

Forensic Environmental Services, Inc.

113 John Robert Thomas Drive
The Commons at Lincoln Center
Exton, Pennsylvania 19341

Telephone: (610) 594-3940

Telecopier: (610) 594-3943

August 21, 2020

Alicia Barraza
NYS Dept. of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau B, 625 Broadway, 12th Floor
Albany, NY 12233-7016

**RE: Quarterly Progress Report on Project Activities
Former Norton/Nashua Tape Products Facility
(April 1 through July 31, 2020)
2600 Seventh Avenue, Watervliet, New York
NYSDEC Order on Consent Index No. CO: 4-20001205-3375 (amended on January
10, 2019)**

Dear Ms. Barraza:

In accordance with the Site Management Plan (SMP), Forensic Environmental Services, Inc. (FES), on behalf of Saint-Gobain Corporation (SGC), submits this Quarterly Progress Report for ongoing project activities at the Former Norton/Nashua Tape Products Facility in Watervliet, New York. Activities performed during the reporting period (April 1 through July 31, 2020) consisted of: 1) implementation of ISCO remedial activities (May 26 – June 5, 2020); 2) the collection of ISCO-related vapor intrusion pathway samples on May 28, 2020; 3) submittal of the Financial Assurance mechanism for the site; and 4) receipt of NYSDEH approval of the August 2019 Final Engineering Report (FER).

ISCO Injection Activities

ISCO injection/treatment activities were conducted by ISOTEC of West Windsor, New Jersey from May 26 to June 5, 2020 in two areas of the site exhibiting elevated toluene concentrations. These included: 1) Building #58 proximal to monitoring well MP-37; and, 2) along the interior and exterior north wall of Building #61 (proximal to monitoring wells MP-24 through MP-27). It should be noted that ISCO injections were previously conducted proximal to monitoring well MW-27 in the northern portion of the site (see Figure 1); however, subsequent to ISCO and enhanced Fluid Recovery (EFR) activities conducted in this area through October 2019, the toluene concentration in MW-27 was reduced to less than 500 µg/L. Currently (July 2020), the toluene concentration in MW-27 is 11 micrograms per liter (µg/L). ISCO injection locations are presented in Figure 1. ISCO reagent injection volumes, flow rates, and field monitoring data are presented in Tables 1 and 2, respectively.

As outlined in the SMP, as well as previous (NYSDEC-approved) ISCO workplans, pre-ISCO injection clearance borings were installed inside the existing warehouse building, which included 8 borings in Building #61 proximal to existing monitoring well MP-27 and 8 additional borings in Building #58 proximal to monitoring well MP-37 (Note: ISCO injection locations located to the north of Building #61 and proximal to monitoring well MW-27 were installed using conventional Geoprobe drilling methods). Clearance borings were installed by Cascade Drilling

and Technical Services (Cascade) of Schenectady, New York concurrently with injection activities. Injection point locations are presented in Figure 1.

A total of 18,400 gallons of ISCO reagents were injected into the subsurface during the 9-day injection event at depths ranging from 5 to 15 feet including: 1) 3,220 gallons of catalyst/stabilizer; 5,980 gallons of hydrogen peroxide; and 9,200 gallons of sodium persulfate into 23 borings in the vicinity of target wells. Injection point locations and reagent volumes and flow rates are presented in Figure 1 and Table 1, respectively.

Field monitoring was conducted throughout ISCO injection activities to: 1) evaluate the progress of the injection; 2) determine the approximate radius of influence around each injection point; and 3) conduct air monitoring in accordance with the site-specific Health and Safety Plan (HASP). Field monitoring parameters included: 1) depth-to-water; 2) monitoring well headspace PID, lower explosive limit (LEL), oxygen, and carbon dioxide; 3) groundwater quality parameters (temperature, conductivity, pH, oxidation reduction potential [ORP]; 4) injected reagents (iron, hydrogen peroxide, and persulfate; and 5) worker breathing zone PID monitoring.

During ISCO injection activities, elevated PID, LEL, specific conductivity, and temperature readings were observed at selected monitoring wells within and adjacent to the injection areas (see Table 2). Field data obtained from downgradient monitoring well MP-39, located in the Durham school bus maintenance area, exhibited elevated PID readings during the first week of injections; however, MP-39 was inaccessible during the second week of ISCO injections due to temporary closure of the facility due to COVID-19. Light non-aqueous phase liquid (LNAPL) was not observed in any monitoring well throughout injection activities (see Table 2).

With respect to HASP monitoring, the presence of PID readings (above background) were limited to the immediate injection areas (e.g., exclusion zones); therefore, all injection points were sealed at the surface with hydrated bentonite; all monitoring points (wells) were sealed with expandable “churney” plugs; and ambient air ventilation and large fans were used to abate the presence of vapors, if any, inside the warehouse buildings throughout injection activities.

Investigation-Derived Waste Disposal Activities

During the installation of the pre-ISCO soil borings described above, a total of three 55-gallon drums of soil cuttings were generated. These three drums were transported to the Tradebe facility in Meriden, Connecticut on June 3, 2020. Non-hazardous waste manifests are presented in Attachment 1.

ISCO-Related Vapor Intrusion Investigation Sampling Activities (May 2020)

In accordance with the SMP and NYSDEC/NYSDOH approved work scope, vapor intrusion sampling was conducted during the second day of ISCO injection activities on May 28, 2020. Vapor intrusion sampling activities included the collection of air-phase samples from: 1) existing sub-slab vapor monitoring points DB-VMP-2 and DB-VMP-3; 2) indoor air proximal to DB-VMP-2; and 3) an outdoor ambient sample. In addition, a trip blank (QA/QC sample) accompanied the samples to and from the laboratory. All air-phase samples were submitted to SGS Accutest Laboratories of Dayton, New Jersey (Accutest) for analysis of VOCs via EPA

Method TO-15 plus tentatively identified compounds (TICs) and included NYSDEC CLP/Category B laboratory deliverables.

Pre-Sampling Inspection and Product Inventory

All air-phase samples in May 2019 (DB-VMP-2, DB-VMP-3, and IA-2) were collected in the Stone Management (Stone) warehouse area, while the outdoor ambient sample was collected in the northwest portion of the property (see Figure 3). A pre-sampling inspection was conducted on May 28, 2020, which included: 1) a site walkover; 2) confirmation of the general floor plan; 3) PID field screening of the proposed sampling areas; and 4) an inventory of warehoused materials in the general vicinity of the sampling locations. The NYSDOH Indoor Air Quality Questionnaire and Building Inventory is presented in Attachment 2.

PID screening results from DB-VMP-2 and DB-VMP-3 prior to sampling were 3,589 ppbv and 2,376 parts per billion by volume (ppbv), respectively (see Table 3). Indoor ambient readings were between 953 – 1,239 ppbv, and outdoor ambient PID readings were 0.0 ppbv.

With respect to the material inventory, the site is an active warehousing facility storing various materials on wooden or composite pallets, which typically change over time based on inventory and available warehouse space. In addition, a number of propane-powered forklifts operate within the facility during normal working hours from approximately 7:00 am to 4:00 pm. Below is a summary of the materials observed on May 28, 2020 during sampling activities and the associated PID field screening results proximal to these materials (a photographic log is presented in Attachment 2). In addition, the adjacent Durham facility is an active school bus maintenance/repair shop, and although isolated from the Stone warehouse, routine activities at Durham were conducted on the day of the sampling. The PID readings summarized below are consistent with prior data and are indicative of background conditions in the warehouse.

<u>Material Description</u>	<u>PID Results (ppbv)</u>
Steel (vent) stack	1,275 – 1,242
Cardboard	1,240
White plastic containers	1,060
White insulation	1,100 – 1,130
Large hydrogen tanks	885
Document crates	977
2018 Plug Power documents	991
Plug Power unit	1,022
Gen Drives to proximal to DB-VMP-2	1,230 – 1,250
Gen Drives proximal to DB-VMP-3	975 – 1,100
Indoor Air by IA sample	1,239
Indoor Air by DB-VMP-2	1,260
Indoor Air by DB-VMP-3	953

Sub-Slab VMP Sampling and Tracer Gas Monitoring

On the day of VMP sampling, a final site inspection, VMP inspection, and PID field screening survey were performed to document conditions at the time of sampling and each VMP was connected to several feet of dedicated 0.25-inch (inch diameter) Teflon tubing. Immediately

prior to VMP sampling, helium gas monitoring was conducted to confirm the integrity of each VMP (and associated fittings). Tracer gas (helium) and associated sampling readings are presented in Table 3.

A low-flow peristaltic pump (i.e., flow rate 0.2 liters per minute or less) was connected to the Teflon tubing to purge approximately 1.0 liter of air from each VMP location (1-liter Tedlar bag), which was used for tracer gas monitoring and PID field screening. The Teflon tubing from the VMP was attached to the 6-liter Summa canister and the canister valve was opened to begin sub-slab vapor collection at each VMP location at a flow rate of approximately 0.75 liters per hour. The sampling assembly was periodically inspected during testing to determine the rate of vacuum loss (i.e., sample collection) and no abnormalities were noted on any sample. The VMP sub-slab samples were recovered approximately 8 hours later by closing the Summa canister valves, disconnecting the Teflon tubing from the VMP, and recording the remaining vacuum.

At the end of VMP sampling, tracer gas helium concentrations in the flux chambers had decreased in all VMP sampling locations; therefore, immediately after VMP sampling was completed, tracer gas monitoring and PID field screening was repeated as described above by recharging the flux chambers with helium gas. Post-sampling tracer gas readings were well below the screening limit of 20% (see Table 3).

Indoor/Outdoor Air Sampling and QA/QC Air Samples

In conjunction with sub-slab VMP sampling, concurrent ambient indoor/outdoor air samples were also collected on May 28, 2020 (see Figure 1 for sample locations). Ambient indoor/outdoor air samples were collected by placing certified-clean 6L Summa canisters, equipped with particulate filters and 8-hour regulators preset by the laboratory, in each sampling area approximately four to five feet off the floor/ground to collect representative “breathing air” samples. Field readings associated with indoor/outdoor air sampling are presented in Table 3.

The Summa canisters were not attached to any tubing. The Summa canister valves were opened to begin indoor/outdoor ambient air collection at a rate of approximately 0.75 liters per hour. Similar to VMP sampling, each sampling assembly was periodically inspected during testing to determine the rate of vacuum loss (i.e., sample collection). In addition to ongoing ISCO injection activities, normal business operations (i.e., operation of forklifts at Stone and bus repair/maintenance at Durham) continued at both the Stone and Durham facilities during the air sampling event and employees were occasionally present near or in the active sampling areas.

Vapor Sampling Results

VMP, ambient indoor/outdoor air, and QA/QC samples were submitted to SGS Accutest of Dayton, New Jersey for laboratory analysis of VOCs via EPA Method TO-15 plus TICs. Laboratory analytical results are presented in Table 4. The final laboratory data package was submitted to DataVal, Inc. for third-party validation on June 26, 2020 and the validated sampling results will be uploaded to the NYSDEC EQulS database.

A total of eighteen individual VOCs were present in sub-slab VMPs DB-VMP-2 and/or DB-VMP-3 at concentrations ranging from 1.7 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) (MEK in DB-VMP-3) to 42.3 $\mu\text{g}/\text{m}^3$ (acetone in DB-VMP-2). Toluene, which is the primary compound of

concern in groundwater at the former Norton/Nashua Site, was detected in DB-VMP-2 and DB-VMP- at concentrations of 2.3 $\mu\text{g}/\text{m}^3$, at 4.9 $\mu\text{g}/\text{m}^3$, respectively.

Compounds identified in the May 2017 NYSDOH Soil Vapor/Indoor Air Matrices (A, B, and C); including: trichloroethylene (TCE), cis-1,2-Dichloroethylene (cis-1,2-DCE), 1,1-Dichloroethylene (1,1-DCE), and carbon tetrachloride (Matrix A); 1,1,1-TCA (Matrix B), and vinyl chloride (Matrix C) were not detected in either DB-VMP-2 or DB-VMP-3 (see Table 4). PCE (Matrix B) was detected in DB-VMP-2 and DB-VMP-3 at estimated concentrations of 11 J $\mu\text{g}/\text{m}^3$ and 4.2 J $\mu\text{g}/\text{m}^3$, respectively. Methylene chloride (Matrix B) was detected in DB-VMP-2 at a concentration of 2.9 $\mu\text{g}/\text{m}^3$, however, methylene chloride was also detected in the outdoor ambient air sample at a concentration of 12 $\mu\text{g}/\text{m}^3$.

