#### COMMONWEALTH OF PENNSYLVANIA

Department of Environmental Protection Hazardous Sites Cleanup Program

#### **Easton Road PFC HSCA Site**

Doylestown, Buckingham, Plumstead Townships, Bucks County

#### STATEMENT OF DECISION

The Commonwealth of Pennsylvania, Department of Environmental Protection (DEP) files this statement of the basis and purpose for its decision in accordance with Section 506(e) of the Pennsylvania Hazardous Sites Cleanup Act, Act of October 18, 1988, P.L. 756, No. 108 (HSCA), 35 P.S. Section 6020.506(e).

DEP has selected the proposed Interim Response Alternative 3, Installation and Maintenance of Whole-House Filtration Systems (systems) with Restrictions on the Use of Groundwater, which is outlined in the Analysis of Alternatives and Proposed Response document to address the threats posed by exposure to per- and poly-fluorinated alkyl substance (PFAS) contamination above the United States Environmental Protection Agency's (EPA) published lifetime Health Advisory Limit (HAL) in residential privately-owned potable wells within the Easton Road PFC HSCA Site (the Site), located in parts of Doylestown, Buckingham and Plumstead Townships, Bucks County. DEP considers this type of response to be an interim response as additional actions may be needed to achieve a complete and final cleanup for the Site. For that reason, DEP does not intend to seek the restrictions on the use of groundwater included in this proposed interim response unless it is selected as a Final Response in the future.

#### **I. SITE INFORMATION**

#### A. Site Location and Description

The Easton Road PFC HSCA Site is located in parts of Doylestown, Buckingham and Plumstead Townships, Bucks County. The area is a mix of residential homes with various recreational, commercial, and industrial properties nearby. The Doylestown, Buckingham, and Plumstead Township municipal boundaries intersect the Site area. Pine Run Creek also bisects the Site area.

#### B. Site History

In May 2016, the Doylestown Township Municipal Authority (DTMA) conducted sampling for PFAS on a local public supply well in Doylestown Township, in accordance with EPA's Unregulated Contaminant Monitoring Rule 3¹ (UCMR3) protocol. Results of this sampling documented combined concentrations of Perfluorooctanoic acid (PFOA) and Perflourooctane sulfonate (PFOS) of 267 parts per trillion (ppt), which is above the HAL of 70 ppt. Once

<sup>&</sup>lt;sup>1</sup> Available at https://www.epa.gov/sites/production/files/2017-02/documents/ucmr3-data-summary-january-2017.pdf.

notified, DEP took immediate action to begin a thorough investigation of the surrounding area.

In order to determine the extent of drinking water contamination resulting from the impact of PFOA and PFOS, DEP established a 1-mile radius around the impacted DTMA supply well. DEP identified approximately 375 private drinking water wells located within a 1-mile radius and mailed private well questionnaires to all of the properties identified. Due to the high number of private wells identified and the limited laboratory capacity for analyzing samples, DEP conducted sampling of the wells in a phased approach, beginning with the homes closest to the impacted DTMA supply well. To date, approximately 350 residential and commercial wells located within the Site area have been sampled by DEP. PFOA and PFOS are the primary contaminants of concern (COC) for this Site, and were the only chemicals analyzed during sampling of the private wells. The original 1-mile radius has since been expanded in specific areas to the northwest and southeast to identify the boundaries of private drinking water wells impacted by PFOA and PFOS contamination.

Combined concentrations of PFOA and PFOS above the HAL have been found in the private drinking water wells of 8 residential properties. The highest combined concentration detected was 229 ppt. DEP identified a localized area of concern within Doylestown Township where the highest concentrations of PFOA and PFOS have been discovered. DEP has continued to sample homes affected by the contamination on a regular basis. DEP is supplying bottled water to 2 residential properties that are exceeding the HAL; 5 properties have elected to privately install filtration systems at their own expense, while 1 property is currently vacant.

There are businesses within the site area that have private wells impacted by PFOA and PFOS. However, they are either regulated as permitted public water supplies or do not use their well water as a potable water supply and are therefore not subject to this response under HSCA.

## C. Release of Hazardous Substances and Contaminants

The compounds identified above are considered "contaminants" as that term is defined by Section 103 of HSCA, 35 P.S. § 6021.103, and Section 9601 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S. Code § 9601. Exposure to concentrations of PFOS and PFOA above the HAL pose a threat to human health when ingested in water.

Health effects associated with long-term exposure to these chemicals may include developmental delays, decreased function of the liver, damage to the immune system and increased risk of certain cancers.

PFAS are man-made chemicals and are not found naturally in the environment. Of the PFAS chemicals, PFOA and PFOS have been the most extensively produced and studied. They have been used to make cookware, carpets, clothing, fabrics for furniture, paper packaging for food, and other materials that are resistant to water, grease, or stains. They are also used in firefighting foams and in a number of industrial processes.

#### II. RESPONSE CATEGORY

The proposed response is an Interim Response, which is defined in Section 103 of HSCA, 35 P.S. § 6020.103, as a response which does not exceed 12 months in duration or \$2,000,000 in cost.

An interim response may exceed these limitations only where one of the following applies:

- (1) Continued response actions are immediately required to prevent, limit or mitigate an emergency.
  - (2) There is an immediate risk to public health, safety or welfare or the environment.
  - (3) Assistance will not otherwise be provided on a timely basis.
- (4) Continued response action is otherwise appropriate and consistent with future remedial response to be taken.

#### III. CLEANUP STANDARDS

The selected response is not a final remedial response pursuant to Section 504 of HSCA, 35 P.S. § 6020.504.

Additional response actions may be needed to achieve a complete and final cleanup for the Site.

### IV. APPLICABLE, RELEVANT and APPROPRIATE REQUIREMENTS (ARARs)

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

#### A. ARARs

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

- Gives DEP 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 DEP 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.

