

February 9, 2022

Mr. Matthew Hubicki
Project Manager, Remedial Bureau C
Division of Environmental Remediation
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, NY 12233-7014

Re: NYSDEC Site No. 360174

January-February 2022 Monthly Progress Report Westchester County Airport, 240 Airport Road White Plains, New York 10604

Dear Mr. Hubicki:

Actions Taken/Accomplishments (January 2022)

No work was performed on the storm sewer system this month. A schedule of planned operations is included as Appendix A.

- 1. Submitted the North Parcel Workplan to the NYSDEC for approval.
- 2. Entered into extensive discussions with OLA Engineering to coordinate the New King Street water line replacement.
- 3. Initiated addressing NYSDEC comments for the Site Characterization Report (SCR).
- 4. Review data to support Remedial Investigation Workplan.
- 5. Dismantled and demobilized equipment from the treatment system. The three frac tanks remain on-site due to the need to remove sediment and pressure wash them prior to returning them to GWTT.

February & March, April Activities

1. Complete review of video documentation of the condition of the newly constructed storm sewer looking for leaks and debris. Several sections of storm sewer may require sediment removed.

- 2. Will resume work with the County to facilitate the OF-7 abandonment and reconstruction of storm sewer system with accompanying air monitoring, when needed. First Environment will provide oversight, continuous air monitoring, and waste classification of soil for disposal purposes.
- 3. First Environment is evaluating surface water permit requirements for discharge of treated PFAS water below the mound at SW-2.
- Submit the New King Street Water Supply Pipeline Workplan to the NYSDEC.
- 5. Upon NYSDEC approval, execute the New King Street Workplan.
- 6. First Environment continues to evaluate another PFAS technology manufactured by CETCO called FLUOR-SORB for a pilot test to reduce PFAS in surface water. Site meeting scheduled February 7, 2022. The pilot test being considered is passive consisting of reactive core mat and PFAS filter box. We do not anticipate this pilot test will be available for application until the spring-summer of 2022 (Appendix B).
- 7. Decontaminate the existing frac tanks remaining on-site in preparation for return of the tanks to the lender.
- 8. Respond to NYSDEC comments pertaining to the Site Characterization Report and submit revised SCR to the NYSDEC.
- 9. Submit a Remedial Investigation Workplan in March-April.

If you have any questions, please do not hesitate to call.

Regards,

FIRST ENVIRONMENT, INC.

Scott R. Green, P.G.

Director, Insurance Consulting

Service Group

David Luer

Project Manager/Field Team Leader

Att.

c: B. Tod Delaney, Ph.D., P.E., BCCC - First Environment, Inc.

Arthur Clarke, J.D. - First Environment, Inc.

Hugh Greechan, Jr. P.E. - Westchester County (hjg7@westchestergov.com)

John Nonna - Westchester County (<u>inonna@westchestergov.com</u>)

