

McCaffrey Street Remedial Investigation

Site Number: 442046

Site Location: 14 McCaffrey Street, Hoosick Falls, NY

December 2021

Objective of Project Update

- 1) Overview of Data relevant to the Remedial Investigation
- 2) Discuss forthcoming workplans



Project Type and Status

Current Status:

- Class 2 Site and listed on National Priorities List
- Order on Consent signed with Saint-Gobain Performance Plastics on June 3, 2016.
- Remedial investigation underway preliminary samples collected in 2015, RIWP approved in 2016, and a supplemental work plan approved in 2017.
 - OU-01: On-site
 - OU-02: Water Supply
- PFOA and PFOS identified in the overburden groundwater on- and off-site at concentrations exceeding USEPA Health Advisory and NYS MCL for PFOA in drinking water.
- PFOA and PFOS identified in the village water supply wells, and in hundreds of private drinking water wells at homes throughout the Town of Hoosick.



Site Location and Description





Location:

- Location: 14 McCaffrey Street
- Size: 6.41 acres
- Eastern Rensselaer County, about 4 miles west of the VT boarder.
- Within the river valley and watershed of the Hoosic River, south of the Wollomsac River Valley, and within the Taconic Mountain range.



Geology and Hydrogeology

- Bedrock is phyllite. The phyllite or slate in the region is highly deformed from the Taconic Orogeny (mountain building event).
- Bedrock is overlain by unconsolidated soils and sediment – this overburden can be thick in the valley
- Two overburden aquifers separated by a discontinuous confining unit 0 to 130 feet thick
- Deep transmissive zone located within the deep aquifer.
- depth to bedrock within OU01 ranges between zero and 240 feet below ground surface.
 - Bedrock outcrops in the Hoosic River as well as on the valley walls of the river valley at several locations near the Village.
- The hillsides have thinner soil cover.





McCaffrey Street Site

Geologic Cross Section: Transect D-D'





D

Geologic Cross Section D-D'



D

Bedrock (phyllite)

Clay and Silt

Sand and Gravel



Groundwater Well





Groundwater Flow within the Shallow **Overburden Aquifer** (Village)

Groundwater Flow Direction

(estimated)

- Groundwater Elevation Contour (10 ft)
- Village Water Supply Well \oplus
- OU-01 Boundary Groundwater Elevation Contour
 - Sites of Interest
 - I Hoosick Falls Village Limits
- CN. 500 1.000 1.500 2.000

Feet

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Groundwater Flow within the Deep **Overburden Aquifer**

- Village Water Supply Well Groundwater Flow Direction 0 Groundwater Elevation OU-01 Boundary Contour (10 ft) Sites of Interest Groundwater Elevation Contour (2 ft)

 - Hoosick Falls Village Limits
- Further detail provided on Figure A4 included in Appendix A.



500

CN.

1.000

1 500 2 000



Regional Deep Transmissive Zone



Remedial Investigation Summary and Results to date:

OU-01 Data set

- 2,200 groundwater samples
- 1,600 soil samples
- 120 surface water samples
- 60 sediment samples





PFOA in Surface Soils (ppb) 0"-12" bgs

Maximum PFOA Concentration (ng/g)/Guidance Value Site Use

- Non-Detect 0.66
- > 0.66/Unrestricted
- >6.6/Residential
- >33/Restricted Residential
- >500/Commercial





PFOA in Near-Surface Soils (ppb) 2"-12" bgs

Maximum PFOA Concentration (ng/g)/Guidance Value Site Use

- Non-Detect 0.66
- > 0.66/Unrestricted
- >6.6/Residential
- >33/Restricted Residential
- >500/Commercial





PFOA in Sub-Surface Soils (ppb) >12" bgs

Maximum PFOA Concentration (ng/g)/Guidance Value Site Use

- Non-Detect 0.66
- > 0.66/Unrestricted
- >6.6/Residential
- >33/Restricted Residential
- >500/Commercial





PFOA in Shallow Groundwater (ppb)







PFOA in Deep Groundwater (ppb)



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PFOA in Bedrock Groundwater (ppb)

Maximum PFOA Concentration* (ng/L)

- <10
- 10 < 100
- 100 <1,000
- 1,000 < 10,000
- 10,000 <100,000
- 100,000 220,000





PFOA in Surface Water (ppb)

Maximum PFOA Concentration* (ng/L)

- <10</p>
- 10 < 100
- 100 <1,000
- 1,000 <10,000
- **10,000 <100,000**
- 100,000 220,000





PFOA in Sediment (ppb)

Maximum PFOA Concentration* (ng/L)

- <10
- 10 < 100
- 100 <1,000
- 1,000 < 10,000
- 10,000 <100,000
- 100,000 220,000



Conceptual Site Model

Contaminants of Concern:

• PFAS

Source:

- Historical disposal of industrial waste via the sewer and/or direct on-site disposal
- Historical atmospheric deposition

Migration and Pathways:

- Overburden groundwater aquifer (shallow and deep) on- and off-site
- Migration toward the Hoosic River

Exposure Pathway:

- Drinking water
- Surface soil
- Surface water





300 —



Department of Environmental Conservation

24



Operable Units

OU 1 – includes the 6.41acre site, as well as groundwater contamination directly attributable to onsite disposal of hazardous waste





Operable Units

OU 2 – Village of Hoosick Falls Water Supply





Operable Units

OU 3– off-site contamination related to atmospheric deposition and direct disposal of siterelated contaminants.



6.000



DRAFT Remedial Investigation OU-01 Addendum Workplan

- The addendum was submitted on December 3, 2021.
 - Additional soil and groundwater sampling within OU-01
 - 5 well locations and 4 soil boring locations
 - Groundwater/Surface water connection
 - Upgradient, within, and downstream of OU-01.
 - Municipal Sewer evaluation
 - PFAS transport to WWTP
 - Transport of PFAS impacted water through sewer



DRAFT OU-01 RI workplan addendum

- Proposed Groundwater Sample
 Proposed Soil Sample
 Hoosic River Transect Sample
 (Surface Water)
 Planned OU-03 Surface Water/Sediment
 Sample Location
 OU-01 Boundary
 - DEC Class 2 or Class P Site

- Existing Groundwater Sample Location
- Existing Surface Water Sample Location
- Existing Sediment Sample Location
- Existing Soil Sample Location

Approximate Location of Private

- Well Sample for PFAS by NYSDOH
- Waste Water Treatment Plant
- Hoosick Falls Village Limits





Remedial Investigation Workplan for OU-03

Based on the screening level soils data collected during the aerial deposition study the department has recommended a full remedial investigation of OU-03.



Thank You

NYS Department of Environmental Conservation

NYS Department of Environmental Health

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McCaffrey Street Documents and Information: https://www.dec.ny.gov/chemical/108791.html