Pennsylvania Safe Drinking Water Act, Act of May 1, 1984, P.L. 206, No. 43, as amended, 35 P.S. §§ 721.1 et seq., and the regulations promulgated thereunder at 25 Pa. Code Chapter 109.

- Establishes a state program to oversee the provision of safe drinking water to the public.
- Sets forth drinking water quality standards and provides requirements for public water systems, including permit design, construction, source quality, and siting requirements.

Uniform Environmental Covenants Act, Act of December 18, 2007, P.L. 450, No. 68, 27 Pa. C.S. §§ 6501 *et seq.* ("UECA"), and the regulations promulgated thereunder at 25 Pa. Code Chapter 253.

- Provides a standardized process for creating, documenting and assuring the enforceability of activity and use limitations on contaminated sites.
- Requires an environmental covenant whenever an engineering or institutional control is used to demonstrate the attainment of an Act 2 remediation standard for any cleanup conducted under an applicable Pennsylvania environmental law.

### B. TO BE CONSIDERED

In addition to the ARARS listed above, the following documents are relevant to the response actions proposed herein, though they do not create any statutory or regulatory obligations.

Standard Operating Procedure for the Hazardous Sites Cleanup Program, HSCA Handbook, Division of Site Remediation, Bureau of Environmental Cleanup and Brownfields, January 2013.

Guidance for Commonwealth-Funded Water Supply Response Actions, November 21, 2015, Department of Environmental Protection, Bureau of Environmental Cleanup and Brownfields, document number 262-5800-001.

- Outlines implementation of Commonwealth-funded water supply responses, including procedures for providing temporary or permanent response actions for impacted private water supplies.
- Details specific work related to response actions that may be financed via the HSCA fund.

- Explains operation and maintenance duties of response actions, including the appropriate parties that should conduct such activities.
- Describes the use of institutional controls as part of the response action process.

#### V. ANALYSIS OF ALTERNATIVES

#### **ALTERNATIVE 1: No Action**

#### Description of the Alternative:

The no further action alternative serves as a baseline to compare against other proposed response action options. Under this alternative DEP would take no further action and would not continue providing bottled water to affected residents.

#### Protection of Human Health and Environment:

This alternative would not eliminate the ingestion exposure pathway for PFOS and PFOA above the HAL.

#### Compliance with ARARs:

This alternative would not comply with ARARs. The public would be exposed to concentrations of PFOS and PFOA in the groundwater and drinking water above the HAL established by the EPA.

#### Feasibility, Effectiveness, Implementability and Permanence:

This alternative would be feasible and implementable because no action is being taken but would not be effective in addressing the health threats to the public.

#### **Cost Effectiveness:**

There is no cost associated with this alternative.

# Alternative 2. Continued Delivery of Bottled Water with Restrictions on the Use of Groundwater

#### **Description of Alternative:**

Under this alternative, DEP would continue to supply bottled water to the residential properties at the Site that have untreated privately-owned potable wells with concentrations of PFOS and PFOA above the HAL. Bottled water would be supplied for the duration of DEP's ongoing investigation. DEP would sample wells with combined concentrations above 40ppt over this period to determine if PFOS and PFOA exceed the HAL.

Pursuant to Section 512 of HSCA, 35 P.S. § 6020.512, and Section 6517(a)(2) of UECA, 27 Pa.C.S. § 6517(a)(2), DEP would ensure that future property owners are aware of the contamination and that future exposure to PFOS and PFOA at any property is eliminated by requiring that a limitation on groundwater usage be included in an environmental covenant recorded at the local recorder of deeds. An Administrative Order under Section 512 of HSCA could be issued to enforce deed restrictions in instances when DEP is unable to secure a signed covenant.

### Protection of Human Health and Environment:

This alternative would effectively eliminate the ingestion exposure pathway for PFOS and PFOA above the HAL.

#### Compliance with ARARs:

This alternative would comply with ARARs as the bottled water that DEP uses to supply affected residential properties does not have PFOS and PFOA above the HAL. DEP's contractor provided documentation to demonstrate that the bottled water that is being supplied was sampled to verify that it does not have PFOS and PFOA above the HAL.

# Feasibility, Effectiveness, Implementability and Permanence:

This alternative is not considered a permanent solution because it would not allow the existing residential privately owned potable wells at the Site to be used as potable wells for an undetermined amount of time. Additionally, this alternative may be difficult to implement in times of inclement weather.

#### Cost Effectiveness:

The estimated cost of continuing to provide bottled water to affected residential properties above the HAL is approximately \$1,900 per year. The cost associated with sampling during a one-year period is \$14,080. The total annual cost for this alternative is \$15,980. This alternative is cost effective; however it is not a permanent solution.

# Alternative 3. Installation and Maintenance of Whole-House Filtration Systems with Restrictions on the Use of Groundwater

### Description of Alternative:

Under this alternative, DEP would install and maintain Whole-House Filtration Systems in the form of point of entry treatment (POET) systems. These systems would be placed in homes at the Site that have untreated privately-owned potable wells with concentrations of PFOS and PFOA above the HAL. DEP would inspect existing POET systems that were privately installed in homes at the Site with concentrations above the HAL, to determine whether they provide a level of protection that is equivalent to that provided by DEP-installed POET systems. If necessary, these systems would be upgraded. DEP would sample the systems to determine if the filters are operating properly. DEP would continue to provide bottled water until the systems

have demonstrated that they are reducing PFOS and PFOA concentrations to below the HAL. DEP plans to monitor and maintain the systems it installs for the duration of its ongoing investigation to ensure they are effectively removing the PFOS and PFOA from the water supplies. If this alternative is selected as DEP's final response, then the responsibility for maintaining the systems would be turned over to homeowners.

DEP would also continue to sample select residential properties in the surrounding area during its ongoing investigation of the Site. If necessary, additional POET systems would be installed on any additional residence with combined concentrations of PFOA and PFOS exceeding the HAL.

