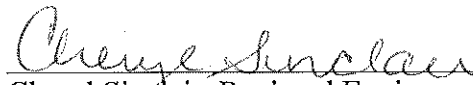


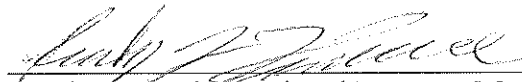
**PROMPT-INTERIM COMBINED RESPONSE JUSTIFICATION
DOCUMENT/ANALYSIS OF ALTERNATIVES AND PROPOSED RESPONSE**
Benner Township PFAS Investigation
Benner Township, Centre County
NCRO

DEP APPROVALS

Based on the facts and findings outlined in this Prompt-Interim Response Justification Document/Analysis of Alternatives and Proposed Response, prompt-interim response action is deemed appropriate, pursuant to Section 501(a) of the Hazardous Sites Cleanup Act.


Cheryl Sinclair, Regional Environmental Group Manager
Hazardous Sites Cleanup Program

5/10/22
Date


Randy Farmerie, Regional Program Manager
Environmental Cleanup and Brownfields

5/10/22
Date


Jared Dressler, Acting Regional Director, North Central Regional Office

5/11/22
Date

RESPONSE JUSTIFICATION - SUMMARY OF FACTS

This Site is located in Benner Township, Centre County.

The Site is currently a groundwater plume where PFAS contamination is present in the groundwater. The portion of the site being addressed by this prompt interim response currently consists of 10 homes with water supply wells containing PFOA and PFOS combined at concentrations of 70 parts per trillion (PPT) or greater. Additional homes within the Benner Township PFAS site whose water supply is found to have combined PFOA and PFOS above the concentration of 70 PPT will also be addressed by this prompt interim response. The homes are geographically located to the south of the University Park Airport located on Fox Hill Road in Benner Township.

Local land use consists of mixed commercial, agricultural and residential uses. The University Park Airport is owned and co-managed by Pennsylvania State University and the Centre County Airport Association.

Spring Creek flows through and in close proximity to the investigation area. The surface water is used for recreation, but there are no known uses of this surface water body for drinking.

The local aquifer is situated in the Gatesburg Formation. The average depth to groundwater in the community is estimated at 270 feet below ground surface but may vary with topography. A public water supply well field for State College Borough Water Authority is located within the subject area. Benner Spring, a spring that discharges to Spring Creek, is also in the subject area. The spring is used as a backup drinking water supply and it also feeds water to a PA Fish and Boat Commission hatchery.

To date, DEP and the assigned HSCA contractor HDR have conducted sampling of 65 private water supply wells, and both surface and subsurface soil samples have been collected by HDR. Public water and sewer lines are available for a portion of the investigation area, but other areas of the community rely on private water supply wells and septic systems.

PFAS is known to have impacted the local groundwater within the investigation area and soil in certain locations on the University Park Airport property as well as commercial properties to the north of the airport. Impacts have also been detected in limited surface water samples collected from a local spring.

The primary concern in this case is for human health of those residents living in these homes and consuming the drinking water. The concentrations of PFAS that are present in some private supply wells exceeds the EPA HAL.

This initial response will be a Prompt Interim Response action as outlined in attached the Analysis of Alternatives. There are currently residents who are exposed to PFAS in their drinking water at concentrations greater than the EPA HAL of 70 PPT for PFOS and PFOA combined. The source of the contamination is not yet known but is being investigated by HDR and regional HSCA staff. The proposed response will cost less than \$2 million and take less than 1 year to implement. Due to the continued exposure of residents to levels of PFAS above the EPA HAL in their water supply, the response should not be delayed for the length of time that it would take to develop and close an Administrative Record (3-6 months).

The Prompt Interim Response is being proposed due to the relatively low cost and short time frame under which the remedial action will take place. This is not expected to be a final remedial response as the proposed alternative provides protection to residents but is not a permanent alternate water supply. Options for a permanent water supply will be developed as part of a final response.

Section 504 of HSCA requires that final remedial responses must meet (or waive or modify) all applicable, or relevant and appropriate, requirements (ARARs), and be cost effective. The primary, applicable ARAR, for final remedial responses conducted under HSCA is the Land Recycling and Environmental Remediation Standards Act, Chapter 250, Administration of Land Recycling Program. In this case, the Department has determined that while the proposed prompt interim response will provide safe drinking water for impacted residents, an additional prompt interim response consisting of whole home treatment systems is being initiated as an alternate water supply to comply with the cleanup standards for a final remediation under the Land Recycling and Environmental Remediation Standards Act.