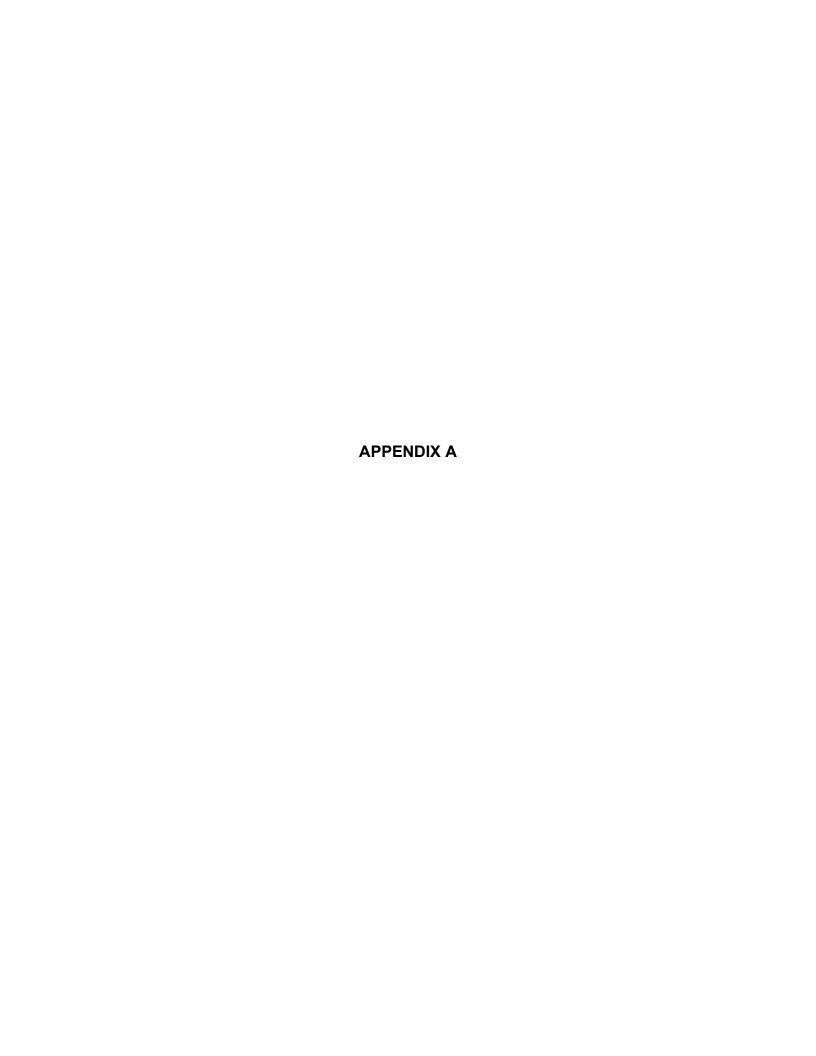
John Inserra - Westchester County Airport (jhi1@westchestergov.com)

John Benvegna - WSP (john.benvegna@wsp.com)

G. Heitzman

S. Crisafulli

- M. Murphy
- J. Brown
- J. Carpenter
- M. Schuck NYSDOH
- K. Kulow NYSDOH



APPENDIX A Work Activity Schedule 2022

Milestone	Estimated Completion Date	Estimated Completion Percentage
OF-7 Storm Sewer Installation	November 30, 2021	99%
OF-7 Performance Monitoring	1 st Quarter 2022	0%
New King Street Workplan	January 24	100%
Waterline Workplan	February 17	75%
OF-4 IRM Pilot Test Permits & Workplan	Spring 2022	0%
OF-4 IRM Pilot Test	Spring/Summer 2022	0%
Remedial Investigation Workplan	Spring 2022	25%
GW IRM Workplan & Pilot Test	Summer 2020	0%

Estimated task durations and completions are tentative and are subject to modification based on site work, progress, weather delays, and other considerations such as contractor availability or Airport access.

Monthly progress reports will provide task initiation date for next month activity.



FLUORO-SORB® ADSORBENT

GENERAL INSTRUCTIONS FOR LOADING AND CONDITIONING FLUORO-SORB ADSORBENT IN A FILTRATION VESSEL







FLUORO-SORB® 200

FLUORO-SORB® 300

FLUORO-SORB® 400

GENERAL INSTRUCTIONS FOR LOADING AND CONDITIONING IN A FILTRATION VESSEL

FOR FLUORO-SORB 200 ADSORBENT, FLUORO-SORB 300 ADSORBENT, AND FLUORO-SORB 400 ADSORBENT

A distributor or splash plate is required in the top inlet of the vessel. Laterals in the bottom of the vessel are also necessary. The openings in the bottom laterals or screens should be smaller than 0.0165 in (0.42 mm), which is the smallest particle size in media.

The waste stream to be treated must be free of suspended solids; otherwise, FLUORO-SORB adsorbent will be blinded and no treatment will occur. If suspended solids are a problem, a bag or cartridge filter must be placed prior to the vessel.

The vessel should have an air eliminator valve. If not, install one on the vessel or on the inlet pipe as it enters the top of the vessel.

Load the vessel with a minimum of 2 ft (0.6 m) of FLUORO-SORB adsorbent. Leave a minimum of 15% - 20% head space to allow for expansion of media (>30%) during back flush.