If this alternative is selected as a final response, then pursuant to Section 512 of HSCA, 35 P.S. § 6020.512, and Section 6517(a)(2) of UECA, 27 Pa.C.S. § 6517(a)(2), DEP would ensure that future property owners are aware of the contamination and that future exposure to PFOS and PFOA at any property is eliminated by requiring that a limitation on groundwater usage be included in an environmental covenant recorded at the local recorder of deeds. An Administrative Order under Section 512 of HSCA could be issued to enforce deed restrictions in instances when DEP is unable to secure a signed covenant.

#### Protection of Human Health and the Environment:

This alternative would effectively eliminate the exposure pathways and, as a result, eliminate exposure to concentrations of PFOS and PFOA in the groundwater above the HAL. This alternative would also have the benefit of potentially providing control of local groundwater flow direction and preventing further spread of the PFOS and PFOA in groundwater at the Site via the continued pumping of existing wells.

#### Compliance with ARARs:

This alternative would comply with ARARs because the systems would reduce PFOS and PFOA concentrations to below the HAL.

#### Feasibility, Effectiveness, Implementability and Permanence:

This alternative is considered permanent provided that the systems are properly maintained and monitored. This alternative does require ongoing monitoring and maintenance costs for the property owners in order to ensure the systems are effective in eliminating exposure to concentrations of PFOS and PFOA in groundwater above the HAL. This alternative also allows for DEP to quickly and efficiently expand and implement it for a relatively low cost should additional properties be identified in the future as affected by PFOS and PFOA contamination as the investigation continues. Relative to Alternative 4, this alternative can be more quickly implemented.

#### **Cost Effectiveness:**

The costs associated with this alternative include installation, and sampling and maintenance of systems at impacted residential properties for an initial 12-month period. DEP will continue to

provide bottled water until the systems demonstrate that they are reducing PFOS and PFOA to below the HAL.

The systems will require periodic maintenance and sampling for the systems to continuously and effectively treat the water. Maintenance or issues related to the systems may arise, which DEP would cover during its ongoing investigation. If this Alternative is selected as DEP's final response, any maintenance issues arising after that selection would be the responsibility of the homeowner.

The total cost for installing filtration systems is estimated at \$40,000. Two sampling events would be provided by DEP per year, costing \$2,640 per system and totaling \$21,120.

The total cost associated with this alternative is estimated to be \$75,200, making it a cost-effective alternative.

# Alternative 4. Extension of an Existing Public Water Line with Restrictions on the Use of Groundwater

#### Description of Alternative:

Under this alternative, DEP would fund the connection of affected and threatened residential properties to an existing water line in the Site area. DEP would fund: 1) any necessary construction of an extension of existing water line mains, 2) the lateral connections from the main to the affected properties, 3) the connection of the laterals to the existing buildings' plumbing, 4) the repairs to all road surfaces or properties disturbed by the water line construction, and 5) the abandonment of residential privately owned potable wells. Groundwater usage would be restricted by a municipal ordinance to ensure residents cannot be exposed to PFOS and PFOA above the HAL. Such an ordinance would require all residential properties with privately owned potable wells with concentrations of PFOS and PFOA above the HAL to abandon those wells and connect to public water.

## Protection of Human Health and the Environment:

This alternative would effectively eliminate the exposure pathways for PFOS and PFOA above the HAL.

#### Compliance with ARARs:

This alternative would comply with ARARs. It would eliminate the exposure to PFOS and PFOA above the HAL in the groundwater. The utility providing the public water would be required to provide their customers with potable water below the HAL for PFOS and PFOA.

# Feasibility, Effectiveness, Implementability and Permanence:

This alternative is effective at eliminating exposure to PFOS and PFOA among the currently identified affected properties and would be permanent in nature. This alternative is not as feasible or quickly implemented as Alternative 3, because it would involve a long period of construction. Finally, this alternative requires that included residential properties abandon their

groundwater wells, the process of which could affect groundwater flow and result in the further spread of PFOS and PFOA.

#### **Cost Effectiveness:**

The estimated cost for Alternative 4 is over \$2,000,000. DEP does not consider this a cost-effective alternative since the groundwater conditions at the Site may continue to change and additional properties may be affected in the future. This alternative is cost-prohibitive because the entirety of the Site would need to be connected to the waterline to guarantee that no additional properties will be exposed to the groundwater with concentrations of PFOS and PFOA above the HAL.

#### VI. SELECTED RESPONSE

DEP has determined, based upon the information contained in this document and the Administrative Record, that an Interim Response action is justified at the Site in accordance with Section 505(b) of HSCA, 35 P.S. § 6020.505(b).

DEP has selected Alternative 3, installation and maintenance of whole-house filtration systems with restrictions on the use of groundwater (Selected Response), as an Interim Response at the Easton Road PFC HSCA Site. The Selected Response is effective in mitigating threats to public health and is cost effective.

The Selected Response, Alternative 3, affords substantially more protection to human health than Alternatives 1 and 2, and is as protective as Alternative 4 because it eliminates exposure to the contaminants in groundwater. The Selected Response abates the threat to human health from ingestion of water containing PFOS and PFOA above the HAL while allowing for the continued investigation of the Site. The Selected Response can also be implemented more quickly than Alternative 4.

DEP considers this type of response to be an interim response as additional actions may be needed to achieve a complete and final cleanup for the Site. For that reason, DEP does not intend to seek the restrictions on the use of groundwater included in this proposed response unless this Selected Response is selected as a Final Response in the future.

DEP received comments from a select few residents in support of Alternative 4. As discussed above, the widespread spatial area of the Site and remaining uncertainties regarding the long-term groundwater flow and number of properties affected makes the implementation of Alternative 4 neither feasible nor cost-effective at this time.

The Selected Alternative provides flexibility so that additional systems may be installed if subsequent sampling identifies properties where concentrations of PFOS and PFOA in residential privately owned potable wells exceed the HAL.