The following standards, requirements, criteria or limitations are legally applicable, or relevant and appropriate under the circumstances presented by the site.

For this response, the ARARs are those requirements under the Land Recycling and Environmental Remediation Standards Act, Chapter 250, Administration of Land Recycling Program. PFAS in the water supply wells at a number of homes is currently present at concentrations greater than the EPA HAL of 70 PPT for PFOA and PFOS combined.

Hazardous Sites Cleanup Act, Act of October 18, 1988, P.L. 756, No. 108, *as amended*, 35 P.S. §§ 6020.101 *et seq.*

- Gives the Department the authority to perform investigations, initiate cleanups, and provide replacements for contaminated water supplies
- Establishes a fund to cover the costs of such activities
- Provides administrative procedures for conducting response actions
- Defines a “contaminant” and “hazardous substance” as any substance defined as such by CERCLA

Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S. Code §§ 9601 *et seq.*

- Defines a “contaminant” as any element, substance, compound, or mixture, which when released to the environment and upon ingestion, may reasonably be anticipated to cause disease, cancer and other harm to humans and other organisms

Land Recycling and Environmental Remediation Standards Act, Act of May 19, 1995, P.L. 4, 35 P.S. §§ 6026.101 *et seq.*, and the regulations promulgated thereunder at 25 Pa. Code Chapter 250

- Provides that, for regulated substances where no Maximum Contaminant Level (MCL) has been established by the Department or the EPA, the Medium-Specific Concentrations for groundwater are the Lifetime HAL
- Provides remedial standards to be considered as applicable, relevant and appropriate requirements under CERCLA and HSCA

ANALYSIS OF ALTERNATIVES

Alternative 1. No Action

This alternative would be to conduct no remedial action at the impacted homes.

Compliance with ARARs

This alternative would not be in compliance with ARARs and would provide no protection to the residents.

Cost Effectiveness

This alternative would incur no cost.

Alternative 2. Provide residents with information on treatment systems and a list of contractors who could install them.

Compliance with ARARs

This alternative may or may not be in compliance with ARARS as the Department would not have control over the type of system installed, or the contractor installing it. Nor would we be assured that all impacted residents were installing systems.

Cost Effectiveness

This alternative would incur no cost up front, however retesting of homes may be required to determine if concentrations have increased and become more of a threat to human health. Cost to and responsibility of the property owners to maintain the systems would cause a hardship.

Alternative 3. Provide impacted residents with bottled drinking water for consumptive use

Compliance with ARARs

This alternative does not fully comply with ARARs as PFAS-contaminated water is still entering the homes and being used for non-consumptive purposes. It does however provide temporary safe drinking water for residents until such time as a home treatment system can be installed. This alternative can be initially implemented with minimal delay.

Cost Effectiveness

This alternative incurs a modest to moderate cost to the Department depending upon the length of time bottled water is supplied prior to the installation of a home treatment system or other permanent alternate water supply can be provided.

Alternative 4. Provide residents with treatment systems to provide whole home treatment until such time as permanent alternate waters sources are evaluated.

Compliance with ARARs

Once installed, this alternative would be in compliance with ARARs as we would be assured that PFAS concentrations are being mitigated by a properly installed treatment system. While meeting the ARAR this alternative as a stand-alone option would take some time to implement, in that treatment systems would need to be designed and installed. Long-term effectiveness may vary depending upon proper maintenance of the system and replacement as necessary.

Cost Effectiveness

This alternative will incur upfront costs to the Department however it will provide long-term protection of human health for the impacted residents. Following installation of the systems, and post-installation testing, the Department will be responsible for system maintenance until a final remedy is selected. If this alternative were to be the final remedy, maintenance of the systems would be turned over to the property owners after a 2-year period.

PROPOSED RESPONSE

The proposed prompt interim response is a combination of Alternatives 3 and 4. These combined alternatives provide the most immediate protection for residents by supplying a source of water for consumptive purposes immediately. Bottled water is being supplied in any home that contains combined PFOA and PFOS concentrations of 70 PPT or greater in their water supply well and does not have effective treatment already in place. The installation of treatment systems will fully protect residents from exposure until a final remedy can be selected and completed.

FINDINGS AND AUTHORITY TO ACT

Section 501(a) of HSCA grants DEP the authority to conduct response actions when there has been a release of a hazardous substance or a release of a contaminant which presents substantial danger to public health or safety or the environment.

