Easton Road PFC
HSCA Site
Public Hearing
November 18, 2019
Doylestown Township
Bucks County, PA
• Site background and investigation results

• Response alternatives for providing potable water supply in the Site area

• Q&A

• Public Hearing on DEP’s proposed response
Per- and polyfluorinated alkyl substances (PFAS) are present in commercial, industrial, and residential products

- Cookware, carpets, clothing, food packaging, firefighting foams, water repellent materials

In 2012, USEPA Unregulated Contaminated Monitoring Rule (UCMR) 3

- Included Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA), and other PFAS

May 2016, USEPA set a Health Advisory Limit (HAL) of 70 parts per trillion (ppt) for combined PFOA & PFOS in drinking water
Site Background

• May 2016: Doylestown Township Municipal Authority (DTMA) found combined concentrations of PFOA/PFOS above the HAL in a supply well & a local private residential well

• June 2016:
  - DEP met with local Townships
  - Created the Easton Road website
  - Began extensive well survey of the Site area

• July 2016: DEP identified approx. 375 private drinking water wells in the area and began sampling efforts
Easton Road PFC Site

1-mile Radius Map: Initial Study Area
Bucks County
June 28, 2016
Site Investigation

Private Residential Well Sampling

• Over 300 private residential wells sampled
• 8 homes exceed the HAL 70 ppt
• Approx. 20 homes above 40 ppt
• Localized area of concern

One part per trillion = One drop of detergent in enough dishwater to fill a string of railroad tank cars 10 miles long.

One square inch in 250 square miles.

One second in 32,000 years.
Easton Road PFC HSCA Site
Sampling Results as of 043019

Legend
- Surface/Sediment Sample Location
- Well Sample Results
  (Combined Concentrations of PFOA & PFOS)
  - ≥ 70 ppt
  - 41 - 60 ppt
  - 21 - 40 ppt
  - Above Detection Limit - 20 ppt
  - ND

Doylestown Township Area
Site Investigation

**Private Residential Well**

**Continued Sampling Efforts**

- Expanded original sampling area within Doylestown Township
- October 2017: Resampled 20-69 ppt
- November 2018: Resampled 10-20 ppt
- Quarterly Sampling Above 40 ppt
Groundwater Monitoring Well Installation & Sampling

- February 2017
  - Seven (7) monitoring wells installed within localized area of concern
- Five (5) rounds of sampling have been completed
  - Results have ranged from ND-69 ppt
Site Investigation

Surface Water & Sediment Sampling
Pine Run Creek

• April 2017-August 2019
  – 24 surface water samples and 16 sediment samples from various locations along Pine Run Creek and its tributaries
• Results have ranged from ND-41 ppt
Summary

• Since 2016 DEP has been providing bottled water to homes with private wells with drinking water above the HAL
  • 4 homes currently receiving bottled water
  • 4 homes have privately installed filtration systems

• Multiple sampling events
• Source Investigation
• Analysis of response alternatives (AOA) to evaluate possible interim response actions
Response Alternative Evaluation Criteria

• Effectiveness
  *does it mitigate threats posed by the contamination?*

• Time frame of the response
  *is it temporary or permanent; how long will it take to enact?*

• Reliability
  *can it consistently comply with health based standards?*

• Implementability
  *is it feasible to initiate, install, operate, and/or maintain?*

• Public, municipal, and organizational support
  *discovered through public comments*

• Cost
  *is it cost prohibitive, or appropriate use of Commonwealth funds?*
Response Alternatives

1. No action (*baseline for comparison only*)

2. Bottled water

3. Whole-house Filtration Systems

4. Public water line
## Alternative 1

No Action  
(Baseline Alternative)

<table>
<thead>
<tr>
<th>PROS</th>
<th>CONS</th>
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</thead>
<tbody>
<tr>
<td>Implementable</td>
<td>Not effective</td>
</tr>
<tr>
<td>No cost</td>
<td>Not a permanent solution</td>
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<tr>
<td></td>
<td>Not reliable</td>
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</table>
Alternative 2

Bottled water

**PROS**
- Implementable
- Effective
- Reliable
- Cost Effective

**CONS**
- Not a permanent solution
- Inconvenient to use & store
Alternative 3

Whole-house Filtration Systems

**PROS**
- Quickly Implementable
- Keep well
- Effective
- Permanent
- Reliable

**CONS**
- Requires monitoring
- & some limited maintenance
Alternative 4

Public water line

**PROS**
- Effective
- Permanent
- Reliable

**CONS**
- Not easily implementable
- Inconvenience during construction
- Unintended consequences / Impact groundwater flow
## Response Alternative Comparisons

<table>
<thead>
<tr>
<th>Criteria</th>
<th>#1 (No action)</th>
<th>#2 (Bottled water)</th>
<th>#3 (Whole-house Filters)</th>
<th>#4 (Water line)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective?</td>
<td>NO</td>
<td>YES</td>
<td>YES*</td>
<td>YES</td>
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<tr>
<td>Permanent?</td>
<td>NO</td>
<td>NO</td>
<td>YES*</td>
<td>YES</td>
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<tr>
<td>Reliable?</td>
<td>NO</td>
<td>YES</td>
<td>YES*</td>
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<tr>
<td>Timeframe</td>
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<td>N/A</td>
<td>3 Months</td>
<td>12 Months</td>
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<td>Cost effective?</td>
<td>YES</td>
<td>$16,000</td>
<td>$75,000</td>
<td>&gt;$2,000,000</td>
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<td>Public/municipal</td>
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<tr>
<td>support?</td>
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</tbody>
</table>

*with proper maintenance

To be determined based on public comments
DEP’s Proposed Alternative

Alternative 3
Whole-house Filtration Systems

- Protective of human health
- Complies with HAL
- Implemented quickly
- Cost-effective
- Permanent solution
  - Simple maintenance may be needed on occasion
DEP’s Proposed Alternative

Whole-house Filtration Systems

- Will Remove PFOA/PFOS
- Additional treatment may be required
- Three sampling ports
- Non-freezing location required
Questions?

Off the Record
Public Hearing Comment Period

- Please state your first and last name.
- Please spell your name for the court recorder.
- State your address.
- Provide your comment for the record.

****DEP Appreciates your comment.****
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DEADLINE FOR WRITTEN COMMENTS:
January 17, 2020

*Please indicate in the letter or email that you are providing a comment to be included in the Administrative Record