With respect to the indoor air sample, which was co-located with sub-slab sample DB-VMP-2, a total of 26 individual VOCs were detected at concentrations ranging from 2.1 $\mu\text{g}/\text{m}^3$ (tetrahydrofuran) to 289 $\mu\text{g}/\text{m}^3$ (heptane). Of the NYSDOH Matrix A, B, and C compounds, methylene chloride and PCE were detected at concentrations of 2.3 $\mu\text{g}/\text{m}^3$ and 16 $\mu\text{g}/\text{m}^3$, respectively. VOC TICs were also detected in the indoor air sample at a total estimated concentration of 463.1 ppbv (see Table 4).

A total of 9 individual VOCs were present in the May 2020 outdoor ambient air sample at estimated concentrations ranging from 0.68 J $\mu\text{g}/\text{m}^3$ (toluene) to 12 J $\mu\text{g}/\text{m}^3$ (acetone). Isopropyl alcohol (5.9 $\mu\text{g}/\text{m}^3$) was the only VOC detected in the trip blank sample (see Table 4).

Vapor Sampling Results Review

Similar to the previous (April/June 2019), as well as historical sampling event results, detected VOCs (including toluene, the primary COC for the site and PCE) were generally higher in the indoor air compared to sub-slab samples indicating VOC sources within the warehouse facility as opposed to the presence of a complete sub-slab to indoor air vapor intrusion exposure pathway.

Toluene concentrations in both sub-slab and indoor samples collected in May 2020 were generally consistent with the previous (April/June 2019) sampling results (see Table 4) indicating that ISCO injection activities are not causing significant mobilization/migration of vapor-phase toluene in the subsurface. Furthermore, implementation of preventative measures including: 1) the use of ventilation fans in the immediate vicinity of ISCO injection points; 2) the sealing of injection drilling rods at the surface with hydrated bentonite; 3) minimizing the opening of adjacent monitoring points to prevent of-gassing into the indoor air, etc. were used to minimize exposure during ISCO injections.

Future vapor intrusion monitoring activities at the site will be conducted in accordance with the approved SMP.

Financial Assurance Mechanism and Submittal of the Final Engineering Report (FER)

In accordance with Order on Consent No. CO 4-20001205-3375 (amended on January 10, 2019), a Financial Assurance mechanism (Standby Trust Agreement and Surety Bond) for continued ISCO, EFR, bio-supplementation, and associated groundwater and vapor intrusion sampling was finalized and submitted to the NYSDEC in June 2020. Subsequently, in a

correspondence dated June 23, 2020, the NYSDEC approved the August 30, 2019 (see Attachment 3). A copy of the FER was sent to the document repository (Maplewood Groundwater Project) at the Watervliet Public Library on June 23, 2020.

Upcoming Activities

In accordance with the SMP, upcoming activities at the site include: 1) a second post-ISCO groundwater sampling event; 2) an annual groundwater sampling event (on-site and off-site wells); 3) two EFR events; 4) bio-supplementation activities; and 5) submittal of a Periodic Review Report (PRR). The current project implementation schedule is presented in Table 5. If you have any questions or comments regarding the information provided in this letter, please contact me or Thomas Maguire at (610) 594-3940.

Sincerely,

FORENSIC ENVIRONMENTAL SERVICES, INC.



Bryan J. Machella
Senior Project Manager

cc: James Smith, SGC
Kelsey Hillegass, SGC
Ravi Korlipara, P.E., Korlipara
Silje Roalsvik, Resolute Management, Inc.
Jennifer Galoski, Resolute Management, Inc.
Brian K. Helf, Cloverleaf Distribution, LLC
Pete Popovics, Cenveo, Inc.
Thomas S. West, Esq., The West Firm, PLLC
Steve N. Siegel, Esq., The Frink Law Firm, LLC
Joseph Janeczek, PE, Tyco International
Jeffrey Danko, Tyco International
J. Hall, Esq., Berry Plastics Corporation
Michael Komoroske, NYSDEC
Scarlett McLaughlin, NYSDOH
Sara Bogardus, NYSDOH
Andrew Park, USEPA

TABLES

Table 1
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Field Monitoring Data (Injection Data)
Former Norton/Nashua
Watervliet, New York

Date	Injection Point	Screen Interval (feet)	Catalyst			Oxidizer			Persulfate			Well Head Pressure (psi)
			Injection Time (mins)	Volume (gal)	Flow Rate (gpm)	Injection Time (mins)	Volume (gal)	Flow Rate (gpm)	Injection Time (mins)	Volume (gal)	Flow Rate (gpm)	
5/27/2020	IP28-05	9-14	32	70	2.19	50	105	2.10				5
5/27/2020	IP28-03	9-14	55	70	1.27	45	85	1.89				20
5/27/2020	IP28-01	9-14	12	20	1.67	29	45	1.55				25
5/27/2020	IP28-02	9-14	34	70	2.06	59	130	2.20				5
5/27/2020	IP28-07	9-14	34	70	2.06	59	130	2.20				8
5/27/2020	IP28-04	9-14				83	130	1.57				10
5/27/2020	IP28-06	9-14	37	70	1.89	39	65	1.67				0
5/27/2020	IP28-07	7-12	12	20	1.67	38	65	1.71				3
5/27/2020	IP37-01	10-15	36	70	1.94	35	65	1.86				2
5/27/2020	IP37-06	10-15	40	50	1.25	25	30	1.20				6
5/27/2020	IP28-02	7-12	39	70	1.79							
5/28/2020	IP28-01	9-14	44	50	1.14	21	25	1.19				40
5/28/2020	IP28-05	9-14				15	25	1.67				5
5/28/2020	IP28-03	9-14				21	45	2.14				10
5/28/2020	IP37-01	10-15				28	65	2.32				2
5/28/2020	IP37-06	10-15	10	20	2.00	25	25	1.00				3
5/28/2020	IP28-05	7-12				39	35	0.90				5
5/28/2020	IP37-02	10-15	41	70	1.71	60	130	2.17				2
5/28/2020	IP37-07	10-15	38	70	1.84	50	95	1.90				2
5/28/2020	IP28-07	7-12				15	20	1.33				2
5/28/2020	IP28-02	7-12				72	130	1.81				4
5/28/2020	IP28-06	9-14				41	65	1.59				5
5/28/2020	IP37-06	10-15				48	75	1.56				2
5/28/2020	IP37-01	5-10	38	70	1.84	85	130	1.53				0
5/28/2020	IP28-06	7-12	55	70	1.27	87	130	1.49				5
5/28/2020	IP37-07	10-15				18	35	1.94				3
5/28/2020	IP28-04	9-14	37	70	1.89							3
5/28/2020	IP28-01	9-14				42	60	1.43				5
5/28/2020	IP28-04	7-12	14	20	1.43	53	65	1.23				10
5/28/2020	IP37-03	10-15	45	70	1.56	75	130	1.73				0

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5/28/2020	IP37-06	5-10				12	15	1.25				0
5/28/2020	IP28-01	7-12				12	10	0.83				
5/28/2020	IP37-07	5-10				6	5	0.83				
5/28/2020	IP37-02	5-10	33	70	2.12	57	130	2.28				0
5/28/2020	IP37-06	5-10	38	70	1.84	55	115	2.09				3
5/28/2020	IP28-03	7-12	41	70	1.71	33	60	1.82				3
5/28/2020	IP37-07	5-10	56	70	1.25	38	65	1.71				0
5/28/2020	IP37-05	10-15	40	70	1.75	32	65	2.03				4
5/28/2020	IP28-01	7-12				45	85	1.89				0
5/28/2020	IP28-07	7-12				21	30	1.43				2
5/29/2020	IP37-05	10-15				47	65	1.38				3
5/29/2020	IP37-07	5-10				60	60	1.00				4
5/29/2020	IP28-01	7-12	48	70	1.46	26	35	1.35				45
5/29/2020	IP28-03	7-12				55	70	1.27				0
5/29/2020	IP28-04	7-12	31	50	1.61	36	65	1.81				3
5/29/2020	IP28-05	7-12	56	70	1.25	77	95	1.23				0
5/29/2020	IP37-03	5-10	37	70	1.89	65	130	2.00				8
5/29/2020	IP37-08	10-15	48	70	1.46		130					
5/29/2020	IP28-07	7-12	41	50	1.22	12	15	1.25				3
5/29/2020	IP37-04	10-15	35	70	2.00	70	130	1.86				5
5/29/2020	IP37-08	5-10	38	70	1.84	60	130	2.17				3
6/1/2020	IP37-04	5-10	37	70	1.89	72	130	1.81				0
6/1/2020	IP37-05	5-10	31	70	2.26	73	130	1.78				4
6/1/2020	IP27-01	9-14	35	70	2.00	60	130	2.17				4
6/1/2020	IP27-04	9-14				28	50	1.79				3
6/1/2020	IP27-02	9-14	58	70	1.21	103	130	1.26				10
6/1/2020	IP27-08	9-14	51	70	1.37	31	45	1.45				4
6/1/2020	IP27-07	9-14				10	10	1.00				
6/1/2020	IP27-05	9-14	53	70	1.32	39	65	1.67				3
6/1/2020	IP27-03	9-14				15	25	1.67				3

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6/1/2020	IP27-06	9-14				34	35	1.03				3
6/1/2020	IP27-04	9-14				32	40	1.25				4
6/1/2020	IP37-01	10-15							76	150	1.97	0
6/1/2020	IP37-03	10-15							79	163	2.06	0
6/1/2020	IP27-01	7-12	48	70	1.46	88	90	1.02				3
6/2/2020	IP37-01	10-15							30	50	1.67	2
6/2/2020	IP37-03	10-15							27	38	1.39	0
6/2/2020	IP27-05	9-14				54	65	1.20				2
6/2/2020	IP27-01	7-12				24	40	1.67				2
6/2/2020	IP27-08	9-14				11	10	0.91				3
6/2/2020	IP37-02	10-15							114	200	1.75	2
6/2/2020	IP37-06	10-15							112	200	1.79	3
6/2/2020	IP27-06	9-14	34	70	2.06	69	95	1.38				0
6/2/2020	IP27-04	9-14	52	70	1.35	34	25	0.74				4
6/2/2020	IP27-03	9-14				16	20	1.25				3
6/2/2020	IP27-02	7-12	11	20	1.82	43	65	1.51				3
6/2/2020	IP37-01	5-10							97	200	2.06	0
6/2/2020	IP37-03	5-10							90	200	2.22	3
6/2/2020	IP27-05	7-12	70	70	1.00	65	70	1.08				2
6/2/2020	IP27-07	9-14	44	70	1.59	104	120	1.15				3
6/2/2020	IP27-08	9-14				86	75	0.87				0
6/2/2020	IP37-02	5-10							136	200	1.47	2
6/2/2020	IP37-06	7-12							136	200	1.47	2
6/2/2020	IP37-07	10-15							88	138	1.56	0
6/2/2020	IP37-04	10-15							92	138	1.49	0
6/2/2020	IP27-03	9-14	49	70	1.43	35	50	1.43				3
6/2/2020	IP27-04	9-14				12	15	1.25				0
6/2/2020	IP27-06	7-12	42	70	1.67	54	75	1.39				2
6/3/2020	IP37-07	10-15							39	63	1.60	0
6/3/2020	IP37-04	10-15							41	63	1.52	0

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6/3/2020	IP27-03	9-14				24	35	1.46				3
6/3/2020	IP27-08	7-12	50	70	1.40							0
6/3/2020	IP27-05	7-12				52	60	1.15				0
6/3/2020	IP37-05	10-15							106	200	1.89	0
6/3/2020	IP37-08	10-15							110	200	1.82	0
6/3/2020	IP27-07	7-12	48	70	1.46	88	130	1.48				2
6/3/2020	IP27-06	7-12				35	55	1.57				2
6/3/2020	IP27-08	7-12				85	130	1.53				0
6/3/2020	IP27-03	7-12	47	70	1.49	96	130	1.35				2
6/3/2020	IP37-07	7-12							107	200	1.87	2
6/3/2020	IP37-04	7-12							103	200	1.94	2
6/3/2020	IP27-04	7-12	46	70	1.52	101	130	1.29				2
6/3/2020	IP27-02	7-12	38	50	1.32	51	65	1.27				2
6/3/2020	IP37-05	7-12							107	200	1.87	0
6/3/2020	IP37-08	5-10							114	200	1.75	0
6/3/2020	IP28-05	9-14							81	200	2.47	5
6/3/2020	IP28-04	9-14							84	200	2.38	0
6/3/2020	IP28-02	9-14							33	75	2.27	5
6/3/2020	IP28-07	9-14							33	75	2.27	5
6/4/2020	IP28-02	9-14							48	125	2.60	2
6/4/2020	IP28-07	9-14							50	125	2.50	2
6/4/2020	IP28-01	9-14							70	200	2.86	3
6/4/2020	IP28-03	9-14							74	200	2.70	0
6/4/2020	IP27-01	9-14							100	200	2.00	0
6/4/2020	IP27-02	9-14							103	200	1.94	5
6/4/2020	IP28-06	9-14							76	200	2.63	5
6/4/2020	IP28-01	7-12							74	200	2.70	5
6/4/2020	IP27-03	9-14							110	200	1.82	10
6/4/2020	IP27-04	9-14							107	200	1.87	0
6/4/2020	IP28-02	7-12							76	200	2.63	5

