTE OR PETROLEUM? ☐ YES ☒ NO
6. HAS THE APPLICANT BEEN CONVICTED OF A CRIMINAL OFFENSE THAT INVOLVES A VIOLENT FELONY, FRAUD, BRIBERY, PERJURY, THEFT, OR OFFENSE AGAINST PUBLIC ADMINISTRATION? ☐ YES ☒ NO
7. HAS THE APPLICANT KNOWINGLY FALSIFIED STATEMENTS OR CONCEALED MATERIAL FACTS IN A MATTER RELATED TO THE DEPARTMENT? ☐ YES ☒ NO
8. HAS THE APPLICANT, BASED ON THE PROVISIONS OF ECL ARTICLE 27-1407 (OR A SIMILAR PROVISION OF FEDERAL OR STATE LAW), COMMITTED AN ACT OR FAILED TO ACT, AND SUCH ACT OR FAILURE TO ACT COULD BE THE BASIS FOR DENIAL OF A BCP APPLICATION? ☐ YES ☒ NO

Site Eligibility Information (Please refer to ECL § 27-1405)

1. DOES THE SITE MEET THE DEFINITION OF A BROWNFIELD SITE (REAL PROPERTY, THE REDEVELOPMENT OR REUSE OF WHICH MAY BE COMPLICATED BY THE PRESENCE OR POTENTIAL PRESENCE OF A HAZARDOUS WASTE, PETROLEUM, POLLUTANT, OR CONTAMINANT)? ☒ YES ☐ NO
2. IS THE SITE LISTED ON THE NATIONAL PRIORITIES LIST? ☐ YES ☒ NO
3. IS THE SITE LISTED ON THE NYS REGISTRY OF INACTIVE HAZARDOUS WASTE DISPOSAL SITES? ☐ YES ☒ NO
   IF YES, PLEASE PROVIDE: SITE #_____ CLASS # _____
4. IS THE SITE SUBJECT TO A PERMIT UNDER ECL ARTICLE 27, TITLE 9, OTHER THAN AN INTERIM STATUS FACILITY? ☐ YES ☒ NO
5. IS THE SITE SUBJECT TO A CLEANUP ORDER UNDER NAVIGATION LAW ARTICLE 12 OR ECL ARTICLE 17 TITLE 10? ☐ YES ☒ NO
6. IS THE SITE SUBJECT TO A STATE OR FEDERAL ENFORCEMENT ACTION RELATED TO HAZARDOUS WASTE OR PETROLEUM? ☐ YES ☒ NO

Project Description

PLEASE ATTACH A DESCRIPTION OF THE PROJECT WHICH INCLUDES THE FOLLOWING COMPONENTS:

- PURPOSE AND SCOPE OF THE PROJECT
- ESTIMATED PROJECT SCHEDULE

Site's Environmental History

TO THE EXTENT THAT EXISTING INFORMATION/STUDIES/REPORTS ARE AVAILABLE TO THE APPLICANT, PLEASE ATTACH THE FOLLOWING:

1. **ENVIRONMENTAL DATA**
   A PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT PREPARED IN ACCORDANCE WITH ASTM E 1527 (American Society for Testing and Materials: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process), AND ALL ENVIRONMENTAL REPORTS RELATED TO CONTAMINANTS ON OR EMANATING FROM THE SITE.
   IF A FINAL INVESTIGATION REPORT IS INCLUDED, INDICATE WHETHER IT MEETS THE REQUIREMENTS OF ECL ARTICLE 27-1415(2):
   ☐YES ☐NO
2. **OWNERS**
   A LIST OF PREVIOUS OWNERS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS (DESCRIBE APPLICANT'S RELATIONSHIP, IF ANY, TO EACH PREVIOUS OWNER LISTED. IF NO RELATIONSHIP, PUT "NONE").
3. **OPERATORS**
   A LIST OF PREVIOUS OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBER (DESCRIBE APPLICANT'S RELATIONSHIP, IF ANY, TO EACH PREVIOUS OPERATOR LISTED. IF NO RELATIONSHIP, PUT "NONE").

Contact List Information

PLEASE ATTACH, AT A MINIMUM, THE NAMES AND ADDRESSES OF THE FOLLOWING:

1. THE CHIEF EXECUTIVE OFFICER AND ZONING BOARD CHAIRPERSON OF EACH COUNTY, CITY, TOWN AND VILLAGE IN WHICH THE SITE IS LOCATED.
2. RESIDENTS, OWNERS, AND OCCUPANTS OF THE SITE AND PROPERTIES ADJACENT TO THE SITE.
3. LOCAL NEWS MEDIA FROM WHICH THE COMMUNITY TYPICALLY OBTAINS INFORMATION.
4. THE PUBLIC WATER SUPPLIER WHICH SERVICES THE AREA IN WHICH THE SITE IS LOCATED.
5. ANY PERSON WHO HAS REQUESTED TO BE PLACED ON THE SITE CONTACT LIST.
6. THE ADMINISTRATOR OF ANY SCHOOL OR DAY CARE FACILITY LOCATED ON OR NEAR THE SITE.
7. THE LOCATION OF A DOCUMENT REPOSITORY FOR THE PROJECT (E.G., LOCAL LIBRARY)

Contaminant Information

INDICATE KNOWN OR SUSPECTED CONTAMINANTS AND THE MEDIA WHICH ARE KNOWN OR SUSPECTED TO HAVE BEEN AFFECTED:

Contaminant Category	Soil	Groundwater	Surface Water	Sediment	Soil Gas
Petroleum					
Chlorinated Solvents		X			X
Other VOCs					
SVOCs					
Metals	X	X			
Pesticides					
PCBs					
Other*					

*Please describe: _____

Land Use Factors (Please refer to ECL § 27-1415(3))

Current Use: ☐ Residential ☐ Commercial ☐ Industrial ☒ Other WAREHOUSE

Future Use: ☐ Residential ☒ Commercial ☐ Industrial ☐ Other _____

Please check the appropriate boxes and provide an explanation as an attachment if appropriate.

	Yes	No	Unknown
1.Do current historical and/or recent development patterns support the proposed use?	☒	☐	☐
2. Is the proposed use consistent with applicable zoning laws/maps?	☒	☐	☐

3. Is the proposed use consistent with applicable brownfield opportunity area designations? (See GML 970-r)	☐	☐	☒
4. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, other adopted land use plans?	☒	☐	☐
5. Are there any Environmental Justice Concerns? (See §27-1415(3)(p)).	☐	☒	☐
6. Are there any federal or State land use designations relating to this site?	☐	☒	☐
7. Do the population growth patterns and projections support the proposed use?	☒	☐	☐
8. Is the site accessible to existing infrastructure?	☒	☐	☐
9. Are there important cultural resources, including federal or state historic or heritage sites or Native American religious sites proximate to the site?	☐	☒	☐
10. Are there important federal, state or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species proximate to the site?	☐	☒	☐
11. Are there floodplains proximate to the site?	☐	☒	☐
12. Are there any institutional controls currently applicable to the site?	☐	☒	☐
13. Describe on attachment the proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural, and recreational areas.			
14. Describe on attachment the potential vulnerability of groundwater to contamination that might migrate from the site, including proximity to wellhead protection and groundwater recharge areas.			
15. Describe on attachment the geography and geology of the site.			
(Note: the 16th criteria relates to comments from the public, which would not be received at the time of application)			

Statement of Certification

(By applicant who is an individual)
I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Date: _____ Signature: _____ Print Name: _____

(By an applicant other than an individual)
I certify that I am PRESIDENT (title) of BINGHAMTON REALTY INC. (entity); that I am authorized by that entity to make this application; that this application was prepared by me or under my supervision and direction; and that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Date: 6-2-04 Signature: Joseph C Morgan Print Name: JOSEPH C. MORGAN

SUBMITTAL INFORMATION:

Four (4) complete copies, one with original signatures, are required.

- **Three (3)** of the copies, one with original signatures, must be sent to:

  Chief, Site Control Section
  New York State Department of Environmental Conservation
  Division of Environmental Remediation
  625 Broadway
  Albany, NY 12233-7020

- **One (1)** copy must be sent to the DEC regional contact in the regional office covering the county in which the site is located. Please check our website for the address of our regional offices: http://www.dec.state.ny.us/website/der/index.html

FOR DEPARTMENT USE ONLY

BCP SITE NO: C 704045 **BCP SITE T&A CODE:** _____ **PROJECT MANAGER:** _____

Supplemental Attachment to BCP Application for Binghamton Realty

Site Environmental History

Triple Cities Metal facility is located in the community of Hillcrest on Nowlan Road in Binghamton, New York (see attached Site Location Plan). Triple Cities Metal has manufactured products with decorative, functional and corrosion-resistant finishes that included zinc, chrome and nickel for the military, aerospace and automotive industries since 1953. All facility processes were terminated at the Nowlan Road facility in the winter of 1999-2000; the building is currently vacant.

Investigations and studies that have been completed at Triple Cities Metal have included the following:

- A facility assessment for the USEPA to gather information on, and evaluate the potential for releases to the environment from solid and hazardous waste handling practices "Preliminary RCRA Facility Assessment" (November 1993, ERM);
- Air emissions testing assessing the 1998 emissions levels at Triple Cities Metal, "Air Emission Study" (September 1999, ERM and NYSDEC);
- Surface soil sampling at Triple Cities Metal and within the Hillcrest community, catch basin sediment sampling "RCRA Phase I Sampling" (August 1999, GeoLogic);
- Evaluation of subsurface soil and groundwater at the site that included analysis of interior concrete flooring and underlying soils. "RCRA Phase II Subsurface Investigation" (May 2000, GeoLogic);
- Evaluation of groundwater and subsurface soils under the building, at site boundaries and off-site "Continuing Phase II Subsurface Investigation" (May 2002, GeoLogic);
- Corrective Action Study (May 2003, GeoLogic).

Additional Investigative Work

Purpose and Scope of Project

On February 25, 2004, NSYDEC collected soil gas samples below the concrete floor at three locations inside Triple Cities Metals. Chlorinated compounds were detected at all three sample locations. Trichloroethene was detected at concentrations of 0.350, 1.8 and 13 mg/m^3 in the soil vapor below the concrete floor.

The purpose of the project is investigate and evaluate soil gas vapor underlying the former Triple Cities Metals property on Nowlan Road in Hillcrest, New York and at two adjacent commercial properties.