DEP will continue to monitor the concentrations of PFOS and PFOA at the residential properties where the systems are installed as part of its ongoing investigation of the Site.

#### VIII. RESPONSE TO PUBLIC COMMENTS

DEP's response to public comments concerning the selection of this response action is filed in the administrative record.

FOR THE COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Patrick L. Patterson, Regional Director

Southeast Region Office

Date

# DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Sites Cleanup Program

# RESPONSE TO COMMENTS

# Easton Road PFC HSCA Site

March 31, 2020

Notice of the establishment of an Administrative Record concerning the proposal of the Interim Response at the Easton Road PFC HSCA Site (Site) was published in the Pennsylvania Bulletin on October 19, 2019, and in the Bucks County Courier Times on October 21, 2019. The Administrative Record was available for public review on the Pennsylvania Department of Environmental Protection (DEP)'s website, in the Doylestown Township Building, in the Plumstead Township Building, in the Buckingham Township Building, in the Doylestown Borough office, and in the DEP's Southeast Regional Office in Norristown. The DEP accepted comments on the Administrative Record between October 19, 2019 and January 17, 2020 and conducted a public hearing on November 18, 2019, at Lenape Middle School, in Doylestown Township. During the hearing, DEP accepted oral comments on the Administrative Record. The DEP has compiled all comments, both oral and written, received during the comment period. Oral comments have been excerpted from the public hearing transcript, and a complete transcript of the oral comments is available for review at the DEP's Southeast Regional Office in Norristown.

#### Commenters:

- 1. Breanna Hashman, Clean Water Action
- 2. Tim Bergere
- 3. Hope Grosse, Buxmont Coalition for Safer Water
- 4. David Donahue
- 5. Sue Thomas
- 6. Linda Ventola & Charles Wimmersberger

- 7. Tom Joyce
- 8 Fred Greco
- 9. Thomas Hoover & Michael Hoover
- 10. Timothy Harriman
- 11. Frank and Darlene Crumley

For each comment, the name of the commenter, and the DEP's response are listed below:

# Commenter #1: Breanna Hashman

Oral Comment #1 transcribed on pages 4-9 of the hearing transcript:

"My name is Breanna Hashman. My address is Chestnut Street, Philadelphia, PA 19104. I work for Clean Water Actions [Action]. I'm speaking in support of full house filtration systems for local water supplies involving granular, activated carbon, GAC, or reverse osmosis systems. When I read about the meeting, I thought it was about water filtration systems for the public, but I think that these homes are a guide to how we can apply these different methods on a larger scale. In regards chronic exposure, when DEP sets an enforceable MCL years from now it will only compound potential health issues to residents.

What the DEP has now, since 2016, this site has PFAS contamination. How much longer will we expose residents - residents to chemicals that other countries, states, municipalities have deemed unsafe? The use of GAC or other simple filters will prevent not only PFAS contamination of drinking water, but also proactively protect constituents against the large main groundwater contaminates. I'll be the first person to tell you that we researchers lack conclusive evidence to predict health risks for specific individuals based on levels of PFAS exposure. It's hard to establish cause and effect in those types of scenarios, but that doesn't mean risk to the public - public health isn't important. Risks to individuals are more definitive because we have - not because we have 15 bodies of research, it's because we don't have enough studies on this complex and reactive compound that are so long lasting in the environment that there are deemed, quote, forever chemicals. We don't know all the precursor compounds that can form PO – PFOS or PFOA. PFOS or PFOA can change different compounds as they move through the environment. We're more than just two species, PFAS species is so important. This community deserves to have the PFAS species sample that DEP has deemed important enough to sample for their current state wide sampling initiative. My final striking is how this field has evolved over time in the community. When a new hypothesis is presented in a study and, since I peter out, its discredited, you didn't isolate it with research groups or strengthen it over time. The link between chronic PFAS exposure and health problems is strengthening with time. And its not just in one science or discipline. These chemicals are being studied and discovered by scientists across the globe in the fields of ecology, toxicology, epidemiology, isotopic geochemistry, and biogeochemistry. Researchers in the DEP can't prevent the health risks individuals face when it comes to PFAS. But what do know is that communities exposed to PFAS and long terms in contained drinking water tend to have higher rates for illnesses compared to national rates or the rates of unaffected neighboring municipalities. We also know that there are studies that have shown strongly between these illnesses and PFAS exposure through animal toxicology studies. Figuring out differences between correlation and causation can be hard but when you have correlation, so many of them, it becomes ridiculous to suggest that PFAS is not – is not the

# Commenter #2: Tim Bergere

Oral Comment #2-1 transcribed on pages 9-10 of the hearing transcript:

"My name is Tim Bergere, I live at Radcliff Drive in Doylestown Township. I'm here to speak primarily to the fact the Department's proposed interactions does not include a treatment system for the public water supply well, which was the first well that was impacted and which drove the action - action in this case. That is a public water supply well in which every township resident has an investment. It's right now at a high cost. There's probably a million dollars invested in that well, and more if you count the infrastructure to get that water to township residents. We are the township, with the borough, has had many recent assaults on the water supply. The Kempath [ChemFab] site has contaminated Doylestown Borough water supply. Many neighboring communities have been impacted by PFAS, and I don't see any reason to why the internal response action can't include an action for a public water supply well which has been impacted by the same PFAS contaminants that we're concerned about in the interim action. That well is out of service. Needs to be placed back into service to serve the township

Oral Comment #2-2 transcribed on pages 10-11 of the hearing transcript:

"...I would also point out that the tax payers have a right to have PFAS compounds designated as hazardous substances. The Department should take more concerned action to make sure there's a legislature change or a regulatory change to make them a hazardous substance. Because right now, the township, if it has to proceed under the Safe Drinking Water Act, does not have legal authority under HASCA [HSCA] or SERPLA [CERCLA] to pursue a responsible party for that cost because those substances are not hazardous substances. No cost to cover the contribution acts that could be filed to recover those costs. Right now, one of the criticisms that we're not making a hazardous substance is, is the concern that it might create an unfunded mandate if we declare the PFAS a hazardous substance. That's nonsense. Right now, we have townships in Warrington and now Doylestown Township who are without a remedy and have — and have to impose on the tax payers the cost of either not putting that well back in service and getting water from other services or paying to put their own treatment systems up. And it is an unfunded mandate not to make them hazardous substances, and I think the Department needs to move forward as quickly as possible to designate the PFAS family of compounds as hazardous substances."

