The Southern New Hampshire PFOA Investigation
5/23/2016 – 1:45 PM

Presented by Mike Wimsatt, Director, Waste Management Division
At the State/EPA Meeting on PFAS – Poly- and Perfluoroalkyl Substances
Quinsigamond Community College, Worcester, Massachusetts
May 23, 2016

Initial Site Discovery – Saint-Gobain Facility in Merrimack, NH

- Due to contamination detected near its NY and VT plants, Saint-Gobain (S-G) tests water at its NH plant
- 2/26/16: S-G reports PFOA detected at 30 parts per trillion in water supplied to plant by Merrimack Village District Water System (MVD), a public water supply
- NHDES and MVD take immediate steps to sample public and private drinking water supplies in vicinity of the plant
- Testing quickly expands across the river to Litchfield – airborne transport pathway becomes evident
Public Water Supply Testing Results

Map showing distribution and testing results of PFOA + PFOS (PPT) in water supplies.

- Red: ≥400 PPT
- Orange: 70 - <400 PPT
- Yellow: 10 - <70 PPT
- Green: < 10 PPT
- Grey: Result Pending

Public Water Supplies:
- Water Distribution
- Political Boundary

Scale:
1 in = 3,000 feet
1:36,000

Environmental Services

Public Water Supply Testing Results

Map showing specific water supplies and testing results.

- Cabot Preserve: 52
- Souhegan Woods: 4.9
- MVD4: 54
- 52MVD: 5
- MVD2: 6
- MVDS: 8
- Nashua Pequotuck: 3

Legend:
- Water Source
- Sample Result PPT
- Redistribution

Environmental Services
Incident Response Components

- Private drinking water well sampling
  - Well owner identification/outreach/reporting
    - GIS / mailings / phone / door-to-door
    - DES Website / Survey Monkey / DHHS Public Info Line
  - >600 wells sampled to date; on our way to >1000
  - Laboratory overload

- Public water supply sampling

- Bottled water provision
  - Contractor capacity
  - Initial distribution / followed by home delivery
  - >400 homes and growing
Incident Response Components, cont’d

- Local government communications
  - 7 communities involved

Public Outreach
- 7 public meetings to date; more to come
- Press releases / press calls
- DES Website
  - Dedicated page
  - One-Stop Public Database
- DHHS Public Info Line
- Field samplers / Office staff

Saint-Gobain Performance Plastics Site Investigation Components

- Plant site soil/groundwater investigation
  - Up to 7300 ppt in site groundwater
- Public/private water supply well sampling
- Sensitive receptor site soil sampling
- Agricultural site soil sampling
- Potential off-site disposal area
  - Former Merrimack Town Landfill
    - Up to 2200 ppt in site groundwater
Saint-Gobain Performance Plastics
Response/Remedial Actions

- Solution for impacted drinking water
  - Public water system (MVD)
    - Alternate water sources
    - Wellhead treatment
  - Private drinking water wells
    - POE Treatment systems
    - Provision of public water
  - Possible solution in Litchfield
    - Extension of Pennichuck system from south
    - S-G Funding design – work ongoing
Evolution of Investigation – Leads to Amherst, New Hampshire

- Review to identify other potential NH facilities (44)
- 4/4/16 Inspection of current Textiles Coated International, Inc. (TCI) facility in Manchester
- TCI founded by former ChemFab employees
- Conducted same manufacturing activities as S-G at its Amherst facility from 1985 to 2006
- 4/15/16 NHDES initiated drinking water well sampling
- 5/11/16 Test results showed PFOA >100 ppt
- Extensive private drinking water well sampling ongoing
- Sampling of nearby former solid waste landfill pending
Incident Management Challenge – Lack of an Enforceable Standard

- 2009 – EPA issues Public Health Advisory of 400 parts per trillion for PFOA, based upon short term exposure
- January 2016 – EPA Region 2 announces 100 ppt level in Hoosick Falls, NY
- February 2016 – Vermont establishes 20 ppt standard
- March 2016 – NHDES uses 100 ppt as action level
- May 19, 2016 – EPA issues Lifetime Health Advisories for PFOA and PFOS of 70 ppt
- NHDES reviewing LHA – considering emergency rulemaking to establish groundwater standard

Current and Future Considerations

- Reviewing list of other potential manufacturing facilities
  - Information requests
  - Facility multi-media inspections
- Landfill groundwater monitoring
  - Active/lined facilities
  - 150 +/- closed, unlined facilities
- Review of fire sites, firefighting training facilities, and airports
- Superfund sites and federal facilities
- Review of PFOA substitutes – C6?
Future Questions…

- “C6” or “NextGen” as a substitute for PFOA
- Ammonium perfluoro(2-methyl-3-oxahexanoate)

Many Thanks are Due!

- Our colleagues in New York and Vermont
- U.S. EPA Region 1 leadership and staff
- NH Elected Officials
  - Governor Hassan
  - Congressional delegation
  - Municipal officials in 7 towns
- NH agency leadership and staff
  - NHDES
  - NH Dept. of Health & Human Services
  - NH Dept. of Agriculture, Markets, and Food
- NEWMOA