The Work Plan for the investigation will be provided by the end of June 2004

Land Use Factors

Section 13:

North of Triple Cities Metal is a gasoline dispensing station and residential properties. To the east is the former Singer-Link Electronic facility. South of Triple Cities Metal are residential properties and west is an electrical contracting business, a residential property and an automotive repair shop (former gasoline station). (See attached Land Use Factors Plan)

Section 14:

Groundwater hydraulically upgradient, underlying and downgradient of Triple Cities Metals have been impacted by chlorinated compounds and metals. The primary contaminants of concern are trichloroethene, cadmium and chromium.

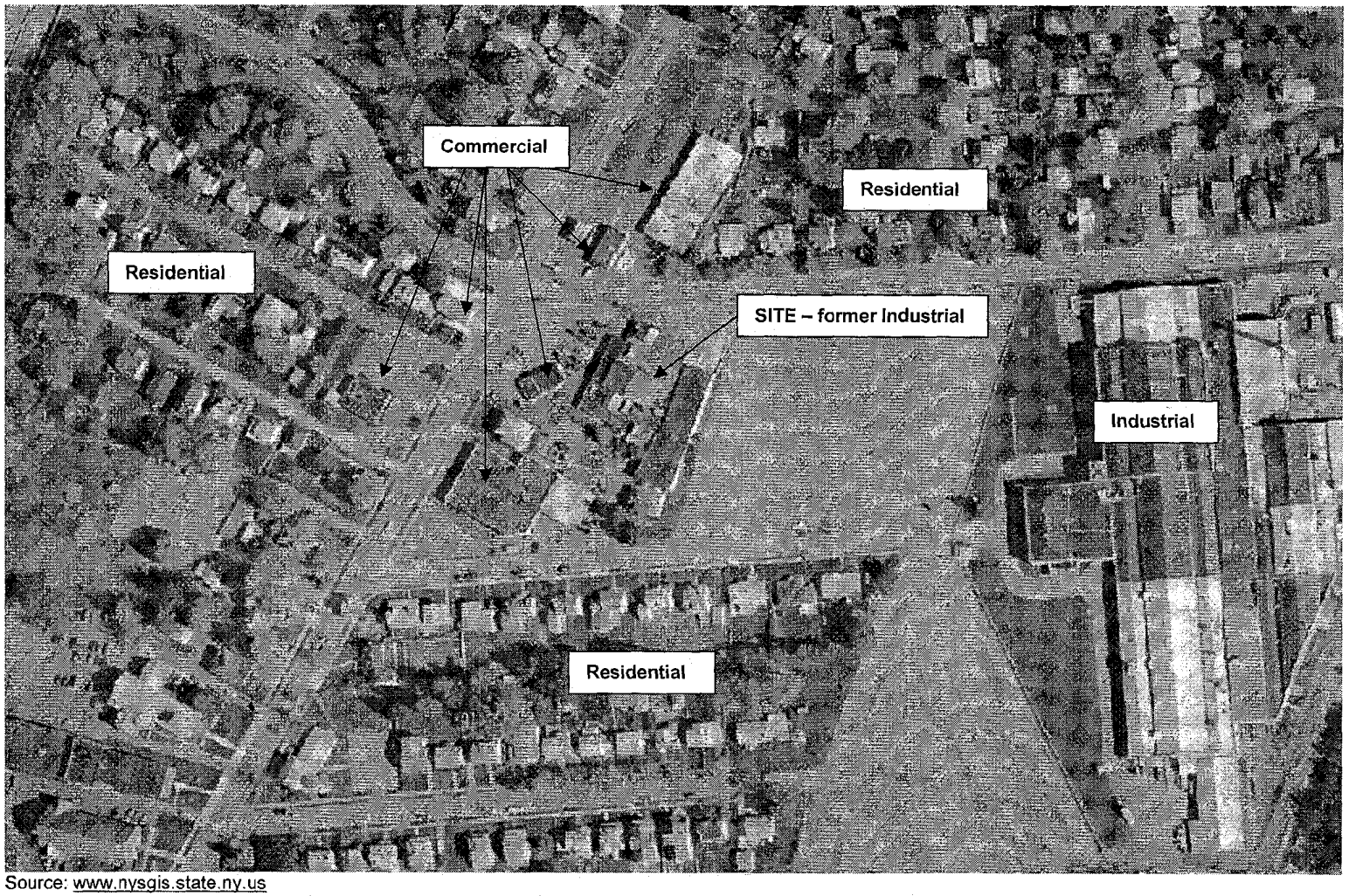
The Town of Fenton has three water supply wells located north of Triple Cities Metal. Fenton Well #3 is the primary water supply well for the community of Hillcrest and is the closest community water supply well to Triple Cities Metal, approximately 3,000 feet from Triple Cities Metal. Fenton Well #1 reportedly operated approximately 1 hour a day to maintain the pumping equipment; and Fenton Well #2, is reportedly used occasionally (about once a month for well maintenance), are located further north of Fenton Well #3. All three water supply wells are reportedly screened in the lower sand and gravel deposit. The Broome County Health Department has performed a Time Travel Capture Zone Model that theorized cones of influences of the three Fenton Wells within the lower sand and gravel deposit that the wells draw from. Triple Cities Metal is located on the fringe of the 10 and 25-year capture zone. The model assumed that all three wells would be pumping a full capacity, 24 hours a day, 365 days per year. This scenario is not realistic since water demand for the Hillcrest community is not likely to increase to the demand that would require this pumping rate. One well, Fenton Well #3, currently meets Hillcrest's water demand and is reportedly operating at less than full time (reportedly approximately 4 to 5 hours per day).

Section 15:

Triple Cities Metal is located in the Chenango River Valley approximately 50 feet higher in elevation than the current river channel. The topography features in the vicinity of the site include a hillside rising over 400 feet above the Triple Cities Metals facility approximately 2,000 feet east of the site, Phelps Creek flowing off the hillside in a southwest direction within 1,000 feet southeast of the site and the Chenango River with its southerly flow located within 2,000 feet west of the site. Triple Cities Metal and the Hillcrest community are located primarily on the terrace above the river channel and along the hillside east of the terrace. According to the Flood Insurance Rate Maps, Triple Cities Metal is not located within the 100-year flood plain, but is mapped in an area of minimal flooding.

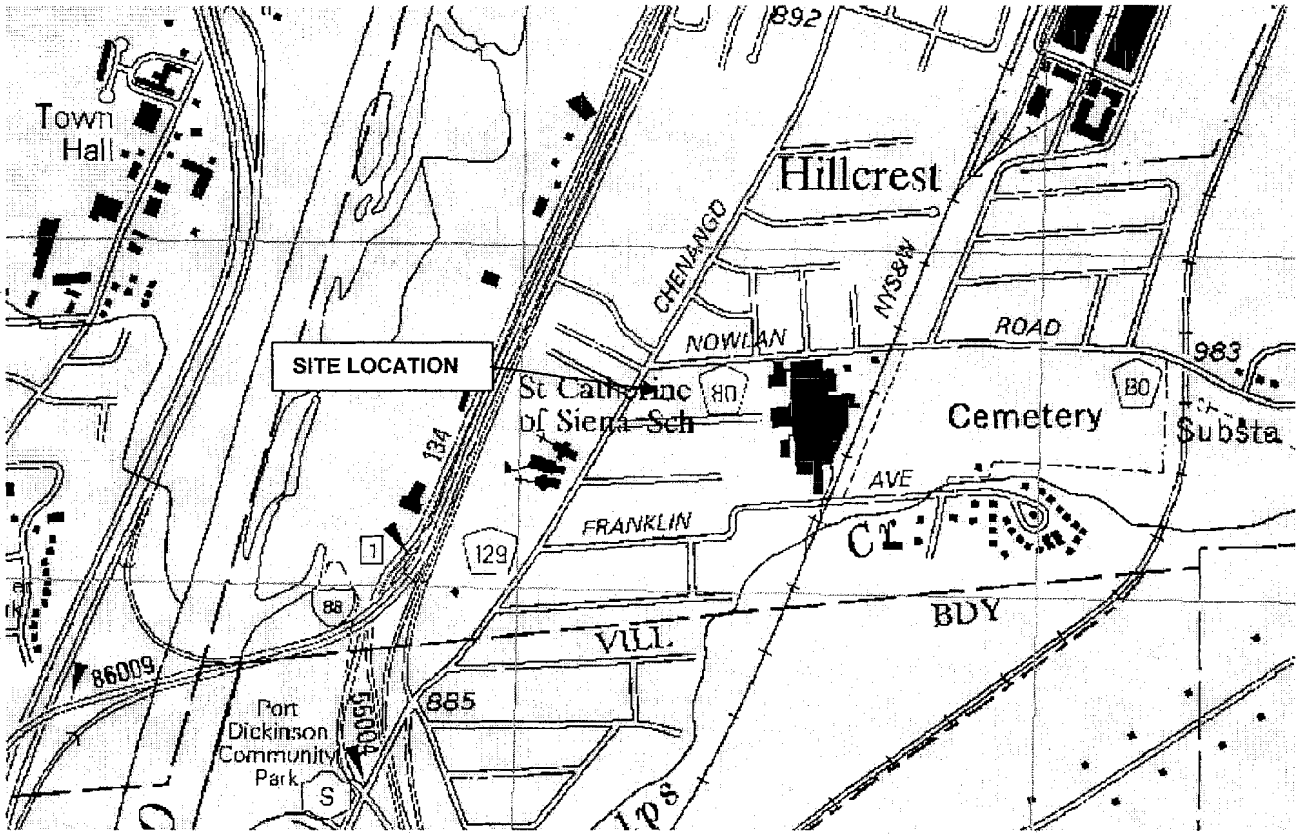
The geology of the terrace consists of glacial meltwater (outwash) deposits of sand and gravel with variable silt content that range in thickness from approximately 30 to 55 feet. Lacustrine silt, sands and clay deposits underlie the outwash sand and gravel unit ranging in thickness from 130 to 160 feet. Underlying the lacustrine deposit is a sand and gravel deposit.