#### Commenter #3: Hope Grosse

Oral Comment #3, transcribed on pages 11-13 of the hearing transcript:

"I'm Hope Grosse, Samantha Lane, Landale. I represent Buxmont Coalition for Safer Water. I would like to say that I believe we know that our health - that this health - this seven[ty] parts per trillion is way too high. There is evidence done by ATFTR [ATSDR], government institutions stating that anything over 11 parts per trillion causes health problems. We have lists for them. They are online. They're - you can find them at the Department of Health on their website, Pennsylvania Department of Health. We also know that there's second hand health affects in vitro. We know that when we drink the water as a mother, that when I bear a child that these chemicals go into our children. That when we breastfeed our children, when we feed them bottle formula with PFAS in it, that these chemicals are going into our babies and we need to be more proactive. We also know that ground water and surface water is polluting our food, polluting our fish. It's polluting our soil. And we need to make some changes, and we need an MCL in Pennsylvania. We need this class of chemicals, which is a large class of chemicals, we need them classified at a hazard – as a hazardous substance immediately. The public water systems in this area as well as the ones that are large and full of growth, their surface water, you know, system, they're - we get this water from our creeks that go into public water systems that people are drinking public water. And its polluted. And we need this to change. And we can only get change if it's deemed a hazardous substance and MCL needs to be put in place."

#### Commenter #4: David Donahue

#### Comment #4 Received via email on January 8, 2020:

Subject: [External] RE: Easton Road Site Comments

Dear Joshua,

After thought and consideration of the proposal to address the problem at the Easton Road PFC HSCA Site, I would like to share with you my feelings and concerns.

As you have explained, there are 8 homes within the cluster whose reading are above the threshold of contamination. There are also a larger number of home below threshold but where continued testing is

being provided by DEP. In addition there also exists the Doylestown well which has been shut down due to elevated levels.

While the solution proposed is one of several options available for the for remedy of the problem, it is lacking in several areas which were not discussed in the November 18th meeting at Lenape Middle School.

First: Since no locus of contamination has been identified, there is no reasonable guarantee that the problem (<70 ppt) could not spread to more homes within the Site. This would necessitate additional purifying system into additional compromised homes. The additional cost of these installations would not be insignificant.

Second: There currently exists a fire main running south on Pine Run Road which provides fresh water to at least one fire hydrant located at Chapman Rd. and Pine Run Rd. Could this not be used as a source of water for the affected homes. The estimates for a fresh water hook up were expectedly high, however no consideration was discussed for an extended search for alternative sources of funding (Local, State grants, home owner contributions, etc.).

Third: The installation of home filtration systems places an undue burden on the affected homeowners. The Deed Restriction, which non of the current residents anticipated, is an unwanted encumbrance on the title to the property. The requirements to maintain the system also places an unwanted responsibility and continuing cost on the DEP to constantly test and maintain these systems.

Fourth: The homeowners of those homes with the installed filtration systems face the distinct possibility of reduced property values when they decide to sell their homes (The average homeowner will sell their home approximately once every seven years). The remaining home owners within the site also face the possibility of reduced property values and difficulty in selling their homes. The presence of contaminated ground water in a particular area must be revealed in any Sellers Disclosure, even if the owners water tested below 70 ppt. It would be negligent for a Seller or the Sellers Real Estate Agent not to reveal the problems in The Easton Road PFC Site. It is reasonable to expect that property values will be substantially less within the Easton Road Site compared to other areas of Doylestown Township where there is no PFC problem. The homeowners should not have to bear significant financial loss due to external forces and pollution which are not of their own making.

For all of the above reasons, I strongly disagree with the current proposal for remedying the PFC problem at the Easton Road Site. I urge you and the DEP to seriously reconsider providing City Water to the affected area. I would also recommend that the DEP investigate alternative sources of financing which would be fair and equitable for all parties involved.

Sincerely,

David Donahue
Cedar Woods Dr.
Doylestown, Pa. 18901

### Commenter #5: Tom Joyce

# Comment #5 Received via email on December 12, 2019:

Subject: [External] Re: Easton Road PFC: Public Hearing Notice

Hello Joshua,

My name is Tom Joyce and I have lived at Cedar Woods Drive for the last 35 years. My water was tested last year and it was determined that it was safe. I have come to learn that 8 of my very close neighbors tested negatively and that their well contamination was being mitigated by a carbon filtration system. I suspect that that will work in the short term, but what about the rest of our neighborhood? Can it be only a matter of time before we are all affected? Do you even know the source of this contamination? I can cite two neighbors who died of brain tumors? Could well water have contributed? We'll never know. What we do know is that to continue on the current strategy of Band-Aid fixes won't work, and we as home owners will pay the price as our property values drop due to this reality. Our neighborhood is an integral part of the Doylestown community and to gamble on it's future is ludicrous. The right thing to do is immediately begin planning on a public water system. I welcome your feedback.

Best regards, Tom Joyce

# Commenters #6: Linda Ventola and Charles Wimmersberger

# Comment #6 Received via email December 7, 2019:

Subject: Re: Public comment for the Easton Road PFC Administrative Record

Mr. Joshua R. Crooks
Environmental Protection Specialist
Department of Environmental Protection-Southeast Regional Office
2 East Main Street
Norristown, PA 19401

Hello Josh,

Many thanks for the work done to date on the Cross Keys/Easton Road PFOA/PFOS Remediation. For the record, I am a licensed real estate broker of over 40 years doing business in the immediate area affected by this situation.

