

December 16, 2020

To:

Jonathan Dziekan, Tetra Tech
One Oxford Valley, Suite 200A, Langhorne, PA 19047

Subject:

Proposed Scope of Work for Pilot Test Remediation Application Services of
PlumeStop® Liquid Activated Carbon™ Barrier at
Ridge Run PFAS Site in Bucks County, Pennsylvania

REGENESIS Remediation Services (RRS) appreciates the opportunity to provide Tetra Tech with this Scope of Work for a Pilot Test Remediation Application of a [PlumeStop® Liquid Activated Carbon™](#) (PlumeStop®) barrier at the Ridge Run PFAS Site in Bucks County, Pennsylvania (the Site). PlumeStop® is a liquid activated carbon that consists of a very fine suspension of charged particles which resists clumping and has a water-like viscosity. As a result, PlumeStop® is easily applied into the subsurface via injections. Upon reagent injection, target contaminants partition out of the aqueous phase and sorb onto the liquid activated carbon matrix, thereby removing mobile contaminants from the immediate risk pathway.

RRS has successfully completed hundreds of similar remediation applications across the country and has the product knowledge and implementation expertise to actively manage this field application. RRS will provide custom built injection equipment and a team of experienced personnel who specialize in applying REGENESIS' remedial technologies. Our team will ensure a high probability of success, while minimizing risks with our institutional in-house knowledge. Our best-in-class remediation design team and application services ensures proper placement, distribution, and performance of the remedial technologies being applied. With the information provided by Tetra Tech, RRS is estimating it will take a total of four (4) days on-site to safely complete this application.

If you have any questions regarding the application details provided within this proposal, please feel free to contact us.

Very truly yours,
REGENESIS



Glenn Nicholas Iosue, P.E., BCEE
Mid-Atlantic Technical District Manager



Ryan Moore
PFAS Program Manager



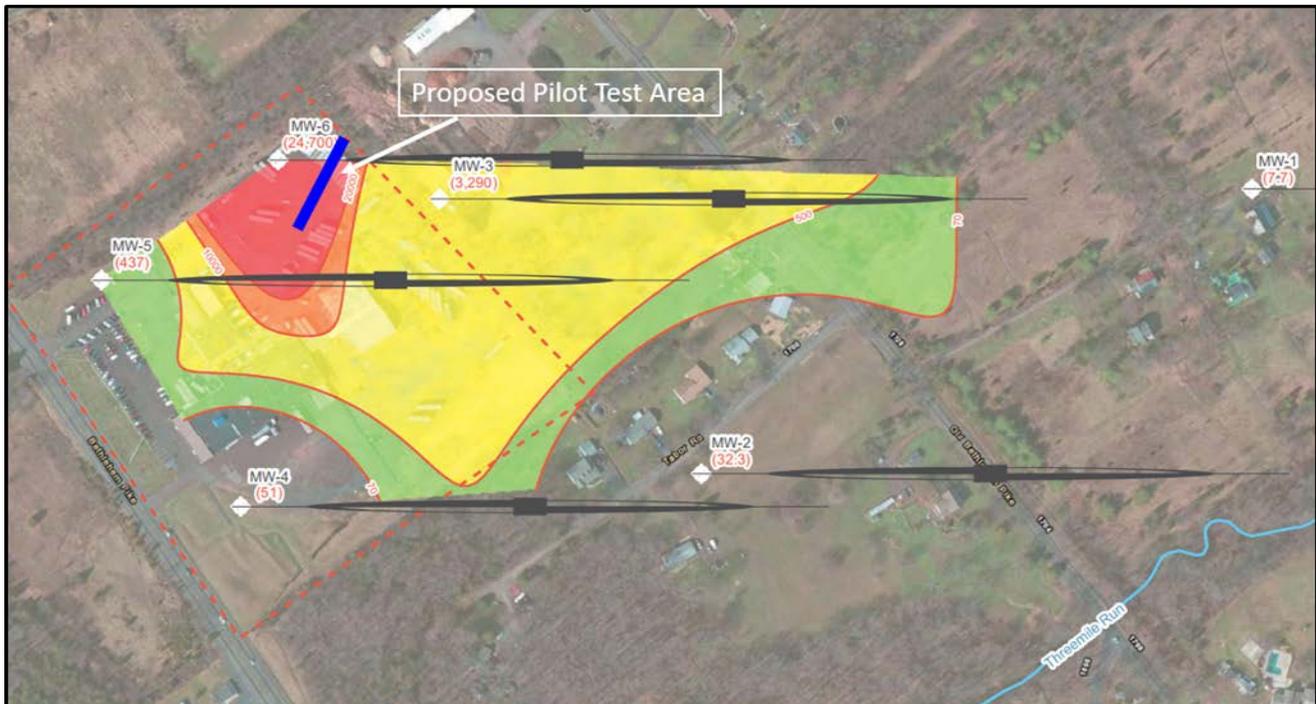
Breakthrough Treatment for PFAS
[Watch Video](#)

Design Summary and Remedial Approach

REGENESIS has developed this pilot test design for application of [PlumeStop® Liquid Activated Carbon™](#) along a portion of the source area located in the Northwest corner of the property boundary. The Pilot will consist of approximately 8,000 gallons PlumeStop® solution within a 100 foot long barrier. *In Situ* injection of the PlumeStop® will take place within four (4) open borehole injection wells utilizing an inflatable straddle packer system. The straddle packer system will isolate up to six (6) Target Treatment Zones (TTZ) from approximately 20 to 80 feet below ground surface (bgs) that will be identified during yet to be completed geophysical logging services. Tetra Tech will be responsible for completing the geophysical logs prior to RRS mobilizing to site in order to identify the depths of fractures in the bedrock. Those fractures will determine the treatment intervals for each injection well. Each TTZ will represent a 10-foot vertical treatment interval with the downhole packer system isolating that interval during injection activities.