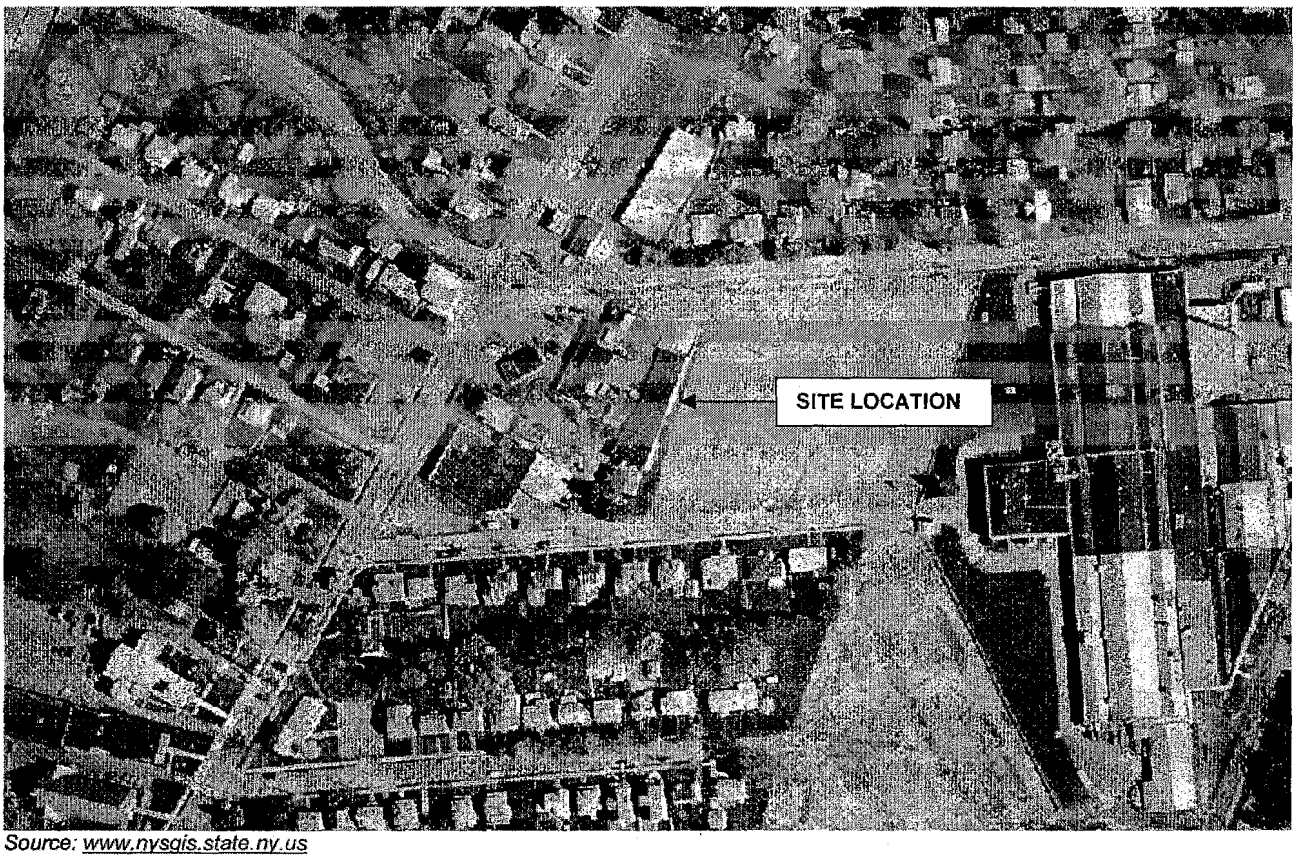
Groundwater flow shows a general west, west-northwest flow toward the Chenango River.



Source: www.nysgis.state.ny.us

LAND USE FACTORS
CURRENT PROPERTY USES IN VICINITY
FORMER TRIPLE CITIES METAL FINISHING CORPORATION
NOWLAN ROAD
COMMUNITY OF HILLCREST
BROOME COUNTY, NEW YORK





Source: www.nysgis.state.ny.us

SITE LOCATION PLAN
FORMER TRIPLE CITIES METAL FINISHING CORPORATION
NOWLAN ROAD
COMMUNITY OF HILLCREST
BROOME COUNTY, NEW YORK

Previous owners and operators:

Triple Cities Metal Finishing Corporation
349 Industrial Park Drive
Binghamton, N. Y. 13904
607 722 3431
Relationship: Triple Cities Metal Finishing Corporation and
Binghamton Realty are subsidiaries of Zurenda Enterprises Incorporated.

Community Plating Works
Relationship: None

Hillcrest Officials Mail List (Provided by NYSDEC):

Thomas W. Libous New York State Senator 1607 State Office Bldg. 44 Hawley Street Binghamton, NY 13901-4477	Broome Co. Env. Health Dept. 225 Front Street Binghamton, New York 13901 Attn: Robert Denz/Ronald Brink
Hon. Charles E. Schumer U.S. Senator Federal Office Bldg. 15 Henry Street Binghamton, New York 13901	Fox 40 News WICZ-TV 4600 Vestal Parkway East Vestal, New York 13850
Hon. Hillary Clinton U.S. Senator PO Box 7378 Syracuse, New York 13261	WBNG-TV Action News 560 Columbia Drive Johnson Ctiy, NY 13790
Hon. Sherwood L. Boehlert US Congressman Alexander Pirnie Federal Bldg. 10 Broad Street Utica, New York 13501	WIVT-TV News Channel 34 203 Ingraham Hill Road Binghamton, NY 13903-5511
Hon. Maurice Hinchey US Congressman Federal Office Bldg. 15 Henry Street Binghamton, New York 13901	WSKG-TV 46 601 Gates Road Vestal, New York 13850-2330
Assembly Clifford Crouch 1 Kattelville Rd. Suite 1 Binghamton, New York 13901	WHWK-FM/WNBF-AM 59 Court Street Binghamton, New York 13901
Jeffrey P. Kraham Broome County Executive 44 Hawley Street, PO Box 1766 Binghamton, New York 13902	WMRV-FM/WENE-am 320 N. Jensen Rd. Vestal, New York 13850-2111
David Lindsey Broome County Legislator District #3 12 Mulberry Street Binghamton, New York 1390	WKOP/WAAL 59 Court Street Binghamton, NY 13901
Richard A. Bucci, Mayor City of Binghamton City Hall - 4th Floor 38 Hawley Street Binghamton, New York 13901	Press & Sun-Bulletin PO Box 1270 Binghamton, NY 13902

John Cordisco, Councilman c/o Clerk's Office City Hall - 1st Floor 38 Hawley Street Binghamton, New York 13901	Kenneth Lynch Regional Director NYS Dept. Env. Conservation 615 Erie Blvd. Syracuse, New York 13202
Edward Banks Town of Fenton Supervisor Town Hall 44 Park Street Port Crane, New York 13833	Mary Jane Peachey Regional Engineer NYS Dept. Env. Conservation 615 Erie Blvd. West Syracuse, New York 13202
Mr. Geoffrey Laccetti NYS Health Dept. Flannigan Square 547 River St. - Room 300 Troy, NY 12180-2216	Mary Jane Peachey Regional Engineer NYS Dept. Env. Conservation 615 Erie Blvd. West Syracuse, New York 13202
Ms. Bridget Callaghan NYS Health Dept. Flannigan Square 547 River St. - Room 300 Troy, NY 12180-2216	NYS Dept. Env. Conservation 625 Broadway Albany, New York 12233 Att: David Smith DER –7010 Att: Dale Desnoyer DER-7010 Att: Robert Knizek DER – 7010 Att: Robert Cozzy DER - 7016
NYS Health Dept. 217 So. Salina St. - 3rd Floor Syracuse, New York 13202 Attn: Ron Heerkens	

GeoLogic NY, Inc.

PO Box 5080, Cortland, NY 13045, 607-836-4400, Fax: 607-836-4403

INVESTIGATION WORK PLAN

BINGHAMTON REALTY

FORMER TRIPLE CITIES METAL FINISHING FACILITY

4 NOWLAN ROAD

HILLCREST, NEW YORK

Prepared For:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Prepared By:

Binghamton Realty, Inc.

and

GeoLogic NY, Inc.

June 2004

PROJECT NO. 99011A

TABLE OF CONTENTS

1 INTRODUCTION

Binghamton Realty and GeoLogic NY, Inc. (GeoLogic) have developed this Work Plan for the investigation of reported detection of chlorinated compounds in soil vapor underlying the former Triple Cities Metal Finishing (Triple Cities Metal) facility at 4 Nowlan Road in Hillcrest, New York. As a Volunteer to a Brownfield Cleanup Program Application ("Application") signed June 2, 2004, and a prospective signatory to a Brownfield Site Cleanup Agreement ("Agreement"), Binghamton Realty proposes to complete an investigation and any remedial measures necessary to address hazardous constituents detected on-site that have the potential to adversely affect human health or cause significant off-site impact.

1.1 SITE DESCRIPTION

Triple Cities Metal manufactured products with decorative, functional and corrosion-resistant finishes that included zinc, chrome and nickel for the military, aerospace and automotive industries from 1953 to 1999. All facility processes were terminated at the Nowlan Road facility in 1999; the building is currently vacant. The site, consisting of two adjacent parcels, encompasses 0.88 acres, and is bordered on the south by Beckwith Avenue, and on the east by the B. W. Elliot Manufacturing Company (former CAE Electronics facility), on the west by two commercial properties and a residence and on the north by Nowlan Road. Further south, west and north are residential properties (Drawing No. 1).

The 27,000-square foot industrial building is located on a 0.62-acre parcel and the office building (former residential structure) is located on a 0.26-acre parcel. The industrial building was used primarily for production work with offices in the northern portion of the building. The former residential structure housed the corporate offices.

1.2 SITE HISTORY

The site has been used for commercial purposes since the 1930's. The first known commercial use of the 4 Nowlan Road property was by a metal plating shop. Several additions have been

made to the original (circa 1930's) structure with the last additions constructed in the late 1980's. All facility processes were terminated over four years ago. Triple Cities Metal submitted a Part A application for interim status when the hazardous waste regulations were first enacted, and although it did not utilize interim status, and operated as a generator, it has been subject to corrective action under the hazardous waste regulations.

1.3 PREVIOUS INVESTIGATIONS

Investigations and studies that have been completed at Triple Cities Metal have primarily been conducted as part of a corrective action program and have included the following:

- A facility assessment for the USEPA to gather information on, and evaluate the potential for releases to the environment from, solid and hazardous waste handling practices, "Preliminary RCRA Facility Assessment" (November 1993, ERM);
- Air emissions testing assessing the 1998 emissions levels at Triple Cities Metal, "Air Emission Study" (September 1999, ERM and NYSDEC);
- Surface soil sampling at Triple Cities Metal and within the Hillcrest community, and catch basin sediment sampling, "RCRA Phase I Sampling" (August 1999, GeoLogic);
- Evaluation of subsurface soil and groundwater at the site that included analyses of interior concrete flooring and underlying soils, "RCRA Phase II Subsurface Investigation" (May 2000, GeoLogic);
- Evaluation of groundwater and subsurface soils under the building, at site boundaries and off-site, "Continuing Phase II Subsurface Investigation" (May 2002, GeoLogic);
- Corrective Action Study (May 2003, GeoLogic).