I wish to state that I am one of the 'affected' wells, whose levels increased, and eventually forced me to install a carbon filtration system in the home to bring the levels to 'acceptable' in order to allow the occupants of my home to continue to reside at the property while the source of this issue was being investigated. At no time did I assume that this would be a final solution to the issue. This is merely a temporary, but not satisfactory, band-aid.

Addressing the three options offered by the DEP; here are our thoughts:

- 1) Bottled water: Not an Option. It is a ridiculous solution. Drinking water is only one part of the issue. Water enters your skin through your pores when showering; your ears and your eyes and your nose, when you wash your face; and this does not take in swimming in a pool for a child or an adult. This should not even be a consideration as it is not a solution.
- 2) Carbon Filtration System for 8 'currently' affected homes: I did this immediately as my own 'temporary' fix. I know it will be tweaked and we will be reimbursed, but that is still not a permanent solution. It only masks the issue and sweeps it under the rug for now. It leaves all the other homes in the surrounding area in an 'exposed' situation, as their well can be affected at any time during or in between testing. It leaves all the homes in this area of exposure to be potentially VICTIMIZED at any time. An entire geographic area is at risk.
- 3) Public Water Installation: This is the ONLY ACCEPTABLE solution. The cost that is estimated at approximately \$2M is peanuts and is far, far lower than the value of the real estate that is being virtually destroyed by this occurrence. PUBLIC WATER IS THE ONLY SOLUTION for this neighborhood. I/We are taxpayers who have homes that have mortgages on them based on the value of their homes. We deserve and are entitled to SAFE drinking water, not contaminated water. After installation of public water, the DEP can take all the time they need to determine the source, which more than likely will take years, of the contamination. We cannot just sit on the sidelines and wait for the mystery to be solved. It is frivolous and unconscionable to think that the DEP can suggest masking this problem rather than PROVIDE SAFE PUBLIC water to the affected area.

In closing, It is our request and yes, demand, that the decision to merely install filtration in 8 houses be overturned in favor of a decision to protect the homeowners in the area and the values of their real estate, in which they have a financial interest, and to protect the health and well being of the VICTIMS that are residing in this geographic area.

Sincerely,

Linda Ventola and Charles Wimmersberger

Cedarwoods Circle Doylestown, PA 18901

Doylestown, 111 10701

Commenter #7: Sue Thomas

# Comment #7 Received via email December 8, 2019:

Subject: [External] Letter for Public for the Easton Road PFC Administrative Record

Hi Josh,

I wanted to thank you for your work this far on the well contamination issues in my neighborhood. First I wish to speak to you as a homeowner. I live on Cedar Woods Dr and although

my well testes within then "acceptable" range for PFOS/PFOA, 6 of the 8 severely contaminated wells are within view of my home. This is very concerning to me as a homeowner and I wonder when my well might be in the same state as the 8 being "remediated". And if that happens, what will MY remedy be,

But even far more concerning is that our health may be in jeopardy if we continue to drink our own well water. I have learned that the "acceptable levels" may be reduced to be far lower than they are today so it begs the question, how many of us will be in the danger zone at that point? And how many impacted wells are enough to warrant the DEP taking the correct action which is to provide the citizens of this area with clean, safe public water.

The recent meeting outlined the three options for the DEP to remediate the 8 severely impacted wells, Bottled water forever, installing water treatment systems in those 8 homes or safe, public water for all in the area to avoid future negative impact. The water treatment approach chosen by DEP as it was supposedly cost effective since in the DEP's view, only these 8 homes need attention. This leaves the entire surrounding community in the lurch, waiting for the other shoe to drop as their wells are tested year over year. It seems very shortsighted to this homeowner and only a band aid on a much bigger problem. A problem, in fact, that no one can determine the root cause of nor the likelihood of further contamination to the surrounding wells.

Now I will put my realtor hat on. I have been a full time residential real estate specialist for 32 years. It is a fact that homes with public water sell faster than those with a private well. Consumers worry about water contamination, particularly after what happened at Willow Grove and other sites. It is also a fact that CONTAMINATED wells and the proximity to such will greatly devalue homes, in fact creating a blight on not only the affected homes but the entire area. If the DEP declines to provide safe, clean public water to ALL of the homes in the affected area, the homes in that area may very well become unsellable. After all, if you were looking for a home for your family, your children, would you choose one in a neighborhood with known contamination or would you go elsewhere? Consumers are very educated nowadays and there is NO LEVEL of contamination that is acceptable. Additionally, the contamination will be a disclosure issue forever.

I absolutely believe that if given the information about the contamination and the opportunity to hook up to public water, the vast majority of homeowners would do so. Particularly if the DEP were to provide this at no cost, as would be expected given the contamination.

I strongly urge you to reassess your decision to do the simple thing and to do the right thing: provide safe, public water to all homes in the Cross Keys/Easton road area.

Thank you for your time,

Sue Thomas

#### Commenter #8: Fred Greco

### Comment #8 Received via email January 15, 2020:

Subject: [External] Re: Easton Road Site Comments

Dear Joshua,

I live at Cedar Woods Circle. I am very concerned with the water situation. I find it discerning that the DEP is aware of the circumstances and have not made the effort to bring in public water. I share several of the thoughts that my neighbor David Donahue wrote to you last week. I have two young boys and very concerned how this will affect them through the years.

After thought and consideration of the proposal to address the problem at the Easton Road PFC HSCA Site, I would like to share with you my feelings and concerns.

As you have explained, there are 8 homes within the cluster whose reading are above the threshold of contamination. There are also a larger number of home below threshold but where continued testing is being provided by DEP. In addition there also exists the Doylestown well which has been shut down due to elevated levels.

