

11 July 2013

Bernadette Anderson Site Control Section New York State Department of Environmental Conservation Bureau of Technical Support 625 Broadway, 11th Floor Albany, New York 12233-7020 Howden North America Inc. 1775 Wehrle Drive Williamsville NY 14221 USA

Tel: 716 817 6900 Fax: 716 810 9419 Web: www.howden.com

RE:

Revised Brownfield Cleanup Program Application Former Buffalo Forge Property – Buffalo, New York NYSDEC BCP Site Number C915280

Dear Ms. Anderson:

In response to correspondence from the New York State Department of Environmental Conservation (NYSDEC) dated 12 June 2013 containing NYSDEC comments on the original Brownfield Cleanup Program (BCP) application for the above-referenced site, Howden North America Inc. is pleased to enclose one original and one electronic copy of its revised application to enter the New York State BCP.

Thank you for your assistance and please do not hesitate to contact us if you have additional questions or comments.

Very truly yours,

Howden North America Inc.

Julie C. Haley

Assistant General Counsel

Cc: Martin Doster, P.E. (NYSDEC - Region 9)

Morgan G. Graham (Phillips Lytle)

Jon Fox (ERM)

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BUREAU OF TECHNICAL SUPPORT



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



BROWNFIELD CLEANUP PROGRAM (BCP)

ECL ARTICLE 27 / TITLE 14

DEPARTMENT USE ONLY BCP SITE #:

07/2010							
Section I. Requestor Informati	on						
NAME HOWDEN NORTH AMERICA INC.							
ADDRESS 7907 Park Lane Rd, Ste	e 300						
CITY/TOWN Columbia, South Carol	lina	ZIP CODE 292	223				
PHONE (716) 817-6924	FAX (716) 807-4	1371	E-MAIL Julie.Haley@howden.com				
Is the requestor authorized to conduct business in -If the requestor is a Corporation, LLC, LLP of requestor's name must appear, exactly as given al from the database must be submitted to DEC wit	or other entity requiring author bove, in the NYS Departmen	t of State's Corporation & Busin	ness Entity Database. A print-out of entity information				
NAME OF REQUESTOR'S REPRESENTATIV	E Julie C. Haley						
ADDRESS 1775 Wehrle Drive							
CITY/TOWN Williamsville, New Y	ork	ZIP CODE 142	221				
PHONE (716) 817-6924	FAX (716) 807-43	71	E-MAIL Julie.Haley@howden.com				
NAME OF REQUESTOR'S CONSULTANT J	on Fox, Environme	ental Resources Mar	nagement (ERM)				
ADDRESS 5788 Widewaters Park	kway						
CITY/TOWN Syracuse, New Yo	ork	ZIP CODE 132	214				
PHONE (315) 233-3035	FAX (315) 315-44	5-2543	E-MAIL jon.fox@erm.com				
NAME OF REQUESTOR'S ATTORNEY MO	rgan G. Graham, F	Phillips Lytle LLP					
ADDRESS 3400 HSBC Center							
CITY/TOWN Buffalo, New York		ZIP CODE 142	203				
PHONE (716) 847-7070	FAX (716) 854-61	00	E-MAIL mgraham@phillipslytle.com				
THE REQUESTOR MUST CERTIFY THAT H CHECKING ONE OF THE BOXES BELOW:	E/SHE IS EITHER A PART	ICIPANT OR VOLUNTEER I	N ACCORDANCE WITH ECL 27-1405 (1) BY				
PARTICIPANT A requestor 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. NOTE: By checking this box, the requestor 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.							
Requestor Relationship to Property (check one):	Potential /Future Purch	aser Other					
Previous Owner ✓ Current Owner If requestor is not the site owner, requestor will -Proof of site access must be submitted for nor	have access to the property th	Page 1	Yes No RECEIV				

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TECHNICAL SUPPORT

PROPERTY NAME Former Buffalo Forge Prope	rty					
ADDRESS/LOCATION 490 Broadway	CITY/TOWN	Buffalo, Nev	v York	ZIP CO	DDE 14204	4
MUNICIPALITY(IF MORE THAN ONE, LIST ALL): City of Buffalo						
COUNTY Erie	SITE SIZE (ACRES) 12.4	82			
LATITUDE (degrees/minutes/seconds) 42 ° 53 · 26	6.80 "	LONGITUDI	E (degrees/minut	es/seconds) 7	′8 ° 51	· 23.70 "
HORIZONTAL COLLECTION METHOD: SURVEY 🗸	GPS MAP	HORIZONTA	AL REFERENCI	E DATUM: V	/GS 84	
COMPLETE TAX MAP INFORMATION FOR ALL TAX PARO PER THE APPLICATION INSTRUCTIONS. Parcel Address	CELS INCLUDED W	ITHIN THE PR	OPERTY BOUN	NDARIES. AT	TTACH REQU	JIRED MAPS Acreage
More than three parcels; please see Attacl	nment A					
 Do the property boundaries correspond to tax map If no, please attach a metes and bounds descriptio Is the required property map attached to the applie Is the property part of a designated En-zone pursuant of the property of the pr	n of the property. cation? (applicati ant to Tax Law §	on will not b 21(b)(6)?	e processed v	vithout map	✓ Yes	S No
If no, please attach a metes and bounds description 2. Is the required property map attached to the application of a designated En-zone pursus For more information please see Empire State Designation of the property area (name) Census Tract 25.02 (002502 on ES) Percentage of property in En-zone (check one):	n of the property. cation? (application!) (application of the cate	on will not b 21(b)(6)? site. ap for Northern Erie	County); meets Eligib 30-99% where the dev	ility Criteria A&B 1 1 7elopment)	S No
If no, please attach a metes and bounds descriptio 2. Is the required property map attached to the applic 3. Is the property part of a designated En-zone pursus For more information please see Empire State Destroyers, identify area (name) Census Tract 25.02 (002502 on EST) Percentage of property in En-zone (check one): 4. Is this application one of multiple applications for project spans more than 25 acres (see additional caproperties in related BCP applications:	n of the property. cation? (application? (application) to Tax Law § velopment's websited in the second of the seco	on will not b 21(b)(6)? site. ap for Northern Erie [nent project, blication institution dential/comme	County); meets Eligib 30-99% where the deveructions)? If cotal area. Import the footprints of the property.	velopment yes, identify orted soil-like to former build Topography	OO% Yes Yes Yes Yes y name of	No No
If no, please attach a metes and bounds descriptio 2. Is the required property map attached to the applic 3. Is the property part of a designated En-zone pursus For more information please see Empire State Designated En-zone pursus of the property area (name) Census Tract 25.02 (002502 on ES) Percentage of property in En-zone (check one): 4. Is this application one of multiple applications for project spans more than 25 acres (see additional contents in related BCP applications: 5. Property Description Narrative: The property currently consists of vacant land in a highly-contents of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently consists of vacant land in a highly-content of the property currently content of the property currently	n of the property. cation? (application? (application)? (applicati	on will not be 21(b)(6)? site. ap for Northern Erie ment project, oblication institution dential/comme the property over astern portion one area is servince area is servince to the property, and the property and the property and the property and the property such as this roperty such as the roperty s	County); meets Eligib 30-99% where the deverties of the footprints of the property. ced by municipal the fact that the Requires ments, including	ported soil-like to former build Topography and water and s	00% Yes	No N

Section III. Current Property Owner/Operator Information									
OWNER'S NAME Howden North America Inc.									
ADDRESS 7909 Park Lane Rd, Ste 300									
CITY/TOWN Columbia, South C	arolina	ZIP CODE 292	223						
PHONE (716) 817-6924	FAX (716) 807-4371		E-MAIL Julie.Haley	@howd	len.com				
OPERATOR'S NAME									
ADDRESS									
CITY/TOWN		ZIP CODE							
PHONE	FAX		E-MAIL						
Section IV. Requestor Eligibilit	y Information (Please ref	er to ECL § 2	27-1407)						
If answering "yes" to any of the following 1. Are any enforcement actions pending 2. Is the requestor subject to an existing 3. Is the requestor subject to an outstand 4. Has the requestor been determined to 5. Has the requestor previously been de 6. Has the requestor been found in a civact involving contaminants?	g against the requestor regarding g order relating to contamination ding claim by the Spill Fund for have violated any provision of nied entry to the BCP?	this site? at the site? this site? ECL Article 27?	intentionally tortious	☐ Yes	☑ No ☑ No ☑ No ☑ No ☑ No ☑ No				
7. Has the requestor been convicted of a theft, or offense against public admir		a violent felony,	fraud, bribery, perjury,	☐ Yes	☑No				
8. Has the requestor knowingly falsified false statement in a matter before the	d or concealed material facts or k	knowingly subm	itted or made use of a	☐ Yes	☑No				
9. Is the requestor an individual or entit or failed to act, and such act or failur	y of the type set forth in ECL 27			☐ Yes	☑ No				
Section V. Property Eligibility I	Information (Please refer	to ECL § 27	-1405)						
 Is the property, or was any portion of If yes, please provide relevant inform Is the property, or was any portion of If yes, please provide: Site # Is the property subject to a permit under types, please provide: Permit types. Date permit if Is the property subject to a cleanup of If yes, please provide: Order # Is the property subject to a state or fed If yes, please provide explanation as 	ration as an attachment. Sthe property, listed on the NYS Class # der ECL Article 27, Title 9, other EPA ssued: Perr rder under navigation law Article deral enforcement action related	Registry of Inacer than an Interinal ID Number:	m Status facility? ate: ticle 17 Title 10?	☐ Yes Disposal S ☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes	☑No ites? ☑No ☑No ☑No ☑No				
Section VI. Project Description									
What stage is the project starting at? Please attach a description of the project • Purpose and scope of the project	Investigation which includes the following co	_	emediation						
Estimated project schedule									

