PERIODIC REVIEW REPORT FOR PORTION OF THE NIAGARA FALLS MUNICIPAL COMPLEX 1925 MAIN STREET NIAGARA FALLS, NEW YORK 14305 BCP SITE NUMBER C932133 REPORTING PERIOD: FEBRUARY 3, 2021— FEBRUARY 3, 2022



Prepared for : Bellevue Local Development Corporation & the City of Niagara Falls 745 Main Street PO Box 69 Niagara Falls, NY 14302

February 2022



4950 Genesee St., Suite #100 Buffalo, N.Y. 14225 716-633-4844

PERIODIC REVIEW REPORT

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1.0 INTRODUCTION

The City of Niagara Falls retained Greenman-Pedersen Inc. (GPI) to evaluate current conditions at the Niagara Falls Municipal Complex (henceforth referred to as the "Site") in the City of Niagara Falls, New York and prepare this Periodic Review Report (PRR) for the Site. This Site is currently owned by the Bellevue Local Development Corporation (Owner). This PRR is being completed to meet the Site Management Periodic Review Report and Institutional Control / Engineering Control (IC/EC) Certification requirements under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP). The NYSDEC BCP site number is C932133. This PRR documents the implementation of, and compliance with, the November 2010 Site Management Plan (SMP) prepared for this site.

1.1 Site Overview

The Site is a portion of the Niagara Falls Municipal Complex, measuring approximately 0.803 acres. Figures 1 and 2 from the SMP are included in this PRR and show the location of the Site and the boundaries of the 0.803 acre portion comprising the BCP site. The properties comprising the Site were historically used for multiple purposes including an automotive repair / service facility, a dry cleaner, various retail stores, a beauty shop, jewelry stores, a liquor store, a tailor, dentist and lawyers offices, unidentified commercial structures, and residential properties. Historically, the Site was comprised of seven separate tax parcels, which along with several additional adjoining tax parcels not part of the BCP site, were combined in 2011 to form the single tax parcel 144.13-3.24. The Site is currently occupied by Niagara Falls Municipal Complex building which is approximately 130,000 square feet in size.

Remedial investigations were conducted at the Site between July and October 2007. These investigations identified the presence of petroleum and solvent based volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs), which consisted primarily of polycyclic aromatic hydrocarbons (PAHs) and heavy metals in the overburden soils. The evaluation of detected concentrations revealed that one VOC and no SVOCs were recorded above NYSDEC's Part 375 Unrestricted Soil Cleanup Objectives (SCOs). Also, several metals were detected at concentrations above the Unrestricted SCOs. Additionally, analytical testing on staged soils excavated from beneath the former on-site structures during Interim Remedial Measures (IRMs) revealed the presence of tetrachloroethene, a common dry cleaning solvent at concentrations excess of the Industrial SCO. Also, total petroleum hydrocarbon analysis of the staged soils revealed the presence of petroleum impacts.

The investigation of groundwater identified the presence of chlorinated solvents at concentrations exceeding NYSDEC's water quality standards (WQS) in the overburden and bedrock groundwater. The highest concentrations were detected in the northern portion of the Site. Also, petroleum-related VOCs exceeding the WQS were detected in the overburden groundwater in the northern portion of the Site. No petroleum-related VOCs were detected in the bedrock groundwater. It

should be noted that groundwater is not used for potable or non-potable purposes at the Site or in the general vicinity of the Site.

An IRM was implemented at the Site and was conducted between late 2007 and early 2008. The IRM involved the excavation and off-site disposal of approximately 22,000 tons of impacted soils exceeding the Unrestricted SCOs. Also, four underground storage tanks identified during excavation along with 750-gallons of petroleum product were removed and disposed of off-site. The IRM addressed the impacted soil/fill from the Site; however, solvent contaminated groundwater within the bedrock aquifer remains on-site.