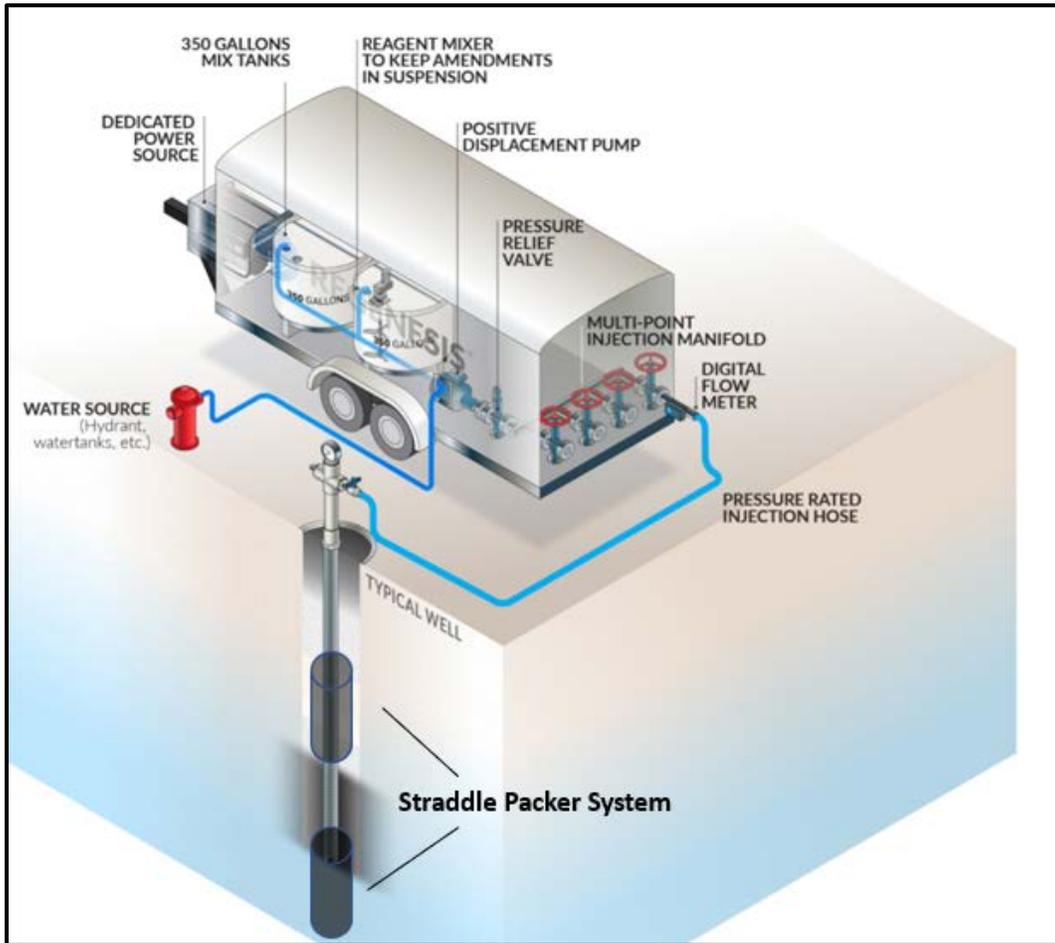
RRS will work under the direction of Tetra Tech to implement the field work associated with the application of the selected remediation technologies. The application of the remediation technologies will be performed via injection wells installed by Tetra Tech prior to RRS mobilizing to site (see Figure 1).

Figure 1: Proposed Location for PlumeStop® Injection Wells



RRS has a national team of experts with decades of experience in the remediation industry and trained/certified field personnel with in-depth product and application knowledge. Our custom-built injection systems are specifically designed to properly apply REGENESIS products to ensure your investment in our remediation technologies achieves its full potential (see Figure 2).

Figure 2: Injection System Diagram



REGENESIS is committed to providing a safe and healthy working environment for all employees, clients and contractors on-site. Before mobilization, RRS will develop a site-specific Health and Safety Plan (HASP). All personnel on-site are required to participate in daily safety tailgate meetings with the goal of proactively identifying potential hazards and mitigating risks to the full extent possible. The effectiveness of our safety program can be seen in our industry leading EMR ratings listed in Table 2.

Table 2: REGENESIS EMR Rating 2017-2020

Year	Total Hours	EMR
2020	82,851*	0.64
2019	169,964	0.66
2018	144,600	0.70
2017	140,706	0.70

* As of June 2020