Section VII. Property's Environmental History									
To the extent that existing information/studies/reports are available to the requestor, please attach the following: 1. Environmental Reports 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. SAMPLING DATA: INDICATE KNOWN CONTAMINANTS AND THE MEDIA WHICH ARE KNOWN TO HAVE BEEN AFFECTED. LABORATORY REPORTS SHOULD BE REFERENCED AND COPIES INCLUDED.								
Contaminant Category	Soil	Groundwater	Surface Water	Sediment	Soil Gas				
Petroleum	х	Х							
Chlorinated Solvents									
Other VOCs									
SVOCs	х								
Metals	х	Х							
Pesticides									
PCBs	х								
Other*									
*Please describe:									
3. SUSPECTED CONTAC AFFECTED. PROVIDE I			TAMINANTS AND THE MENT.	IEDIA WHICH MAY	HAVE BEEN				
Contaminant Category	Soil	Groundwater	Surface Water	Sediment	Soil Gas				
Petroleum	Х								
Chlorinated Solvents									
Other VOCs									
SVOCs	Х								
Metals	X								
Pesticides									
PCBs									
Other*									
*Please describe:									
	OR SUSPECTED SCHMENT.	OURCES OF CONTAMI	NANTS (CHECK ALL TH	AT APPLY). PROVII	DE BASIS FOR				
Above Ground Pipeline or Tank									
5. INDICATE PAST LAN	D USES (CHECK	ALL THAT APPLY):							
☐Coal Gas Manufacturin☐Pipeline Other:	□Coal Gas Manufacturing □ Agricultural Co-op □ Dry Cleaner □ Salvage Yard □ Bulk Plant □ Pipeline □ Service Station □ Landfill □ Tannery □ Electroplating □ Unknown								
6. PROVIDE A LIST OF PREVIOUS PROPERTY OWNERS AND OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS AS AN ATTACHMENT. DESCRIBE REQUESTOR'S RELATIONSHIP, IF ANY, TO EACH PREVIOUS OWNER AND OPERATOR. IF NO RELATIONSHIP, PUT "NONE".									

Section VIII. Contact List Information

Please attach, at a minimum, the names and addresses of the following:

- 1. The chief executive officer and planning board chairperson of each county, city, town and village in which the property is located.
- 2. Residents, owners, and occupants of the property and properties adjacent to the property.
- 3. Local news media from which the community typically obtains information.
- 4. The public water supplier which services the area in which the property is located.
- 5. Any person who has requested to be placed on the contact list.
- 6. The administrator of any school or day care facility located on or near the property.
- 7. The location of a document repository for the project (e.g., local library). In addition, attach a copy of a letter sent to the repository acknowledging that it agrees to act as the document repository for the property.

Section IX. Land Use Factors (Please refer to ECL § 27-1415(3))						
1. Current Use: ☐Residential ☐Commercial ☐Industrial ☑Vacant ☐Recreational (check all that apply) Provide summary of business operations as an attachment.						
2. Intended Use Post Remediation: ☐Unrestricted ☐Residential ☑Commercial ☑Industrial (check all that apply) Provide specifics as an attachment.						
3. Do current historical and/or recent development patterns support the proposed use? (See #14 below re: discussion of area land uses)	☑Yes □No					
4. Is the proposed use consistent with applicable zoning laws/maps?	☑Yes □No					
5. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, designated Brownfield Opportunity Area plans, other adopted land use plans?	☑Yes □No					
6. Are there any Environmental Justice Concerns? (See §27-1415(3)(p)).	□Yes ☑No					
7. Are there any federal or state land use designations relating to this site?	□Yes ☑No					
8. Do the population growth patterns and projections support the proposed use?	☑Yes □No					
9. Is the property accessible to existing infrastructure?	☑Yes □No					
10. Are there important cultural resources, including federal or state historic or heritage sites or Native American religious sites within ½ mile?	☑Yes □No					
11. Are there important federal, state or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species within ½ mile?	□Yes ☑No					
12. Are there floodplains within ½ mile?	□Yes ☑No					
13. Are there any institutional controls currently applicable to the property?	□Yes ☑No					
14. Describe the proximity to real property currently used for residential use, and to urban, commercial, industri recreational areas in an attachment.	al, agricultural, and					
15. Describe the potential vulnerability of groundwater to contamination that might migrate from the property, including proximity to wellhead protection and groundwater recharge areas in an attachment.						
16. Describe the geography and geology of the site in an attachment.						

Sec	ction X. Statement of Certification and Signatures
(Ву	requestor who is an individual)
of D fortl	tis application is approved, I acknowledge and agree to the general terms and conditions set forth in DER-32 <i>Brownfield</i> camp <i>Program Applications and Agreements</i> and to execute a Brownfield Cleanup Agreement (BCA) within 60 days of the date DEC's approval letter. I also agree that in the event of a conflict between the general terms and conditions of participation set in DER-32 and the terms contained in a site-specific BCA, the terms in the BCA shall control. I hereby affirm that rmation provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that false statement made herein is punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.
Date	e: Signature: Print Name:
(Ву	an requestor other than an individual)
appl ackn Agre agre cont attac	reby affirm that I am President and CEO (title) of Howden North America Inc. (entity); that I am authorized by that entity to make this lication; that this application was prepared by me or under my supervision and direction. If this application is approved, I nowledge and agree to the general terms and conditions set forth in DER-32 Brownfield Cleanup Program Applications and elements and to execute a Brownfield Cleanup Agreement (BCA) within 60 days of the date of DEC's approval letter. I also see that in the event of a conflict between the general terms and conditions of participation set forth in DER-32 and the terms ained in a site-specific BCA, the terms in the BCA shall control. I hereby affirm that information provided on this form and its characteristic is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is shable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Print Name: Karl Kimmerling President 4.
UBN	MITTAL INFORMATION:
hree	e (3) complete copies are required.
	Two (2) copies, one paper copy with original signatures and one electronic copy in Portable Document Format (PDF) on a CD, 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) paper 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.
OR D	EPARTMENT USE ONLY

LEAD OFFICE:_

BCP SITE T&A CODE:_

Section II.

ADDRESS/LOCATION

This Brownfield Cleanup Program (BCP) Property has multiple street addresses. It is commonly known as the Former Buffalo Forge Property. The Property is often identified as being located at 490 Broadway Street, Buffalo, New York. The Property subject to the BCP includes approximately 8.0 acres of former factory area and an additional approximately 4.5 acres associated with related neighboring parcels. The BCP Property totals approximately 12.482 acres, bounded by Broadway Ave. to the South; Toussey and Spring Streets to the West (with the BCP Property including two parcels on Spring Street); and Sycamore Street to the North. The eastern portion of the Property is comprised of three tax parcels that border Mortimer Street (to the West), Matthews Street (to the North), George Street, Rey Street and Broadway Ave. (to the South). A total of seven (7) parcels comprise the BCP Property (490 Broadway (approx. 7.982 acres); 498 Broadway (approx. 0.779 acres); 187 Mortimer (approx. 1.498 acres); 213 Mortimer (approx. 0.933 acres); 233 Mortimer (approx. 0.667 acres); 498 Spring (approx. 0.316 acres); and 516 Spring (approx. 0.307 acres).

COMPLETE TAX MAP INFORMATION FOR ALL TAX PARCELS INCLUDED WITHIN THE PROPERTY BOUNDARIES

1.	490 Broadway
2.	498 Broadway
3.	187 Mortimer
4.	213 Mortimer
5.	233 Mortimer
6.	498 Spring
7.	516 Spring

Parcel No.	Section	Block	Lot	Acreage
	No.	No.	No.	_
111.41-6-1.1	111.41	6	1.1	7.982
111.41-5-31.1	111.41	5	31.1	0.779
111.41-5-1.1	111.41	5	1.1	1.498
111.41-4-1.1	111.41	4	1.1	0.933
111.41-8-26	111.41	8	26	0.667
111.41-7-17.1	111.41	7	17.1	0.316
111.41-7-12.1	111.41	7	12.1	0.307

Total = 12.482 acres

The following Property maps are attached in Attachment A.1:

Figure 1 – BCP Site and Adjoining Properties

Figure 2 – Site Location on USGS 7.5 Minute Quadrangle Map

Figure 3 – Tax Map

VI. Project Description:

Previous environmental studies have concluded or demonstrated that the Property is an excellent candidate for the New York State BCP. The purpose of the BCP Project is to perform a final environmental investigation to address any data gaps and to design a final remedy. Redevelopment of the Property would most likely occur concurrently with potential additional remediation, including institutional and/or engineering controls. The planned re-use of the Property could encompass a combination of remedies, uses and development scenarios. community and developer interests will merge and drive a potential mixture of commercial/industrial uses along with possibly parcels for a form of residential use. Our BCP Application anticipates a dynamic project with environmental factors and economic factors evolving in a manner that will identify the preferred end use and cleanup criteria for each parcel. We expect that the further assessment and resolution of environmental conditions will prompt developer interest and define development objectives. The presumptive remedial approach is to obtain final closure on any remaining data gaps or uncertainties, and design an appropriate and applicable site management plan which would be implemented during redevelopment activities. Anticipated remedial measures would include limited source material removal and the placement of a soil cover system over impacted surface materials which would not otherwise be covered by development improvements (e.g. parking lots, sidewalks, building foundations, etc.). Redevelopment interest in the Property is expected to be spurred by entering into the BCP. The Property is a prime candidate for the BCP, in order to establish a "shovel ready" site, for appropriate redevelopment.

The purpose of this BCP Project is to twofold: first to conduct a Remedial Investigation (RI) to appropriately characterize current site environmental conditions and second to develop Remedial Actions to adequately address all conditions of environmental concern identified during the RI. Using the site data and information collected both from previous site studies and as part of the RI, various remedy alternatives will be proposed, evaluated and ultimately selected for implementation. This entire project will be conducted in accordance with the NYSDEC's guidance document DER-10 "Technical Guidance for Site Investigation and Remediation," dated May 2010.