Recently, as part of a NYSDEC Soil Vapor Investigation in Hillcrest, sub-slab soil vapor samples and groundwater samples were taken at the Triple Cities Metal facility by URS Corporation. Sampling locations are shown on Drawing No. 2. Although other compounds were detected during the sampling, trichloroethene concentrations were highest at the Site. The soil vapor samples taken by URS Corporation revealed the following concentrations:

Sample ID	Location	Trichloroethene Concentration
TCMF-1	Sub-Slab Soil Vapor In the former Barrel Room Area	1.8 mg/m^3 0.33 ppm
TCMF-2	Sub-Slab Soil Vapor In the former Plating Room Area	0.35 mg/m^3 0.06 ppm
TCMF-3	Sub-Slab Soil Vapor In the former Warehouse Area – East Addition	13.0 mg/m^3 2.4 ppm

Monitoring was not conducted inside the building structure, but instead samples were collected from the fill soils underlying the building's slab.

1.4 SUMMARY OF ENVIRONMENTAL CONDITIONS

1.4.1 Nature and Extent of Contamination

During the course of the evaluations completed for Triple Cities Metal to date, eleven soil borings using conventional soil sampling drill rigs and nineteen direct-push sampling points have been advanced. Six monitoring wells, three on the Triple Cities Metal property and three off-site, have been installed. Trace to no volatile organic solvent compounds were detected in the soils collected at Triple Cities Metal, and the concentrations in groundwater were similar to or lower than upgradient concentrations, suggesting that the organic solvents are migrating onto the site from upgradient sources. Concentrations of trichloroethene in the groundwater have been measured:

Trichloroethene Concentrations in ug/L

Date	MW-1 (D)	MW-2 (D)	MW-3 (C)	MW-4 (D)	MW-5 (D)	MW-6 (D)	MW-18 (U)
2/5/02	9	14	-	-	-	-	25
4/5, 7 & 8/04	13	-	14	18	13	-	16

(U) – Hydraulically upgradient of Triple Cities Metal
(D) – Hydraulically downgradient of Triple cities Metal
(C) – Hydraulically crossgradient of Triple Cities Metal

The contaminants of concern identified at the site through the previous investigations were heavy metals with a focus on the eight RCRA metals.

1.4.2 Hydrogeologic Setting

At the adjacent CAE Electronics facility, groundwater elevation data has been collected at its facility and in the neighboring community for over 15 years. At the CAE Electronics wells (MW-16 and MW-18) located near the Triple Cites Metal east property boundary, groundwater has been historically encountered in the lower portion of the surficial outwash sand and gravel unit. Groundwater levels in these CAE Electronics wells have fluctuated generally less than 5 feet over this 15-year period.

Groundwater elevation data collected at the wells installed by Triple Cities Metal have reported fluctuations in groundwater levels of less than 1.0 foot over the period between February 2000 and March 2003.

Given the historical fluctuations noted through CAE Electronics investigations, depth to groundwater at the Triple Cities Metal properties could range from 18 to 33 feet below ground surface.

Based on the data collected in the wells that are monitored by Triple Cities Metal, direction of groundwater flow at the site is from east to west.

2 PROPOSED INVESTIGATION

2.1 AREA AND CONTAMINANT OF CONCERN

The areas of concern for the proposed investigation will be the area that the Triple Cities Metal building encompasses, along the periphery of the property, and at three adjacent properties; Panko Electric (1080 Chenango Street), Hillcrest Auto Center (1092 Chenango Street), and a residence (1090 Chenango Street).

The contaminants of concern for this investigation will initially include the following chlorinated compounds. These compounds are the chlorinated compounds detected in sub-slab soil vapor samples collected both underlying Triple Cities Metal as well as at other properties sampled by NYSDEC.

1,1-dichloroethane
1,1-dichloroethene
1,2-dichloroethene (total)
1,1,1-trichloroethane
trichloroethene
tetrachloroethene
vinyl chloride
dichlorofluormethane
trichlorofluormethane
1,1,2-trichloro-1,2,2-trifluoroethane

2.2 SUMMARY OF PROPOSED WORK

2.2.1 Task #1 – Obtain Samples Under the Triple Cities Metal Building Concrete Floor Slabs

Purpose: Determine whether there are elevated volatile contaminant concentrations underlying the concrete floor of the Triple Cities Metal buildings. The results of this sampling will provide information about current sub-slab vapor concentrations and if

elevated levels are identified in a particular area, may be able to localize contamination.

Obtain sub-slab soil vapor samples from up to ten locations within the former industrial building and the corporate office building (former residence). Proposed locations for the first ten sampling points are shown on Drawing Nos. 2 and 3. Three of the ten locations will be placed at the locations of the three previous sub-slab samples collected by NYSDEC. Six others will be placed spatially through the industrial building, and one sample will be collected below the basement sub-slab in the office building.

Based on field observations from the first ten sampling locations, additional sampling points may be advanced. Additional sampling locations will depend upon encountering elevated volatile compounds (VC) readings (>100 ppm). If area(s) with readings in excess of 100 ppm are encountered, this may indicate the presence of an area of contamination under the building and additional hole(s) will be advanced nearby in an attempt to better define and determine extent of elevated readings.

Method for Sub-Slab Sampling:

A concrete drill will be used to drill a series of holes through the floors in the buildings. Soil vapor from below the concrete slabs will be directly screened with a detector capable of measuring in both the parts per billion range (ex. ppbRAE volatile compound (VC) detector, range 0-999 ppb) and parts per million range (ex. Photovac PID, range 0.1 to 2,000 ppm). A temporary sealed portal through the concrete floor will be installed to extract the sub-slab vapors using the detector. Soil vapor grab samples from the locations in the industrial building with the three highest VC levels measured by the detectors will be collected for contaminant level verification through laboratory analysis. These soil vapor grab samples will be collected into laboratory provided mini-canisters or tedlar bags for analysis.

The holes made through the concrete floor will be plugged with concrete grout.

2.2.2 Task #2 - Obtain Soil Vapor Samples Below Concrete Floor Slab at Adjacent Properties

Purpose: Investigate the presence of chlorinated compounds in properties adjacent to Triple Cities Metal.

Method: One sub-slab soil vapor sample will be collected from below the basement floor at the one residence, two below the slab-on-grade at the Panko Electric building, and one below the slab-on-grade at the Hillcrest Auto Center building. These properties are adjacent and directly west of Triple Cities Metal.

Binghamton Realty will seek the consent of the adjacent property owners to access the properties. If consent is denied, the assistance of NYSDEC will be sought.

Sampling methodology will be the same as described in Section 2.2.1, except mini-canisters with flow controller valves pre-calibrated at the laboratory will be used. The samples will be collected over a short-termed duration, approximately for 1 hour.

The holes through the concrete floors will be plugged with a concrete grout after sample collection.

2.2.3 Task #3 – Obtain Soil Samples and Install Permanent Sub-slab and Subsurface Soil Vapor Monitoring Point Inside Triple Cities Metal Building

Purpose: Further evaluate elevated volatile contaminant concentrations in soil (horizontally and vertically) in order to maximize efficiency of soil vapor extraction system and to assess possible on-site source(s) of any contaminants observed in the soil vapor samples collected from below the building floor slab.

Method for Subsurface Sampling:
The data collected under Task #1 will guide placement of the subsurface sampling locations. Locations with the highest concentrations measured by the VC detectors and laboratory analysis (up to six locations initially) in the industrial building will be further evaluated.

A concrete drill will be used to drill the holes through the floors in the industrial building. The soil vapor from below the concrete slabs will be initially screened and recorded using VC detectors capable of measuring in both the parts-per-billion and parts-per-million ranges.

A truck-mounted Geoprobe® will be used to advance the subsurface sampling points. Initially six sampling locations are anticipated. Soil samples will be obtained with a 2-inch diameter, 4-foot steel tube sampler (macrocore). The sampler has single-use acetate liners for sample collection. Continuous soil sampling will be attempted to depths of 16 to 20 feet below the floor slab.

Soil samples will be scanned with a VC detector. Soil samples will be placed in zip-lock plastic bags and allowed to equilibrate for 10 minutes before screening with a VC detector. Soil samples with the highest VC readings from each of the locations will be placed in laboratory supplied sample jars for possible laboratory analysis. Samples will be held at 4° C in a cooler. Single-use latex or vinyl gloves will be used during sample handling. Up to twelve soil samples may be analyzed for volatile organics concentration verification using EPA Method 8260.

Permanent subsurface soil vapor implants at depths to be determined from observations and data collected from the sampling points will be installed inside the industrial building. A minimum of four implant clusters are anticipated. The anticipated depths of the clusters are one, 1-foot below the concrete floor slab, one between 8 to 10 feet and one between 16 and 18 feet below floor.

Soil vapor implants will be constructed of six-inch long, double woven stainless steel wire screen. The stainless steel implants will be connected to polyethylene tubing. The direct-push sampling rods will be advanced to the determined depths. The soil vapor implant will be placed down through the rods, and then as the rods are withdrawn, the annular space around the implant will be filled with glass beads to a height of six inches above the implant. For the two deeper implants, sand will be placed above the glass beads to a depth of two feet below the floor surface. Hydrated bentonite pellets will be used to seal the upper two feet of the annular space. The polyethylene tubing will extend at least six inches above the floor

surface. To minimize the risk of ambient air being drawn down the borehole and into the implant during sampling, hydrated bentonite will be placed around the tubing.

Four hundred-cc mini-canisters will be used to collect the soil vapor samples. Before collecting the soil vapor samples, the soil vapor implant and tubing will be purged of one liter of air using a vacuum pump. A tubing pinch valve will be used to seal the end of the tube after the tubing is purged. Immediately after purging, the tubing will be connected to the 400-cc canister and soil vapor samples will be collected directly into the canisters for laboratory analysis. The samples will be collected over a one-hour period.

Permanent implant access entries will be installed in the concrete floor for future access to the sub-slab and subsurface soil vapor implants.