Table 1
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Field Monitoring Data (Injection Data)
Former Norton/Nashua
Watervliet, New York

Date	Injection Point	Screen Interval (feet)	Catalyst			Oxidizer			Persulfate			Well Head Pressure (psi)
			Injection Time (mins)	Volume (gal)	Flow Rate (gpm)	Injection Time (mins)	Volume (gal)	Flow Rate (gpm)	Injection Time (mins)	Volume (gal)	Flow Rate (gpm)	
6/4/2020	IP28-04	7-12							79	200	2.53	0
6/4/2020	IP28-03	7-12							97	200	2.06	0
6/4/2020	IP28-05	7-12							99	200	2.02	4
6/4/2020	IP27-08	9-14							99	200	2.02	0
6/4/2020	IP27-05	9-14							90	200	2.22	0
6/4/2020	IP28-06	7-12							87	200	2.30	5
6/4/2020	IP28-07	7-12							85	200	2.35	5
6/4/2020	IP27-06	9-14							82	200	2.44	3
6/4/2020	IP27-07	9-14							85	200	2.35	3
6/4/2020	IP27-01	7-12							35	75	2.14	0
6/4/2020	IP27-02	7-12							37	75	2.03	0
6/5/2020	IP27-01	7-12							62	125	2.02	0
6/5/2020	IP27-02	7-12							62	125	2.02	0
6/5/2020	IP27-03	7-12							90	200	2.22	0
6/5/2020	IP27-04	7-12							93	200	2.15	0
6/5/2020	IP27-05	7-12							94	200	2.13	2
6/5/2020	IP27-06	7-12							90	200	2.22	0
6/5/2020	IP27-07	7-12							84	200	2.38	2
6/5/2020	IP27-08	7-12							90	200	2.22	0
Total Volume/Average Flow				3,220	1.64		5,980	1.52		9,200	2.09	
Total Volume Injected			18,400									

Notes:

1. Catalyst: ISOTEC Cat-4260; Oxidizer (H2O2): 10% Concentration; Sodium Persulfate: 10% Concentration
2. gpm = gallons per minute; psi = pounds per square inch.

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MP-23 Hydrogen Peroxide	5/26/2020	10:26	9.35	0.5	0	16.8	2.3	7.68	1,406	-50.8	6.65	15.04			
	5/27/2020	13:25	9.33	0.6	0	OR	8.7	2.41	1,345	-61.7	6.67	16.88	0	7	0
	5/28/2020	8:50	9.31	0.0	0	OR	6.1	2.11	1,308	-63.0	6.64	16.16	0	6	3
	5/28/2020	13:10	9.12	20.8	0	OR	6.5	1.95	1,227	-37.5	6.67	17.49	0	7	3
	5/29/2020	8:25	9.38	0.0	0	23.3	3.9	2.40	1,211	-53.8	6.70	16.76			
	5/29/2020	12:00	9.20	35.0	0	23.5	4.6	2.17	1,198	-44.7	6.73	18.25	0	7	4
Persulfate	6/1/2020	8:18	9.46	1.8	NM	21.2	0.6	3.06	922	-48.4	6.65	13.74			
	6/1/2020	12:40	9.43	31.4	0	19.8	9.3	3.96	892	-62.1	6.69	15.32	0	9	2
	6/2/2020	7:25	9.45	9.3	NM	21.2	0.4	4.32	888	-24.5	6.69	13.97			
	6/2/2020	12:40	9.41	6.8	0	28.1	0.6	3.01	848	-12.8	6.68	15.26	0	10	2
	6/3/2020	7:20	9.41	0.6	0	20.8	0.1	4.22	890	-60.8	6.81	14.95			
	6/3/2020	12:22	9.41	2.7	0	OR	16.6	3.72	880	-62.5	6.70	16.23	0	16	0
	6/4/2020	7:35	9.41	1.5	0	20.9	0.1	2.26	914	74.9	6.75	15.78			
6/4/2020	12:30	9.36	1.2	0	20.8	0.2	3.80	1,292	217.8	6.72	18.02	14	14	0	
MP-24 Hydrogen Peroxide	5/26/2020	10:36	9.34	0.5	0	10.1	5.9	1.55	8,425	-4.7	6.77	14.98			
	5/27/2020	13:30	9.27	0.4	0	20.2	1.4	25.26	5,739	340.1	7.00	14.80			
	5/28/2020	9:00	7.95	95.7	6	OR	3.9	30.09	12,600	283.2	6.78	15.57	0	23	8
	5/28/2020	13:15	9.29	87.1	0	OR	6.1	26.22	12,880	316.5	6.77	16.16	0	29	25
	5/29/2020	8:30	9.25	25.5	0	OR	2.6	24.20	13,900	177.6	6.64	17.19			
	5/29/2020	12:05	9.18	28.3	0	OR	3.8	NM	NM	NM	NM	NM	0	40	20
Persulfate	6/1/2020	8:25	9.53	0.0	NM	21.7	0.4	14.78	8,673	72.1	6.45	13.34			
	6/1/2020	12:44	9.68	212.8	67	OR	12.0	13.60	8,522	41.6	6.46	14.35	0	48	8
	6/2/2020	7:28	9.65	152.8	NM	OR	0.9	10.24	7,625	28.9	6.63	13.80	0	60	6
	6/2/2020	12:46	9.49	282.0	21	OR	0.4	10.97	7,692	56.2	6.54	15.04	0	56	5
	6/3/2020	7:24	9.60	220.0	4	22.9	0.5	9.22	8,138	106.3	6.68	14.42			
	6/3/2020	12:26	9.43	257.1	5	OR	7.7	8.28	7,857	68.2	6.65	15.36	0	48	6
	6/4/2020	7:39	9.28	86.4	4	22.1	0.1	7.70	7,442	173.4	6.75	15.81			
	6/4/2020	12:36	9.02	196.0	0	22.2	0.2	23.01	29,440	196.4	12.40	17.75	7,000	28	4

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MP-25 Hydrogen Peroxide	5/26/2020	10:55	9.35	1.0	0	18.1	1.6	0.25	12,310	-205.8	6.82	15.13			
	5/27/2020	13:50	7.37	1,548	26	OR	8.0	NM	NM	NM	NM	NM			
	5/28/2020	9:10	NM	950.0	18	OR	5.4	NM	NM	NM	NM	NM	0	25	2
	5/28/2020	13:25	9.27	1,120	19	OR	8.1	NM	NM	NM	NM	NM	0	81	6
	5/29/2020	9:00	9.35	700.0	7	OR	4.9	NM	NM	NM	NM	NM			
	5/29/2020	12:15	9.28	1,042	30	OR	11.6	NM	NM	NM	NM	NM	0	244	12
Persulfate	6/1/2020	8:37	9.49	7.8	NM	OR	0.0	2.36	7,430	-8.3	6.59	15.20			
	6/1/2020	12:52	NM	723.1	NM	NM	NM	NM	NM	NM	NM	NM	0	116	4
	6/2/2020	7:35	NM	596.0	NM	NM	NM	NM	NM	NM	NM	NM	0	88	3
	6/2/2020	12:56	9.36	544.3	14	OR	8.8	3.76	7,529	48.2	6.57	16.75	0	96	3
	6/3/2020	7:31	9.51	601.7	3	OR	0.4	3.20	7,440	-4.0	6.61	16.00			
	6/3/2020	12:36	9.39	781.3	20	OR	9.8	2.87	7,920	10.1	6.55	17.29	0	128	3
	6/4/2020	7:50	9.38	587.1	8	OR	2.1	4.64	31,190	289.6	8.41	19.17			
	6/4/2020	12:45	8.29	579.2	0	OR	0.3	15.62	97,520	199.2	13.41	19.83	7,000	96	4

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MP-26 Hydrogen Peroxide	5/26/2020	11:33	9.88	1.4	0	20.9	0.3	6.89	5,267	-243.3	6.88	15.00			
	5/27/2020	12:50	NM	2,600	20	OR	9.6	NM	NM	NM	NM	NM	0	2	0
	5/28/2020	8:25	NM	512.0	9	OR	10.2	NM	NM	NM	NM	NM			
	5/28/2020	12:45	NM	2,237	---	OR	10.9	NM	NM	NM	NM	NM			
	5/29/2020	8:00	NM	1,950	9	NM	NM	NM	NM	NM	NM	NM			
	5/29/2020	11:35	9.75	850.0	6	OR	8.5	1.39	2,538	-34.1	7.15	16.26	0	3	0
Persulfate	6/1/2020	9:27	9.99	343.8	NM	OR	2.4	NM	NM	NM	NM	NM			
	6/1/2020	13:03	NM	448.9	NM	NM	NM	1.00	2,363	70.2	7.08	15.06	0	18	9
	6/2/2020	7:38	NM	1,795	NM	NM	NM	NM	NM	NM	NM	NM	0	48	5
	6/2/2020	13:30	NM	1,599	NM	NM	NM	NM	NM	NM	NM	NM			
	6/3/2020	7:40	NM	3	NM	NM	NM	NM	NM	NM	NM	NM			
	6/3/2020	12:59	NM	2,223	NM	NM	NM	NM	NM	NM	NM	NM			
	6/4/2020	7:05	9.60	642	0	22.7	0.4	2.90	7,046	10.2	6.87	15.73			
	6/4/2020	12:50	9.18	224	0	OR	1.0	8.06	18,830	296.0	9.01	16.94	14	62	2
MP-27 Hydrogen Peroxide	5/26/2020	11:44	9.98	1.5	0	20.9	0.5	0.60	3,015	-249.6	6.94	15.15	NM	NM	NM
	5/27/2020	12:55	NM	100.6	0	14.5	13.7	NM	NM	NM	NM	NM			
	5/28/2020	8:30	NM	395.0	6	OR	6.4	NM	NM	NM	NM	NM			
	5/28/2020	12:50	NM	653.2	---	OR	5.2	NM	NM	NM	NM	NM			
	5/29/2020	8:05	NM	614.0	4	NM	NM	NM	NM	NM	NM	NM			
	5/29/2020	11:40	9.84	795.0	4	OR	6.1	NM	NM	NM	NM	NM	0	3	0
Persulfate	6/1/2020	13:04	NM	1,557	NM	NM	NM	NM	NM	NM	NM	NM	0	105	12
	6/2/2020	7:40	NM	1,630	NM	NM	NM	NM	NM	NM	NM	NM	0	116	6
	6/2/2020	13:21	9.85	579	0	OR	8.4	9.36	7,228	340.0	6.91	15.05	0	132	9
	6/3/2020	7:46	NM	1,522	NM	NM	NM	NM	NM	NM	NM	NM			
	6/3/2020	12:57	NM	1,775	NM	NM	NM	NM	NM	NM	NM	NM			
	6/4/2020	7:11	NM	1,127	NM	NM	NM	NM	NM	NM	NM	NM			
	6/4/2020	12:56	7.69	631	0	21.6	0.1	13.96	64,620	248.2	13.37	16.16	7,000	96	4

