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November 7, 2017

Mr. James Moras, P.E.
Section Chief
Section C, Remedial Bureau B
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7015
james.moras@dec.ny.gov

RE: Drum Removal and Exploratory Test Pitting Plan- Final Saint-Gobain Performance Plastics
1 Liberty Street
Village of Hoosick Falls, Rensselaer County
DEC Site No.: 442048

Dear Mr. Moras:

This Drum Removal and Exploratory Test Pitting Plan has been prepared as a supplement to the May 19, 2017 Supplemental Scope of Work for the Saint-Gobain Performance Plastics (Saint-Gobain) Site located at 1 Liberty Street in the Village of Hoosick Falls, Rensselaer County, New York. A Site Location Map is included as Figure 1 in Attachment A.

Purpose and Objectives

The scope of work addressed in this plan includes: 1) the sampling and removal of a drum that is partially buried within the western portion of the Site that was identified in the fall of 2016; and 2) the implementation of a subsurface exploratory test pitting investigation within the western portion of the Site to evaluate the potential occurrence of other buried materials in this area. The test pitting investigation is proposed based on the lack of electromagnetic anomalies in mapping of the surface geophysical survey data collected in the fall of 2016. The locations of the existing drum and the proposed exploratory test pit grid are depicted on Figure 2 in Attachment A.

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Site Controls

Site controls will be established prior to the commencement of the work and maintained throughout the work. Site controls include the following:

- -The perimeter of the Work Area will be delineated using wooden stakes and caution tape or temporary plastic snow fencing. The boundary of the Work Area will generally extend approximately 10 feet beyond the boundaries of the "Area of Drum Removal and Exploratory Test Pitting" shown on Figure 2 to allow adequate space for the excavation equipment to maneuver at the terminus points of the proposed test trenches.
- -An approximate 50 foot by 50 foot or larger Support Area contiguous to the Work Area will be delineated employing the aforementioned methods. The Support Area will be used for equipment cleaning and material staging.
- -Vegetation within the Work Area will be brush hogged and/or chipped to allow clear access to the drum, test pits, and cleaning/staging area. The chipped material will be stockpiled and ultimately used as ground cover within the Work Area at the completion of the test pit investigation.
- -As the area of test pit disturbance (~5,000 sq. ft.) is less than one (1) acre, a State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges is not required. A silt fence will be proactively installed along the downslope perimeter of the Work Area as shown on Figure 2.
- -The Work Area perimeter, drum location and the test pit grid system array will be field-staked using survey controls.

Laboratory Analysis

Media sampling and laboratory analysis will be performed in general accordance with the Field Sampling Plan (FSP) and the Quality Assurance Project Plan (QAPP) contained in the Final Draft Site Characterization Work Plan (SCWP) prepared for the Site by C.T. Male, dated April 6, 2016 and revised July 15, 2016, with the exception of the addition of the following four perfluorinated compounds (PFCs):

- Perfluorobutanoic acid
- Perfluoropentanoic acid
- Perfluoroheptane sulfonic acid

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• Perfluorodecane sulfonic acid

A total of 16 PFCs will be analyzed. All samples will be analyzed by Eurofins Lancaster Laboratories Environmental (ELLE).

It is anticipated that two (2) types of samples may be submitted for laboratory analysis; 1) native/fill soil samples from the drum removal and test pit investigation, and 2) drum content and other waste samples for chemical characterization. Drum content samples and other waste materials will be analyzed for PFAS and for any additional parameters required by the disposal facility. The native/fill soil samples will be analyzed for the following parameters.

- PFAS: EPA Method 537 Rev 1.1 Modified for Soil.
- TCL VOCs: EPA Analytical Method SW-846 8260C and EPA Preparation Method 5035A.
- TCL SVOCs: EPA Analytical Method SW-846 8270D and EPA Preparation Method 3546.
- TCL Pesticides: EPA Analytical Method SW-846 8081B and EPA Preparation Method 3546.
- TCL PCBs: EPA Analytical Method SW-846 8082A and EPA Preparation Method 3546.
- TAL Metals (except mercury): EPA Analytical Methods SW-846 6010C and 6020A and EPA Preparation Method 3050B.
- Mercury: EPA Analytical and Preparation Method SW-846 7471B.
- Cyanide: EPA Analytical and Preparation Method SW-846 9012A.
- Total Organic Carbon, EPA Method 5310C

Drum Removal

The drum removal work will be sub-contracted to a remediation firm experienced in waste handling, removal and characterization and exploratory excavation. C.T. Male personnel will be on-site full-time to observe and document the removal event.