The scope of this BCP Project involves both investigative and corrective measures. Previous investigations of the Property have provided documentation of impacts to the surface and subsurface soil/fill but those results did not sufficiently characterize the Property for remedial purposes. The presumptive RI will further characterize the Property areas of interest (AOIs) identified during the previous investigations to support planned development. Based on the historical uses of the Property and documented characterization results, a scope of work consistent with DER-10 has been developed to further investigate and characterize surface and subsurface conditions and is attached hereto as Attachment A.2. This presumptive scope of work details specific tasks that will

facilitate Property characterization in compliance with BCP requirements. Specifically, when used in concert with results of previous investigations, the findings of the RI will be used to:

- Describe the source, amount, concentration, persistence, mobility, form (e.g., solid, liquid), and other significant characteristics of the contamination present.
- Define hydrogeological factors (e.g., depth to saturated zone, hydrologic gradients (if possible), proximity to a drinking water aquifer, and wetlands proximity).
- Define the aerial extent of the historical fill (i.e., 'black sand') layer and characterize the chemical composition of this material.
- Provide sufficient information to allow for the identification of potentially feasible remedial alternatives.

An RI Work Plan consistent with the conceptual scope of work in Attachment A.2 will be submitted to the Department for review as soon as possible.

The Remedial Action Objectives (RAOs) for the Property will be developed based on the contaminant characterization results, exposure pathways, and risk evaluation data. Based on existing knowledge of potential Property issues, the RAOs will likely involve preventing dermal exposure, inhalation, or incidental ingestion of contaminants identified in impacted soil to minimize potential risks to human health. As part of the development of the RAOs, a determination will be made as to whether Interim Remedial Measures (IRMs) will be necessary to properly manage site conditions.

The presumptive schedule for this BCP Project is as follows:

Phase	Milestone	Milestone Date
1A	Submit completed BCP Application to NYSDEC	7/12/2013
1B	Submit Remedial Investigation (RI) Work Plan and Signing	8/30/2013
	of Brownfield Cleanup Agreement (BCA)	
1C	Regulatory Approval of RI Work Plan	9/30/2013
1D	Complete RI Site Work	10/30/2013
1E	Submit RI Report	12/15/2013
1F	Regulatory Approval of RI Report	1/30/2014
2A	Submit Remedial Alternatives Analysis Report (AAR) and	2/15/2014
	Remediation Action Work Plan (RAWP)	

2B	Preliminary NYSDEC Approval of AAR and RAWP,	3/15/2014
	Issuance of NYSDEC Draft Decision Document and Fact	
	Sheet, and Start of 45-Day Public Comment Period on	
	AAR/RAWP	
2C	End of Public Comment Period and Issuance of NYSDEC	5/1/2014
	Comments on Draft AAR/RAWP	
2D	Regulatory Approval of Final AAR/RAWP	5/15/2014
2E	NYSDEC Issues Final Decision Document	5/30/2014
3A*	Initiate Remediation Site Work	6/15/2014
3B*	Complete Remediation Site Work	8/15/2014
3C*	Completion of Final Survey	8/30/2014
4A	Submission of Draft Environmental Easement (EE)	9/15/2014
4B	Regulatory Approval of Final EE	10/30/2014
4C	Filing of Final EE with Erie County	11/15/2014
5A	Submission of Draft Site Management Plan (SMP)	11/16/2014
5B	Regulatory Approval of Final SMP	1/15/2015
6A	Submission of Final Engineering Report (FER)	1/31/2015
6B	Regulatory Approval of FER/Issuance of Certificate of	3/30/2015
	Completion (COC)	
6C	Issuance of NYSDEC Fact Sheet Providing Notice of COC	4/15/2015
	and Engineering/Institutional Controls to the Brownfield Site	
	Contact List	
6D	Recording of Notice of COC with Erie County	4/30/2015

Phase Legend

- 1 BCP Agreement and Remedial Investigation
- 2 Remedial Action Selection and Design
- 3 Remedial Action Implementation
- 4 Environmental Easement
- 5 Site Management Plan
- 6 Final Engineering Report and Certificate of Completion

A revised detailed schedule will be submitted with RI Work Plan that will include a public comment period on the RI Work Plan and submission of an AA with the RI Report.

VII. Property's Environmental History

1. Previous Environmental Reports:

<u>Final Draft Report and Hazard Ranking System Model; Buffalo Forge Company Plant #1, Buffalo, New York;</u> NUS Corporation; January 27, 1987.

^{*} In the event no developer has agreed to initiate redevelopment of the property, these phases will not be implemented until such time as redevelopment occurs. That redevelopment would occur in a manner consistent with the Final RAWP and approved Final SMP. Dates are subject to change depending upon development plan, nature of the remedy, and funding.

NUS Corporation performed a USEPA Site Inspection and Hazard Ranking of the "Buffalo Forge Plant #1" site. This assessment addressed all parcels previously described as being on the Property included in the BCP. The summary of existing conditions indicated that various hazardous and non-hazardous wastes are generated and stored on-site until shipment off-site for disposal. The report also indicated that no groundwater use for drinking existed in the vicinity of the Property, and that the abandoned industrial/commercial wells exhibited high levels of hydrogen sulfide making them unsuitable for consumption without treatment. Also, the report noted there is no potential for contaminant migration to surface waters, as all sewers are combined and ultimately discharge to the City of Buffalo wastewater treatment plant. The Hazard Ranking Scores presented included: $S_M = 0$ ($S_S_W = 0$, $S_S_W = 0$) for contaminant migration; $S_S_S_W = 0$. In the moderate fire and explosion, $S_S_S_S_W = 0$ for direct contact with human receptors. The moderate fire and explosion score was related to the facility's then use of oils for lubrication and solvents in painting.

Phase I Environmental Assessment; Buffalo Forge Plant No. 1; 490 Broadway Avenue, Buffalo, New York; Dames & Moore; May 20, 1993.

Dames & Moore performed a Phase I environmental site assessment of the Buffalo Forge facility located at 490 Broadway, Buffalo, New York. This assessment did not address all parcels previously described as being included in the BCP Property, but focused strictly on the main plant site commonly known as 490 Broadway. This assessment identified several issues of concern in connection with the main plant based on information obtained during the assessment. Some issues concern regulatory compliance, asbestos or off-site waste disposal that were since resolved or rendered moot and that are not further addressed here.

Issues identified that would currently be identified as Recognized Environmental Conditions include the following: 1) A 20,000-gallon UST that was filled with water should be removed or officially closed; 2) Two other USTs on-site that were already filled with concrete; and 3) No records could be found that document the removal or closure of the USTs associated with the former gas station located at Sycamore and Spring Streets (which operated sometime between 1945 and 1953). That property was covered by Buffalo Forge's building at the time of the Dames & Moore assessment.

Other issues presented in the compliance discussions include aboveground storage tanks (ASTs), machine pits, a machine shop, lubricant storage area, paint storage area, paint booth grates, hazardous waste storage area, capacitor room, interior manholes, and a 2,000-gallon UST located in the "Sycamore Yard" removed in 1990 and a UST located near the former 513 Spring Street removed in 1964.

Dames & Moore indicated it would typically recommend a Phase II based on the information obtained regarding the Spring Street gasoline USTs to determine if the USTs are still in place and if so, to determine if they have leaked. However, the cost to core through the concrete foundation that covered the area of concern was considered prohibitive. In Dames & Moore's opinion, considering the fact that there are no potable water wells in the area and that the soils beneath the site are of low permeability, they believed the risks associated with this issue were minimal.

<u>Site Evaluation Report; Former Buffalo Forge Plant No. 1;</u> Conestoga Rovers & Associates; April 2000.

Conestoga Rovers & Associates (CRA) completed a preliminary environmental evaluation of the main plant site commonly known as 490 Broadway. This project did not address all parcels previously described as being included in the BCP Property. Based on background information collected, the following areas of potential environmental concern were identified and selected for further investigation: USTs, ASTs, Machine Pits, Assembly Area and Machine Shop Floors, Lubricant Storage Area, Paint Storage Area, Press Pit, Paint Booth Grate(s), Hazardous Waste Storage Area, Capacitor Room, and Interior Additionally, the City requested the analysis of samples of Manholes. accumulated water from the basement of the manufacturing building and of soil in the Mortimer Street Parking Lots. Limited soil staining was observed and low level organic vapor readings were obtained; however, no evidence of gross chemical presence in soil underlying the facility was observed. PAH compounds were present at concentrations which exceed the NYS standards in the following areas: the 20,000-gallon UST, Assembly Area/Machine Shop Floor, Press Pit and Hazardous Waste Storage Area. Exceedances of NYSDEC standards for metals in soil occurred in all but one of the analytical samples. CRA indicated that the concentrations detected are generally indicative of Site background.

<u>Decommissioning and Demolition Report; Buffalo Forge Facility, 490 Broadway Street, Buffalo, New York;</u> Brown and Caldwell Associates; September 14, 2007.

Brown and Caldwell Associates directed the decommissioning of the remaining equipment, demolition of the remaining buildings, remediation of soil beneath the building foundations, and transport and disposal of all waste materials off-site. This project did not address all parcels previously described as being included in the BCP Property, but focused strictly on the main plant site commonly known as 490 Broadway. This report summarized the environmental building survey and related materials characterization procedures, PCBs and asbestos cleanup procedures, decommissioning procedures (e.g., sump and pit residue management, floor sweeping, etc.), above-grade demolition and slab, foundation and sidewalk removal, PCBs soil remediation, removal of both a 5,000-gallon #2 fuel oil UST from outside Building 4 and a 4,000-gallon #2 fuel oil UST from

inside Building 10 with associated soil remediation, black sand characterization, miscellaneous remediation tasks, and wastes disposal.

Phase I Environmental Assessment Report; Former Buffalo Forge Site, Buffalo, New York; Benchmark Environmental Engineering & Science, LLC; January 2009.