Fill the vessel with freshwater and back flush vessel (up-flow) for 30± 2 minutes.

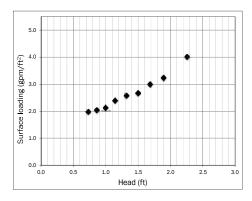
Water should be directed slowly up through the column starting at 1 gpm/ft 2 (41 Lpm/m 2) and gradually increasing flowrate to 9 gpm/ft 2 (370 Lpm/m 2) in the first few minutes to fluidize the media and attain sufficient transport velocities. This step accomplishes three important things:

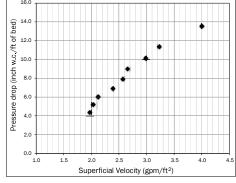
- · Removes fines
- · Eliminates entrained air from the bed
- · Washes off residual compounds from the manufacturing process

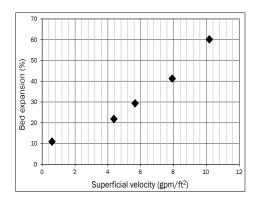
After back flush, do not drain vessel. The vessel is now ready for down flow operation.

OPERATION

Please refer to FLUORO-SORB adsorbent technical data sheets to estimate the pressure drop as a function of superficial velocity. For drinking water applications, please refer to the NSF/ANSI certification for flow through conditions.







cetco@mineralstech.com | cetco.com | 800.527.9948





FLUORO-SORB® ADSORBENT







FLUORO-SORB® 200



FLUORO-SORB® 300



FLUORO-SORB® 400

FLUORO-SORB® ADSORBENT

ADSORPTION MEDIA FOR THE REMEDIATION AND REMOVAL OF PFAS

FLUORO-SORB adsorbent is a proprietary, NSF-certified adsorption media that is proven to effectively treat multiple variants of PFAS. Unlike other sorbent products that are selective and unpredictable in adsorbing PFAS, FLUORO-SORB adsorbent binds the entire spectrum of PFAS and in a wide variety of removal and remediation processes.

With a specially modified surface, FLUORO-SORB adsorbent resists competitive adsorption from other water and sediment contaminants making it a more effective and efficient choice.

FLUORO-SORB adsorbent is commercially available in four variations. For more information or to obtain a sample for your laboratory treatability study, contact cetco@mineralstech.com.

TREATMENT APPLICATIONS

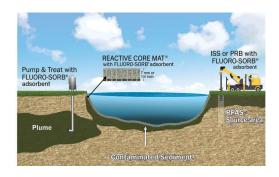
Groundwater

Drinking Water

Surface Water

Soil









Adaptable Solutions for Your Specific Project

Versatility in deployment

- Flow-through filtration technology for drinking and/or groundwater
- Permeable Reactive Barrier (PRB) for passive groundwater
- In-situ stabilization for source zone treatment
- Within a CETCO REACTIVE CORE MAT® composite geotextile mat for sediment capping
- Pre- or post-treatment in connection with other treatment media

Variability in design

- Three available grain sizes in four custom blends
- 1500lb (680.4kg) supersacks

High-Performing Treatment Option

Superior Technology

- Higher sorption kinetics and better sorption capacity
- More selective toward entire family of PFAS
- Not impacted by co-contaminants in the waste stream
- Use with or in place of other treatment media for improved efficacy

Trusted

- NSF/ANSI 61 certified
- Manufactured in an ISO9001:2015 facility
- · Made in the USA

To obtain a sample for your laboratory treatability study, contact cetco@mineralstech.com.



Our Standards. Your Peace of Mind.

At CETCO, our goal is to help you succeed. Through our knowledge and experience in minerals, polymers, and the construction industry, we provide solutions to unique challenges globally. Our remediation technologies exceed industry standards and offer innovative alternatives to traditional construction options.

cetco@mineralstech.com | cetco.com |800.527.9948



REACTIVE CORE MAT®

WITH FLUORO-SORB® 200 ADSORBENT

DESCRIPTION

REACTIVE CORE MAT with FLUORO-SORB 200 adsorbent consists of a layer of FLUO-RO-SORB 200 sandwiched between two geotextiles, which are needle-punched together. The result is a contaminated sediment capping mat that adsorbs PFAS contaminants.