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The remediation subcontractor will employ manual and/or mechanical (small track-mounted excavator) methods to remove soils surrounding the drum. The excavated soils will be staged on, covered, and secured with polyethylene sheeting in the vicinity of the drum. Once the drum is exposed, its integrity will be assessed (currently assumed to be paperboard with plastic liner). If the integrity of the drum is such that it can be moved, the drum and its contents (if any) will be transferred into an over-pack drum and staged at a secure location on Site. If the integrity of the drum appears compromised, the contents of the drum and the drum carcass will be transferred into a DOT-approved 55-gallon steel drum and the drum staged at a secure location on Site for possible future testing and analysis.

Excavated materials will be field screened for organic vapors, staining and chemical/petroleum-type odors employing photoionization detector (PID) headspace analysis and organoleptic (sight and smell) perception. Excavated materials with visual, olfactory, or field-screening evidence of potential contamination, if encountered, will be sampled for laboratory analysis for PFAS, TCL VOCs, TCL SVOCs, pesticides, PCBs, TAL metals, mercury, and cyanide. One (1) sidewall sample and one (1) bottom sample will be collected from the drum excavation for laboratory analysis for PFAS, TOC and moisture content.

<u>Test Pitting Investigation</u>

The test pitting excavation work will utilize a track-mounted excavator to complete the work. During the work, C.T. Male personnel will be on-site full-time to observe and document the test trenching efforts. The proposed test grid is depicted on Figure 2 in Attachment A.

The test pits will be excavated to an approximate depth of four (4) feet beneath the ground surface (bgs) utilizing a 12" to 16" wide excavation bucket. The excavated materials will be placed on the ground surface alongside the test pit and will be field screened using the methods described in the "Drum Removal Section". Excavated materials will be placed back into the test excavation with the exception of any drums or other waste containers that may be encountered in accordance with DER-10 Section 3.3.e.4. If a drum is ecountered, its integrity will be assessed (currently assumed to be paperboard with plastic liner). If the integrity of the drum is such that it can be moved, the drum and its contents (if any) will be transferred into an over-pack drum and staged at a secure location within the Site. If the integrity of the drum appears compromised, the contents of the drum and drum carcass will be transferred into a DOT-approved 55-gallon steel drum and the drum staged at a secure location within the Site. The drum

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and drum contents (if any) will be staged at the Site for possible future testing and analysis.

Other media encountered that contains significant visual, olfactory, or field-screening evidence of potential contamination (if any) will be sampled for laboratory analysis and placed back in the excavation after the excavation is lined with a double layer of six-mil poly sheeting. The location of any areas of potentially-affected media will be staked, logged, and documented using GPS equipment. The analytical results for these samples will then be reviewed to develop appropriate actions, including further investigation, delineation and removal, as a separate work task.

If any excavated areas require backfilling with additional material, the excavation will be backfilled with clean fill from a pre-approved clean source as determined in accordance with NYSDEC DER-10, "Technical Guidance for Site Investigation and Remediation", Section 5.4.

Excavation end point soil samples along trench runs with no evidence of waste or impacted soil will be collected for laboratory analysis. One soil sample will be collected from the trench floors at approximate 100 foot spacing intervals. In areas where drums or other containers, if any are removed, one floor sample will be collected for every 900 square feet of excavation floor, and every 30 feet along the excavation area side walls. The end point samples will be analyzed for all parameters listed above.

Health and Safety

The remedial subcontractor will develop their own site-specific Health and Safety Plan (HASP). The plan will be reviewed in advance of field work to ensure it conforms to the health and safety standards required by Saint-Gobain and C.T. Male.