Benchmark Environmental Engineering & Science, LLC (Benchmark) performed a Phase I site investigation in accordance with ASTM Standard 1527-05. This assessment addressed all parcels previously described as being included in the BCP Property. This assessment revealed evidence of the following Recognized Environmental Conditions in connection with the Property: The main plant Site (i.e., 490 Broadway) was a foundry from the late 1880s through the early 1990s. Black foundry sand was observed to be scattered throughout most Site soils in the former factory building areas during the 2006-2007 demolition and remedial work. With the exception of an area along Spring Street beneath the sidewalk where black sand was excavated and disposed off-Site, the black sand was partially consolidated or left in-place throughout the Site. Based on a review of historic Sanborn maps, a sand warehouse was identified at 490 Spring Street (now part of 498 Spring Street). It is not known whether new sand or spent foundry sand was stored in that building. Multiple underground storage tanks (USTs) were historically located on-Site. USTs not previously investigated and/or with unknown disposition include the gasoline USTs in the area of a former gasoline station on the corner of Sycamore and Spring Street, at least one UST in the area of a former gasoline station on the corner of Broadway and Mortimer, one gasoline UST on the parcel currently addressed as 187 Mortimer, and one gasoline UST in the area of 513 Spring Street (currently 490 Broadway). As there was some evidence of elevated petroleum compounds in the area of the 20,000gallon fuel oil UST during the April 2000 investigation, this area Benchmark reported as a potential environmental concern. Other environmental concerns considered historic recognized environmental conditions included: excavation and off-Site disposal of PCB-impacted concrete; excavation and off-Site disposal of PCB-impacted soil; removal of two USTs (i.e., 5,000-gallon fuel oil UST in the former Broadway Yard and 4,000-gallon fuel oil UST in the area of the former building #10); removal of petroleum-impacted soil associated with the USTs; excavation and off-Site disposal of black foundry sand along Spring Street; and the area of the 2,000-gallon gasoline UST in the former Sycamore Yard, which was investigated during the April 2000 investigation. Based on the information contained in this report, it was the opinion of the environmental professional that prepared the report that the additional investigation of the Property was warranted.

Phase II Environmental Assessment Report; Former Buffalo Forge Site, Buffalo, New York; Benchmark Environmental Engineering & Science, LLC; January 2009.

Benchmark performed a Phase II site assessment during December 2008 which involved a subsurface soil investigation that included the installation of 46 testpits and six soil borings across the site. A summary of the areas of concern, sample locations and rationale includes: TP-1 through TP-41 Black Foundry Sand/Main Plant (490 Broadway), TP-21 Historic Fuel Oil UST (490 Broadway), TP-42 Historic Gasoline UST (513 Spring), TP-43 and TP-44 Historic Gasoline UST (199 Mortimer), TP-45 and TP-46 Former Sand Warehouse (498 Spring), SB-1 through SB-3 Former Gasoline Service Station (Corner of Broadway and Mortimer), SB-4 through SB-6 Former Gasoline Station/UST (Mortimer and Matthews Streets).

Field observations made during this Phase II Site Investigation were stated to be consistent with the previous findings from the 2006-2007 building demolition and environmental remediation work; black foundry sand was observed to be distributed throughout most of the Property, with evidence of black foundry sand being noted in 25 subsurface sample locations in the former main plant area (i.e., 490 Broadway) and in one subsurface location in the area of the former sand warehouse (i.e., 498 Spring Street). The black foundry sand was generally encountered as lenses, small pockets or intermixed with other fill materials from approximately 0.5 fbgs to approximately 3.0 fbgs.

Analytical results indicated that the distribution of PAHs, arsenic, cadmium, zinc and mercury above 6NYCRR Part 375 Industrial Soil Cleanup Objectives (SCOs) is Site-wide and correlated with the distribution of black foundry sand. Other results indicate cadmium, copper, nickel and lead above 6NYCRR Part 375 Commercial SCOs and chromium and manganese above 6NYCRR Part 375 Restricted-Residential SCOs are also correlated with the black foundry sand. There was no evidence of impact encountered in the areas of the former gasoline stations or in the area of historic gasoline tanks. Subsurface samples collected from the 187 Mortimer Street parcel during this investigation contained arsenic above its 6NYCRR Part 375 Industrial SCO and benzo(a)anthracene, lead and mercury above their respective 6NYCRR Restricted-Residential SCOs. Only manganese was detected above its Restricted-Residential SCO on the 213 and 233 Mortimer Street parcels during this investigation.

Benchmark concluded that based on the existing data, it appears that the former Buffalo Forge Site is an excellent candidate for the New York State Brownfield Cleanup Program (BCP).

<u>Limited Ground Water Investigation Report, Former Buffalo Forge Facility – Buffalo, New York; ERM Project 0157929; 24 August 2012-10-18</u>

This investigation was initiated by Howden North America (HNA) to assess the actual ground water conditions at the Property and to evaluate the potential for contaminant migration in Site ground water. ERM and HNA selected locations for 11 temporary monitoring wells (TMW's) based on their position in relation to

former UST's and other areas of concern. In addition to a well installed to represent anticipated background (upgradient) conditions on the 187 Rey Street parcel, TMW's were placed into the subsurface at 498 Broadway, 498 Spring Street, and at the central parcel known as 490 Broadway where 8 TMW's were The findings confirm several working assumptions from previous investigations and add clarity to other issues. The Site has a perched ground water table that is inconsistent in dispersion and hydraulically separate from other water bearing strata. There was no evidence of off-Site migration of any contaminants that would drive risk to abutting or downstream groundwater users or property occupants. In fact, there was only one VOC quantified at a level only slightly higher than the NYSDEC TOGS ambient groundwater quality standards. The study successfully affirmed that the ground water pathway is not a significant threat to human health or the environment. Weathered petroleum was encountered during the early phases of the study in three of the TMW's, and the discovery was promptly reported on the NY Spills Hotline (Spill Number 11-13734). The referenced report was also provided to the Regional Spills office of NYSDEC as evidence that the observed petroleum was not a risk driver and that it was likely to be residual oil from the demolition activity. The NYSDEC Spill Number/File has been closed since August 6, 2012. In addition to the favorable analytical results for perched groundwater, the study provided groundwater and inferred bedrock contours plus a confirmation that anthropogenic metals are not significantly present in the perched groundwater. Given the findings and the absence of receptors for the perched local groundwater, the study effectively refocuses the project on soil conditions and soil risk pathways as previously assumed.

2. Sampling Data:

The known historical contaminants listed below are based strictly on data from the following reports:

Site Evaluation Report; Former Buffalo Forge Plant No. 1; Conestoga Rovers & Associates; April 2000.

<u>Decommissioning and Demolition Report;</u> <u>Buffalo Forge Facility, 490 Broadway Street, Buffalo, New York;</u> Brown and Caldwell Associates; September 14, 2007.

Phase II Environmental Assessment Report; Former Buffalo Forge Site, Buffalo, New York; Benchmark Environmental Engineering & Science, LLC; January 2009.

<u>Limited Ground Water Investigation Report, Former Buffalo Forge Facility – Buffalo, New York; ERM Project 0157929; 24 August 2012-10-18</u>

Sampling Data: Indicate Known Contaminants and the Media Which Are Known to							
Have Been Affected. Laboratory Reports Should Be Referenced and Copies Included.							
Contaminant	Soil	Groundwater	Surface	Sediment	Soil Gas		
Category			Water				
Petroleum	X	X					
Chlorinated							
Solvents							
Other VOCs							
SVOCs	X						
Metals	X	X					
Pesticides							
PCBs	X						
Other*							
*Please Describe:							

3. Suspected Contaminants:

Based upon information available in the review of historical documents for the Property, the suspect contaminants and the likely affected media for the Property include the following:

Suspected Contaminants: Indicate Suspected Contaminants and the Media Which May								
Have Been Affected. Provide Basis For Answer as an Attachment.								
Contaminant Soil Groundwater Surface Sediment Soil Gas								
Category			Water					
Petroleum	X							
Chlorinated								
Solvents								
Other VOCs								
SVOCs	X							
Metals	X							
Pesticides	Pesticides							
PCBs								
Other*								
*Please Describe:								

4. Known or Suspected Sources of Contaminants:

A review of historical information has provided the following list of conditions that have existed within the boundaries of the BCP Property which present the potential to be sources or suspect sources of contaminants, whether hazardous

substances or petroleum products. The Buffalo Forge facility was a foundry from the late 1880s through the early 1990s, with earlier products including machine tools (e.g., drill presses, bending rolls, shears, etc.). More recent operations included the manufacture of large industrial air moving equipment (e.g., fans, blowers, cabinets, etc.). Known contaminants associated with these operations included PCBs-contaminated oils, paints and painting-related solvents, lubricating oils and machining fluids, and waste foundry sand (exhibiting PAHs and heavy metals contaminants and petroleum fuels) which was determined to be scattered as a shallow layer throughout much of the main parcel of the Property during the 2006-2007 demolition and remedial work. In addition, multiple underground storage tanks have been historically located on the various parcels that now make up the BCP Property, including a 20,000-gallon fuel oil UST in the former Broadway Yard, a 5,000-gallon fuel oil UST outside Building 4, a 4,000-gallon fuel oil UST inside Building 10, a 2,000-gallon gasoline UST in the Sycamore Yard, two gasoline USTs (unknown size) in the area of a former gasoline station on the corner of Sycamore and Spring Street (southeast corner of Spring Street and Sycamore Street in the 1950 Sanborn Map); one 4,000-gallon gasoline UST at the 498 Broadway filling station (gasoline station between approximately 1931 and 1958), and one gasoline UST of unknown size at 223 Mortimer Street (a fibers and fabrics distributor) for which a permit was granted to replace an existing tank in August 1914. The 2012 Limited Ground Water study detected a single slight exceedance of the groundwater NYSDEC TOGS standard for one VOC in the Sycamore Yard area of the central parcel.

5. Past Land Uses:

Three separate areas have been addressed as part of this review of past land uses, including: 1) the main former Buffalo Forge Plant No. 1 site that is commonly known as 490 Broadway Street; 2) an area to the east of Mortimer Street between Broadway and Sycamore Streets; and 3) an area to the west of Spring Street between Broadway and Sycamore Streets. It should be noted that Area 1, the 490 Broadway parcel, encompasses a historical city roadway formerly known as Champlin Street that was located between, and ran parallel to, Spring and Mortimer Streets. Area 2, located east of Mortimer Street, contains the following current parcels: 498 Broadway, 187 Mortimer, 213 Mortimer and 233 Mortimer. Area 3, located west of Spring Street, contains the following current parcels: 498 Spring and 516 Spring.