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings								
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)	
MP-28 Hydrogen Peroxide	5/26/2020	11:50	9.92	1.3	0	12.1	9.2	0.87	3,356	-105.4	7.03	15.30				
	5/27/2020	13:00	9.82	2.7	0	10.8	10.9	3.44	2,681	-66.3	6.68	17.12				
	5/28/2020	8:35	9.87	0.1	0	11.3	11.8	1.96	3,374	-35.9	6.73	16.60				
	5/28/2020	13:00	9.81	0.0	0	14.9	8.9	1.76	2,454	-42.4	6.82	15.91				
	5/29/2020	8:10	9.95	0.4	0	14.6	12.5	1.91	2,023	-34.6	6.84	15.97				
	5/29/2020	11:45	9.87	4.1	0	20.8	7.0	1.72	2,253	-35.9	6.88	16.31	0	14	1	
Persulfate	6/1/2020	13:10	10.01	129.9	0	OR	13.9	23.90	3,175	364.0	6.63	15.19	0	15	1,000	
	6/2/2020	7:41	9.97	8.9	NM	OR	13.5	26.18	5,498	382.6	6.45	14.64	0	23	1,000	
	6/2/2020	13:16	10.00	54.5	0	OR	13.6	21.42	7,426	396.4	6.16	15.15	0	28	1,000	
	6/3/2020	7:49	10.05	1.2	0	OR	9.0	22.98	9,477	332.1	6.03	15.39				
	6/3/2020	12:44	10.11	38.3	0	OR	9.1	21.77	10,750	347.5	5.74	15.78	0	39	1,000	
	6/4/2020	7:20	10.12	11.0	0	21.1	0.2	28.20	11,520	331.2	5.78	15.63				
	6/4/2020	12:59	9.82	0.9	0	or	0.6	46.30	58,070	259.9	13.45	15.86	7,000	42	1,000	
MP-29 Hydrogen Peroxide	5/26/2020	11:57	9.91	46.7	0	16.4	3.4	0.86	648	-59.3	6.69	15.42				
	5/27/2020	13:05	9.85	1.3	0	15.3	3.7	2.55	671	-39.0	6.67	15.82				
	5/28/2020	8:40	9.86	42.1	15	19.5	5.3	1.55	716	-29.4	6.65	15.64				
	5/28/2020	12:55	9.84	23.4	37	OR	6.5	2.52	673	-15.7	6.76	16.40				
	5/29/2020	8:15	9.94	13.5	5	OR	4.5	2.10	738	-22.6	6.78	15.36				
	5/29/2020	11:50	9.89	20.0	0	OR	7.3	1.77	769	-31.1	6.81	15.93	0	4	0	
Persulfate	6/1/2020	13:17	NM	317.8	NM	NM	NM	NM	NM	NM	NM	NM	0	24	0	
	6/2/2020	7:47	NM	1,010	NM	NM	NM	NM	NM	NM	NM	NM	0	30	1	
	6/2/2020	13:13	9.96	480	10	OR	12.5	2.47	1,462	60.5	6.38	14.91	0	28	2	
	6/3/2020	7:54	9.97	402	6	OR	8.0	3.34	2,233	269.0	6.08	14.55				
	6/3/2020	12:48	9.94	176	3	OR	2.4	24.99	3,280	351.6	5.78	15.33	0	75	1,000	
	6/4/2020	13:05	9.76	188	0	or	3.6	52.30	5,128	256.1	7.30	15.40	7,000	82	700	

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MP-30 Hydrogen Peroxide	5/26/2020	12:05	9.82	2.2	0	20.1	1.6	0.96	1,668	-126.6	6.64	16.02			
	5/27/2020	13:10	9.72	1.2	0	7.5	14.4	3.40	1,380	-84.6	6.60	15.80			
	5/28/2020	8:45	9.75	0.2	0	8.1	13.3	3.40	1,220	-51.8	6.60	17.06			
	5/28/2020	13:105	NM	0.0	0	6.3	15.2	2.96	1,199	2.4	6.77	17.69			
	5/29/2020	8:20	9.85	0.5	0	7.6	13.6	1.16	1,222	-8.9	6.70	---			
	5/29/2020	11:55	9.75	15.0	0	6.4	14.2	2.67	1,119	-35.7	6.74	18.29			
Persulfate	6/1/2020	13:25	9.52	2.3	0	7.3	16.6	6.20	664	344.5	6.57	15.57			
	6/2/2020	7:48	9.91	0.3	NM	9.5	18.0	3.01	1,076	203.1	6.68	15.21			
	6/2/2020	13:31	9.83	2.2	0	20.9	19.5	2.54	1,087	70.5	6.72	16.20			
	6/3/2020	8:00	9.85	1.1	0	25.0	5.9	1.81	1,139	-32.1	6.59	15.37			
	6/3/2020	12:53	9.85	1.3	0	OR	6.6	3.20	1,119	205.9	6.56	15.57			
	6/4/2020	7:26	9.85	3	0	21.2	0.3	3.20	1,444	156.2	6.56	16.23			
	6/4/2020	13:12	9.64	8	NM	22.0	0.7	14.20	2,293	236.2	6.85	15.49			
MP-34 Hydrogen Peroxide	5/26/2020	9:30	9.63	4.4	0	18.6	1.9	6.92	717	-69.2	6.98	16.86			
	5/28/2020	7:55	9.45	0.1	0	11.3	7.7	2.45	747	-67.1	6.90	18.57			
	5/28/2020	12:19	9.51	976.0	0	10.4	8.9	1.37	700	-73.8	6.96	18.22			
	5/29/2020	7:40	9.67	624.0	0	10.3	8.8	1.98	642	302.9	6.79	17.57			
	5/29/2020	11:10	9.48	730.0	1	10.6	8.7	2.04	655	-62.4	6.96	18.57			
Persulfate	6/1/2020	9:45	9.74	0.8	NM	10.9	9.4	2.23	652	-56.8	6.93	17.30			
	6/2/2020	8:14	9.79	0.0	NM	12.7	7.3	2.30	569	-52.1	6.96	16.56			
	6/2/2020	14:15	9.74	0.6	0	11.1	9.3	1.13	4,001	135.0	12.30	17.51			
	6/3/2020	8:29	9.71	0.0	0	11.5	9.0	1.48	618	-40.9	6.93	16.68			
	6/3/2020	13:30	9.71	0.0	0	11.0	8.6	1.76	599	-50.6	6.90	17.01			
	6/4/2020	6:30	9.79	0.0	0	20.5	0.2	3.35	626	-34.6	6.80	16.98			
	6/4/2020	14:10	9.79	0	NM	20.4	0.1	3.92	1,002	-26.1	6.82	16.80			

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MP-35 Hydrogen Peroxide	5/26/2020	8:45	9.86	0.5	0	20.2	0.8	7.90	880	-51.0	6.83	16.87			
	5/28/2020	8:20	9.84	1,112	5	14.0	6.4	NM	NM	NM	NM	NM			
	5/28/2020	12:40	9.58	3,125	17	12.1	7.9	2.44	721	-36.2	6.77	16.74			
	5/29/2020	7:50	9.89	2,238	6	11.9	8.3	1.68	723	-35.0	6.76	18.17			
	5/29/2020	11:30	9.78	1,944	10	10.5	9.0	2.26	722	-38.1	6.78	17.53			
Persulfate	6/1/2020	8:47	9.97	6.6	NM	19.5	1.1	2.10	702	-35.2	6.74	15.61			
	6/1/2020	13:49	9.91	2.5	0	18.8	2.7	2.11	596	-34.1	6.76	16.61			
	6/2/2020	7:57	9.94	13.5	NM	18.9	1.6	1.58	590	22.1	6.76	16.16			
	6/2/2020	13:46	9.98	7.0	0	13.2	6.8	1.50	662	-38.2	6.77	16.65			
	6/3/2020	8:08	9.91	7.8	0	17.5	3.1	1.55	618	-67.8	6.69	15.37			
	6/3/2020	13:05	9.90	6.3	0	21.5	0.8	2.09	610	188.5	6.72	17.00			
	6/4/2020	6:57	9.95	2	0	20.5	0.2	2.30	595	-65.8	6.78	16.41			
6/4/2020	13:40	9.59	198	NM	21.1	0.6	1.60	1	-68.2	6.70	16.66				
MP-37 Hydrogen Peroxide	5/26/2020	9:10	9.96	95.2	0	20.9	0.1	5.76	685	-71.7	6.67	16.87			
	5/28/2020	8:10	NM	254.7	>100	OR	12.5	NM	NM	NM	NM	NM			
	5/28/2020	12:35	NM	199.5	>100	NM	NM	NM	NM	NM	NM	NM			
	5/29/2020	7:30	NM	729.7	NM	NM	NM	NM	NM	NM	NM	NM			
	5/29/2020	11:25	NM	226.5	NM	NM	NM	NM	NM	NM	NM	NM			
Persulfate	6/1/2020	9:08	10.06	41.3	NM	21.0	0.1	13.82	5,590	34.1	6.80	16.94			
	6/1/2020	14:01	10.05	42.1	0	OR	0.6	19.76	26,140	229.9	7.33	17.89			
	6/2/2020	8:10	NM	983.0	NM	NM	NM	NM	NM	NM	NM	NM	7,000	8	30
	6/2/2020	13:59	10.04	30.9	6	OR	0.1	3.10	151,800	178.6	13.51	21.36	7,000	18	30
	6/3/2020	8:27	NM	570.2	NM	NM	NM	NM	NM	NM	NM	NM			
	6/3/2020	13:21	NM	892.6	NM	NM	NM	NM	NM	NM	NM	NM	7,000	9	
	6/4/2020	6:40	10.08	27	0	20.5	0.1	2.17	28,810	96.2	12.99	19.05			
	6/4/2020	13:20	10.05	148	NM	21.1	0.1	4.68	10,890	166.2	10.74	19.02	7,000	12	300

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MP-38 Hydrogen Peroxide	5/26/2020	8:59	9.97	187.1	0	5.9	2.3	9.07	1,205	-44.2	6.46	16.77			
	5/28/2020	8:05	9.79	201.2	>100	1.9	24.8	3.82	899	-20.1	6.42	18.21			
	5/28/2020	12:30	9.90	126.5	>100	3.2	21.3	3.94	1,010	-20.8	6.41	17.88			
	5/29/2020	7:25	10.02	4,965	>100	1.8	17.3	2.81	715	-21.3	6.40	19.60			
	5/29/2020	11:20	9.86	1,693	17	6.9	23.8	3.00	802	-15.1	6.41	17.54			
Persulfate	6/1/2020	9:02	10.06	2.6	NM	20.6	0.4	2.23	544	-1.9	6.39	16.85			
	6/1/2020	14:07	10.06	198.1	0	20.2	1.8	2.29	1,602	40.2	6.57	17.46			
	6/2/2020	8:21	9.98	239.6	NM	20.6	0.4	2.01	543	4.4	6.44	16.92			
	6/2/2020	14:05	10.06	2.6	0	18.8	2.8	2.31	601	-53.1	6.44	17.21			
	6/3/2020	8:20	10.01	39.4	0	21.1	0.1	2.02	1,028	-39.9	6.42	16.91			
	6/3/2020	13:25	10.00	66.4	0	20.6	0.4	7.29	1,059	-17.1	6.42	17.20			
	6/4/2020	6:45	10.07	175	0	20.4	0.1	2.17	2,507	68.1	7.17	17.77			
6/4/2020	13:50	10.06	193	NM	20.1	0.2	2.89	2,601	92.7	7.02	16.68				
MP-39 Hydrogen Peroxide	5/26/2020	11:14	10.03	1.7	0	20.6	0.0	2.30	1,412	-132.0	7.70	19.68			
	5/27/2020	14:00	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM			
	5/28/2020	9:15	10.05	1,500	5	19.7	0.5	1.93	1,272	-63.0	7.66	18.74			
	5/28/2020	13:30	10.03	2,469	0	20.8	0.0	1.14	1,306	-66.5	7.73	21.22			
	5/29/2020	8:45	10.10	1,364	0	20.9	0.1	1.52	1,670	-87.3	7.62	20.02			
	5/29/2020	12:20	10.02	1,635	0	20.5	0.1	5.80	1,150	-172.4	7.78	22.50			
	6/1 - 5/ 2020			Durham Bus Closed											

