



September 10, 2021

Stora Enso C/O
John T. Kolaga, Esq.
Rupp Baase Pfalzgraf Cunningham LLC
1600 Liberty Building
Buffalo, New York 14202

RE: Remedial Monitoring/Closure Assessment Work Plan,
Vails Gate Manufacturing, LLC,
Vails Gate, New York, NYSDEC Site No. 336065

Dear Mr. Kolaga:

Leader Consulting Services, Inc. (“Leader”) is pleased to provide Rupp Baase Pfalzgraf Cunningham, LLC (“RBFC”), on behalf of Stora Enso, with this Site Monitoring Plan (“SMP”) Shutdown Plan for the former Vails Gate Manufacturing facility (“VGM”) at 1073 Route 94 in Vails Gate, New York (hereafter referred to as “the Site”). The Site is currently identified as the Vails Gate Business Center (“VGBC”).

1.0 PROGRESS THROUGH MARCH 2021

Leader was retained to implement the New York State Department of Environmental Conservation (“NYSDEC”)-approved Remedial Action Work Plan (“RAWP”) that was developed for Area of Concern 6 (“AOC 6”) at the Site. As identified in the approved RAWP, In-situ bioremediation was the selected remedial alternative identified in the NYSDEC-approved Corrective Measure Study (“CMS”).

The Site-specific Standards, Criteria and Guidance (“SCGs”) applicable to the RAWP were developed to meet the Remedial Action Objectives (“RAOs”) of the CMS. An “unrestricted use remedy” has been established for the Site, which is based on the regulatory standard values for Class GA groundwater identified in 6 NYCRR Part 703.5. The RAWP was developed to address the SCGs and RAOs for the Site. The RAWP has been implemented in accordance with NYSDEC Department of Environmental Remediation (“DER”) Guidance Document DER-10, *Technical Guidance for Site Investigation and Remediation*.

The In-Situ Bioremediation program identified in the RAWP was based on the March 2012 Phase II RCRA Facility Investigation (“RFI”) and the 2013 CMS. Quarterly sampling and laboratory analyses of groundwater samples from four (4) groundwater monitoring wells (MW-14, MW-5A/AR, MW-16 and MW-CHA-RFI-7) was required per the RAWP.

A Site Management Plan (“SMP”) was approved by NYSDEC after the final Quarterly Sampling event was completed. This SMP required the following to be completed during the 2020/2021 heating season: 1) Evaluation and repair (if needed) of existing Sub Slab Depressurization System (“SSDS”) in Space 15; 2) Indoor Air Sampling and Testing in the Tesla Space (formerly Solar



City); and 3) Groundwater sampling and testing of MW-SA/AR and MW-14. Groundwater sampling was conducted at the Site from June 2011 through March 2021. The sampling events were designed to evaluate the success of the Bioremediation Activities. The Post-Remediation sampling and analysis includes the typical parameters of volatile organic compounds (“VOCs”), sulfate, total organic carbon (“TOC”), and dissolved iron (“DI”) and the field parameters of dissolved oxygen (“DO”), pH, oxidation reduction potential (“redox”), temperature and turbidity. Groundwater sample locations at MW-16 and MW-CHA-RFI-7 meet the Class GA groundwater standards as of the August 2017 sampling event and were not sampled during the March 2021 sampling event.

For the purpose of assessing the continued viability of the bioremediation medium, periodic sampling of the groundwater was conducted. Laboratory data are reviewed to evaluate analyte concentrations from groundwater samples from two (2) of the on-Site monitoring wells. The results are compared to previous data generated during RAWP implementation (i.e, bioremediation sampling and analysis) and the SCGS.

The March 2021 sampling event involved the collection of groundwater samples from monitoring wells MW-14 and MW-5A/AR. These laboratory reports were included with the March 2021 Progress Report. The groundwater sample from MW-14 detected 1,1-dichloroethane at 6.1 ppb, slightly above the Class GA groundwater standard (5 ppb) and no analytes were detected above the groundwater standards at MW-5A/AR during the March 2021 sampling event. These results are similar to previous post-remediation data and indicate the remedy is still achieving the RAOs.

Indoor Air Sampling is conducted periodically to assess the adequacy of the vapor mitigation system. Leader sampled the Indoor Air in February 2021 and the laboratory results were submitted in the April 2021 Progress Report. Air sample results were below the NYSDOH 2003 Indoor Air Study of VOCs in Air of Oil Fueled Homes Guidelines for the contaminants potentially related to this Remedial Action. There were no integrity issues with the bioremediation remedial systems at the Site. MW-5A/AR and MW-14 were in satisfactory operating condition; however, MW-14 is in a depressed area of the parking lot and was under surface water during the March 2021 sampling event. The concrete floor above the area where bio-remediation material had been injected was in good condition.

Engineering Controls include the SSDS which was installed in Space 15 in February 2010. The vapor mitigation system was inspected by Alpine Environmental Services, Inc. in June 2011, April 2012, February 2018, March 2020 and January 2021. The January 2021 vapor mitigation system inspection assessed the operating conditions and involved maintenance and repair of the system. During the January 2021 inspection no deficiencies were observed or noted.