This area of the City of Buffalo has been developed since the mid-1800s, and as is common for such developing neighborhoods, has experienced notable transformation throughout the decades in the various land uses. Primary examples include the following:

Area 1 – The current parcel at 490 Broadway historically consisted of two entire city blocks centered along Champlin Street between Mortimer and Spring Streets. Like the surrounding area, Champlin Street was a mixture of residential and

commercial properties. In the late 1800s, the Buffalo Forge facility originally operated along Broadway between Champlin and Mortimer Streets. During the late 1800s Champlin Street was located within the central portion of the site running from Spring Street to Mortimer Street. The primary land use of the portion of the property located south of Champlin Street consisted of Buffalo Forge Co., which included a machine shop, blacksmith and foundry, and E.N. Cook's Distillery, which included a malt house and various warehousing and storage. The portion of the property located to the north of Champlin Street consisted primarily of residential dwellings. From the 1920s to the 1950s, Champlin Street no longer appears on this site. The southern portion of the site consists primarily of Buffalo Forge Co. which includes a carpenter, machine shop and various warehousing structures. The northern portion of the site appears to include a filling station, an apparent residential gasoline tank, a furniture repair structure, several dwellings and a garage. In the 1980s, the entire site appears to be utilized by Buffalo Forge Co., primarily as a foundry, machine shop, and storage/warehousing facility.

Area 2 – The four current parcels represent the accumulation of numerous other sub-parcels over the years, including 498 Broadway (492-510 Broadway Street, 175-185 Mortimer Street, 11-17 Rey Street), 187 Mortimer (187-207 Mortimer Street, 12-36 Rey Street, 11-33 & 37 George Street), 213 Mortimer (213-231 Mortimer Street, 12-18 George Street, 13-25 Matthews Street) and 233 Mortimer (233-243 Mortimer Street and 14-18 Matthews Street). The primary land use from the early 1900s until the present has been for residential purposes. Notable commercial or industrial land uses within Area 2 have included: 1) a filling station and produce market at 498 Broadway in 1934 which later became a fish and produce market; 2) a fibers and fabrics distributor at 223-227 Mortimer from 1940 through1955; 3) a trucking firm at 213 Mortimer in 1934; and 4) the Buffalo Forge garage and parking lot at 6 and 14 Rey from 1960 through the early 1990s.

Area 3 – The two current parcels represent the accumulation of numerous other sub-parcels over the years, including 498 Spring (488-498 Spring Street) and 516 Spring (502-516 Spring Street). The primary land use from the early 1900s until the present has been for residential purposes. Notable commercial or industrial land uses within Area 3 have included: 1) Buffalo Forge storage at 490 Spring from 1960 through the early 1990s.

6. List of Previous Property Owners and Operators:

Current Property Owner: Howden North America Inc.

7909 Park Lane Rd, Ste 300

Columbia, SC 29223

(716) 817-6924

Howden North America Inc. 1775 Wehrle Drive Williamsville, NY 14221 (716) 817-6924

Howden North America Inc. and its predecessors have owned the property since at least 1877. Title work is not available relative to owners previous to the 1900s. Entity name information for Howden North America Inc. from the New York Department of State's Corporation and Business Entity Database (attached to this application as Attachment A.4) is reiterated below.

me Type	Entity Name
tual l	Howden North America Inc.
tual l	Howden Buffalo Inc.
tual l	Howden Fan Company
tual l	Buffalo Forge Company
tual A	AMPCO-Pittsburgh Securities II Corporation
1	tual tual tual tual

VIII. Contact List Information:

Chief Executive Officer

County of Erie: County Executive Mark Polencarz

16th Floor, Room 1600 95 Franklin Street

Buffalo, NY 14202

City of Buffalo: Mayor Byron Brown

201 City Hall 65 Niagara Square Buffalo, NY 14202

Planning Board Chair

County of Erie: Jason Knight, Planning Board Coordinator

95 Franklin Street, 10th Floor

Buffalo, NY 14202

City of Buffalo: James K. Morrell - Chairman

901 City Hall

Buffalo, NY 14202

Site Owner: Howden North America Inc.

1775 Wehrle Drive

Williamsville, NY 14221

Adjoining Property Owners by Address:

See Attachment A.3

IX. Land Use Factors

2. The proposed use of the BCP Property would be a commercial, light or heavy manufacturing/industrial use or mixed use. Development could entail retail, commercial, office space, and other mixed and multiple uses consistent with zoning, land use and BCP outcomes, as well as economic drivers. Consideration will also be made of whether planned re-use could include some form of residential development. Current infrastructure of roads, sewer, water and other utilities are available, and amenable to reuse and redevelopment. Existing infrastructure capacity is available. Public transportation is readily available on Sycamore Street and Broadway and Jefferson Avenue. Historical and recent development patterns support a commercial/industrial reuse.

Areas near the BCP Property bounded by Jefferson Avenue, and Sycamore, Mortimer, and Matthews Streets, have seen relatively recent single-family residential development. A small City of Buffalo paved recreational park is located at the corner of Broadway and Spring Street. Commercial use continues in various areas in the vicinity of the BCP Property, including Pratt-Willert Business Center; Henry's Shop (Hair Salon/Cutting); and House of China (Restaurant). Significant commercial development activity is occurring within .854 miles of the Property (e.g., Buffalo Medical Campus and related development). The closest public school, PS 41, is located on Madison Street, between Sycamore and Broadway, approximately 2 blocks from the BCP Property. The Pentecostal Temple Church of God is located at the corner of Matthews Street and Jefferson Avenue, approximately 1 block from the Property.

The proposed use is consistent with applicable zoning laws/maps. 490 Broadway is zoned M-2 (General Industrial District); 187, 213 and 233 Mortimer are zoned R3 (Dwelling District); 498 Spring Street is zoned CM (General Commercial District); and 516 Spring Street is zoned R3 (Dwelling District). Local residents and the City officials are receptive to reuse and redevelopment of the BCP Property. Should uses be proposed that conflict with current zoning designations, the possible pursuit of a variance or zoning change will be considered and discussed with the appropriate planning authorities.

10. The New York State Historic Preservation Office (NYSHPO) website (www.nysparks.com) has an online GIS tool using information found in the National Register of Historic Places including various Archeological Sensitivity Maps. Based on review of the NYSHPO's GIS tool, there are two sites that may be deemed cultural resources within 0.5 mile of the Former Buffalo Forge property:

Buffalo Trunk Manufacturing Company Building 125 Cherry St. Buffalo, NY 14204

St. Andrews Evangelical Lutheran Church Complex Corner of Sherman St. and Peckham St. Buffalo, NY

- 14. Figure 1 in Attachment A.1 provides detailed information on the proximity of the site to adjacent and nearby real property, and also provides detailed information on nearby property ownership, address, use, and zoning. Land use surrounding the site is typically commercial or residential.
- The vulnerability of groundwater in the vicinity of the Property is very low. There is no known or permitted use of groundwater for human consumption or agricultural purposes, so there is no reasonable likelihood of human exposure from consumption of groundwater. Also, there are no known groundwater wells of any type (e.g., water supply, monitoring, etc.) on the Property. This characteristic was documented by NUS in 1987 as part of the Property Hazard Ranking System investigation cited above. A contact at the Erie County Department of Health indicated that at that time groundwater was not used for drinking in Buffalo and that the few wells in the City that had been used for industrial purposes had been phased out.
- 16. The Property is located within the Erie-Ontario Lake Plain Physiographic Province, which is characterized by the gently sloping to flat topography of an abandoned lake bed. The current eastern shore of Lake Erie is located approximately 1.5 miles west of the Property. Bedrock underlying Erie County was derived primarily from the Upper Silurian and the Middle and Upper Devonian period. The bedrock in the area of the Property, Onondaga Limestone (Nedrow Member), the lowest formation of the Devonian period, is generally five feet or more below the ground surface. The Nedrow Member is an intermixed light-grey limestone and dark-grey chert bedrock. Bedrock outcrops were not observed on the subject site.

According to the <u>National Cooperative Soil Survey</u> prepared by the USDA Soil Conservation Service, soil beneath the portions of the site located west of Spring Street and along the northeast and far east sides of the Property is classified as Urban land-Collamer complex (Um). These areas are estimated to make up approximately 20% of the Property. The Collamer soil included in this complex is a nearly level, deep and moderately well drained soil that formed from silty and clayey glaciolacustrine deposits. The remainder of the Property is characterized as Urban Land (Ud). Urban land is generally covered by fill material, asphalt, concrete, buildings and/or other impervious structures. It includes parking lots, shopping and business centers, and industrial parks.

The depth to the bedrock surface on the Property was observed by Benchmark, as cited above, to be from 2.0' to 7.0' below grade. The temporary monitoting wells (TMWs) installed by ERM in 2012 found bedrock at depths ranging from approximately 2' bgs to just over 11' bgs. The document "Erie-Niagara Basin Ground Water Resources" prepared for the Erie-Niagara Basin Regional Water Resources Planning Board by A. M. LaSala, Jr., dated 1968, indicated that the Onondaga Limestone bedrock is characterized by water-bearing openings at bedding plane joints that are connected with solution-widened vertical joints. The area of the limestone formation located along the shore of Lake Erie is considered a discharge area, as groundwater recharge within the Erie-Niagara Basin takes place to the greatest extent in the higher elevations located to the south and east of the City. Under these conditions, as water moves toward its ultimate discharge within the Lake Erie basin, it tends to move upward through the vertical joints when nearing the lake shore. As a result, shallow groundwater which may exist within the unconsolidated material in the vicinity of the Property will tend to move laterally to the west. Such natural conditions minimize the potential for contaminant migration to any notable depth within the underlying bedrock. Contours of the Site's underlying bedrock are inferred from the ground water contours developed by ERM in 2012. They conclude that the predominant direction of perched water flow is towards the Southeast, but local bedrock contours will influence local areas of perched water flow. In the case of the 490 Broadway Site, there is a medial flow to the perched ground water which then moves towards the south (the Broadway) side of the property. This localized perched groundwater flow pattern likely is a result of the backfilling of the basements that formerly existed beneath the offices in this portion of the Site. The basements were backfilled with permeable gravel fill during site demolition activities in 2006-2007.

