#### Eastside (Corrective Action Area II) Site Investigation Update



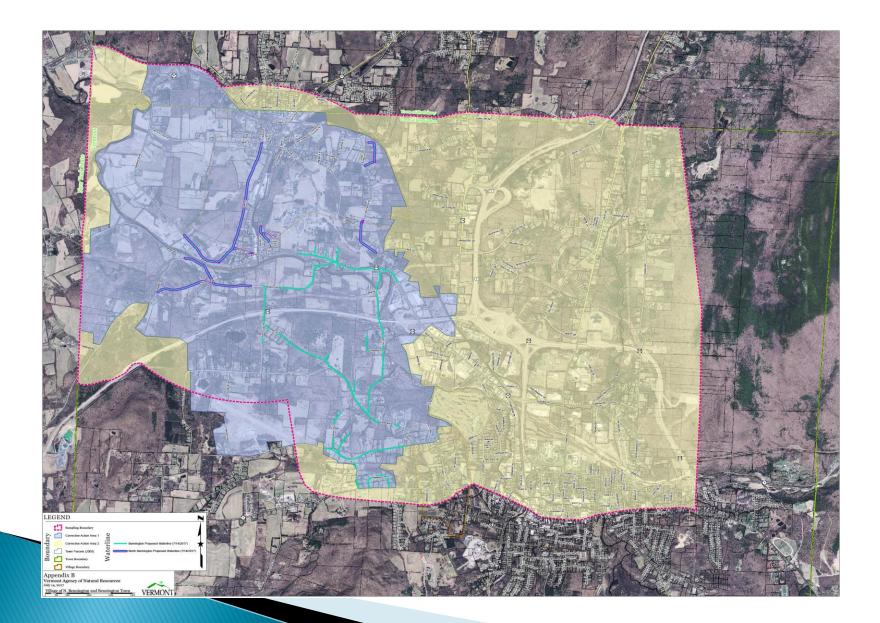
Draft Interim Conceptual Site Model Site Investigation Report: Bennington, Vermont

Prepared for Saint-Gobain Performance Plastics

December 2017

Bennington Public Meeting January 9, 2018 Bennington College, Tishman Hall

### Map of Corrective Action Area II



#### Site Investigation Update

- Draft Site Investigation Report by Barr Engineering for Saint-Gobain: Received December 15, 2017
- Field Activities August–October, except bedrock wells–just finishing up
- VT ANR and our Consultant (Amec Foster Wheeler Environment and Infrastructure, Inc) Reviewing Report
- Supplemental Site Investigation–Bedrock data due February 15, 2018
- Final Site Investigation Report due March 15, 2018
- Next Steps

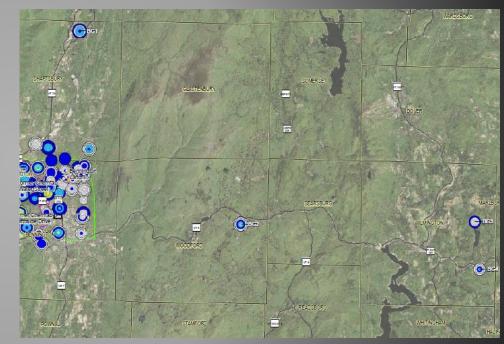
#### Brief Summary of Site Investigation and VT ANR Review

- Background
- Area-wide Soil and Groundwater Investigation Saint-Gobain Conclusions Comparative Analysis of **Targeted** Split Sampling



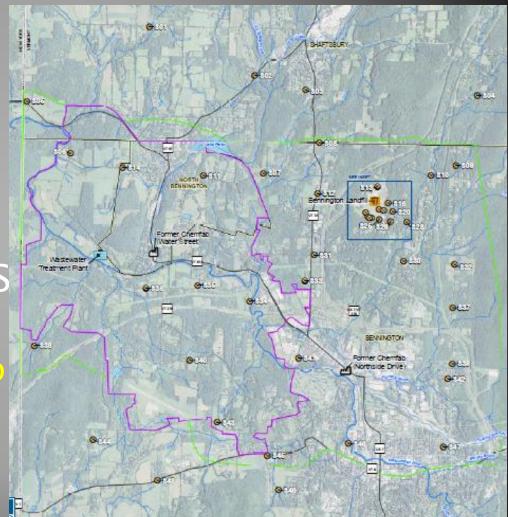
#### Background Investigation 3 state parks and a boat launch

- 4 shallow soil borings
- 10 of 18 samples detected with PFCs
- **PFOA-0.37 to 7.2 ppb**
- PFOS-0.42 to 1.1 ppb (4 samples)
- Highest levels in shallow soil
- Groundwater sample collected at Molly Stark SP (PFOA at 6 ppt and PFOS at 0.9 ppt)