C.T. Male personnel will adhere to the HASP contained in the Final Draft Site Characterization Work Plan (SCWP) prepared for the Site by C.T. Male, dated April 6, 2016 and revised July 15, 2016. The HASP provides general worker safety guidance for the anticipated work activities.

The Community Air Monitoring Plan (CAMP) contained in Appendix C of the HASP will be implemented during subsurface intrusive activities for the drum removal and test pit investigation.

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Surveying

Surveying will be completed to delineate the work area and to locate the drum and the proposed test pits prior to the commencement of the field work. The horizontal coordinates will be surveyed to applicable horizontal and vertical datum. The Work Area, drum and test pitting lines will be field staked by the survey crew. The location(s) of obviously impacted fill material and/or objects discovered during the drum removal and test pitting investigation will be marked; these locations will be located utilizing GPS equipment.

Quality Control

Quality control samples will be collected from equipment that is anticipated to be used for the work prior to mobilization. At a minimum, QC samples will be collected from the tank and/or tote used by the excavation contractor for storage of the equipment decontamination water and the bucket of the excavator. The samples will be collected and analyzed for PFAS. Analytical results will be reviewed prior to Site mobilization. Mobilization to the Site will only be permitted if analytical results indicate PFAS below detection limits or at concentrations that are not expected to affect environmental samples. Source equipment, including the totes and tanks used for the storage of decontamination water, will not be used for any other purpose by the excavation contractor from the time that the quality control samples are collected to the time that the equipment is mobilized to the Site. Water for equipment cleaning and other uses will be supplied from the Granular Activated Carbon (GAC) treated water tank located at the SGPP McCaffrey facility because sampling performed on multiple loads of municipal water on various dates indicate this water does not exhibit detectable PFAS concentrations.

Field Quality Control samples include Equipment Blanks, Duplicates, and Matrix Spike/Matrix Spike Duplicates (MS/MSD). Quality Control samples will be prepared for each media type at a ratio of one (1) set of Quality Control samples per each 20 media samples and one (1) set of Quality Control samples (duplicate and MS/MSD only). The types of field quality control samples to be collected and the sampling method and rationale are detailed in the FSP and QAPP.

Decontamination and Investigation-Derived Waste

The excavation equipment will be cleaned prior to entering and leaving the Work Area or if it comes in contact with impacted soil and/or fill materials during the investigation

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as determined using the field screening methods. Decontamination will be completed within the aforementioned approximate 50 foot by 50 foot decontamination/staging Support Area. A decontamination pad will be constructed to capture the decontamination waste for daily transfer to appropriate containers.

Investigation-derived waste (IDW) is anticipated to consist of decontamination liquids and solid wastes (plastic, paper, buckets, etc.). All IDW will be segregated as described above, covered, and staged at a secure location within the Site for temporary storage and waste characterization. Pending waste characterization, IDW may be transported by a 6 NYCRR Part 364 permitted waste transporter to the SGPP McCaffrey Street facility if appropriate for consolidation with other IDW liquids and solid wastes.

<u>Laboratory Reporting and Data Validation</u>

The laboratory will generate NYSDEC ASP Category B data deliverable packages of the analytical data. A Data Usability Summary Report (DUSR) of the analytical data will be prepared to confirm that the data meets the project specific criteria for data quality and data use. The DUSR will be completed by an independent data validator and will be conducted in accordance with Appendix 2B of DER-10 entitled *Guidance for Data Deliverables and the Development of Data Usability Summary Reports*.

Reporting

Data generated during implementation of this work plan will be incorporated into the Remedial Investigation/Feasibility Study Report for the Liberty Street facility.

Please contact the undersigned at should you have any questions regarding this Plan.

Respectfully,

C.T. MALE ASSOCIATES

Kirk Moline

Managing Geologist

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Reviewed and Approved,

Drueie P. Kaly

Daniel Reilly, P.E.

Division Manager, Environmental Services

Attachment A

Figure 1: Site Location Map

Figure 2: Drum Removal and Exploratory Test Trenches

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ATTACHMENT A FIGURES