The natural chemical constituents in groundwater are obtained primarily from the solution of rock materials, both during percolation and lateral migration. The major constituent of limestone is Calcite (CaCO₃), but other dissolved minerals also are picked up as water passes through the bedrock of the basin, including Halite (NaCl), dolomite [CaMg(CO₃)₂] and Gypsum (CaSO₄.2H₂O). Due to the likelihood that groundwater will encounter these various minerals as it passes through the basin until discharge, significant concentrations of these minerals are present in the groundwater of the area. NUS noted as part of its investigation that high yield industrial wells in Buffalo were abandoned due to elevated H₂S levels. Groundwater quality within the City of Buffalo is commonly referred to as being brackish. The 2012 ERM report includes analytical data for widespread dissolved metals that they suggest are naturally occurring.

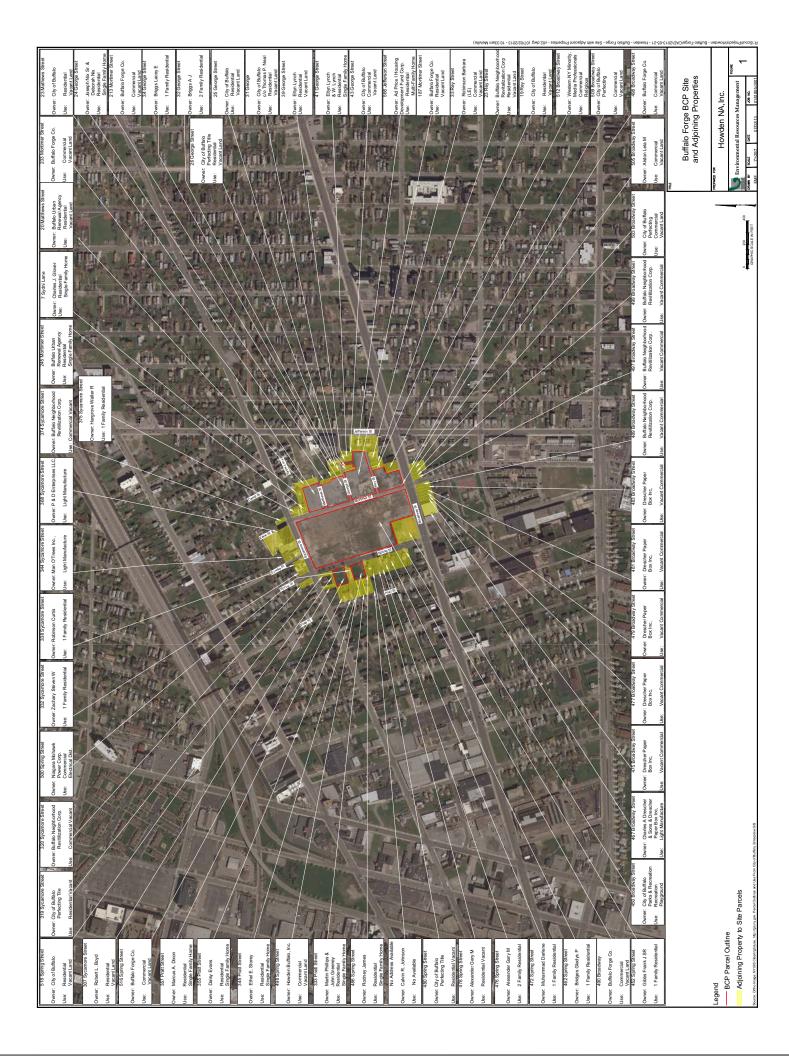
The Buffalo Public Library, Main Branch, has acknowledged that they will act as the document repository for the Site. A copy of the e-mail acknowledgement is presented in Attachment A.5.

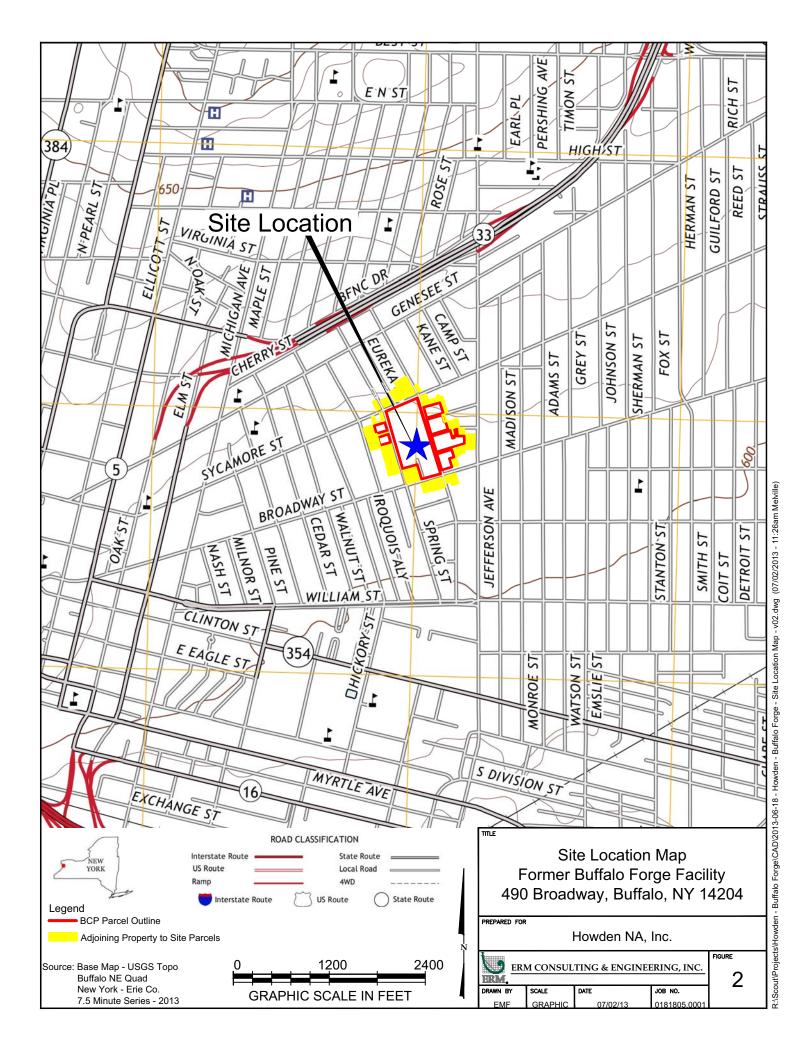
<u>List of Additional Attachments – Attachment A</u>

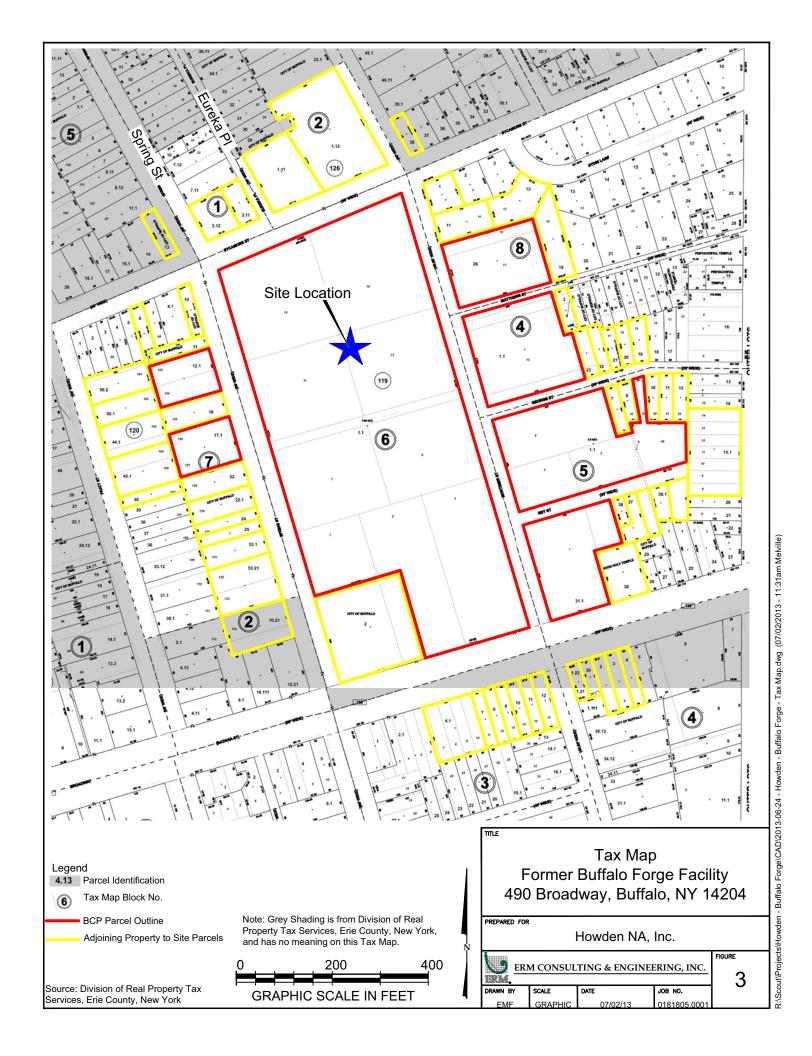
A.1	Figures
A.2	Remedial Investigation Conceptual Scope of Work
A.3	Additional Contacts – BCP Site Contact List
A.4	Department of State Corporation and Business Entity Database Print-Out
A.5	Document Repository Acknowledgement
A.6	Digital Copy of Application including Historic Environmental Reports

Attachment A.1

Figures







Attachment A.2

Remedial Investigation Conceptual Scope of Work

REMEDIAL INVESTIGATION CONCEPTUAL SCOPE OF WORK FORMER BUFFALO FORGE SITE – BUFFALO, NEW YORK

Introduction

Consistent with New York State Department of Environmental Conservation (NYSDEC) requirements contained in the Technical Guidance for Site Investigation and Remediation (DER-10), a conceptual Remedial Investigation (RI) scope of work has been developed to meet the following goals:

- define the nature and extent of contamination;
- identify contaminant source areas;
- evaluate potential exposures; and
- produce data of sufficient quantity and quality to support the development of an Alternatives Analysis Report (AAR) and acceptable Remedial Action Work Plan (RAWP).