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MW-22 Hydrogen Peroxide	5/26/2020	9:52	9.53	3.3	0	12.8	5.8	8.35	691	-10.8	6.42	16.21			
	5/28/2020	8:00	9.42	362.2	>100	14.8	13.2	2.58	682	-13.9	6.37	17.50			
	5/28/2020	12:25	9.45	355.6	>100	OR	15.1	3.07	670	-0.2	6.37	17.81			
	5/29/2020	7:45	9.56	950.0	55	OR	14.5	2.81	674	30.0	6.42	17.54			
	5/29/2020	11:15	9.40	1,171	47	OR	13.9	2.65	653	-9.1	6.45	17.20			
Persulfate	6/1/2020	8:55	9.60	90.1	NM	20.9	0.4	2.88	548	-9.1	6.46	16.03			
	6/1/2020	13:57	9.61	423.9	15	20.6	5.0	2.16	642	-7.5	6.56	16.34			
	6/2/2020	8:05	9.60	23.2	NM	20.9	10.8	1.94	529	7.1	6.52	16.29			
	6/2/2020	13:52	9.62	152.8	12	20.5	11.6	2.12	558	-10.1	6.49	16.60			
	6/3/2020	8:15	9.59	410.1	0	20.3	2.6	2.13	521	-42.6	6.50	16.29			
	6/3/2020	13:15	9.59	13.6	4	19.1	7.5	2.12	522	-15.2	6.48	16.50			
	6/4/2020	6:50	9.60	362	0	20.4	0.3	1.76	617	-43.3	6.62	16.75			
6/4/2020	13:28	9.58	314	NM	20.1	4.5	1.62	860	179.2	7.81	16.85				
MW-28 Hydrogen Peroxide	5/26/2020	10:47	9.25	2.2	0	12.8	5.3	0.59	8,344	-69.8	6.88	14.60			
	5/27/2020	13:40	6.77	2,763	26	OR	5.6	NM	NM	NM	NM	NM			
	5/28/2020	9:05	NM	1,943	34	OR	7.6	NM	NM	NM	NM	NM			
	5/28/2020	13:20	9.34	1,637	18	OR	6.5	NM	NM	NM	NM	NM			
	5/29/2020	8:50	9.15	2,408	20	OR	5.7	NM	NM	NM	NM	NM			
	5/29/2020	12:10	9.13	1,300	12	OR	4.9	NM	NM	NM	NM	NM	0	204	40
Persulfate	6/1/2020	8:30	9.40	2.4	NM	21.8	0.4	14.81	8,651	91.5	6.91	15.14			
	6/1/2020	12:50	NM	496.1	NM	NM	NM	NM	NM	NM	NM	NM	0	104	1
	6/2/2020	7:32	9.40	28.2	NM	OR	4.0	7.14	8,703	47.8	6.89	16.12	0	92	35
	6/2/2020	12:52	9.19	302.1	14	OR	7.2	5.62	9,140	65.8	6.82	17.59	0	76	25
	6/3/2020	7:28	9.32	218.0	0	OR	0.5	4.10	9,288	99.5	6.84	16.83			
	6/3/2020	12:30	9.20	809.6	17	OR	11.6	4.62	9,479	90.6	6.79	17.76	0	80	16
	6/4/2020	7:42	9.81	245	4	22.0	0.3	2.86	22,130	212.9	9.28	18.37			
	6/4/2020	12:40	7.61	79	0	OR	1.7	24.45	24,820	268.1	9.92	20.04	7,000	88	10

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
MW-37R Hydrogen Peroxide	5/26/2020	9:17	9.74	41.8	4	16.1	3.6	3.15	646	-60.2	6.96	16.66			
	5/28/2020	8:15	NM	1,823	52	15.4	5.1	NM	NM	NM	NM	NM			
	5/29/2020	7:35	NM	492.0	NM	NM	NM	NM	NM	NM	NM	NM			
DB-VMP-2	5/27/2020	8:15	---	0.6	0	20.9	0.5	---	---	---	---	---	---	---	---
	5/28/2020	---	---	NM	NM	NM	NM	---	---	---	---	---	---	---	---
	5/29/2020	9:25	---	0.9	---	---	---	---	---	---	---	---	---	---	---
	5/29/2020	12:30	---	1.0	---	---	---	---	---	---	---	---	---	---	---
	6/1/2020	12:10	---	0.0	---	---	---	---	---	---	---	---	---	---	---
	6/2/2020	10:40	---	0.0	---	---	---	---	---	---	---	---	---	---	---
	6/3/2020	12:00	---	0.0	---	---	---	---	---	---	---	---	---	---	---
6/4/2020	11:00	---	0.0	---	---	---	---	---	---	---	---	---	---	---	
DB-VMP-3	5/27/2020	8:20	---	2.2	0	20.8	0.2	---	---	---	---	---	---	---	---
	5/27/2020	13:15	---	0.9	NM	NM	NM	---	---	---	---	---	---	---	---
	5/28/2020	---	---	NM	NM	NM	NM	---	---	---	---	---	---	---	---
	5/29/2020	9:05	---	11.5	---	---	---	---	---	---	---	---	---	---	---
	5/29/2020	12:25	---	0.3	---	---	---	---	---	---	---	---	---	---	---
	6/1/2020	12:10	---	0.0	---	---	---	---	---	---	---	---	---	---	---
	6/2/2020	10:40	---	0.0	---	---	---	---	---	---	---	---	---	---	---
	6/3/2020	12:00	---	0.0	---	---	---	---	---	---	---	---	---	---	---
6/4/2020	11:00	---	0.0	---	---	---	---	---	---	---	---	---	---	---	
IA (DB)	5/29/2020	12:50	---	2.0	---	---	---	---	---	---	---	---	---	---	---
IA (MP-26)	5/27/2020	8:30	---	0.5	0	20.9	0.1	---	---	---	---	---	---	---	---
	5/28/2020	9:30	---	0.2	0	NM	NM	---	---	---	---	---	---	---	---
	5/28/2020	13:40	---	0.0	NM	NM	NM	---	---	---	---	---	---	---	---
	5/29/2020	9:10	---	0.7	---	---	---	---	---	---	---	---	---	---	---
	5/29/2020	12:40	---	0.8	---	---	---	---	---	---	---	---	---	---	---
	6/1/2020	12:10	---	0.6	---	---	---	---	---	---	---	---	---	---	---
	6/2/2020	10:45	---	0.5	---	---	---	---	---	---	---	---	---	---	---
	6/3/2020	12:00	---	0.3	---	---	---	---	---	---	---	---	---	---	---
6/4/2020	11:00	---	0.9	---	---	---	---	---	---	---	---	---	---	---	

Table 2
Summary of In-Situ Chemical Oxidation (ISCO) Activities
May/June 2020 Groundwater/Vapor Field Monitoring Data
Former Norton/Nashua
Watervliet, New York

Monitoring Point	Date	Time (24hr)	DTW (feet)	Monitoring Well Headspace Readings				Groundwater Readings							
				PID (ppmv)	LEL (%)	O ₂ (%)	CO ₂ (%)	DO (mg/L)	Sp. Cond. (µS/Cm)	ORP (mV)	pH (pH Units)	Temp (°C)	Persulfate (mg/L)	Iron (mg/L)	H ₂ O ₂ (mg/L)
IA (MP-37)	5/27/2020	8:25	---	0.7	0	20.9	0.2	---	---	---	---	---	---	---	---
	5/28/2020	9:25	---	0.4	0	NM	NM	---	---	---	---	---	---	---	---
	5/28/2020	13:46	---	0.0	NM	NM	NM	---	---	---	---	---	---	---	---
	5/29/2020	9:15	---	1.0	---	---	---	---	---	---	---	---	---	---	---
	5/29/2020	12:35	---	0.9	---	---	---	---	---	---	---	---	---	---	---
	6/1/2020	12:10	---	0.5	---	---	---	---	---	---	---	---	---	---	---
	6/2/2020	10:40	---	0.0	---	---	---	---	---	---	---	---	---	---	---
	6/3/2020	12:01	---	0.3	---	---	---	---	---	---	---	---	---	---	---
	6/4/2020	14:16	---	0.8	---	---	---	---	---	---	---	---	---	---	---
IA (Outside)	5/29/2020	9:20	---	0.0	---	---	---	---	---	---	---	---	---	---	---
	5/29/2020	12:45	---	0.0	---	---	---	---	---	---	---	---	---	---	---

Notes:

1. DTW = Depth to Water; DO = dissolved oxygen; PID = Photoionization Detector; ORP = Oxidation Reduction Potential; OR = Over Range; LEL = lower explosive limit; O₂ = vapor-phase oxygen; CO₂ = vapor-phase carbon dioxide; mg/L = milligrams per liter; ppmv = parts per million by volume; "-" = not recorded; in/H₂O = inches of water
 NA = Not Accessible.
2. * = Light non-aqueous phase liquid (LNAPL) present in MW-28; maximum thickness estimate at 0.20 feet. LNAPL removed with sorbent socks.
3. Field readings from select monitoring wells exhibiting elevated PID and/or LEL readings were not collected in order to minimize indoor air/worker breathing zone concerns.

Table 3
Vapor/Ambient Air Sampling Field Measurements (May 28, 2020)
Former Norton/Nashua Tape Products Facility
Watervliet, New York

Sample Designation	Initial Summa Vacuum (inHg)	Post-Sample Summa Vacuum (inHg)	Post-Sample Laboratory Summa Vacuum (inHg)	Purge Volume (Liters)	Pre-Sample PID Screening (ppbv)	Post-Sample PID Screening (ppbv)	Tracer Gas (Helium) Monitoring			
							Pre-Sample Concentration (Flux Chamber) (%)	Pre-Sample Concentration (Tedlar Bag) (ppmv)	Post-Sample Concentration (Flux Chamber) (%)	Post-Sample Concentration (Tedlar Bag) (ppmv)
DB-VMP-2	29.0	7.0	7.5	1.0	3,589	1,376	77.6%	0.4%	87.6%	0.7%
DB-VMP-3	29.0	5.5	6.5	1.0	2,376	1,117	85.7%	520 (ppm)	85.1%	0.6%
Indoor Air	>30	10.0	7.0	NA	1,260	633	NA	NA	NA	NA
Outdoor Ambient	28.0	5.0	7.5	NA	0.0	0.0	NA	NA	NA	NA
Trip Blank	NA	NA	29.4	NA	NA	NA	NA	NA	NA	NA

Notes:

1. PID = photoionization detector; inHg = inches of mercury; ppbv = parts per billion by volume; ppmv = parts per million by volume; VMP = vapor monitoring point; IA = indoor air; TB = trip blank; NA = Not Applicable.

Table 4
Summary of Vapor Analytical Data (May 2020)
Former Norton/Nashua Facility
Watervliet, New York

Sample ID: Date Sampled:	DB-VMP-2 5/28/2020	DB-VMP-3 5/28/2020	Indoor Air 5/28/2020	Outdoor Ambient 5/28/2020	Trip Blank 5/28/2020
Acetone	42.3 J	11 J	112 J	12 J	ND (0.26)
1,3-Butadiene	ND (0.40 J)	ND (0.40)	ND (0.10 J)	ND (0.10)	ND (0.10)
Benzene	ND (0.15 J)	ND (0.15)	3.5 J	ND (0.038)	ND (0.038)
Bromodichloromethane	ND (0.74 J)	ND (0.74)	ND (0.18 J)	ND (0.18)	ND (0.18)
Carbon disulfide	ND (0.29 J)	ND (0.29)	ND (0.075 J)	ND (0.075)	ND (0.075)
Chloroform	ND (0.39 J)	ND (0.39)	2.1 J	ND (0.098)	ND (0.098)
Chloromethane	ND (0.13 J)	ND (0.13)	2.5 J	1.3	ND (0.031)
Carbon Tetrachloride	ND (0.59 J)	ND (0.59)	ND (0.15 J)	ND (0.15)	ND (0.15)
Cyclohexane	ND (0.30 J)	ND (0.30)	4.1 J	ND (0.076)	ND (0.076)
1,1-Dichloroethane (1,1-DCA)	ND (0.19 J)	ND (0.19)	ND (0.049 J)	ND (0.049)	ND (0.049)
1,2-Dichloroethane (1,2-DCA)	ND (0.34 J)	ND (0.34)	ND (0.085 J)	ND (0.085)	ND (0.085)
Dichlorodifluoromethane	ND (0.33 J)	1.9 J	2.1 J	2.4	ND (0.084)
trans-1,2-Dichloroethylene (DCE)	ND (0.11 J)	ND (0.11)	ND (0.029 J)	ND (0.029)	ND (0.029)
m-Dichlorobenzene	ND (0.46 J)	ND (0.46)	ND (0.11 J)	ND (0.11)	ND (0.11)
p-Dichlorobenzene	ND (0.42 J)	ND (0.42)	2.8 J	ND (0.11)	ND (0.11)
Ethanol	39.6 J	11	62.6 J	11	ND (0.41)
Ethylbenzene	ND (0.26 J)	ND (0.26)	20 J	ND (0.065)	ND (0.065)
Ethyl Acetate	5.4 J	4.3	13 J	ND (0.14)	ND (0.14)
4-Ethyltoluene	ND (0.59 J)	ND (0.59)	2.1 J	ND (0.15)	ND (0.15)
Heptane	2.3 J	2.7 J	289 J	ND (0.074)	ND (0.074)
Hexachlorobutadiene	ND (1.9 J)	ND (1.9)	ND (0.49 J)	ND (0.49)	ND (0.49)
Hexane	ND (0.15 J)	2.5 J	9.5 J	3.3	ND (0.039)
2-Hexanone	ND (0.61 J)	ND (0.61)	ND (0.15 J)	ND (0.15)	ND (0.15)
Isopropyl alcohol	5.4 J	2.9 J	9.3 J	<3.4	5.9
Methylene chloride	2.9 J	ND (0.20)	2.3 J	12 J	ND (0.052)
Methyl ethyl ketone	4.1 J	1.7 J	10 J	0.83 J	ND (0.12)
Methyl Isobutyl Ketone	ND (0.57 J)	ND (0.57)	ND (0.15 J)	ND (0.15)	ND (0.15)
MTBE	ND (0.28 J)	4.3	ND (0.069 J)	ND (0.069)	ND (0.069)
Methylmethacrylate	8.6 J	ND (0.53)	ND (0.14 J)	ND (0.14)	ND (0.14)
Propylene	ND (0.11 J)	ND (0.11)	ND (0.027 J)	ND (0.027)	ND (0.027)
Styrene	ND (0.32 J)	ND (0.32)	53.6 J	ND (0.081)	ND (0.081)