2.2.4 Task #4 - Obtain Soil Vapor Samples at Site Boundaries

Purpose: Investigate levels of contaminants in soil vapor in areas not capped by buildings or other structures.

Method: Soil vapor samples will be obtained from soil vapor implants placed at three locations near site boundaries. Proposed sampling locations are shown on Drawing No. 3. We anticipate using NYSDEC implants cluster TSG-7, TSG-8 and TSG-9 for the investigation. The depths of these implants are 8 feet, 14 feet and 19.5 feet below ground surface (bgs), respectively. Soil gas implant TSG-12 installed to a depth of 8 feet bgs may also be utilized.

A truck-mounted, Geoprobe® will be used to install three clusters of soil vapor implants. The locations of the three clusters are at the northeast corner of the property, one east of the industrial building and one on the west side of the industrial building. Each cluster will have three soil vapor implants installed to depths of 8 feet and approximately 14 feet and 20 feet bgs at each of the three locations. Soil vapor implants will be constructed of six-inch long, double woven stainless steel wire screen. The stainless steel implants will be connected to polyethylene tubing. The direct-push sampling rods will be advanced to the desired

depths. The soil vapor implant will be placed down through the rods, and then as the rods are withdrawn, the annular space around the implant will be filled with glass beads to a height of six inches above the implant. Sand will be placed above the glass beads to a depth of two feet below the ground surface. Hydrated bentonite pellets will be used to seal the upper two feet of the annular space.

The polyethylene tubing will initially extend at least six inches above the ground surface. To minimize the risk of ambient air being drawn down the borehole and into the implant during sampling, plastic sheeting will be placed on the ground surface extending at least one foot around the tubing. Hydrated bentonite will be placed over the plastic sheeting and around the tubing.

Sampling methodology will be same as described above in Section 2.2.3.

The implants will be finished with a flush-mounted protective casing.

2.2.5 Task #5 –Soil Vapor Extraction System

Purpose: Provide a mechanism to reduce contaminants in the soil vapor below the industrial building to allow assessment of rebound of soil vapor levels and to provide for long-term control of soil vapor levels to the extent required.

Method: An interim soil vapor extraction system will be installed at the Triple Cities Metal facility to reduce contaminated soil vapor concentrations beneath the building. The interim soil vapor extraction will conceptually consist of at least three sub-slab soil vapor extraction points. The sub-slab extraction points will be 4-inch diameter solid PVC piping placed through the concrete floor and one-foot into the sub-slab structure sand and gravel fill. The sub-slab piping will be sealed into the floor slab. The sub-slab extraction points will be connected to a blower placed on the roof of the building. The exhaust pipe from the blower will extend above the roofline.

A pre-start up sample will be taken at the exhaust pipe discharge of the blower. The airflow rate for a period of 30 minutes will be recorded prior to effluent sample collection. The blower will be turned off after sampling. An Air Facility Registration Form will be submitted to the NYSDEC with the sample results.

After NYSDEC issues the Air Facility Registration, the system will be turned on.

Air discharge samples will be collected one week after turning on the system, and then monthly thereafter for three months. To the extent only low levels of contaminants are detected, the soil vapor extraction system will be shut off for a period of time to permit evaluation of the potential for vapor concentration to rebound. The samples will be taken using tedlar bags and analyzed using NYSDOH Method 311-6 for the volatile chlorinated organic compounds of concern.

If required by the Department, an Interim Work Plan for the Design of the SVE System will be developed by the Project Engineer.

2.2.6 Task #6 - Sample Monitoring Wells

Purpose: Evaluate groundwater quality upgradient, downgradient and beneath the site.

Method: Groundwater analyses indicate that organic solvent constituents are migrating onto the Triple Cities Metal site from an upgradient source. As part of a recent study, NYSDEC collected and analyzed groundwater samples. To further evaluate the presence of solvent constituents in groundwater, water samples will be collected from the monitoring wells (MW-1 through MW-6 and MW-18) including the appropriate QA/QC samples, and depths to water will be recorded.

If the water levels in the wells are within 20 feet of the ground surface, wells will be purged and water samples taken using a low-flow peristaltic pump. New polyethylene tubing will be used to purge and sample each well. If the water level is more than 20 feet below the ground surface, a single-use polyethylene disposable bailer with new nylon rope will be used to purge the wells and obtain the water samples.

The wells will be purged of at least three well volumes prior to sampling. Temperature, pH, conductivity and/or turbidity measurements will assist in determining when the wells have been sufficiently purged. The sampler will wear single-use latex or vinyl gloves during purging and sampling. Samples will be collected directly into laboratory-provided containers and held in a 4°C-maintained cooler. Samples will be submitted for volatile organic analysis by EPA-8260 and analysis of the eight RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver).

2.2.7 Task #7 Prepare Investigation Report

Purpose: Summarize data collected during the investigation and develop recommendations for the need for any additional data or remedial measures.

Method: The need for any additional data and the need for additional remedial action will be evaluated after the completion of the work proposed in this Work Plan. A Work Plan (if warranted) to address additional data gathering or remediation options will be submitted to NYSDEC for approval.

3 HEALTH AND SAFETY PLAN

A Health and Safety Plan (HASP) prepared for personnel protection (both site workers and community), and safety practices and procedures for the field activities proposed under Section 2.2 Summary of Proposed Work, is attached. A Community Air Monitoring Program (CAMP) is included in Section 6.2 of the Health & Safety Plan.

Components of the monitoring will include work zone monitoring, community air monitoring, and vapor emission response plan. Real-time air monitoring for volatile organic compounds at the perimeter of the work areas will be performed.

4 QUALITY ASSURANCE/QUALITY CONTROL

Sampling will be performed by a geologist or chemist from GeoLogic. Chain-of-custody procedures will be followed from sample acquisition through to sample disposal. Sample analyses will be as follows:

- Task #1 - Soil vapor samples will be analyzed for the ten chlorinated organic compounds of concern using EPA Method TO-15. The laboratory that will perform the analyses is Centek Laboratories, approved under the NELAP program by the NYSDOH for performing TO-15 analysis.

- Tasks #2, #3 and #4 - Soil vapor samples will be analyzed for the ten chlorinated volatile organics using modified EPA Method TO-15, by SIMS. The limit of quantitation (LOQ) for the chlorinated volatile organics to be analyzed is between 0.2 and 0.5 ug/m^3. The appropriate QA/QC samples (two field duplicates) will be collected for analysis.

- Task #3 - Soil samples will be analyzed for volatile organic compounds by EPA Method 8260. The laboratory that will perform the analyses is Life Science Laboratory, a NYSDOH ELAP-CLP Certified Laboratory. The appropriate QA/QC samples (matrix spike, matrix spike duplicated and field duplicate) will be collected for analysis.

- Task #5 – The SVE discharge samples will be analyzed by Centek Laboratories using NYSDOH Method 311-6 for the volatile chlorinated organic compounds of concern.

- Task #6 –Water samples will be submitted to Life Science Laboratory for TCL volatiles by EPA Method 8260. The appropriate QA/QC samples (matrix spike, matrix spike duplicate, field duplicate and trip blank) will be collected for analysis. A Data Package Report will be prepared.

The probing equipment will be cleaned with a liquinox and water solution before starting work at the site and between each probe hole to minimize the possibility of cross contamination. Decontamination water will be collected and disposed of properly.

The volatile compound (VC) detectors that will be used for the field screening of soils will be a Photovac Model 2020 equipped with 10.6 eV lamp and the ppbRAE. The instruments will be calibrated in accordance with manufacturer's instructions in the field prior to commencing work. Should the VC detector display not return to zero, the instrument will be cleaned and re-calibrated. The pH, conductivity and temperature meters will be calibrated in accordance to manufacturer's instructions prior to each daily use.

Excess soil from the probe holes will be collected and staged temporarily on-site. VC readings taken during soil sampling will be used to evaluate the need for analysis. Soil samples from the excess stockpile soils will be placed in zip-lock plastic bags and allowed to equilibrate with the atmosphere for 10 minutes before screening with a PID. If all VC readings from the excess soils are less than 5 ppm above background, soil will be reused on-site. If any VC readings are greater than 5 ppm above background, the soil sample with the highest PID reading will be analyzed for chlorinated organics using EPA Method 8260 to evaluate appropriate disposal options. These samples will not be analyzed using ASP Category B deliverables.

PROPOSED SAMPLING CHART
TRIPLE CITIES METAL FACILITY
HILLCREST, NEW YORK

Sample Location	Matrix	No. of Samples	Analysis
Beneath Floor Slab of Building	Soil	Up to 12	EPA Method 8260
Lab QA/QC Samples	Soil	4	EPA Method 8260 – Data Package
Triple Cities Metal Building – Sub-Slab Screening	Air	Up to 5	TO-15
Field Duplicate		None	
Triple Cities Metal Building – Sub-Slab Implants	Air	12	TO-15 Modified SIMS for 10 chlorinated compounds with low detection limits
Property Boundary Implants	Air	12	TO–15 Modified SIMS for 10 chlorinated compounds with low detection limits
Adjacent Properties – Sub-Slab	Air	3	TO–15 Modified SIMS for 10 chlorinated compounds with low detection limits
Field Duplicate	Air	2	TO–15 Modified SIMS for 10 chlorinated compounds with low detection limits
SVE System Effluent Emission	Air	4	NYSDOH Method 311-6
Monitoring Wells	Water	7	EPA Method 8260
Lab QA/QC Samples	Water	4	EPA Method 8260 – Data Package

5 SCHEDULE AND REPORTING

Fieldwork for the investigation will begin within two weeks of receiving written approval from the NYSDEC of this Work Plan. It is anticipated that the investigation fieldwork will be completed within nine to twelve weeks in four stages:

- Tasks #1 and #2 - collect sub-slab samples on-site and off-site;
- Task #3 - perform subsurface investigation below industrial building, and install soil vapor implant inside the industrial building;
- Task #4 - install exterior soil vapor implants;
- Task # 5 - install the conceptual SVE system, start-up sampling, and submittal and approval of the Air Facility Registration Form. If the submittal of a detailed Design Plan is required in lieu of the conceptual plan provided, the anticipated schedule of completion will be extended by one month.

The report, excluding the results of Task #6, will be submitted approximately five weeks after completing Tasks #1 through #5. The total anticipated time for completing the work included in this Work Plan, excluding Task #6, is approximately four months.

Task #6, sampling monitoring wells, is anticipated to be completed six months after the startup of the SVE system. The results will be submitted within one month after receiving the final Data Package.