Results from previous environmental investigation and sampling activities conducted at the Site will be incorporated into the RI. Additional sampling locations will be proposed to fill in data gaps remaining after previous investigations. Currently-identified data gaps include the lateral extent of historic fill materials and the locations of some former pits and chemical storage areas.

Details of the proposed RI will be presented to the NYSDEC for review in a RI Work Plan.

Quality Assurance Project Plan

A Site-specific Quality Assurance Project Plan (QAPP) consistent with the requirements of DER Section 2.4 will be prepared and attached to the RI Work Plan.

Health and Safety Plan

A Site-specific Health and Safety Plan (HASP) consistent with the requirements of DER-10 Section 1.9 will be prepared and attached to the RI Work Plan.

Community Air Monitoring Plan

A Site-specific Community Air Monitoring Plan (CAMP consistent with the requirements of DER-10 Section 1.9 will be prepared and attached to the RI Work Plan.

Citizen Participation Plan

A Site-specific Citizen Participation Plan consistent with the requirements of 6 NYCRR Part 375-1.10 will be prepared and attached to the RI Work Plan.

Soil

The intent of the RI is to assess and further delineate contaminants in the historic fill material (predominantly metals and semivolatile organic compounds (SVOCs)) and evaluate if the underlying native soil has been affected. It is therefore planned that samples of fill material and underlying native soil from the same boring location will be submitted for laboratory analysis.

Dig Safely New York will be notified prior to the initiation of intrusive activities at the Site and requested to identify, locate, and mark public utilities. Howden personnel will be requested to identify any remaining underground utilities associated with plant operations. Additionally, an independent underground utility locating service will be contracted to evaluate and clear proposed soil boring locations prior to commencement of intrusive activities. Boreholes will be advanced using direct push methods.

Each borehole will be sampled continuously using dedicated sample liners. Retrieved soil samples will be visually examined to assess subsurface conditions and physical properties. These properties include: color, texture, moisture content, odor, and visual evidence of discoloration or sheen. If necessary, companion boreholes explorations will be made adjacent to the original sample location to obtain sufficient sample volume from selected depth intervals. Field observations will be documented on boring logs. All soil cores will be field screened for evidence of volatile organic compounds (VOCs) using a calibrated photoionization detector equipped with an 11.7 eV lamp. Additionally, all soil cores will be field screened for elevated radiation by a radiological subcontractor.

Soil Vapor

Available data and information from previous environmental investigation and remediation activities at the Site suggest that soil vapor is not a matrix of potential concern at the Site. Therefore, the investigation of soil vapor is not contemplated as part of the RI.

Surface Water/Sediment

Surface water is not present at or near the Site. Therefore, the investigation of surface water and sediment is not contemplated as part of the RI.

Groundwater

Available data and information from previous environmental investigation and remediation activities at the Site indicate that groundwater is not a matrix of potential concern at the Site. Therefore, further investigation of groundwater is not contemplated as part of the RI.

Investigation-Derived Waste

Investigation-derived wastes will be disposed within the borehole of origin unless non-aqueous phase liquids, sheen, unusual odor, discoloration, or other potential evidence of gross contamination is observed. Any soil cuttings exhibiting visual, olfactory, or photoionization detector (PID) field screening evidence of potential contamination will be containerized in steel 55-gallon drums for future characterization and disposal. The containers will be moved to a designated on-Site staging area until characterized and disposed. On-Site disposal may be accomplished by emptying the drums subsequent to the receipt of analytical results for the borings and waste determination. If off-site disposal is appropriate, it will be accomplished within 90 days of the accumulation start date.

Sample Analyses

The laboratory analysis of samples collected during the RI will be performed by a New York State Department of Health (NYSDOH)-approved environmental laboratory using analytical methods consistent with the NYSDEC's Analytical Services Protocol (ASP). Laboratory analytical reports will contain ASP Category B deliverables to facilitate data usability review. Samples collected as part of the RI will be analyzed for the following parameters:

- United States Environmental Protection Agency (USEPA) Target Compound List (TCL) and NYSDEC Spill Technology and Remedial Series Memorandum Number One (STARS) SVOCs plus 20 tentatively identified compounds (TICs) by USEPA Method 8270C;
- Polychlorinated biphenyls (PCBs) by USEPA Method 8082;

- Target Analyte List (TAL) metals (except mercury) by USEPA Method 6010B; and
- mercury by USEPA Method 7471A.

Previous environmental investigations conducted at the Site suggest that VOCs are not a parameter of potential concern. Therefore, laboratory analysis for VOCs is not contemplated as part of the RI. However, samples will be analyzed for VOCs if consistent olfactory or PID field screening evidence suggests the possible presence of VOCs. If laboratory analysis for VOCs is necessary, samples will be analyzed for TCL and STARS VOCs plus 10 TICs by USEPA Method 8260B.

Data Usability

A Data Usability Summary Report (DUSR) will be prepared for all samples collected during the RI. The DUSR will be prepared consistent with the NYSDEC guidance contained in DER-10 Appendix 2B. The results of the data usability evaluation will be presented in an Electronic Data Summary (EDS) consistent with the requirements of DER-10 Section 3.14(b).

Qualitative Human Health Exposure Assessment

A qualitative human health exposure assessment will be completed consistent with the NYSDOH guidance contained in Appendix 3B of DER-10. The assessment will consist of characterizing the anticipated human exposure settings for the contemplated use of the Site, identifying potential exposure pathways, and evaluating contaminant fate and transport. Site contaminants will be selected for further evaluation based on consideration of the following factors:

- concentrations of contaminants in environmental media;
- field data quality, laboratory data quality, and sampling design; and
- comparison of contaminant concentrations in environmental media at the Site with typical background levels.

Ecological Resources Assessment

The NYSDEC's decision key contained in Appendix 3C of DER-10 will be utilized to evaluate if a Fish and Wildlife Resources Impact Analysis (FWRIA) is needed. If a FWRIA is required in accordance with Appendix 3C, the analysis will be performed consistent with DER Section 3.10.

Site Survey

After completion of RI site work, each borehole or other sampling location will be surveyed by a New York State-licensed professional surveyor to establish horizontal and vertical locations. The location and elevation of other selected site features may also be surveyed.

RI Report

An RI Report consistent with NYSDEC requirements contained in Section 3.14 of DER-10 will be prepared. The RI Report will:

- identify and characterize the sources of contamination;
- describe the amount, location, concentration, environmental fate and transport, and other significant characteristics of the substances present;
- define geological and hydrogeological factors as needed;
- identify potential routes of exposure to human populations;
- provide an evaluation of ecological resources; and
- identify and evaluate presumptive remedies for the AAR and development of an acceptable RAWP.