While the solution proposed is one of several options available for the for remedy of the problem, it is lacking in several areas which were not discussed in the November 18th meeting at Lenape Middle School.

First: Since no locus of contamination has been identified, there is no reasonable guarantee that the problem (<70 ppt) could not spread to more homes within the Site. This would necessitate additional purifying system into additional compromised homes. The additional cost of these installations would not be insignificant.

Second: There currently exists a fire main running south on Pine Run Road which provides fresh water to at least one fire hydrant located at Chapman Rd. and Pine Run Rd. Could this not be used as a source of water for the affected homes. The estimates for a fresh water hook up were expectedly high, however no consideration was discussed for an extended search for alternative sources of funding (Local, State grants, home owner contributions, etc.).

Third: The installation of home filtration systems places an undue burden on the affected homeowners. The Deed Restriction, which non of the current residents anticipated, is an unwanted encumbrance on the title to the property. The requirements to maintain the system also places an unwanted responsibility and continuing cost on the DEP to constantly test and maintain these systems.

Fourth: The homeowners of those homes with the installed filtration systems face the distinct possibility of reduced property values when they decide to sell their homes (The average homeowner will sell their home approximately once every seven years). The remaining home owners within the site also face the possibility of reduced property values and difficulty in selling their homes. The presence of contaminated ground water in a particular area must be revealed in any Sellers Disclosure, even if the owners water tested below 70 ppt. It would be negligent for a Seller or the Sellers Real Estate Agent not to reveal the problems in The Easton Road PFC Site. It is reasonable to expect that property values will

be substantially less within the Easton Road Site compared to other areas of Doylestown Township where there is no PFC problem. The homeowners should not have to bear significant financial loss due to external forces and pollution which are not of their own making.

For all of the above reasons, I strongly disagree with the current proposal for remedying the PFC problem at the Easton Road Site, I urge you and the DEP to seriously reconsider providing City Water to the affected area. I would also recommend that the DEP investigate alternative sources of financing which would be fair and equitable for all parties involved.

Sincerely,

Fred Greco
Cedar Woods Circle
Doylestown, Pa. 18901

# Commenter #9: Thomas Hoover & Michael Hoover

Comment #9 letter received separately via email from Thomas Hoover and Michael Hoover January 15, 2020:

Thomas E Hoover Cedar Woods Circle Doylestown, PA 18901

January 15, 2020.

Pennsylvania Department of Environmental Protection 2 hast Main Street Notristown, PA 19401

Mo Jodina R. Crooks

Re. Laston Road PFC HSCA Site Public Common

Dear Joshua;

This is in response to the results of the tests results, that have been done in our area regarding the high PFC levels. It appears that this is a result of chemicals induced into the ground water in our area, which we have had no control. We rely on DEP to protect us from situations like this, but when they occur, DEP should offer a permanent long-term solution.

It is my opinion, that a connection to Municipal Water should be seriously considered. The suggestion of installing Carbon Filter systems is a band aid solution.

I would appreciate DLP reviewing this and recommending connecting to the Municipal Water Line, which is less than 50 feet as my from some of these properties.

Smearely.

Thomas Intlancin

Commenter #10: Timothy Harriman

Comment #10 Received via email January 16, 2020:

Subject: [External] Re: Easton Road Site Comments

Joshua,

Although our home has registered PFOS/PFOA contaminant readings below the 70 ppt threshold, it appears that a reasonable remedy for the entire range of affected homeowners is connection to a public water supply. Even at our last reading of 34 ppt, we are hesitant to drink our water, and property values certainly are compromised by any level of contaminant reported by the DEP. It is my hope that more research into alternate fresh water sources and funding can be initiated in the near term for the affected community.

I would like to thank the DEP for continuing to monitor the quality of our water supply at our home.

Regards,

Timothy W Harriman Cedar Woods Cir Doylestown PA 18901

#### Commenter #11: Frank and Darlene Crumley

#### Comment #11 Received via email January 17, 2020:

Subject: [External] Easton Road PFC HSCA Site Public Comment

Dear Sir:

As neighbors of David and Julie Donahue, we have communicated with them, read their email to you, and concur with their findings and recommendations, especially as stated in the concluding paragraph. Though our property has not been affected by this contamination, as homeowners for 43 years in this development/neighborhood, we are concerned going forward about the effect on property value; therefore, we are adding our voices to all of the others.

Sincerely,

Frank and Darlene Crumley
Cedar Woods Drive
Doylestown, PA 18901

#### **General Response to All Comments:**

DEP appreciates your comments, which it considered in evaluating the alternatives for its Interim Response.

#### Response to Comment #1:

DEP appreciates your support for full house filtration systems. DEP has selected Alternative 3, installation and maintenance of whole-house filtration systems with restrictions on the use of groundwater, as an Interim Response at the Easton Road PFC HSCA Site. Alternative 3 is effective in mitigating threats to public health and is cost effective.

#### Response to Comment #2-1:

The DEP is implementing a response to address the impacts of perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) contamination above the Health Advisory Level (HAL) in private

residential drinking water wells. Installing filtration systems on a public water supply system is outside the scope of this response action.

In 2018, Governor Wolf signed an Executive Order organizing the PFAS Action Team. The PFAS Action Team is dedicated to both learning more about per- and polyfluoroalkyl substances (PFAS) and implementing effective protocols. One of the action team's goals, among others, is to identify impacted locations and resources and create and implement an action plan to assist state and local authorities and public water systems in delivering safe drinking water.

# Response to Comments #2-2 and #3 regarding listing PFOA and PFOS as Hazardous Substances:

Section 501(a) of the Hazardous Sites Cleanup Act grants DEP the authority to undertake investigations and response actions when there has been a release of a contaminant which presents a substantial danger to the public health or safety or the environment. While it is true that PFOA and PFOS are considered contaminants under the Hazardous Sites Cleanup Act, rather than hazardous substances, that difference has not impacted the DEP's investigation or the actions taken to protect human health, identify the source of the contamination, and address the issue to the best of our ability.