6 PROJECT ORGANIZATION

Property Owner: Binghamton Realty, 349 Industrial Park Drive, Binghamton, NY 13904. Contact: Joseph Morgan Sr., 607-754-9166, ext. 101 and 201.

Environmental Consultant for Binghamton Realty: GeoLogic NY, Inc., P.O. Box 5080, Cortland, NY 13045. Contact: Marjory Rinaldo-Lee, Principal-in-Charge; Susan M. Cummins, Project Manager and Health & Safety Officer; Judson Powell, field supervision, sample collection; Joseph Menzel, remediation system installation, 607-836-4400.

7 ATTACHMENTS

A. Drawings

1. Site Location Plan
2. Sample Location Plan
3. Sample Location Plan

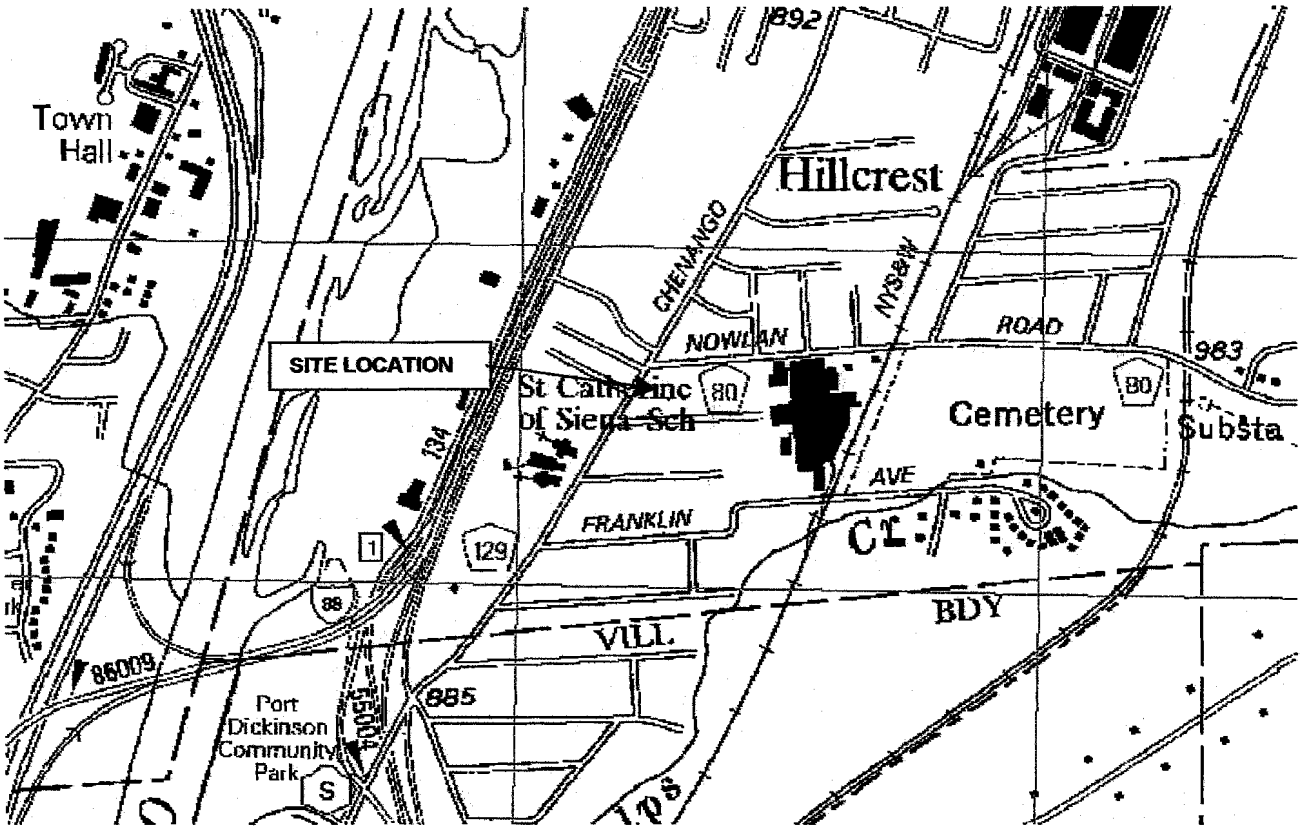
B. Health & Safety Plan

GeoLogic NY, Inc.

PO Box 5080, Cortland, NY 13045, 607-836-4400, Fax: 607-836-4403

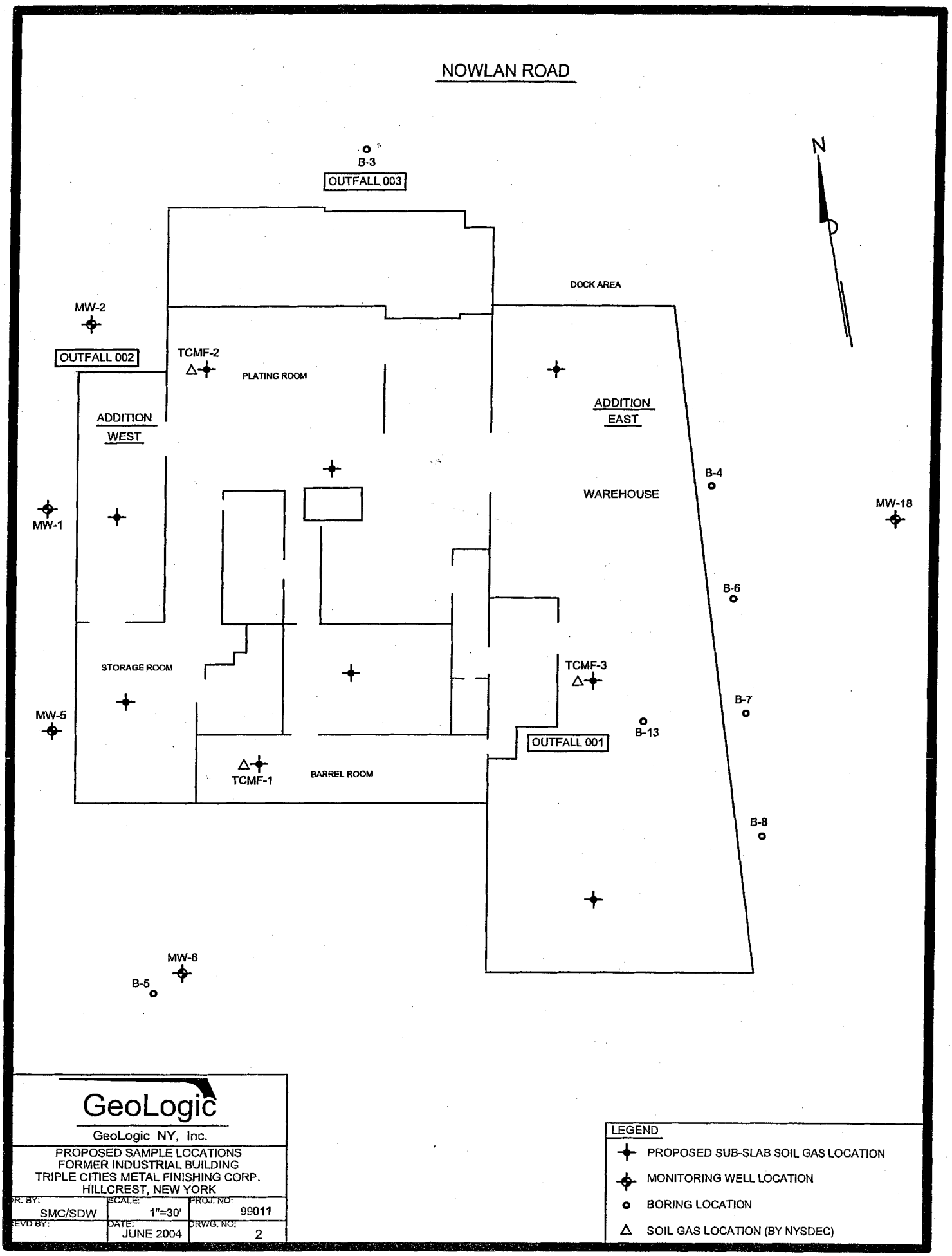
APPENDIX A

DRAWINGS



Source: www.nysgis.state.ny.us

SITE LOCATION PLAN
FORMER TRIPLE CITIES METAL FINISHING CORPORATION
NOWLAN ROAD
COMMUNITY OF HILLCREST
BROOME COUNTY, NEW YORK
Drawing No. 1