Based on the presence of solvent contaminated groundwater that remained on-site following IRM activities, a vapor barrier combined with a sub-slab depressurization system (SSDS) was installed during construction of the Niagara Falls Municipal Complex building. The system consists of a full-slab vapor barrier beneath the entire building footprint (including the portion outside the BCP portion of the Site) and an active venting system, involving the use of negative pressure blowers to evacuate air from below and around the building's basement floor slab.

2.0 PERIODIC REVIEW

GPI conducted the eighth annual Periodic Review in February 2022 for the reporting period occurring between February 3, 2021 through February 3, 2022. This Periodic Review is discussed in the sections below. Appendix A includes photographs taken during the Site Inspection and Appendix B includes the NYSDEC "Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form."

2.1 Institutional and Engineering Controls

Since remaining contaminated groundwater and soil vapor potentially exists beneath the Site, Engineering Controls and Institutional Controls were required to protect human health and the environment.

As described above the EC implemented at the Site includes a vapor mitigation system that is comprised of a vapor barrier beneath the entire footprint of the building combined with a SSDS. Because all contaminated soil was excavated from the Site, an Excavation Work Plan was not included in the SMP and no special procedures are required to be implemented for future excavations at the Site.

In addition to the ECs a series of ICs were also required for the Site. The ICs implemented at the Site include:

- Compliance with the Environmental Easement and the SMP;
- Operation and maintenance of all ECs in accordance with the SMP;

- Inspection of all ECs at the Site in accordance with the SMP;
- The ECs may not be discontinued without an amendment or extinguishment of the Environmental Easement;
- Reporting of all required monitoring data in accordance with the SMP;
- The Site may only be used for restricted-residential or more restrictive uses provided that the long-term EC/ICs listed in the SMP are employed and may not be used for a higher level of use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- The use of the groundwater underlying the Site is prohibited without treatment rendering it safe for intended use;
- The potential for vapor intrusion must be evaluated for any buildings developed within the boundaries of the Site;
- A qualified environmental professional shall submit to NYSDEC a written certified report on annual basis; and
- The NYSDEC shall retain the right to access the Site at any time in order to evaluate any and all controls.

2.1.1 Inspection of Engineering and Institutional Controls

On February 10, 2022, GPI's Senior Environmental Scientist, Mr. James C. Manzella, CHMM, conducted the site inspection. Mr. Manzella was accompanied by Ms. Megan Kuczka, NYSDEC's Project Manager for this Site. The inspection included observation of current conditions throughout and surrounding the building; the basement of the building; and the sub-slab depressurization system. GPI also held discussions with Mr. Genio Violanti, the City of Niagara Falls Electrician, during the site inspection and Mr. Rychel the Supervisor for Plumbing, Heating, Air Conditioning for the City of Niagara Falls following the inspection. Mr. Rychel is the City representative responsible for conducting the monthly sub-slab blower inspections. The evaluation of the IC/ECs obtained from the site inspection is summarized in the paragraphs below.

The Site is currently occupied by the Niagara Falls Municipal Complex, which houses the City's police department headquarters and local court system; therefore, is in compliance with the Site use restriction requirements of the Environmental Easement. Also, the Site is serviced by the public water system and no groundwater use occurs on-site and as such meets the groundwater use restrictions.

While the SMP required a soil vapor intrusion evaluation prior to the construction of any enclosed structures on the Site, the SMP allowed for the installation of vapor mitigation system in lieu of this evaluation. As described above the vapor mitigation system is comprised of a vapor barrier beneath the entire footprint of the building combined with a SSDS. The site monitoring as well as the operation and maintenance components associated with the SSDS are summarized in Sections 2.2 and 2.3 below.

2.2 Site Monitoring Plan

The Site Monitoring Plan component of the SMP requires that the sub-slab depressurization system be inspected pursuant to a monthly inspection checklist to confirm each of the electric blowers is operating. Additionally, the monthly inspection is to include an examination of visible piping for any cracks and ensure the discharge stacks are free from obstructions. Also, in their June 20, 2013 correspondence the NYSDEC provided a modified checklist that includes a column to record the SSDS's pressure readings. The NYSDEC also recommended in this letter that a copy of the monthly checklist be posted on the wall adjacent to the SSDS's pressure gauges. A copy of this letter along with the revised monthly checklist is included in Appendix C.