## Response to Comments #3 and #7 regarding PA creating an MCL for PFOA and PFOS:

We recognize and share the concerns and the sense of urgency of many communities, especially those where PFAS have been discovered above the HAL.

It is extremely important to acknowledge that this is an unprecedented step for DEP, as we have never set a maximum contaminant level (MCL), and that the federal government is failing states by not acting in its proper role to establish sound health-based drinking water standards.

DEP and the Wolf Administration have made it a top priority to address PFAS contamination. Because it's an emerging environmental and health issue and because the compounds are so persistent in the environment, it's critical that we comprehensively examine their impact on Pennsylvania, and that means ensuring that we have the appropriate staff, equipment and testing methods to fully understand the scope of the issue in Pennsylvania before we begin the regulatory process — all of this, absent new dollars and personnel.

In order to set a legally defensible MCL, Pennsylvania's environmental regulatory rulemaking process established by the legislature requires a thorough and transparent process that not only includes scientific evidence, but also non-health related information and analysis. For example, in addition to the public health and environmental scientific data and information, DEP is also required to evaluate all of the economic impacts, conduct a thorough cost vs. benefits analysis of the proposed rule, and we must specifically include an evaluation of the impacts to small businesses from the proposed rule/regulation. The legislature requires DEP to prepare these findings and requires the Environmental Quality Board to consider them even where the rule is a health-based standard, like an MCL.

Pennsylvania's Environmental Quality Board has not proposed a State MCL before issuance of the Statement of Decision. If a State or Federal MCL is issued for PFOS or PFOA that is different from the HAL, DEP will reevaluate the Site, and will take action as necessary and appropriate.

In addition, Pennsylvania's Land Recycling Program (Act 2) establishes environmental remediation standards for cleanups related to specific environmental laws. In accordance with Act 2 for a regulated substance where no MCL has been established, the Medium Specific Concentration (MSC) is the lifetime HAL for that compound.

# Response to Comments #4, #5, #6, #7, #8, #9, #10, and #11 regarding a Public Waterline versus Filtration Systems:

The DEP has been sampling private residential wells within the Site area since 2016. Results of this sampling have remained consistent, indicating that the extent and boundary of this contamination has been identified. In addition, DEP has installed 7 monitoring wells within the localized area of concern in Doylestown Township and has sampled these wells regularly since 2018. Groundwater flow and contour maps have been created utilizing information from these wells to aide DEP in its investigation and create a better understanding of the contamination impacting this localized area. The DEP will continue to conduct sampling of homes with combined concentrations of PFOA and PFOS above 40 parts per trillion (ppt), as well as select homes within the localized area of contamination within Doylestown Township.

DEP does not consider Alternative 3, the Installation and Maintenance of Whole-House Filtration Systems, to be a "band-aid." Carbon filtration systems installed on a few impacted homes have proven to be effective in removing concentrations of PFOA and PFOS to below laboratory detection limits. Alternative 3 allows the DEP to install whole-house filtration system as necessary, in a rapid and costefficient manner. Should additional homes be determined to be impacted during DEP's ongoing monitoring program, additional filtration units can quickly be installed. The DEP is aware of the close proximity of public water nearby the localized area of concern. The DEP has met with the local water authority on several occasions to discuss the feasibility and cost of installing a public water main, as well as options to secure additional funding sources. Alternative 4, the Extension of an Existing Public Water Line, is cost-prohibitive because the entirety of the area of concern would need to be connected to a waterline to guarantee no additional properties would be exposed to groundwater with concentrations of PFOS and PFOA above the HAL. Alternative 4 could allow the further spread of PFOS and PFOA if existing residential privately-owned wells are abandoned, possibly changing groundwater flow and potentially affecting additional properties outside the area of concern in the future. The estimated cost for Alternative 4 is over \$2,000,000. Alternative 4 is not as quickly implemented as Alternative 3 and would involve a long period of construction. DEP appreciates the comments and concerns raised regarding potential impacts to property values. Potential impacts to property values are outside the scope of this interim response action. For the reasons set forth above DEP has selected Alternative 3 as its response action to be implemented at the Site. A properly maintained filtration system will provide potable water that meets the HAL for impacted homes in the same manner that a public water supply would.

# Response to Comments #4, #8, and #11 regarding Land Use Restrictions

Because DEP considers this response to be an interim response, DEP does not intend to seek the restrictions on the use of groundwater included in this proposed interim response unless it is selected as a Final Response in the future

### Response to Comment #5 Regarding the Source Investigation:

DEP's investigation of potential sources is ongoing.

### Response to Comment #5 Regarding the Health Concerns:

Health concerns regarding the exposure to PFOA and PFOS may be directed to Anil Nair, PhD, Director, Division of Environmental Health Epidemiology, Pennsylvania Department of Health and/or your physician.

## Thomas E Hoover Cedar Woods Circle Doylestown, PA 18901

January 15, 2020

Pennsylvania Department of Environmental Protection 2 East Main Street Norristown, PA 19401

Attn: Joshua R. Crooks

Re: Easton Road PFC HSCA Site Public Comment

#### Dear Joshua:

This is in response to the results of the tests results, that have been done in our area regarding the high PFC levels. It appears that this is a result of chemicals induced into the ground water in our area, which we have had no control. We rely on DEP to protect us from situations like this, but when they occur, DEP should offer a permanent long-term solution.

It is my opinion, that a connection to Municipal Water should be seriously considered. The suggestion of installing Carbon Filter systems is a band aid solution.

I would appreciate DEP reviewing this and recommending connecting to the Municipal Water Line, which is less than 50 feet away from some of these properties.

Sincerely,

Thomas P Hoover