GeoLogic

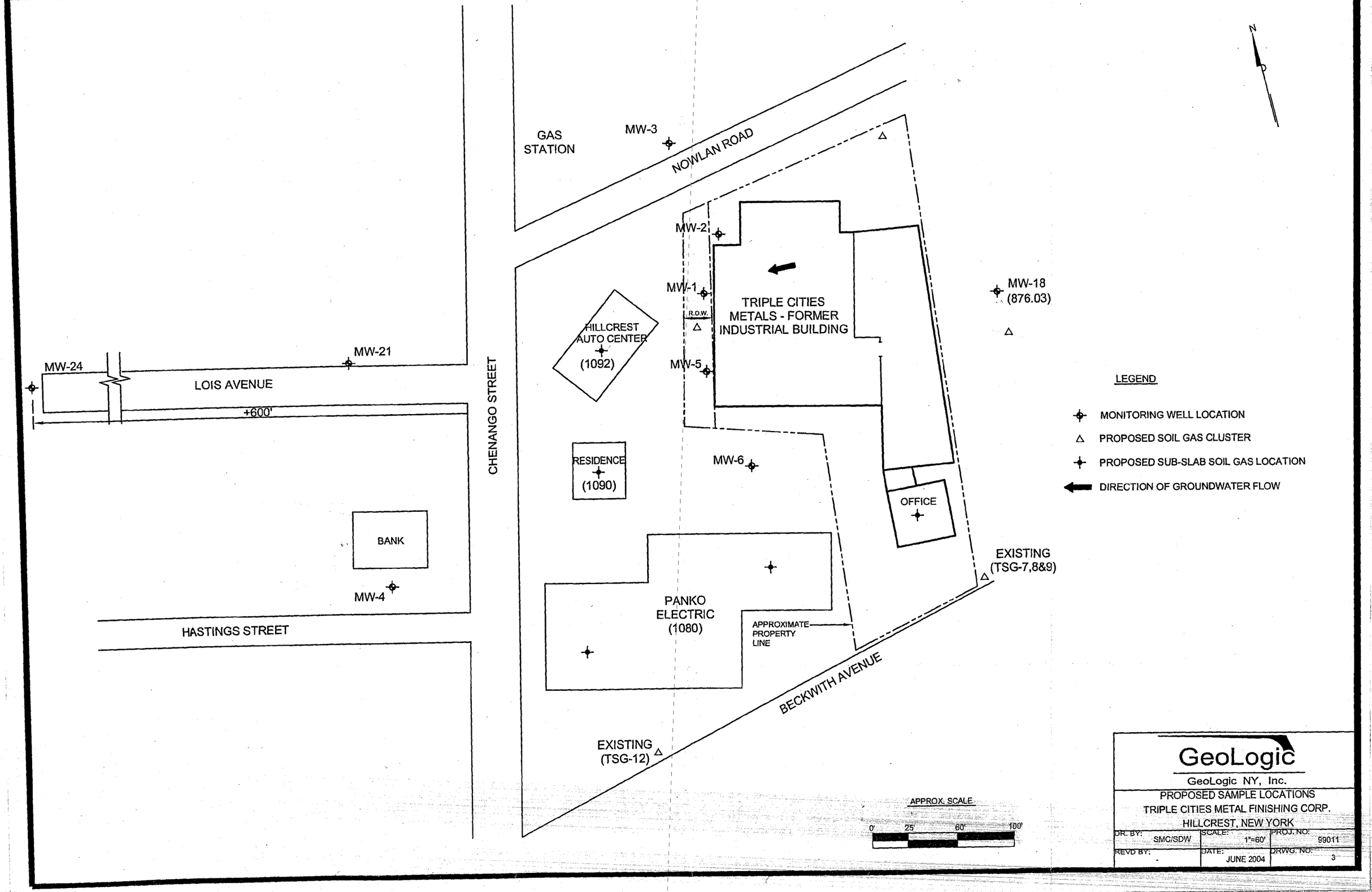
GeoLogic NY, Inc.

PROPOSED SAMPLE LOCATIONS
FORMER INDUSTRIAL BUILDING
TRIPLE CITIES METAL FINISHING CORP.
HILLCREST, NEW YORK

DR. BY:	SCALE:	PROJ. NO:
SMC/SDW	1"=30'	99011
REVD BY:	DATE:	DRWG. NO:
	JUNE 2004	2

LEGEND

- PROPOSED SUB-SLAB SOIL GAS LOCATION
- MONITORING WELL LOCATION
- BORING LOCATION
- △ SOIL GAS LOCATION (BY NYSDEC)



GeoLogic

GeoLogic NY, Inc.

PROPOSED SAMPLE LOCATIONS
TRIPLE CITIES METAL FINISHING CORP.
HILLCREST, NEW YORK

DR. BY: SMC/SDW	SCALE: 1"=60'	PROJ. NO: 99011
REVD BY: -	DATE: JUNE 2004	DRWG. NO: 3

GeoLogic NY, Inc.

PO Box 5080, Cortland, NY 13045, 607-836-4400, Fax: 607-836-4403

APPENDIX B

HEALTH & SAFETY PLAN

GeoLogic NY, Inc.

PO Box 5080, Cortland, NY 13045, 607-836-4400, Fax: 607-836-4403

HEALTH AND SAFETY PLAN

FOR THE

INVESTIGATION WORK PLAN

At

BINGHAMTON REALTY
FORMER TRIPLE CITIES METAL FINISHING FACILITY
4 NOWLAN ROAD
HILLCREST, NEW YORK

Prepared By:
GeoLogic NY, Inc.
July 2004

TABLE OF CONTENTS

1. INTRODUCTION

These health and safety guidelines are an accompaniment to GeoLogic NY, Inc.'s Health and Safety Policies that have been provided to all employees.

The Health and Safety Plan (HASP) addresses the health and safety practices that will be employed by all GeoLogic NY, Inc. (GNY) Employees that will be participating in the work set forth in the Work Plan. A Site Location Map and a Site Plan are attached.

It is expected that officials from NYSDEC and NYSDOH will be visiting the site during site activities. GNY does not guaranty the health and/or safety of any person entering this site. Due to the potential hazards of this site and the activities occurring thereon, it is not possible to discover, evaluate, and provide protection for all possible hazards, which may be encountered. Strict adherence to the health and safety guidelines set forth herein, will reduce, but may not eliminate, the potential for injury at this site. The health and safety guidelines in this plan were prepared specifically for this site and should not be used on any other site. Copies are to be provided to NYSDEC and NYSDOH personnel prior to commencing field activities.

The HASP takes into account the specific hazards inherent to this project and presents procedures that are to be followed by GNY Employees. The objective of this project is to perform a subsurface evaluation in order to determine the extent of any soil, groundwater, and/or soil vapor contamination from past use or disposal of dry cleaning solvents.

The HASP is applicable to the following site activities:

- subsurface soil sampling
- subsurface air sampling
- real time air monitoring
- groundwater sampling

This Health and Safety Plan covers all employees of GNY who visit and/or work at this site.

2. SITE DESCRIPTION

2.1 Physical Description and Site History

The former Triple Cities Metal manufacturing facility is located at 4 Nowlan Road in the community of Hillcrest, Binghamton, New York. All facility processes were terminated at the Nowlan Road facility in the winter of 1999-2000; the building is currently vacant. The site, consisting of two adjacent parcels, encompasses 0.88 acres, and is bordered on the south by Beckwith Avenue, and on the east by the B. W. Elliot Manufacturing Company (former CAE Link facility), on the west by two commercial properties and a residence and on the north by Nowlan Road. Further south, east and north are residential properties.

As part of A NYSDEC Soil Vapor Investigation in Hillcrest, sub-slab air samples were taken at the Triple Cities Metal Facility on February 25, 2004 by URS Corporation. Sampling locations are shown on Drawing No. 2. The air samples taken by URS Corporation revealed the following concentrations:

Sample ID	Location	Trichloroethene Concentration
TCMF-1	Sub-Slab Soil Vapor In the former Barrel Room Area	1.8 mg/m^3 0.33 ppm
TCMF-2	Sub-Slab Soil Vapor In the former Plating Room Area	0.35 mg/m^3 0.06 ppm
TCMF-3	Sub-Slab Soil Vapor In the former Warehouse Area – East Addition	13.0 mg/m^3 2.4 ppm

2.2 Summary of Major Health and Safety Risks

- Work around hydraulic punch probe, including entrapment, pinch points and electrical shock

- Slip, trips and falls
- Noise

3. EMERGENCY CONTACTS & COMMUNICATIONS

3.1 Communications

GNY field personnel will be equipped with cellular telephones. This will enable field personnel to communicate directly with local emergency support units should an accident or injury occur during field operations.

The safety officer is Susan Cummins. The Principal–in-Charge is Marjory Rinaldo-Lee, President. Both can be contacted at **(607) 836-4400**.

3.2 Emergency Contacts

Emergency Phone Numbers for this site are:

Police	911
Fire	911 - Local
Ambulance	911
Hospital	911
	Binghamton General Hospital
	10 Mitchell Avenue, Binghamton, New York
	607-762-2231 (Emergency Services)

Directions: Exit site and proceed south of Chenango Street for about 1.5 miles, Take entrance onto Route 7 south; proceed 3 miles to the Brandywine Highway (Route 363); stay on Route 363 for about 2 miles; exit onto Route 434 (toward Vestal); take left onto Washington Street, first right onto Vestal Street and first left onto Mitchell; follow signs to Emergency entrance. (Map to hospital is attached)

GNY Office 1-800-836-4401 or 1-607-836-4400

NYSDEC Spill Hotline 1-800-457-7362 (Spills must be reported within 2 hours of their

discovery.)

The First Aid Kit provided by GNY must be kept within a reasonable distance of personnel at all times.

3.3 Safety Items

A utility clearance for exterior probing will be arranged by GNY. During the initial site visit, identify and record possible hazards that do, or may, exist at the site.

The safety of employees working around drilling equipment should be maintained at all times.

All accidents or injuries must be reported within a 24-hour period to the Health and Safety Officer (if not available, report to Marjory Rinaldo-Lee or Forrest C. Earl) This includes even minor cuts and abrasions. Failure to immediately report accidents and injuries sustained on the job may result in the loss of workers compensation and disability benefits. All employees reporting an accident or injury will be required to fill out an accident report form.

All GNY personnel working/visiting the site must sign this plan in the space provided below. A copy of this signed acknowledgement will be kept in each signatories personnel file and in the project file **Job No. 99011A.**

_____	_____
NAME	DATE
_____	_____
NAME	DATE
_____	_____
NAME	DATE
_____	_____
NAME	DATE
_____	_____
NAME	DATE

4. SITE HAZARD ASSESSMENT

4.1 Physical Hazards

The physical hazards associated with the work to be performed by GNY are mainly associated with the operation of the Geoprobe®. Personnel will be experienced in the proper operation of the equipment and familiar with the equipment-specific hazards and the built-in safety mechanism of that equipment.

The hazards involved with the use of a Geoprobe® can be significant and include the hazards of pinch points, entrapment in the machinery, impact from moving parts, fatigue, electrocution of overhead power lines and buried utilities. The operator and operator's helper are the only two people allowed to operate the Geoprobe®. Personnel near the Geoprobe® should be aware of what is overhead during drilling procedures. GNY shall require that other personnel entering the Work Zone make their presence known to the operator and operator's helper, and when possible, maintain visual contact with these persons.

For purposes of this Health and Safety Plan, "Work Zone" will be defined as the area within a 10-foot radius of the Geoprobe®

4.1.1 Manual Lifting

Manual lifting of heavy objects will be required. Failure to follow proper lifting techniques can result in back injuries and strains. Special attention will be given to the lifting and moving of heavy objects (drills, jackhammers, probe equipment and 55-gallon barrels). All personnel will be trained in the proper methods of lifting heavy objects.

4.1.2 Utilities

GNY will be responsible for contacting UFPO to locate public utilities, both underground and aboveground. These locations shall be physically marked in the field. Location of boring points will take into consideration the degree of accuracy of these locations and provide adequate distances from the identified utilities. GNY personnel will have the right to make adjustments to sampling point locations should they feel that there are safety

issues associated with the designated location.