While not posted on the wall adjacent to the pressure gauges, a copy of the monthly checklist was maintained within the desk within the adjacent boiler room at the time of the February 10, 2022 site visit. The monthly inspections and the February 10, 2022 site visit indicated that both blowers were operational, no cracks were observed in the visible piping, the discharge stacks were free from obstructions and the pressure readings for the stacks were observed to be 0.6 W.C. (inches of water) for the pressure gauges. A copy of the monthly inspection checklist for the period of October 2020 through January 2022 is included in Appendix D.

2.3 Operation and Maintenance

In addition to the monthly inspections of the SSDS, annual inspections of the following additional components of the system are to be performed: all warning devices/alarm indicators, system labeling, vacuum pressure gauges, exhaust stack discharge and integrity of the vapor barrier, as appropriate. Inspection of these features are confirmed by visual observation as well as noting air discharges from vents located on the roof of the building. As-built drawings as well as other pertinent information regarding the Sub-Slab Depressurization System are presented in Figure 6 and Appendices B and C of the SMP.

GPI evaluated the operation of the SSDS during the February 10, 2022 site inspection. GPI observed the discharge locations on the roof of the building, and the locations were free from obstructions or visible cracks. Additionally, while on the roof GPI confirmed that both blowers were operating properly and that air was flowing out of the vent pipes. No olfactory evidence of organic vapors were noted during the site visit.

GPI manually tripped the alarms on the SSDS to confirm system operation by temporarily closing the valves on the discharge vents. Both units changed from green indicator lights to red indicator lights and an audible alarm sounded within a few seconds indicating the alarm system was functioning properly. System labeling was in place as identified in the SMP. Each of the pressure gauges displayed an operating pressure of approximately 0.6 W.C., which is within the operating pressure range listed in the SMP. While the integrity

of the vapor barrier could not be visually examined due to its subsurface location, the visual examination of the building's basement floor slab showed only minor in the men's jail area.

In a subsequent discussion with Mr. Rychel on March 3, 2022 he indicated that the City has already addressed (i.e. caulked) this crack. The concrete floor joints in the basement showing separation identified during last year's inspection were observed to have been addressed during the February 10, 2022 inspection. No differential settling of the concrete floor slabs were observed anywhere in the facility, which indicates impacts to the vapor barrier are unlikely. Additionally, an evaluation of the exterior perimeter of building did not identify any cracks or settling during the February 10, 2022 site inspection.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the site February 2022 inspection, review of the monthly inspection checklists and discussions with City personnel no deficiencies affecting IC/ECs for the Site were identified and the Site is in compliance with the SMP and Environmental Easement. Therefore, no changes to the periodic review reporting are recommended.

4.0 LIMITATIONS

The conclusions presented in this report are based on information gathered in accordance generally accepted professional consulting principles and practices. All conclusions reflect observable conditions existing at the time of the site inspection. Information provided by outside sources (individuals, agencies, laboratories, etc.), as cited herein, was used in the evaluation of the Site. The accuracy of the conclusions drawn from this Periodic Review is, therefore, dependent upon the accuracy of information provided by these sources. Furthermore, GPI is not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to the performance of services.