Table 4
Summary of Vapor Analytical Data (May 2020)
Former Norton/Nashua Facility
Watervliet, New York

Sample ID: Date Sampled:	DB-VMP-2 5/28/2020	DB-VMP-3 5/28/2020	Indoor Air 5/28/2020	Outdoor Ambient 5/28/2020	Trip Blank 5/28/2020
1,1,1-Trichloroethane (1,1,1-TCA)	ND (0.71 J)	ND (0.71)	ND (0.18 J)	ND (0.18)	ND (0.18)
1,2,4-Trichlorobenzene	6.4 J	ND (2.6)	ND (0.66 J)	ND (0.66)	ND (0.66)
1,2,4-Trimethylbenzene	ND (0.64 J)	ND (0.64)	8.4 J	ND (0.16)	ND (0.16)
1,3,5-Trimethylbenzene	ND (0.64 J)	ND (0.64)	2.8 J	ND (0.17)	ND (0.17)
2,2,4-Trimethylpentane	ND (0.41 J)	3.2 J	ND (0.10 J)	ND (0.10)	ND (0.10)
Tertiary Butyl Alcohol (TBA)	ND (0.17 J)	ND (0.17)	ND (0.042 J)	ND (0.042)	ND (0.042)
Tetrachloroethene (PCE)	11 J	4.2 J	16 J	ND (0.21)	ND (0.21)
Tetrahydrofuran	ND (0.59 J)	ND (0.59 J)	2.1 J	ND (0.15)	ND (0.15)
Toluene	2.3 J	4.9	278 J	0.68 J	ND (0.053)
Trichloroethene (TCE)	ND (0.41 J)	ND (0.41)	ND (0.10 J)	ND (0.10)	ND (0.10)
Trichlorofluoromethane	2.2 J	ND (0.62)	4.5 J	5.5	ND (0.16)
Vinyl Acetate	ND (0.49 J)	ND (0.49)	ND (0.12 J)	ND (0.12)	ND (0.12)
m,p-Xylene	ND (0.61 J)	1.9 J	47.3 J	ND (0.15)	ND (0.15)
o-Xylene	ND (0.30 J)	ND (0.30)	15 J	ND (0.074)	ND (0.074)
Xylenes (total)	ND (0.30 J)	1.9 J	62.5 J	ND (0.074)	ND (0.074)
Total VOC TICs	17 J	ND	463.1 J	ND	ND

Notes:

1. All samples were analyzed for VOCs via EPA Method TO-15 plus TICs. Only detected analytes are listed above.
2. All results presented in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) except total volatile organic compound (VOC) tentatively identified compounds (TICs), which are presented in parts per billion by volume (ppbv).
3. J = estimated concentration, compound detected below the quantitation limit;
ND = not detected (laboratory detection limit); VMP = vapor monitoring point.

Table 5
Tentative Schedule
Former Norton/Nashua Tape Facility
Watervliet, New York

Activity	3Q2019			4Q2019			1Q2020			2Q2020			3Q2020			4Q2020		
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Submit Draft Final Engineering Report (FER)																		
FER approved by NYSDEC/NYSDOH																		
Final Site Management Plan (SMP) approved by NYSDEC/NYSDOH																		
Bio-Supplementation/Well Dosing Events																		
Enhanced Fluid Recovery (EFR) Events																		
On-Site (Semi-Annual) Groundwater Sampling Events																		
Off-Site (Annual) Groundwater Sampling Event																		
Installation of Pre-In-Situ Chemical Oxidation (ISCO) Injection Points																		
ISCO Activities																		
Conduct ISCO-Related Vapor Intrusion Sampling																		
Post-ISCO Groundwater Sampling Events																		
Post-EFR Groundwater Sampling Event																		
Reporting																		

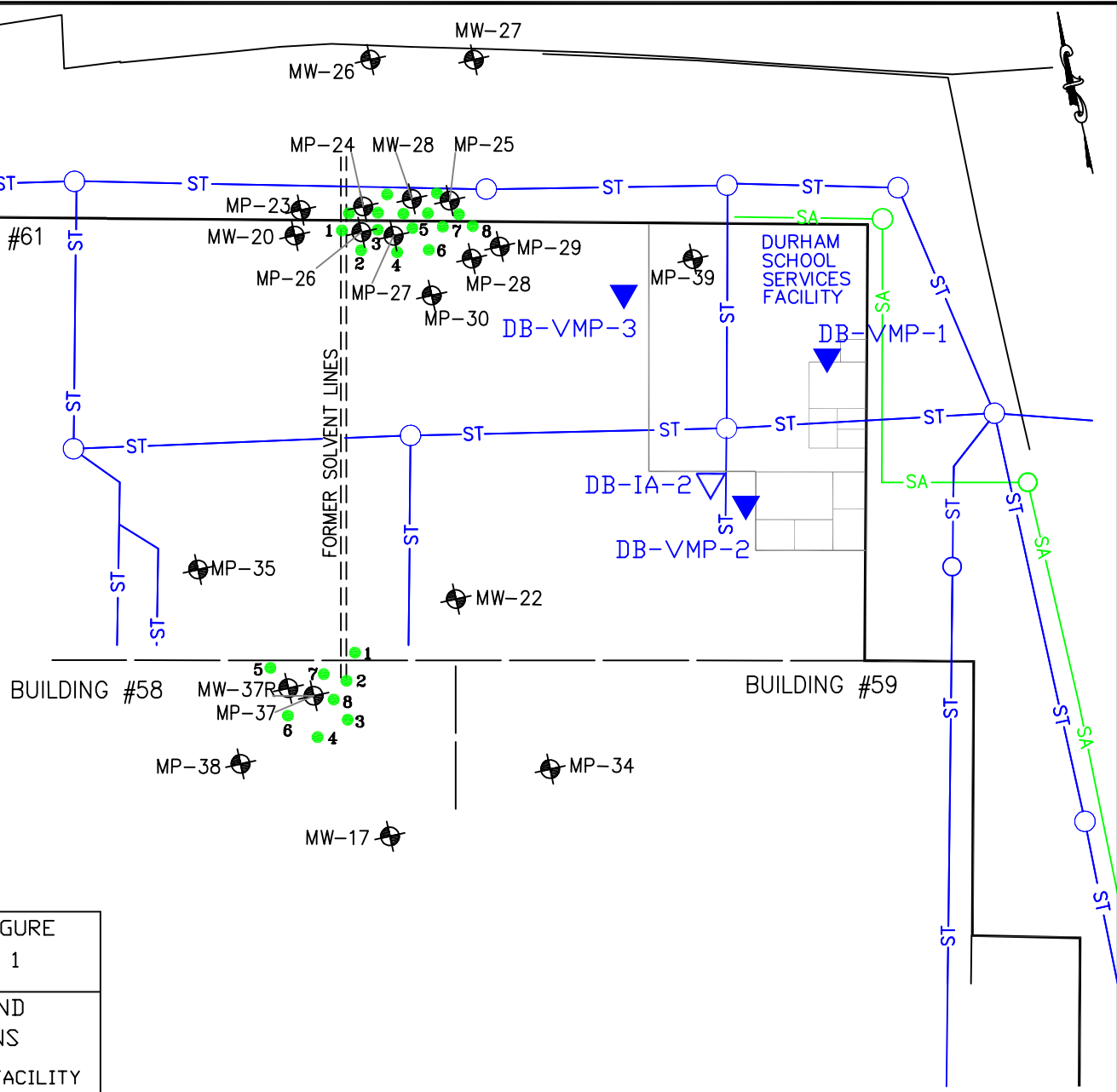
FIGURES

OUTDOOR AMBIENT

(APPROX. 100 FEET WEST)

LEGEND

- SA SANITARY SEWER
- ST STORM SEWER
- FORMER UNDERGROUND SOLVENT LINE
- ISCD INJECTION POINT
- 1 ISCD INJECTION POINT (CLEARANCE BORING)
- MONITORING WELL
- SUB-SLAB VAPOR MONITORING POINT
- INDOOR AIR SAMPLE



FORENSIC ENVIRONMENTAL SERVICES, INC.	FIGURE 1
2020 ISCD INJECTION POINTS AND MONITORING/SAMPLING LOCATIONS	
FORMER NORTON/NASHUA TAPE PRODUCTS FACILITY WATERVLIET, NEW YORK	
<p>SCALE IN FEET</p>	<p>DRAWN BY:</p> <hr/> <p>APPROVED BY:</p>

ATTACHMENT 1
WASTE MANIFEST



GENERATOR	NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number NYD066829599	2. Page 1 of 1	3. Emergency Response Phone 8448738723	4. Waste Tracking Number 2348681
	5. Generator's Name and Mailing Address SAINT-GOBAIN CORPORATION 20 MOORES RD MALVERN, PA 19355 Generator's Phone: 610-893-5667			Generator's Site Address (if different than mailing address) FORMER NORTON NASHUA TAPE PRODUCT 2600 SEVENTH AVE WATERVLIET, NY 12189	
TRANSPORTER	6. Transporter 1 Company Name TRADEBE TRANSPORTATION, LLC				U.S. EPA ID Number CTD021816889
	7. Transporter 2 Company Name				U.S. EPA ID Number
DESIGNATED FACILITY	8. Designated Facility Name and Site Address TRADEBE T&R NORTHEAST, LLC 136 GRACEY AVE MERIDEN, CT 06451 Facility's Phone: 203-238-6745				U.S. EPA ID Number CTD021816889
	9. Waste Shipping Name and Description NON RCRA / NON DOT REGULATED MATERIAL		10. Containers No. Type XX3 DM 2,700 P		11. Total Quantity
				12. Unit Wt./Vol. CR05	
13. Special Handling Instructions and Additional Information 001) ERG P030111010N4 SO: 2348681					
14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.					
Generator's/Offoror's Printed/Typed Name X Andrea Hill		Signature <i>[Signature]</i>		Month Day Year 6 3 20	
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S. Port of entry/exit: _____ Date leaving U.S.: _____					
16. Transporter Acknowledgment of Receipt of Materials					
Transporter 1 Printed/Typed Name Jose Flores		Signature <i>[Signature]</i>		Month Day Year 6 3 20	
Transporter 2 Printed/Typed Name		Signature		Month Day Year	
17. Discrepancy					
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue <input type="checkbox"/> Partial Rejection <input type="checkbox"/> Full Rejection					
Manifest Reference Number: _____ U.S. EPA ID Number					
17b. Alternate Facility (or Generator) _____ U.S. EPA ID Number					
Facility's Phone: _____					
17c. Signature of Alternate Facility (or Generator) _____ Month Day Year					
18. Designated Facility Owner or Operator. Certification of receipt of materials covered by the manifest except as noted in Item 17a					
Printed/Typed Name Mabnia Cautermash		Signature <i>[Signature]</i>		Month Day Year 06 04 20	

ATTACHMENT 2

**NYSDOH INDOOR AIR QUALITY QUESTIONNAIRE
AND BUILDING INVENTORY**



Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Former Norton/Nashua Site Code: 401062 Operable Unit: _____
Building Code: _____ Building Name: Stone Management Warehouse
Address: 2600 7th Avenue Apt/Suite No: _____
City: Watervliet State: NY Zip: 12189 County: Albany