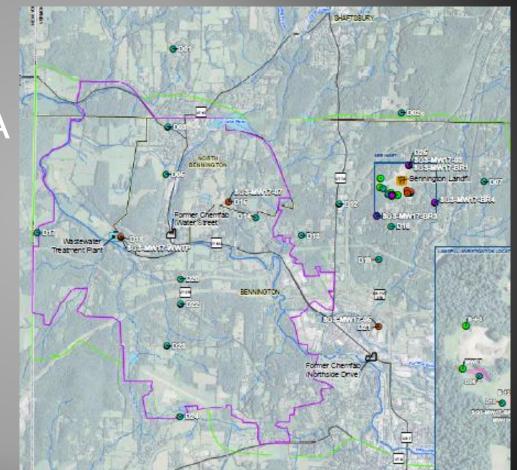
#### Soil Borings

- 46 shallow soil borings (typical depth 8 feet)
   214 samples
   PFOA detected in 120 samples; PFOS 73 samples
  - PFOA 0.17–130 ppb
  - PFOS 0.32–17 ppb

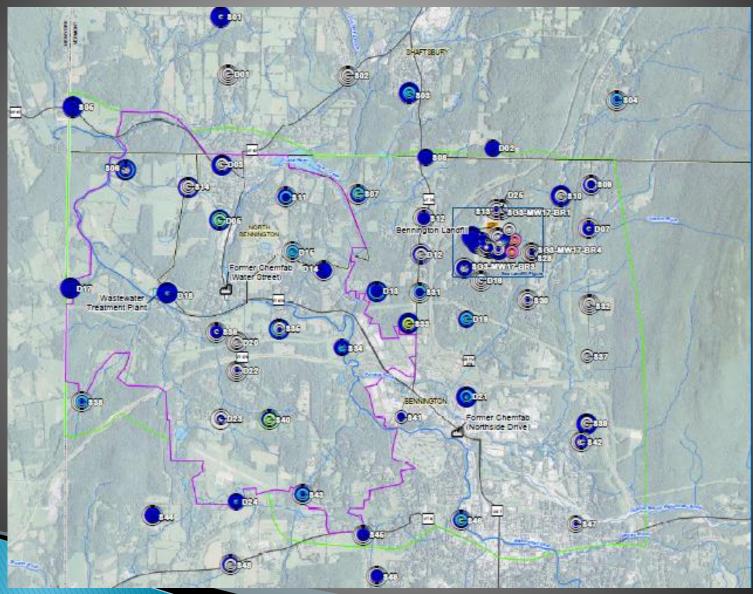


#### Soil Borings (Continued)

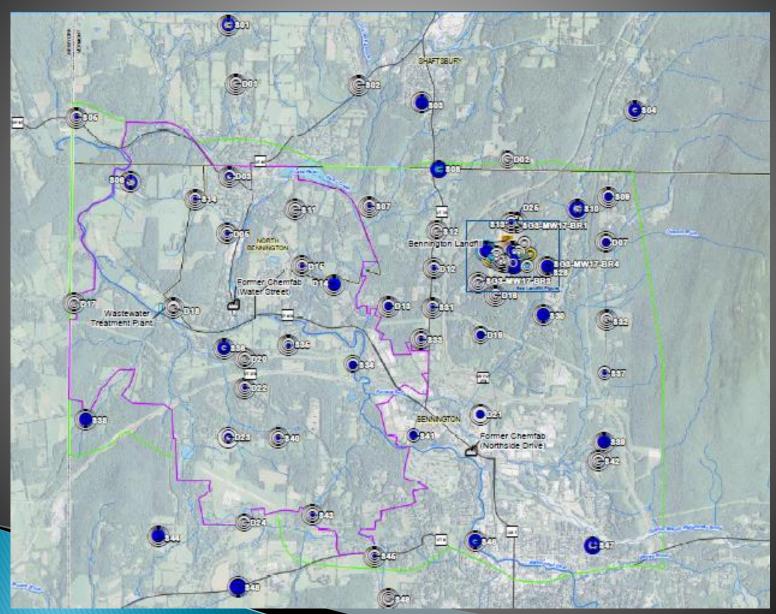
- 25 Deep Borings (10 ft to 200 ft)
   336 samples PFOA detected in 80 samples; PFOS 34 samples
  - PFOA 0.16-7.2 ppb
     PFOS 0.28-16 ppb