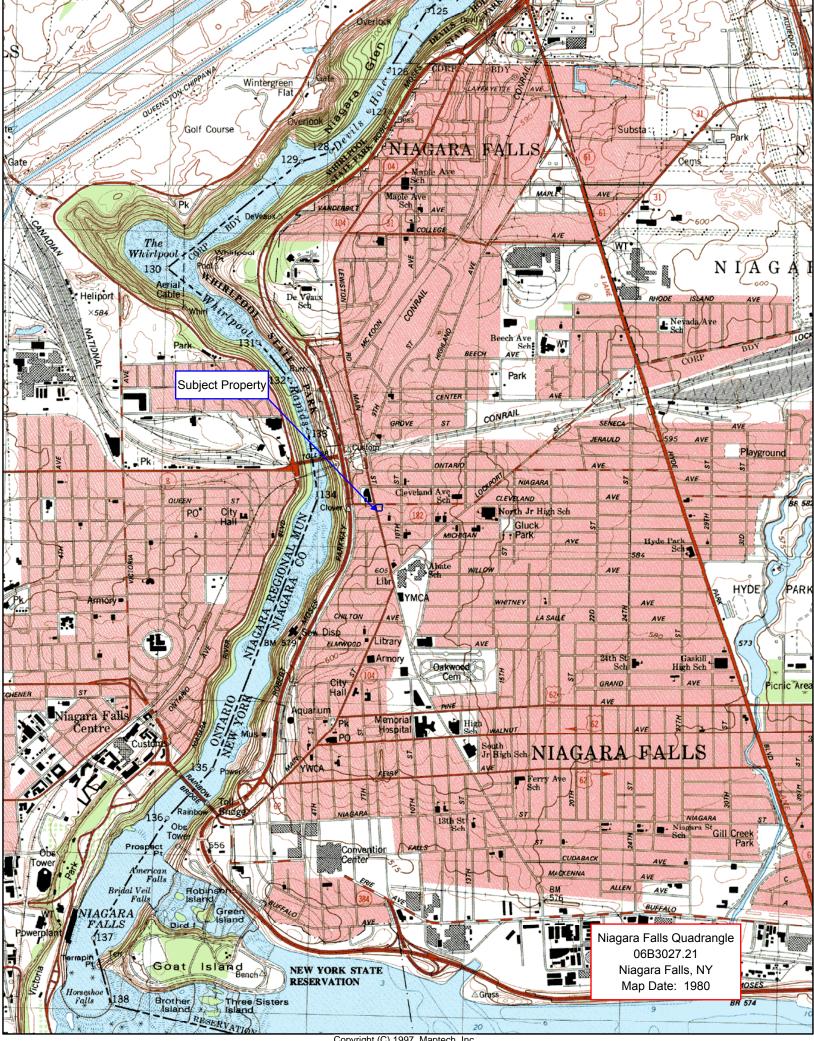
This Periodic Review Report is based upon the application of scientific principles and professional judgment to certain facts with resultant subjective interpretations. Professional judgments expressed herein are based upon the facts currently available within the limits of the existing data, scope of services, budget, and schedule. To the extent that more definitive conclusions are desired by the Client than are warranted by the current available facts, it is specifically GPI's intent that the conclusions and recommendations stated herein will be intended as guidance and not necessarily a firm course of action except where explicitly stated as such. GPI makes no warranties, expressed or implied including without limitation, warranties as to merchantability or fitness of a particular purpose. Furthermore, the information provided in this report is not to be construed as legal advice.

This Periodic Review Report has been completed and prepared on behalf of and for the exclusive use of the City of Niagara Falls. Any reliance on this report by a third party is at such party's sole risk. Furthermore, nothing contained in this report shall be construed as a warranty or affirmation by GPI that the Site described in this report is suitable collateral for any loan or that acquisition of such property by any lender through foreclosure proceedings or otherwise will pose no risk of potential environmental liability on the part of such lender.