Attachment A.3 Additional Contacts – BCP Site Contact List

Property Address/Tax Map ID	Owner/ Current Occupant	Mailing Address	City, State, Zip Code
	Site Parcels		
490 Broadway St.	Buffalo Forge Co. c/o Howden Buffalo Inc.	W 1W 1 1 1	
498 Broadway St.	Buffalo Forge Co. c/o Howden Buffalo Inc.	Karl Kimmerling Howden North America Inc. 7909 Park Lane	Columbia SC 20222
187 Mortimer St.	Buffalo Forge Co. c/o Howden Buffalo Inc.	Rd. Ste 300	Columbia, 3C 29223
213 Mortimer St.	Buffalo Forge Co. c/o Howden Buffalo Inc.	That, ste soo	
233 Mortimer St.	Buffalo Forge Co. c/o Howden Buffalo Inc.	Julie C. Haley Howden	
498 Spring St.	Howden Buffalo Inc.	North America Inc. 1775 Werhle	Williamsville, NY 14221
516 Spring St.	Buffalo Forge Co. c/o Howden Buffalo Inc.	Dr.	
	Properties Adjacent to Site Pa		
450 Broadway St.	City of Parks & Recreation	511 City Hall	Buffalo, NY 14202
467 Broadway St.	Charles A. Drescher & Sons & Drescher Paper Box Inc.	467 Broadway St.	Buffalo, NY 14204
475 Broadway St.	Charles A. Drescher & Sons & Drescher Paper Box Inc.	467 Broadway St.	Buffalo, NY 14204
477 Broadway St.	Charles A. Drescher & Sons & Drescher Paper Box Inc.	467 Broadway St.	Buffalo, NY 14204
479 Broadway St.	Charles A. Drescher & Sons & Drescher Paper Box Inc.	467 Broadway St.	Buffalo, NY 14204
481 Broadway St.	Charles A. Drescher & Sons & Drescher Paper Box Inc.	467 Broadway St.	Buffalo, NY 14204
483 Broadway St.	Charles A. Drescher & Sons & Drescher Paper Box Inc.	467 Broadway St.	Buffalo, NY 14204
489 Broadway St.	Buffalo Neighborhood Revitilization Corp.	214 City Hall 214 City Hall	Buffalo, NY 14202
497 Broadway St. 499 Broadway St.	Buffalo Neighborhood Revitilization Corp. Buffalo Neighborhood Revitilization Corp.	214 City Hall 214 City Hall	Buffalo, NY 14202
503 Broadway St.	City of Buffalo	,	Buffalo, NY 14202
505 Broadway St.	Lela M. Alston	65 Niagara Square 30 Devon Grn	Buffalo, NY 14202 Buffalo, NY 14204
509 Broadway St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14204
512 Broadway St.	WNY Minority; Media Professionals Inc.	512 Broadway St.	Buffalo, NY 14204
24 George St.	Ioeseph Nix Sr. and Deborah Nix	24 George St.	Buffalo, NY 14204
25 George St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
26 George St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
31 George St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
31 George St.	Current Occupant	31 George St.	Buffalo, NY 14222
32 Geoarge St.	A. J. Briggs	684 E Utica St.	Buffalo, NY 14211
32 Geoarge St.	Current Occupant	32 Geoarge St.	Buffalo, NY 14204
34 George St.	Lacey E. Briggs	684 E Utica St.	Buffalo, NY 14211
34 George St.	Current Occupant	34 George St.	Buffalo, NY 14204
39 George St.	Current Occupant	39 George St.	Buffalo, NY 14204
41 George St.	Elton Lynch and W Lynch	41 George St.	Buffalo, NY 14204
43 George St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
566 Jefferson Ave.	Ad Price I Housing Development Fund Corp.	300 Perry St.	Buffalo, NY 14204
566 Jefferson Ave.	Current Occupant	566 Jefferson Ave.	Buffalo, NY 14204
20 Matthews St.	Buffalo Urban Renewal Agency	214 City Hall	Buffalo, NY 14202
23 Matthews St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
245 Mortimer St.	Buffalo Urban Renewal Agency	214 City Hall	Buffalo, NY 14202
245 Mortimer St.	Current Occupant	245 Mortimer St.	Buffalo, NY 14204
Tax Map No.: 11.41-7-40	Calvin R. Johnson	None Available	None Available
333 Pratt St.	Martin Phillips and John Greenway	333 Pratt St.	Buffalo, NY 14204
345 Pratt St.	Ethel E. Storey	61 Otis Place	Buffalo, NY 14204
345 Pratt St.	Current Occupant	345 Pratt St.	Buffalo, NY 14204
355 Pratt St.	Daisy Evans	355 Pratt St.	Buffalo, NY 14204
357 Pratt St.	Marcus A. Dixon City of Buffalo	357 Pratt St.	Buffalo, NY 14204
19 Rey St.	Buffalo Neighborhood Revitilization Corp.	65 Niagara Square 214 City Hall	Buffalo, NY 14202
23 Rey St. 33 Rey St.	Barbara Robinson (LE)	458 S Division St.	Buffalo, NY 14202 Buffalo, NY 14204
33 Rey St.	Current Occupant	33 Rey St.	Buffalo, NY 14204
,	Frank J. Gibbs Jr.	452 Spring St.	Buffalo, NY 14204
452 Spring St. 462 Spring St.	Gladys P. Bridges	462 Spring St.	Buffalo, NY 14204
472 Spring St.	Darlene Muhammad	472 Spring St.	Buffalo, NY 14204
476 Spring St.	Gary M. Alexander	476 Spring St.	Buffalo, NY 14204
478 Spring St.	Gary M. Alexander	476 Spring St.	Buffalo, NY 14204
480 Spring St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
486 Spring St.	Rodney James	7108 Fasano Pl.	Rancho Cucamonga, CA 91701
486 Spring St.	Current Occupant	486 Spring St.	Buffalo, NY 14204
500 Spring St	Niagara Mohawk Power Corp.	300 Erie Blvd West	Syracuse, NY 13202
518 Spring St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
307 Sycamore St.	Robert L Boyd	121 Morningside Dr.	Grand Island, NY 14072
319 Sycamore St.	City of Buffalo	65 Niagara Square	Buffalo, NY 14202
320 Sycamore St.	Buffalo Neighborhood Revitilization Corp.	214 City Hall	Buffalo, NY 14202
332 Sycamore St.	Steven W. Zachary	332 Sycamore St.	Buffalo, NY 14204
338 Sycamore St.	Curtis Robinson	338 Sycamore St.	Buffalo, NY 14204
344 Sycamore St.	Man O' Trees Inc	344 Sycamore St.	Buffalo, NY 14204
368 Sycamore St.	P&D Enterprises LLC	368 Sycamore St.	Buffalo, NY 14204
374 Sycamore St	Buffalo Neighborhood Revitilization Corp.	214 City Hall	Buffalo, NY 14202
375 Sycamore St.	Walter R. Hargrove	375 Sycamore St.	Buffalo, NY 14204

Attachment A.3 Brownfield Cleanup Program - Additional Contacts for Site Contact List Former Buffalo Forge Property - Buffalo, New York NYSDEC BCP Site Number C915280 Page 2 of 2

Other Contacts

Contact	Contact Entity		City, State, Zip Code
	Local News Media		
	WKBW-TV Channel 7	7 Broadcast Plz.	Buffalo, NY 14203
	WGRZ-TV Channel 2	259 Delaware Ave.	Buffalo, NY 14202
	WIVB/WNLO-TV Channel 4	2077 Elmwood Ave.	Buffalo, NY 14207
	WBEN News Radio 930	500 Corporate Pkwy, Suite 200	Buffalo, NY 14226
	WBFO-FM 88.7	Horizons Plaza, P.O. Box 1263	Buffalo, NY 14240
	The Buffalo News		Buffalo, NY 14203
	Document Repository		
Ms. Carol Ann Batt	Buffalo and Erie County Public Library	1 Lafayette Square	Buffalo, NY 14203
	Public Water Supplier		
Mr. Peter Merlo	Buffalo Department of Public Works	City Hall, Room 602	Buffalo, NY 14202
	CAO Head Start/ Early Head St	art	
Mr. L. Nathan Hare	Community Action Organization of Erie County, Inc.	70 Harvard Place	Buffalo, NY 14209

Attachment A.4

Department of State Corporation and Business Entity Database Print-Out

NYS Department of State

Division of Corporations

Entity Information

The information contained in this database is current through June 19, 2013.

Selected Entity Name: HOWDEN NORTH AMERICA INC.

Selected Entity Status Information

Current Entity Name: HOWDEN NORTH AMERICA INC.

DOS ID #:

687889

Initial DOS Filing Date: DECEMBER 09, 1981

County:

NEW YORK

Jurisdiction:

DELAWARE

Entity Type:

FOREIGN BUSINESS CORPORATION

Current Entity Status: ACTIVE

Selected Entity Address Information

DOS Process (Address to which DOS will mail process if accepted on behalf of the entity)

C/O C T CORPORATION SYSTEM 111 EIGHTH AVENUE NEW YORK, NEW YORK, 10011

Chief Executive Officer

KARL KIMMERLING 7909 PARK LANE RD STE 300 COLUMBIA, SOUTH CAROLINA, 29223

Principal Executive Office

HOWDEN NORTH AMERICA INC. 7909 PARK LANE RD STE 300

COLUMBIA, SOUTH CAROLINA, 29223

Registered Agent

C T CORPORATION SYSTEM 111 EIGHTH AVENUE NEW YORK, NEW YORK, 10011

> This office does not record information regarding the names and addresses of officers, shareholders or

directors of nonprofessional corporations except the chief executive officer, if provided, which would be listed above. Professional corporations must include the name(s) and address(es) of the initial officers, directors, and shareholders in the initial certificate of incorporation, however this information is not recorded and only available by viewing the certificate.

*Stock Information

of Shares

Type of Stock

\$ Value per Share

No Information Available

*Stock information is applicable to domestic business corporations.

Name History

Filing Date	Name Type	Entity Name
OCT 20, 2010	Actual	HOWDEN NORTH AMERICA INC.
JUL 19, 1999	Actual	HOWDEN BUFFALO INC.
MAY 05, 1994	Actual	HOWDEN FAN COMPANY
JUL 27, 1982	Actual	BUFFALO FORGE COMPANY
DEC 09, 1981	Actual	AMPCO-PITTSBURGH SECURITIES II CORPORATION

A **Fictitious** name must be used when the **Actual** name of a foreign entity is unavailable for use in New York State. The entity must use the fictitious name when conducting its activities or business in New York State.

NOTE: New York State does not issue organizational identification numbers.

Search Results

New Search

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Attachment A.5

Document Repository Acknowledgement

Jon Fox

From: Jason Reynolds

Sent: Wednesday, June 26, 2013 11:18 AM

To: Jon Fox

Subject: FW: NYSDEC Brownfield Cleanup Program - Former Buffalo Forge Property Document

Repository

From: April Tompkins [mailto:tompkinsa@buffalolib.org]

Sent: Tuesday, June 25, 2013 1:36 PM

To: Jason Reynolds

Subject: FW: NYSDEC Brownfield Cleanup Program - Former Buffalo Forge Property Document Repository

Good afternoon Jason,

This is to inform you that permission has been granted in response to your request below.

The Buffalo and Erie County Public Library will be the repository for your client's documents per your e-mail. Upon receipt of the document(s), they will be made available for public review. Also, this serves as permission to submit other future documents and updates that should be made available for public review.

Please keep the following in mind:

• Documents (including updates) for public inspection should be sent or brought in person to the Central Library to the attention of Carol Batt, of whom I assist. Documents sent via e-mail will not be accepted. The mailing address is:

Attention: Carol Ann Batt
Chief Operating Officer
Buffalo and Erie County Public Library
1 Lafayette Square
Buffalo, NY 14203

- Documents for the Central/Downtown library are made available on the first floor in the Information Services Department within a day or so after receipt. If received Friday afternoon, they go out the following Monday.
- If you would like the document(s) distributed at libraries other than Central, you will need to send the appropriate quantity of copies with labels regarding their destinations. We will distribution accordingly. We do not make copies for distribution.
- It's your choice regarding the format (hard copy and / or disk) you wish to submit. If the document is very large, part in hard copy and part on disk is acceptable. If submitting in both formats, please be sure that they are titled/labeled accordingly. Although CD-ROMs cannot be used on public library computers, if someone brings in their personal laptop, the disc can be viewed in house. If optional, an alternative is the availability to go online using a provided link to read/review/print.

If you have any questions and/or concerns, please feel free to contact me via e-mail or phone. Thank you.

Regards, April Tompkins Phone: 716-858-7129