#### **PFOA Soil Results**

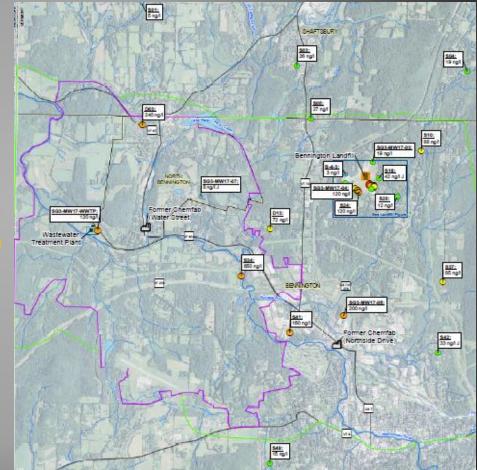


#### **PFOS Soil Results**



#### Monitoring Wells-Groundwater Results PFOA

- 14 Shallow temporary Wells
  - PFOA detections all samples
    - 5 to 850 ppt
  - PFOS detected 8 samples
    - 2 to 23 ppt
- 10 deep wells (2 temp)
  - PFOA detections-all
    - 8 to 240 ppt
  - PFOS detected 7 samples
    - 2 to 10 ppt

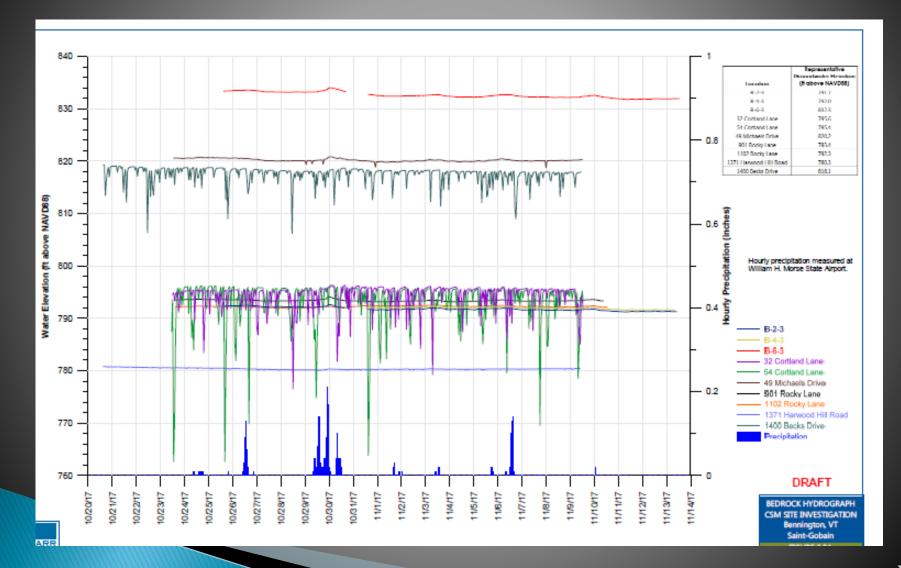


#### **Bedrock Investigation Pending**

- 4 bedrock wells installed
   Water level measures bedrock monitoring wells and drinking water wells
- Results due
   February 15, 2018



#### Bedrock Water level Measurements



#### Barr Engineering's Conclusion

- Hydrogeologic Conditions similar to those identified in their original Conceptual Site Model (CSM)
- Soil and Groundwater Results are not indicative of historical impacts from the two Chemfab facilities
- Source of PFAS found in Eastside consistent with Background or indicative of localized sources

#### Status of ANR REVIEW

- Review ongoing-This is a big report
- ANR hired experts to assist in review of document
- Draft Report: Compares Barr and AMEC results (split samples)-Comparability appears acceptable
- After we provide our response to Saint-Gobain and Barr Engineering, we will prepare a summary document of our comment for the community. This document is expected to be completed by late February or early March of 2018



#### Next Steps

- Based on air modeling and initial groundwater sampling, ANR currently believes that air deposition from the Water Street and Northside Drive Facilities are sources of PFOA in the area east of the railroad tracks near Route 7a.
- After ANR provide comments on the draft site investigation report, Saint-Gobain must submit a final site investigation report by March 15, 2018 that addresses the Agency's comments.

#### Next Steps (Continued)

- If Saint-Gobain and the State reach agreement that Saint-Gobain is responsible for PFOA in this area after the site investigation, then Saint-Gobain must submit a plan to address PFOA, including a proposed drinking water remedy, no later than 90 days from ANR's approval of the site investigation report.
- Saint-Gobain would then be required to perform corrective actions and provide the permanent drinking water remedy in accordance with a schedule approved by ANR.
- If the State and Saint-Gobain are unable to reach agreement, the State will use all authority provided by Vermont law to pursue long-term drinking water solutions for all impacted residents.