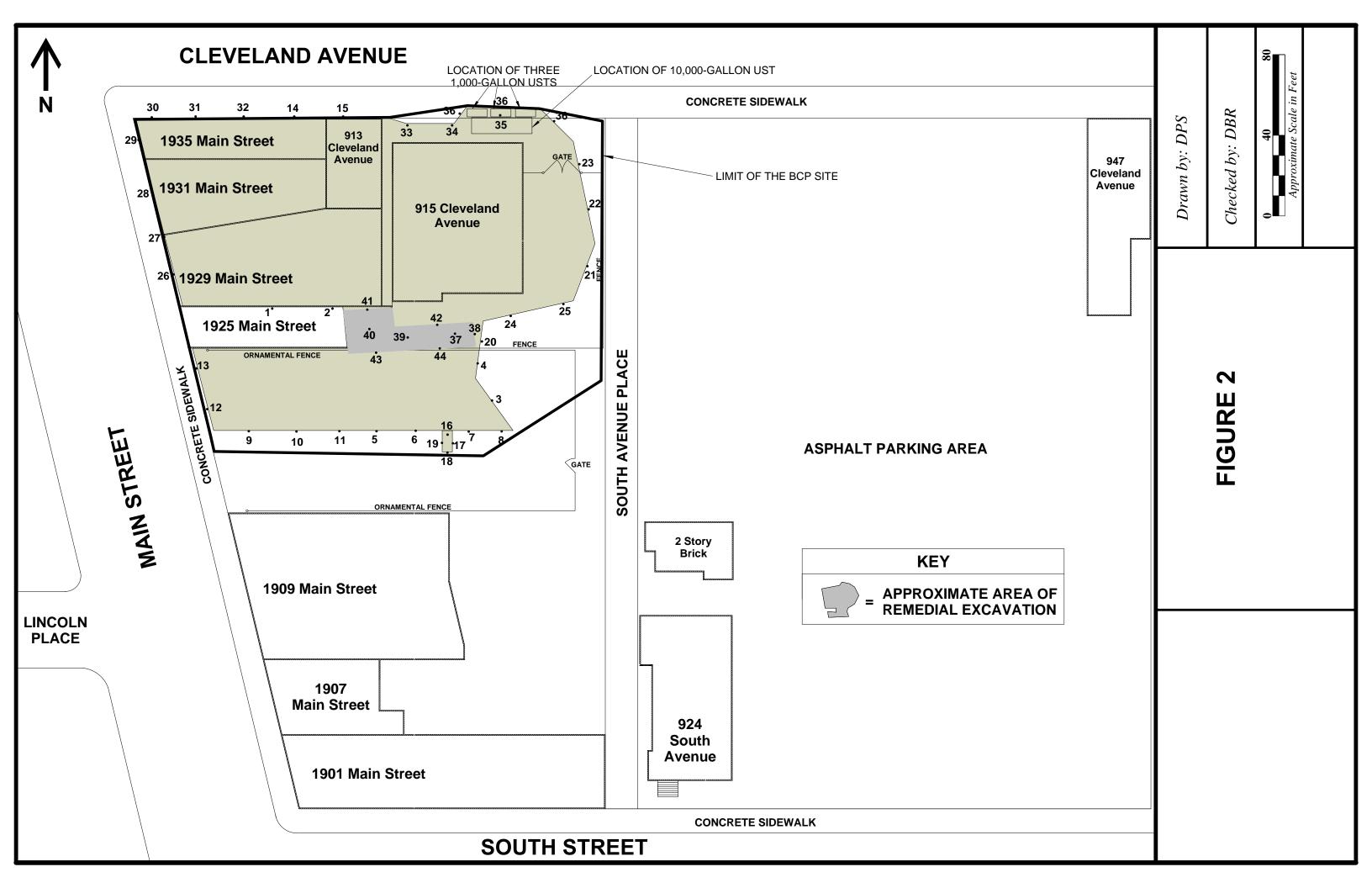
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FIGURES





Copyright (C) 1997, Maptech, Inc.



APPENDIX A - PHOTOGRAPHS





Photograph No. 1 – Front of the Courthouse Building.



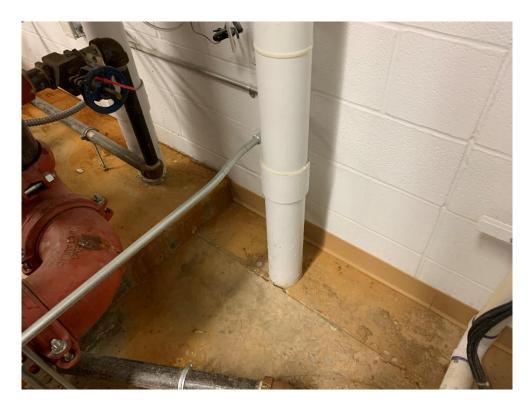
Photograph No. 2 – Sub-slab Depressurization System in basement, depicting pressure gauges.