Institutional Controls (“IC”) were previously implemented to prevent future exposure to the remaining contamination and limit the development of the Site.

2.0 REMEDIAL ACTION OBJECTIVES

The RAOs for the Site are listed in the CMS and RAWP dated February and July 2014, respectively. They identify the Site specific Standards, Criteria and Guidance (“SCGs”) applicable



to the Site and have been selected to meet the overall RAOs of the CMS. An unrestricted use remedy has been established for the Site, which is based on the regulatory standard values for Class GA groundwater identified in 6 NYCRR Part 703.5. This detailed In-situ bioremediation RAWP was designed to address the SCGs and the RAOs for the Site.

Groundwater - RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of, volatiles from contaminated groundwater.

The groundwater is not used as a public drinking water supply or used as process water within the facility. Therefore, the above RAOs have been met.

Groundwater - RAOs for Environmental Protection

- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water.
- Remove the source of ground or surface water contamination.

The Site is in the post-bioremediation phase. There is no release of groundwater into the surface waters.

Soil - RAOs for Public Health Protection

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

A portion of the oil/water separator and 500-gallon overflow tank was removed along with the excavation of the surrounding contaminated soils. The impact to the groundwater is being bio remediated and monitored.

Soil - RAOs for Environmental Protection

- Prevent migration of contaminants that would result in groundwater or surface water contamination.
- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.
- The area where the remediation activities occurred is covered in asphalt or concrete. There is no direct contact with or migration from the former remediation area.



Indoor Air Quality Results

An indoor air sample was collected in the Tesla Space near MW-5R/AR. The sample was analyzed by Centek Laboratories and previously submitted to NYSDEC.

The February 2021 indoor air sampling results are summarized in the March 2021 Progress Report. All Levels detected were below applicable guidance values or standards.

3.0 SMP SHUTDOWN PLAN

On May 11, 2021, representatives from Leader, Rupp Baase, NYSDOH and NYSDEC participated in a conference call to discuss actions needed to obtain closure and SMP Shutdown for the Site. The following action items were identified during the call:

- 1) Leader will draft an SMP Shutdown Plan to include schedule and scope to close out the Site;
- 2) Initial task is to evaluate all wells for operability;
- 3) Groundwater monitoring will include a September event including 5 wells with additional parameters and an early 2022 event involving the same 5 wells.
- 4) SSDS closure will involve the shutdown of SSDS in December 2021 and sampling of sub slab and indoor air in early 2022; and
- 5) Potential final SSDS event may occur in 2022/2023 after shutdown of system for 10 months.

These tasks are discussed in the Tasks summarized below.

Task 1 – Monitoring Well Assessment

Leader will retain Pace Analytical to visit the Site and assess the operability of the following monitoring wells: MW-5A/AR, MW-14, MW-16, MW-13, and MW-CHA-RFI-2. This assessment will involve opening the wells and drawing a well volume with a bailer to evaluate the operability of the well and use for future sampling. If the well recharges to the original water level, it will be considered acceptable for future sampling. Note that alternative wells may be identified for use under Task 2; however, no new monitoring wells will be installed based on this assessment. This assessment was completed on September 2, 2021 and this plan was updated accordingly.

Task 2 – Monitoring Well Sampling Program

Leader will retain Pace Analytical to visit the Site and develop and sample the monitoring wells identified in Task 1, provided they are acceptable for sampling based on the Monitoring Well Assessment. Three (3) well volumes will be evacuated from each well in accordance with the existing QAPP for the Site. The groundwater samples will be taken to Pace Analytical laboratories and tested for the following parameters at the locations listed under Category B:

- 1) TCL VOCs (MW-5A/AR, MW-14 and MW-16); and
- 2) 1,4 Dioxane (MW-5A/AR, MW-14 and MW-16).



The groundwater monitoring schedule will include a September 2021 event including 3 wells with additional parameters and an early 2022 event involving the same 3 wells.

Task 3 – SSDS Sampling and Testing

In December 2021, Leader will retain Pine Environmental to visit the Site and deactivate the SSDS system. Leader will visit the Site in early 2022 and conduct sub-slab and indoor air sampling. The samples will be tested by Centek for the VOC parameters outlined in the SMP. Following sampling, the SSDS system will be reactivated and all eight (8) extraction points will be assessed for vacuum pressure using a manometer and then deactivated again to allow for a 10 month shutdown prior to the next sampling event. The final sampling event will be in 2022/2023 after a 10 month shutdown of the SSDS system.

Task 4 – Report

Leader will prepare a final SMP report summarizing the results of Tasks 1 through 3. The report will either document that the SMP is ready for shutdown or that additional monitoring is needed to obtain shutdown status relating to the SMP for the Site.

If you need any additional information, please contact the undersigned at (716) 565-0963.

Very truly yours,
Leader Consulting Services, Inc.

A handwritten signature in black ink that reads "Jeffrey A. Wittlinger".

Jeffrey A. Wittlinger, P.E., BCEE
President