



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

October 23, 2020

Mr. Jonathan Dziekan
Tetra Tech, Inc.
One Oxford Valley, Suite 200
Langhorne, PA 19047

RE: Rule Authorization (Facility ID: #753237)
Hoff VC Hazardous Sites Cleanup Act (HSCA) Site
334 Layfield Road, New Hanover Township, Pennsylvania

Dear Mr. Dziekan and Mr. Wade,

We have received your request, dated October 22, 2020, to perform an in-situ remediation pilot study at the Hoff VC HSCA Site. This facility is located at 334 Layfield Road, New Hanover Township, Montgomery County, Pennsylvania. Innovative Environmental Technologies, Inc., on behalf of the Pennsylvania Department of Environmental Protection (PADEP) and Tetra Tech, Inc., proposes to conduct a chemical oxidation event at the site. The purpose of this remedial action is in-situ chemical oxidation (ISCO) to oxidize Volatile Organic Compounds (VOC's) and 1,4-Dioxane, and to stimulate a long lasting in-situ bioremediation process. The remedial design is presented as one treatment area with 7 temporary direct push technology (DPT) injection points and 7 permanent injection well locations. Compressed air will first be delivered to the subsurface via IET proprietary injection trailer system in order to assure that injections will occur freely to minimize health and safety risks. A colloidal suspension of the catalyzed persulfate will then immediately be injected into the subsurface pathways and voids under constant pressure ranging from 10-110psi followed by water. The injection lines are next cleared of liquids and all injectants are forced into the created formation and upward into the vadose zone. The substances used in this process will be potassium persulfate, magnesium hydroxide, Klozur® SP (sodium persulfate), and iron oxide. The proposed pilot study is anticipated to be completed over the course of 6 days. Pennsylvania Department of Environmental Protection's (PADEP) Colin Wade is overseeing this project.

The subsurface emplacement of fluids through injection wells is regulated by the Underground Injection Control (UIC) Program. In Pennsylvania, the U.S. Environmental Protection Agency (EPA) directly implements the UIC Program. Based on the information provided, we do not believe that the proposed injection will cause an adverse impact to the ground water. You may therefore proceed with your plan. Please notify our office when the project is completed and the injection wells are taken out of service and plugged.



EPA approval or “rule authorization” of the injection wells are contingent upon operator compliance with all applicable state and local requirements. We appreciate your cooperation in these matters and the opportunity to address these issues with you. If you have any questions, please contact me at hancharick.ryan@epa.gov or (215) 814-3278.

Sincerely,

Ryan Hancharick

Ryan Hancharick
Drinking & Source Water Protection Branch
Source Water & UIC Section

cc: Colin R. Wade, PADEP