Photograph No. 3 – Sub-slab Depressurization System in basement, depicting alarms.



Photograph No. 4 – Sub-slab Depressurization System in basement, depicting stack discharge piping.



Photograph No. 5 – Sub-slab Depressurization System in basement, depicting stack discharge piping floor penetration.



Photograph No. 6 - Minor crack in concrete floor in men's jail.



Photograph No. 7 – Sub-slab Depressurization System discharge vents and blowers and power control for discharge vents.



Photograph No. 8 – Roof penetration of northern discharge vent.



Photograph No. 9 – Roof penetration of southern discharge vent.

APPENDIX B - NYSDEC SITE MANAGEMENT PERIODIC REVIEW NOTICE INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORM





Enclosure 2 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form



Site Details	Box 1				
Site No. C932133					
Site Name 915 Cleveland Avenue					
Site Address: 1925 Main Street Zip Code: 14305-2637 City/Town: Niagara Falls County: Niagara Site Acreage: 0.803					
Reporting Period: February 03, 2021 to February 03, 2022					
	YES NO				
1. Is the information above correct?	\mathbf{X}				
If NO, include handwritten above or on a separate sheet.					
Has some or all of the site property been sold, subdivided, merged, or unde tax map amendment during this Reporting Period?	ergone a				
 Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? 					
4. Have any federal, state, and/or local permits (e.g., building, discharge) beer for or at the property during this Reporting Period?	n issued				
If you answered YES to questions 2 thru 4, include documentation or each that documentation has been previously submitted with this certificati	evidence on form.				
5. Is the site currently undergoing development?					
	Box 2				
	YES NO				
Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	× ü				
7. Are all ICs in place and functioning as designed?	X . 🗉				
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.					
A Corrective Measures Work Plan must be submitted along with this form to address these issues.					
Signature of Owner, Remedial Party or Designated Representative	Date				

					Box 2A
8.		on revealed that assumpti offsite contamination are		alitative Exposure	YES NO
		to question 8, include d as been previously sub			
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)					
		o question 9, the Period Exposure Assessment ba			
SITE	E NO. C932133				Box 3
	Description of Instituti	onal Controls			
Parce	-	Owner		Institutional Contro	<u>li</u>
144.1	3-3-24	Bellevue Local Developm	ient Corporation	Site Management O&M Plan	Plan
				Ground Water Use Soil Management Landuse Restrictic Building Use Restri Monitoring Plan IC/EC Plan	Plan
	Environmental Easement estricted residential use	was filed as of 02-16-201	1. A groundwater u		lace along
					Box 4
I	Description of Enginee	ering Controls			
Parce		Engineering (
The b	uilding has a vapor mitig				21

L

В	ox 5
Periodic Review Report (PRR) Certification Statements	
1. I certify by checking "YES" below that:	
a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;	d
b) to the best of my knowledge and belief, the work and conclusions described in this certif are in accordance with the requirements of the site remedial program, and generally accept engineering practices; and the information presented is accurate and compete.	
YES N	0
\times	
2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:	
(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;	
(b) nothing has occurred that would impair the ability of such Control, to protect public heal the environment;	th and
(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;	
(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and	
(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the documer	
YES N	0
\times	
IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.	
A Corrective Measures Work Plan must be submitted along with this form to address these issues	i.
Signature of Owner, Remedial Party or Designated Representative Date	

IC CERTIFICATIONS SITE NO. C932133	
	Box 6
SITE OWNER OR DESIGNATED REPRESENTATIVE I certify that all information and statements in Boxes 1,2, and 3 are true. statement made herein is punishable as a Class "A" misdemeanor, purs Penal Law.	I understand that a false
Tames (. Manzella print name at 4950 Genesee St. Joit print business addr	
am certifying as Ussignated Representative	(Owner or Remedial Party)
for the Site named in the Site Details Section of this form. Signature of Owner, Remedial Party, or Designated Representative Rendering Certification	2-14-22 - Date

EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

	ine see St. Suite 100 Bullian Ny 14225. rint business address
am certifying as a Qualified Environmental Profession	al for the
\wedge	
lom (. When	- 2-14-22
Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp Date (Required for PE)

APPENDIX C - NYSDEC'S JUNE 20, 2013 INSPECTION LETTER AND REVISED MONTHLY INSPECTION CHECKLIST



New York State Department of Environmental Conservation Division of Environmental Remediation, Region 9

270 Michigan Avenue, Buffalo, New York 14203-2915 **Phone:** (716) 851-7220 • **Fax:** (716) 851-7226 **Website:** <u>www.dec.ny.gov</u>



June 20, 2013

Mr. Thomas Pryce Bellevue Local Development Corporation 745 Main Street P.O. Box 69 Niagara Falls, New York 14302

Dear Mr. Pryce:

915 Cleveland Avenue/1925 Main Street Niagara Falls, NY 14305 Site No.: C932133

On June 13, 2013, I met with Mr. James Anthony to inspect the sub-slab depressurization (SSD) system at the above-subject site. The SSD system was operating; however, one of the vent pipe blowers, located on the third floor roof, was making excessive noise and is in need of maintenance work. I also noted that there was no Monthly Sub-Slab Blower Inspection Check List on site as required by the Site Management Plan (SMP).

Enclosed is a Monthly Sub-Slab Blower Inspection Check List which should be used to record each SSD system inspection. It has been modified from the check list in Appendix D of the SMP to include SSD system pressure readings. It may be useful to mount it in a folder on the basement wall of Mechanical Room B05 where the SSD system valves and pressure gauges are located. A copy of the check list and records of any maintenance performed on the system must be included in the Site Management Periodic Review Report (PRR). Other requirements for the PRR are outlined in the SMP, a copy of which is included for your convenience on the enclosed CD along with a copy of the Vapor Barrier and Collection System Installation Report.

If you have any questions, please call me at (716) 851-7220.

Sincerely,

Tim Diefferbach

Tim Dieffenbach Engineering Geologist II

TD:sz Enclosures

- ec: Teresa Mucha, Esq. NYSDEC, Office of General Counsel Mr. Gregory Sutton - NYSDEC, Division of Environmental Remediation
- cc: Thomas O'Donnell, Esq. Deputy Corporation Counsel Mr. James Anthony - City of Niagara Falls (w/enclosures)

Monthly Sub-Slab Blower Inspection Check List

Date	Initials	Time	All Blowers Operational?	Are there any cracks in the visible piping?	Is the discharge stack clear?	Press. Readings	Comments
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		
			Yes / No	Yes / No	Yes / No		

APPENDIX D - SSDS MONTHLY INSPECTION CHECKLIST OCTOBER 2020 - JANUARY 2022



JManzella @gping. Com

بالمتشاركين

Monthly Sub-Slab Blower Inspection Check List

Comments Press. Readings 5 2 AU Y. 5 14 SP2 N Ν JAI N Is the discharge stack clear? Yes/No YES / No Yes/ No (Gà / No Ves/No N / Sel Yes / No Kes/No ON/Sex Yes / No Are there any cracks in the visible piping? Yes / NO Yes / NO Yes / NO Yes / NO Yes /MG Yes (No) Yes / Ma Yes / Ma Yes / No Yes / No Yes / WD Yes / No Yes / 🕼 Yes / 🕼 Yes / No Yes / No Yes / No Yes / No Yes ((No Yes (NG **Operational?** All Blowers YES/NO YES/NO Yes / No Yes / No ON/SE Kes / No Yes / No YES/ No Yes / No Ves/No Yes / No SN/ Yes / No (reg/No 608 / No Yes / No Yes / No Ĝ 9:30 10:30 9-03 0..0 99 B 50 04:07 6:20 Time 0.00 1.00 8.8 S 0 Initials 3 15 2 Ģ 2000 2 3 - 20 - 2 دي. ^ م -767 -16-51 - (6, 2 17-2 12-13/--2-12-22-2 4 Date 012 ſ 55