4.1.3 Noise

Noise is a potential health hazard associated with the operation of the drill rig and excavation activities. Physical responses to excessive noise can include an increase in heart rate, blood pressure and respiration rate, muscle tension and fatigue. Excessive noise can inhibit verbal communications between site personnel. Hearing protection will be worn during drilling operations. For other site activities, in the absence of instrumentation, an appropriate rule of thumb is that when normal conversation is difficult at a distance of 2 to 3 feet, hearing protection is required.

4.1.4 Temperature Extremes

The air temperatures are expected to be 60°F to 80°F in the late summer, early fall. Based on expected temperature conditions, neither heat stress or cold stress conditions are anticipated.

4.2 Chemical Hazards

Based on previous investigation at the site by others and the known history of the site, the contaminants of concern are chlorinated compounds and heavy metals. These contaminants may be encountered during the drilling of holes through the floor slab of the building, in the soil or soil vapor in these borings, drilling and sampling of soil vapor implants along the periphery of the property, or during the sampling the groundwater monitoring wells. There are several possible routes of exposure to persons working at the site that include dermal and respiratory routes, ingestion, and eye contact. The personal protection equipment and monitoring to be used at this site is listed in Section 5 and Section 6.

5. LEVELS OF PROTECTION

Since site personnel may be exposed to chemical contaminants released during the sampling activities, various levels of Personal Protection Equipment may be necessary. The monitoring equipment and PPE to be used are determined based on the task being performed. It is anticipated that most work will be performed in Level D, with potential upgrade to Level C. The task specific equipment and PPE are summarized below:

Task: Soil and Soil vapor Sampling Below Floor Of Building and along Property Boundaries

The initial PPE to be worn by GNY personnel performing these activities will be at Level D and may include: hardhat, steel-toed boots and OSHA-approved eye, and ear protection. Level C PPE will be immediately available for use, if monitoring results warrants use.

Task: Installation of Soil Vapor Clusters

The initial PPE that will be worn by the Geoprobe® operator and helper during drilling activities will include: steel-toed boots and OSHA-approved eye, and ear protection. The PPE to be used by the supervisor may include: hard hat, and OSHA-approved eye protection and ear protection. Level C PPE will be immediately available for use by the driller, driller's helper and other GNY field personnel, if monitoring results warrant use.

Task: Groundwater Sampling of Monitoring Wells

The PPE to be used during groundwater sampling operations will be contingent upon conditions encountered during drilling. Minimal PPE may include chemically resistant gloves and OSHA-approved eye protection during groundwater sampling.

Task: Installation of SVE system

The PPE that will be worn during the installation of the SVE system will be hearing and eye protection when using power hand tools, and work gloves.

No confined-space entry will be allowed.

6. MONITORING

6.1 Work Zone Monitoring

Volatile compound detectors will be used during the probing and sampling operations in order to determine the approximate concentrations of ionizable vapors emanating from the sampling points. The breathing zones occupied by all workers may be checked with the VC (volatile compounds) detector during soil sample retrieval and/or when solvent-like odors are noticed.

If the concentrations detected by the PID are less than 5 ppm in the breathing zone, no breathing apparatus is necessary. If sustained concentrations are greater than 5 ppm, an air-purifying respirator with the appropriate cartridges must be worn. If the concentrations are greater than 500 ppm, all work must be stopped and the work area must be re-evaluated.

While sampling inside adjacent property buildings, access of building occupants to the immediate area of sample collection will be restricted.

6.2 Community Air Monitoring Plan

During the outdoor probing activities (installation of soil vapor implants) offsite transport of VC is possible. Depending upon site conditions at the time the work is performed and atmospheric conditions, controls may be necessary to reduce the offsite transport of VC These controls may include wetting soils removed during drilling activities.

Real-time air monitoring for volatile compounds at the perimeter of the work area is necessary. The plan will include the following:

- Volatile organic compounds will be monitored daily at the downwind perimeter of the work area. If total organic vapor levels exceed 5 ppm above background, work activities must be halted and monitoring continued under the provisions of a Vapor Emission Response Plan. All readings must be recorded and be available for State (DEC & DOH) personnel to review.

6.3 Vapor Emission Response Plan

If the ambient air concentration of organic vapors exceeds 5 ppm above background at the perimeter of the work area, activities will be halted and monitoring continued. If the organic vapor level decreases below 5 ppm above background, work activities can resume, but more frequent intervals of monitoring, as directed by the Safety Officer, must be conducted. If the organic vapor levels are greater than 5 ppm over background, but less than 25 ppm over background at the perimeter of the work area, activities can resume provided:

- the organic vapor level 200 ft. downwind of the work area or half the distance to the nearest residential or commercial structure, whichever is less, is below 5 ppm over background and;

If the organic vapor level is above 25 ppm over background at the perimeter of the work area, activities must be shutdown. When work shutdown occurs, downwind air monitoring as directed by the Safety Officer will be implemented to ensure that vapor emission does not impact the nearest residential or commercial structure at levels exceeding those specified in the Major Emission section.

6.4 Major Vapor Emission

If the organic vapor levels greater than 5 ppm over background are identified 200 feet downwind from the work area or half the distance to the nearest residential or commercial property, whichever is less, all work activities must be halted.

If, following the cessation of the work activities, or as the result of an emergency, organic vapor levels persist above 5 ppm above background 200 feet downwind or half the distance to the nearest residential or commercial property from the work area, then the air quality must be monitored within 20 feet of the perimeter of the nearest residential or commercial structure (20-Foot Zone).

If efforts to abate the emission source are unsuccessful, and if any of the unacceptable organic vapor levels (greater than 5 ppm above background) persist for more than 30 minutes in the 20-Foot Zone, then the Major Vapor Emission Response Plan shall automatically be placed into effect.

However, the Major Vapor Emission Response Plan shall be immediately placed into effect if organic vapor levels are greater than 10 ppm above background.

6.5 Major Vapor Emission Response Plan

Upon activation, the following activities will be undertaken:

1. All Emergency Response Contacts as listed in the Health and Safety Plan of the Work Plan will go into effect.

2. The local police authorities will immediately be contacted by the Safety Officer and be advised of the situation.

3. Frequent air monitoring will be conducted at 30-minute intervals within the 20-Foot Zone. If two successive readings below action levels are measured, air monitoring may be halted or modified by the Safety Officer.

7. SITE CONTROL

It is important to minimize the possibility of human exposure to contamination, further contamination of the surrounding environment, and cross contamination of equipment. Access to portions of the site and proposed work areas are already physically restricted by the site setting. Pylons and caution tape may be used to assist in keeping unauthorized personnel from entering the Work Zone during drilling and sampling activities.

Based on the anticipated levels of contamination to be encountered, the only "work zone" for the work proposed in the Investigation Work Plan will include the work area itself. For purposes of this Health and Safety Plan, the "Work Zone" is defined as the area within a 10-foot radius of the Geoprobe®.

Free phase solvents are not anticipated at this site. However, sorbent pads are to be readily available in case accidental spillage occurs.

A temporary decontamination area will be set up near each of the work areas to collect wash water during decontamination procedures. The liquids will be containerized for disposal in the sanitary sewer. Proper procedures for sampling, decontamination of equipment, disposal of contaminated equipment and disposal of contaminated soil and/or water samples will be followed at all times.

8. DECONTAMINATION

All disposable field equipment and clothing should be disposed of properly on site, if possible, or containerized in disposable plastic bags for disposal at GNY's office dumpster.

All contaminated, reusable equipment and tools will be cleaned on site. Any contaminated equipment returned to the office will be cleaned immediately.

Drilling tools and equipment will be steam cleaned prior to the commencement of drilling operations and after the advancement of each boring (including the last boring drilled at the site).

9. TRAINING

Any GNY personnel working at this site must have completed the basic 40-hour OSHA health and safety training course and, if applicable, the supplemental yearly 8-hour refresher courses.

All GNY personnel who will be working at this site must go over site specific details outlining the field procedures with the project manager prior to visiting and/or working at the site.

GNY personnel authorized to work at this site include:

Susan Cummins – Project Manager, Health & Safety Officer

Marjory Rinaldo-Lee, Partner-in-Charge, Project Oversight

Joseph Menzel - Interim Remedial System Installation, Geoprobe® Operator

Judson Powell – Interim Remedial System Installation, Geoprobe® Operator

RECOMMENDED PPE
FORMER TRIPLE CITIES METAL FACILITY
NOWLAN ROAD
HILLCREST, NEW YORK

TASK TO BE PERFORMED	Anticipated Level of Protection	Coverall/ Tyvek	Glove In/Out	Air Purifying Respirator Cartridge/Can	Other Personal Protective Equipment
Geoprobe® Operator/Helper	D	Optional	LATEX /VINYL	IF NEEDED	Hardhat, steel-toed boots, eye and hearing protection
Collecting Soil Vapor Samples	D	Optional	LATEX /VINYL	IF NEEDED	
Collecting Groundwater Samples	D	Optional	LATEX /VINYL	IF NEEDED	Eye protection

HAZARD CHARACTERISTICS OF CONTAMINANTS OF CONCERN
POTENTIAL CONTAMINANTS AT FORMER TRIPLE CITIES METAL FACILITY
NOWLAN ROAD
HILLCREST, NEW YORK

Compound	CAS No.	Toxicity	Maximum Identified Concentration, ppbv	Physical Characteristic/Symptoms
Tetrachloroethene	127-18-4	IDLH 500 ppm PEL 100 ppm 200 ppm ceiling 300 ppm 5-min/3-hour peak	0.110 mg/m^3 0.1 ppm (sub-slab soil gas)	Colorless liquid; chloroform or sweet ether odor; non-flammable / irritant to mucous membranes; drowsiness, headaches, nausea
Dichloroethene	540-59-0	IDLH 4000 ppm PEL 200 ppm	0.079 mg/m^3 0.02 ppm (sub-slab soil gas)	Colorless liquid; slight chloroform odor; non-flammable / irritant to mucous membranes, CNS depressant
Trichloroethene	79-01-6	IDLH 1000 ppm PEL 100 ppm 200 ppm ceiling 300 ppm 5-min/3-hour peak	13.0 mg/m^3 (2.4 ppm) (sub-slab soil gas)	Colorless liquid; chloroform odor, / irritant to mucous membranes, skin irritant; headache, nausea, visual disturbance
Vinyl Chloride	75-01-4	IDLH N.D. PEL 1 ppm Ceiling 5 ppm	ND	Colorless liquid with a pleasant odor in high concentrations / frostbite-like skin and eye irritant / weakness, abdominal pain, pallor or cyan of extremities

File:/99011/irm2004/HASP

Map to Hospital