### **Draft Corrective Action Plan**

#### **Corrective Action Plan-Operable Unit B**



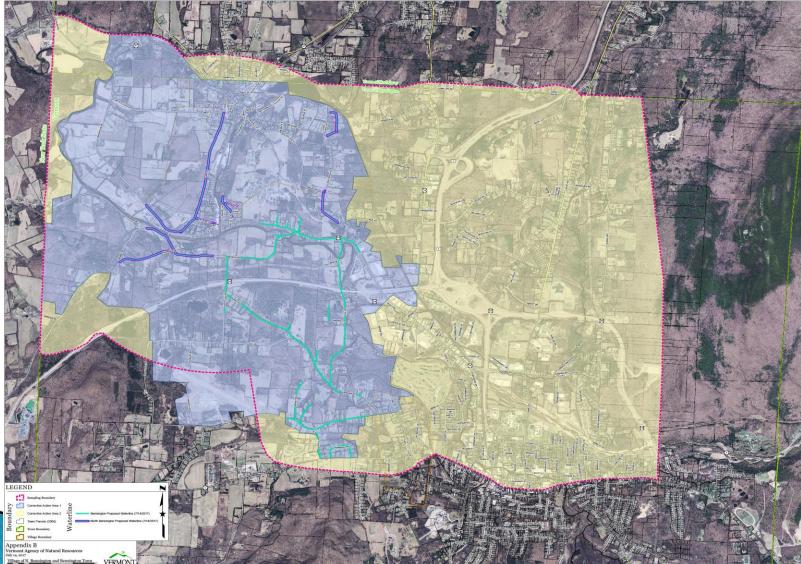
Corrective Action Plan Corrective Action Area I – Operable Unit B North Bennington and Bennington

Prepared for Saint-Gobain Performance Plastics December 2017

> Bennington Public Meeting January 9, 2018 Bennington College, Tishman Hall

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## Map of Corrective Action Area 1 Operable Unit B



Corrective Action Plan – CAA1–OUB (not part of CAA1 – OUA (MWS area))

Analysis of Remedial Alternatives Long-term POET operation Extension of Municipal Water lines Replacement of Drinking Water Wells

#### Analysis followed federal requirements

Protectiveness of human health and env. Compliance with requirements Short-term effectiveness Long-term effectiveness and permanence Reduction of COC mass, mobility & toxicity Implementability Costs, and Community acceptance

# Remedy for CAA1 – CAA B

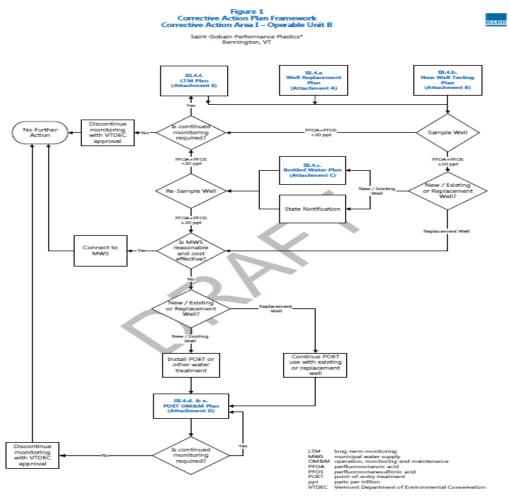
Negotiated in Consent Order following federal criteria

CAP series of individual plans for properties not connecting to municipal water due to technical feasibility or cost-effectiveness

# Individual Plans include:

Well Replacement Plan(Attachment A)New Well Testing Plan(Attachment B)Bottled Water Plan(Attachment C)POET OM&M Plan(Attachment D)Long-Term Monitoring Plar(Attachment E)Long-Term MNA Plan(Attachment F)Institutional Control Plan(Attachment G)

### **Corrective Action Plan Framework**



Referenced Plans are included as Attachments to the Corrective Action Plan. The Long-Term Monitored Natural Attenuation (MNA) Plan (Attachment F) and an Institutional Control Plan (Attachment G) are also part of the Corrective Action Plan and included as attachments; however, because they are independent of this framework they are not referenced in the above framework.

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\* In addition to emissions from the former Saint-Gobain facilities, potential sources of PFAS include other local sources from area industries and background sources resulting from long-range transport from sources outside of Corrective Action Area I.

# CAP – Next Steps

CAP is currently in Draft Form
ANR will submit comments and receive updated CAP from Barr Engineering
Barr will submit DRAFT updated CAP
ANR will put out CAP for Public Comment On ANR web site, EBB, paper copies in public places (Town Hall)
Once public comments received, CAP will be made final and implemented

# Questions?