PANEL DIMENSIONS

- Panel Dimensions: 15 ft (4.57 m) wide x 100 ft (30.5 m) long
- Total Panel Area: 1,500 ft² (139.4 m²)

ROLL DIMENSIONS

- Length: 16 ft (4.9 m)
- Diameter: 22 in (559 mm)
- Core Diameter: 4 in (100 mm) I.D.

- Nominal Weight: 1,500 lbs (680 kg)
- Packaging: 2 mil (0.05 mm) polyethylene sleeve

SHIPPING

- Flatbed truck shipment size: 30 rolls; 45,000 ft² (4,181 m²)
- All shipments will contain three stacks of rolled materials on flatbed

HANDLING

- Core Pipe: length = 18 ft (5.5 m); O.D. = 3.5 in (90 mm); strength rating = XXH or strongest available
- Alternatives: solid steel pipe with above dimensions; custom-fabricated "stinger" for forklift



- Spreader Bar: I-beam supported by chains
- Straps: factory-placed lifting straps available upon request

TESTING DATA				
MATERIAL PROPERTY	TEST METHOD	RESULT		
FLUORO-SORB adsorbent mass/area1	CETCO Test Method	0.8 lb/ft² (3.9 kg/m²) min.		
Tensile strength ²	ASTM D 4632	90 lbs (400 N) min.		
Hydraulic conductivity ^{3,4}	ASTM D4491	1 x 10 ⁻³ cm/sec min.		

Notes:

- ¹ FLUORO-SORB adsorbent mass reported on net roll weight basis
- ² Tensile testing performed in machine direction
- ³ Sample deaired with vacuum for 16 hours. Permittivity at constant head of 2 inches and converted to hydraulic conductivity using Darcy's Law and RCM thickness
- ⁴ Typical values are based on periodic data



REACTIVE CORE MAT®

WITH FLUORO-SORB® 200 ADSORBENT

DESCRIPTION

REACTIVE CORE MAT with FLUORO-SORB 200 adsorbent consists of a layer of FLUO-RO-SORB 200 sandwiched between two geotextiles, which are needle-punched together. The result is a contaminated sediment capping mat that adsorbs PFAS contaminants.

PANEL DIMENSIONS

- Panel Dimensions: 15 ft (4.57 m) wide x 100 ft (30.5 m) long
- Total Panel Area: 1,500 ft² (139.4 m²)

ROLL DIMENSIONS

- Length: 16 ft (4.9 m)
- Diameter: 22 in (559 mm)
- Core Diameter: 4 in (100 mm) I.D.

- Nominal Weight: 1,500 lbs (680 kg)
- Packaging: 2 mil (0.05 mm) polyethylene sleeve

SHIPPING

- Flatbed truck shipment size: 30 rolls; 45,000 ft² (4,181 m²)
- All shipments will contain three stacks of rolled materials on flatbed

HANDLING

- Core Pipe: length = 18 ft (5.5 m); O.D. = 3.5 in (90 mm); strength rating = XXH or strongest available
- Alternatives: solid steel pipe with above dimensions; custom-fabricated "stinger" for forklift



- Spreader Bar: I-beam supported by chains
- Straps: factory-placed lifting straps available upon request

TESTING DATA				
MATERIAL PROPERTY	TEST METHOD	RESULT		
FLUORO-SORB adsorbent mass/area1	CETCO Test Method	0.8 lb/ft² (3.9 kg/m²) min.		
Tensile strength ²	ASTM D 4632	90 lbs (400 N) min.		
Hydraulic conductivity ^{3,4}	ASTM D4491	1 x 10 ⁻³ cm/sec min.		

Notes:

- ¹ FLUORO-SORB adsorbent mass reported on net roll weight basis
- ² Tensile testing performed in machine direction
- ³ Sample deaired with vacuum for 16 hours. Permittivity at constant head of 2 inches and converted to hydraulic conductivity using Darcy's Law and RCM thickness
- ⁴ Typical values are based on periodic data