Contact Information

Preparer's Name: Bryan J. Machella Phone No: (610) 594-3940
Preparer's Affiliation: Forensic Environmental Services, Inc. Company Code: _____
Purpose of Investigation: ISCO-related vapor sampling Date of Inspection: May 28, 2020
Contact Name: Brian Helf Affiliation: OWNER
Phone No: (518) 272-2136 Alt. Phone No: _____ Email: bhelf@stone-mgt.com
Number of Occupants (total): 15-20 Number of Children: _____
 Occupant Interviewed? Owner Occupied? Owner Interviewed?
Owner Name (if different): _____ Owner Phone: _____
Owner Mailing Address: 2622 7th Avenue, Watervliet, NY 12189

Building Details

Bldg Type (Res/Com/Ind/Mixed): COMMERCIAL/MIXED Bldg Size (S/M/L): LARGE
If Commercial or Industrial Facility, Select Operations: WAREHOUSE If Residential Select Structure Type: _____
Number of Floors: 1 Approx. Year Construction: 1960 Building Insulated? Attached Garage?
Describe Overall Building 'Tightness' and Airflows (e.g., results of smoke tests):
Not air tight

Foundation Description

Foundation Type: NO BASEMENT/SLAB Foundation Depth (bgs): _____ Unit: FEET
Foundation Floor Material: POURED CONCRETE Foundation Floor Thickness: 8 Unit: INCHES
Foundation Wall Material: CONCRETE BLOCK Foundation Wall Thickness: 8
 Floor penetrations? Describe Floor Penetrations: Existing monitoring wells; temp. injection points
 Wall penetrations? Describe Wall Penetrations: Doors/garage (bay) doors
Basement is: _____ Basement is: _____ Sumps/Drains? Water In Sump?: _____
Describe Foundation Condition (cracks, seepage, etc.): Minor cracks (no penetrations except as noted above)
 Radon Mitigation System Installed? VOC Mitigation System Installed? Mitigation System On?

Heating/Cooling/Ventilation Systems

Heating System: FORCED AIR Heat Fuel Type: GAS Central A/C Present?

Vented Appliances

Water Heater Fuel Type: _____ Clothes Dryer Fuel Type: _____
Water Htr Vent Location: _____ Dryer Vent Location: _____



Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

PRODUCT INVENTORY

Building Name: Stone Management Warehouse Bldg Code: _____ Date: May 28, 2020

Bldg Address: 2600 7th Avenue Apt/Suite No: _____

Bldg City/State/Zip: Watervliet NY, 12189

Make and Model of PID: PPBRae Date of Calibration: May 28, 2020

Location	Product Name/Description	Size (oz)	Condition *	Chemical Ingredients	PID Reading	COC Y/N?
Bldg #61	Steel (vent) stack	NA	Intact	None	1,242 (ppb) ⁺	<input type="checkbox"/>
Bldg #61	Cardboard (pallet)	NA	Intact	None	1,240	<input type="checkbox"/>
Bldg #61	White plastic containers	NA	Intact	None	1,060	<input type="checkbox"/>
Bldg #61	Insulation	NA	Intact	None	1,130	<input type="checkbox"/>
Bldg #61	Hydrogen tanks	NA	Intact	None	885	<input type="checkbox"/>
Bldg #61	Document crates	NA	Intact	None	977	<input type="checkbox"/>
Bldg #61	2018 Plug Power Documents	NA	Intact	None	991	<input type="checkbox"/>
Bldg #61	Plug Power Unit	NA	Intact	None	1,022	<input type="checkbox"/>
Bldg #61	Gen Drives (VMP-2)	NA	Intact	None	1,250	<input type="checkbox"/>
Bldg #61	Gen Drives (VMP-3)	NA	Intact	None	1,100	<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>
						<input type="checkbox"/>

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

Product Inventory Complete? Yes No Were there any elevated PID readings taken on site? No Yes Products with COC?



Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Site Name: Former Norton/Nashua Site Code: 401062 Operable Unit: _____

Building Code: _____ Building Name: Stone Management Warehouse

Address: 2600 7th Avenue Apt/Suite No: _____

City: Watervliet State: NY Zip: 12189 County: Albany

Factors Affecting Indoor Air Quality

Frequency Basement/Lowest Level is Occupied?: FULL TIME Floor Material: CEMENT

Inhabited? HVAC System On? Bathroom Exhaust Fan? Kitchen Exhaust Fan?

Alternate Heat Source: _____ Is there smoking in the building?

Air Fresheners? Description/Location of Air Freshener: _____

Cleaning Products Used Recently?: Description of Cleaning Products: _____

Cosmetic Products Used Recently?: Description of Cosmetic Products: _____

New Carpet or Furniture? Location of New Carpet/Furniture: _____

Recent Dry Cleaning? Location of Recently Dry Cleaned Fabrics: _____

Recent Painting/Staining? Location of New Painting: _____

Solvent or Chemical Odors? Describe Odors (if any): _____

Do Any Occupants Use Solvents At Work? If So, List Solvents Used: _____

Recent Pesticide/Rodenticide? Description of Last Use: _____

Describe Any Household Activities (chemical use,/storage, unvented appliances, hobbies, etc.) That May Affect Indoor Air Quality:

Propane-powered forklifts in operation Monday through Friday from approximately 7:00 am to 4:00 pm

Any Prior Testing For Radon? If So, When?: _____

Any Prior Testing For VOCs? If So, When?: Annually

Sampling Conditions

Weather Conditions: SUNNY Outdoor Temperature: 70 - 80 °F

Current Building Use: WAREHOUSE Barometric Pressure: 30.07 - 30.17 in(hg)

Product Inventory Complete? Yes Building Questionnaire Completed?



Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

Building Code: _____ Address: 2600 7th Avenue Watervliet, NY 12189

Sampling Information

Sampler Name(s): Bryan J. Machella Sampler Company Code: Consultant
 Sample Collection Date: May 28, 2020 Date Samples Sent To Lab: June 1, 2020
 Sample Chain of Custody Number: JD7907 Outdoor Air Sample Location ID: Outdoor Amb

SUMMA Canister Information

Sample ID:	<u>DB-VMP-2</u>	<u>DB-VMP-3</u>	<u>Indoor Air</u>	<u>Outdoor Amb.</u>	<u>Trip Blank</u>
Location Code:	<u>Bldg #61</u>	<u>Bldg #61</u>	<u>Bldg #61</u>	<u>NW Area</u>	
Location Type:	<u>SUBSLAB</u>	<u>SUBSLAB</u>	<u>FIRST FLOOR</u>	<u>OUTDOOR</u>	
Canister ID:	<u>A764</u>	<u>M002</u>	<u>A636</u>	<u>A841</u>	<u>M415</u>
Regulator ID:	<u>FC526</u>	<u>FC184</u>	<u>FC136</u>	<u>FC609</u>	
Matrix:	<u>Subslab Soil Vapor</u>	<u>Subslab Soil</u>	<u>Indoor Air</u>	<u>Ambient Outd</u>	
Sampling Method:	<u>SUMMA AIR SAMPLI</u>	<u>SUMMA AIR SA</u>	<u>SUMMA AIR SA</u>	<u>SUMMA AIR SA</u>	<u>SUMMA AIR SA</u>

Sampling Area Info

Slab Thickness (inches):	<u>8</u>	<u>8</u>			
Sub-Slab Material:	<u>DIRT</u>	<u>DIRT</u>			
Sub-Slab Moisture:	<u>DRY</u>	<u>DRY</u>			
Seal Type:					
Seal Adequate?:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample Times and Vacuum Readings

Sample Start Date/Time:	<u>05/28/2020 6:45</u>	<u>05/28/2020</u>	<u>05/28/2020</u>	<u>05/28/2020</u>	
Vacuum Gauge Start:	<u>29</u>	<u>29</u>	<u>30</u>	<u>28</u>	
Sample End Date/Time:	<u>05/28/2020 15:</u>	<u>05/28/2020</u>	<u>05/28/2020</u>	<u>05/28/2020</u>	
Vacuum Gauge End:	<u>7</u>	<u>5.5</u>	<u>10</u>	<u>5</u>	
Sample Duration (hrs):	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>	<u>8</u>
Vacuum Gauge Unit:	<u>in (hg)</u>	<u>in (hg)</u>	<u>in (hg)</u>	<u>in (hg)</u>	<u>in (hg)</u>

Sample QA/QC Readings

Vapor Port Purge:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Purge PID Reading:	<u>3,589</u>	<u>1,425</u>			
Purge PID Unit:	<u>ppb</u>	<u>ppb</u>			
Tracer Test Pass:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sample start and end times should be entered using the following format: MM/DD/YYYY HH:MM



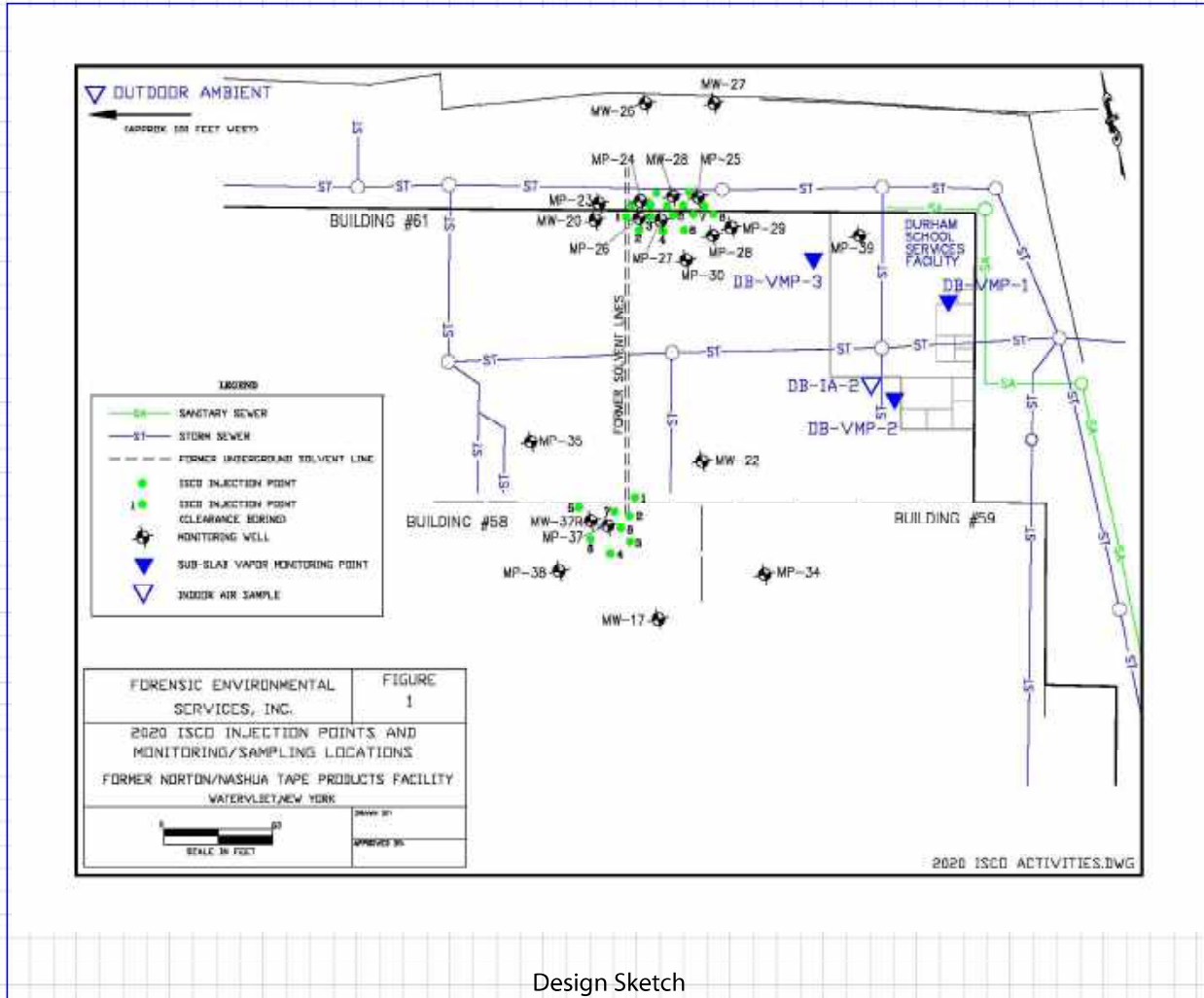
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

LOWEST BUILDING LEVEL LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the lowest building level .
The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbolology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sketch.
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	xxxxxxx	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	#####	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.



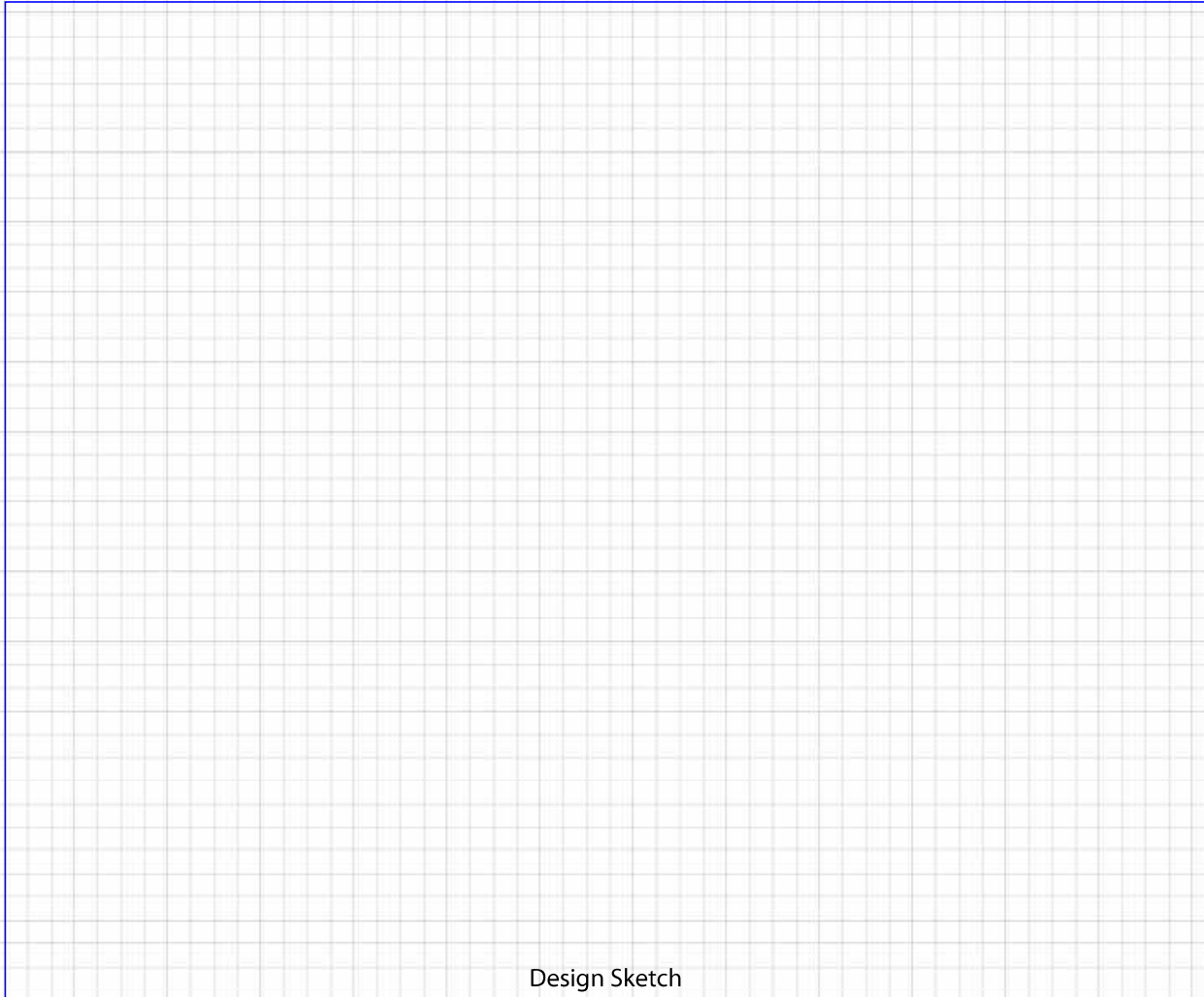
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

FIRST FLOOR BUILDING LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the first floor of the building. The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sketch.
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	xxxxxxx	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	#####	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.



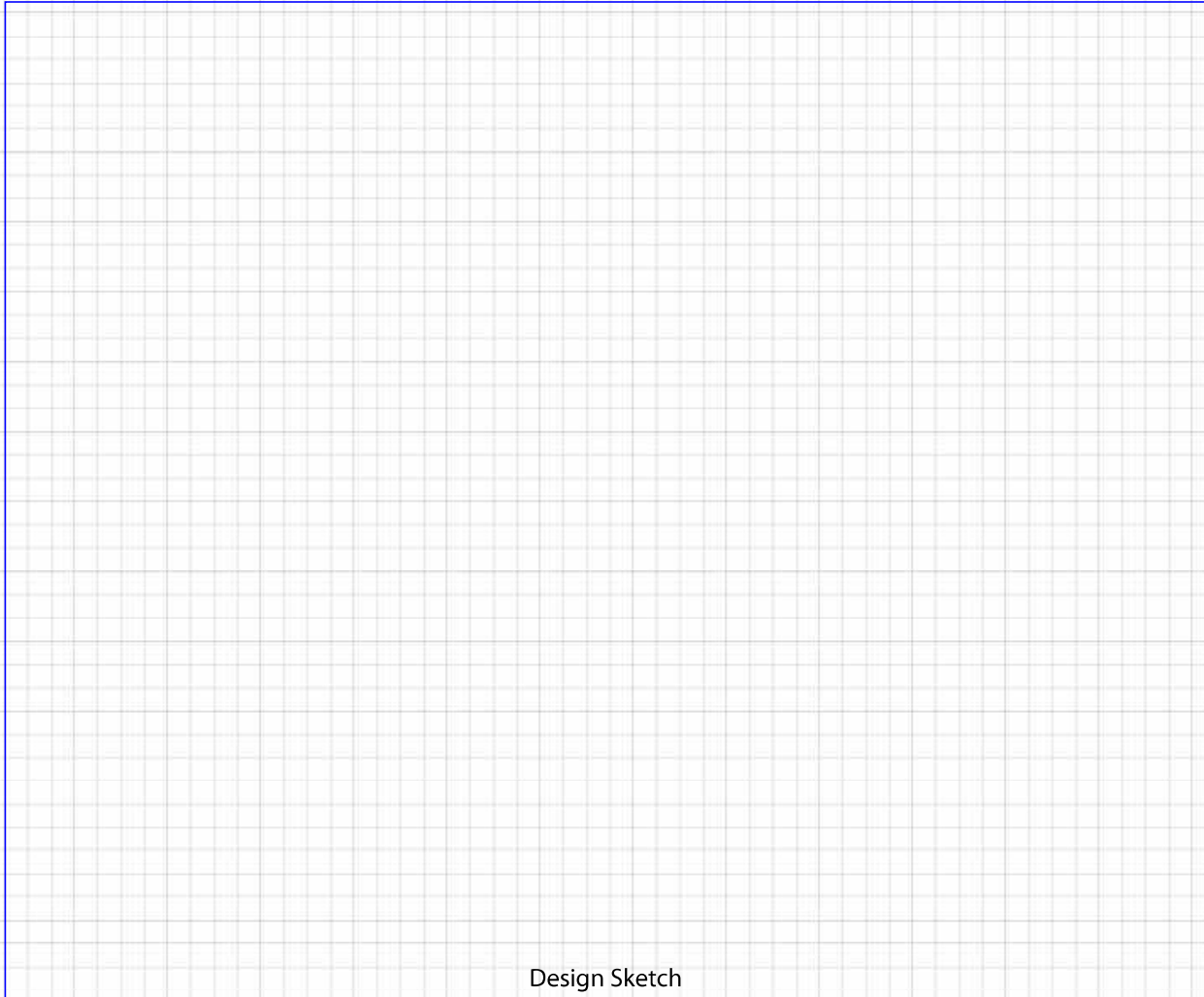
Structure Sampling Questionnaire and Building Inventory

New York State Department of Environmental Conservation

OUTDOOR PLOT LAYOUT SKETCH

Please click the box with the blue border below to upload a sketch of the outdoor plot of the building as well as the surrounding area. The sketch should be in a standard image format (.jpg, .png, .tiff)

Clear Image



Design Sketch

Design Sketch Guidelines and Recommended Symbolology

- Identify and label the locations of all sub-slab, indoor air, and outdoor air samples on the layout sketch.
- Measure the distance of all sample locations from identifiable features, and include on the layout sketch.
- Identify room use (bedroom, living room, den, kitchen, etc.) on the layout sketch.
- Identify the locations of the following features on the layout sketch, using the appropriate symbols:

B or F	Boiler or Furnace	o	Other floor or wall penetrations (label appropriately)
HW	Hot Water Heater	xxxxxxx	Perimeter Drains (draw inside or outside outer walls as appropriate)
FP	Fireplaces	#####	Areas of broken-up concrete
WS	Wood Stoves	● SS-1	Location & label of sub-slab samples
W/D	Washer / Dryer	● IA-1	Location & label of indoor air samples
S	Sumps	● OA-1	Location & label of outdoor air samples
@	Floor Drains	● PFET-1	Location and label of any pressure field test holes.

PHOTOGRAPHIC LOG

Picture 1: Steel stack/vent (Photoionization Detector [PID]: 1,275 – 1,252 parts per billion by volume [ppbv])
DB-VMP-2 in foreground.



Picture 2: Cardboard material (PID: 1,240 ppbv)



Picture 3: Empty white plastic containers (PID: 1,060 ppbv)



Picture 4: White insulation (PID: 1,100 – 1,130 ppbv)



Picture 5: Plug Power “Gen Drive” forklift batteries proximal to VMP-2 (PID: 1,230 – 1,250 ppbv).



Picture 6: Hydrogen Tanks (PID: 885 ppbv)



Picture 7: Plug Power “Gen Drive” Forklift Batteries proximal to VMP-3 (PID: 975 – 1,100 ppbv).



Picture 8: Plug Power Documents (PID: 991 ppbv)



Picture 9: Plug Power Documents (PID: 977 ppbv).



Picture 10: Plug Power Unit (Unknown) (PID: 1,022 ppbv)



Picture 11: Indoor Air Sampling Location (PID: 1,239 ppbv)



Picture 12: DB-VMP-3 sampling location.



Picture 13: Outdoor Ambient sampling location (PID: 0.0 ppbv).



Picture 14: Building #61 warehouse area (view looking east).



ATTACHMENT 3

JUNE 23, 2020 NYSDEC CORRESPONDENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Office of the Director
625 Broadway, 12th Floor, Albany, New York 12233-7011
P: (518) 402-9706 | F: (518) 402-9020
www.dec.ny.gov

June 23, 2020

James Smith
Manager of Environmental Programs
Saint-Gobain Corporation
20 Moores Road
Malvern, PA 19355

Re: Final Engineering Report, Kendall Polken
Nashua Tape, Albany County, Site No. 401062

Dear Mr. Smith:

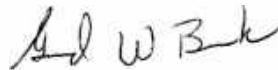
The New York State Department of Environmental Conservation (Department) is pleased to inform you that the Final Engineering Report (FER) is hereby approved for the above-referenced site.

The Department will develop a fact sheet announcing approval of the FER and describing the institutional and engineering controls (IC/ECs), if any, that are required at the site and distribute it to the County Listserv within 10 days.

Please note that you are required to Implement the Department-approved Site Management Plan (SMP) which details the activities necessary to assure the performance, effectiveness, and protectiveness of the remedial program. You must also report the results of these activities to the Department in a Periodic Review Report (PRR) which includes any required IC/EC Certifications. The first PRR including the certification of the IC/ECs is due to the Department in October 2021.

If you have any questions regarding any of these items, please contact Alicia Barraza at alicia.barraza@dec.ny.gov or 518-402-9690.

Sincerely,



Gerard Burke, P.E.
Bureau B Director
Division of Environmental Remediation

Enclosure

ec w/ enclosure:

- C. Vooris – NYSDOH, Christine.Vooris@health.ny.gov
- R. Ockerby – NYSDOH, renata.ockerby@health.ny.gov
- J. Deming – NYSDOH, justin.deming@health.ny.gov
- S. Bogardus – NYSDOH, sara.bogardus@health.ny.gov

ec w/o enc.:

- A. Barraza
- M. Komoroske
- A. Fleck, Region 4
- C. Bower, OGC
- K. Lewandowski, SC