

Montague, MI – Site Status Discussion

At Chemours Montague, MI
Facility

09:30 EDT

16 May 2018

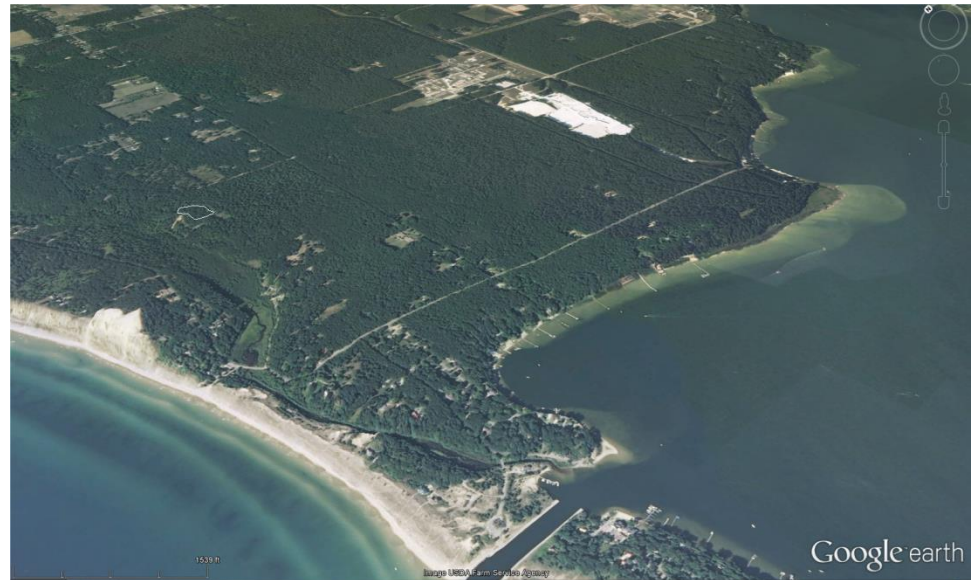


PHOTO: White Lake Channel and
DuPont Montague Facility (Jul 25, 2010;
from Google Earth)

16 May 2018

Safety Moment

Meeting Objectives

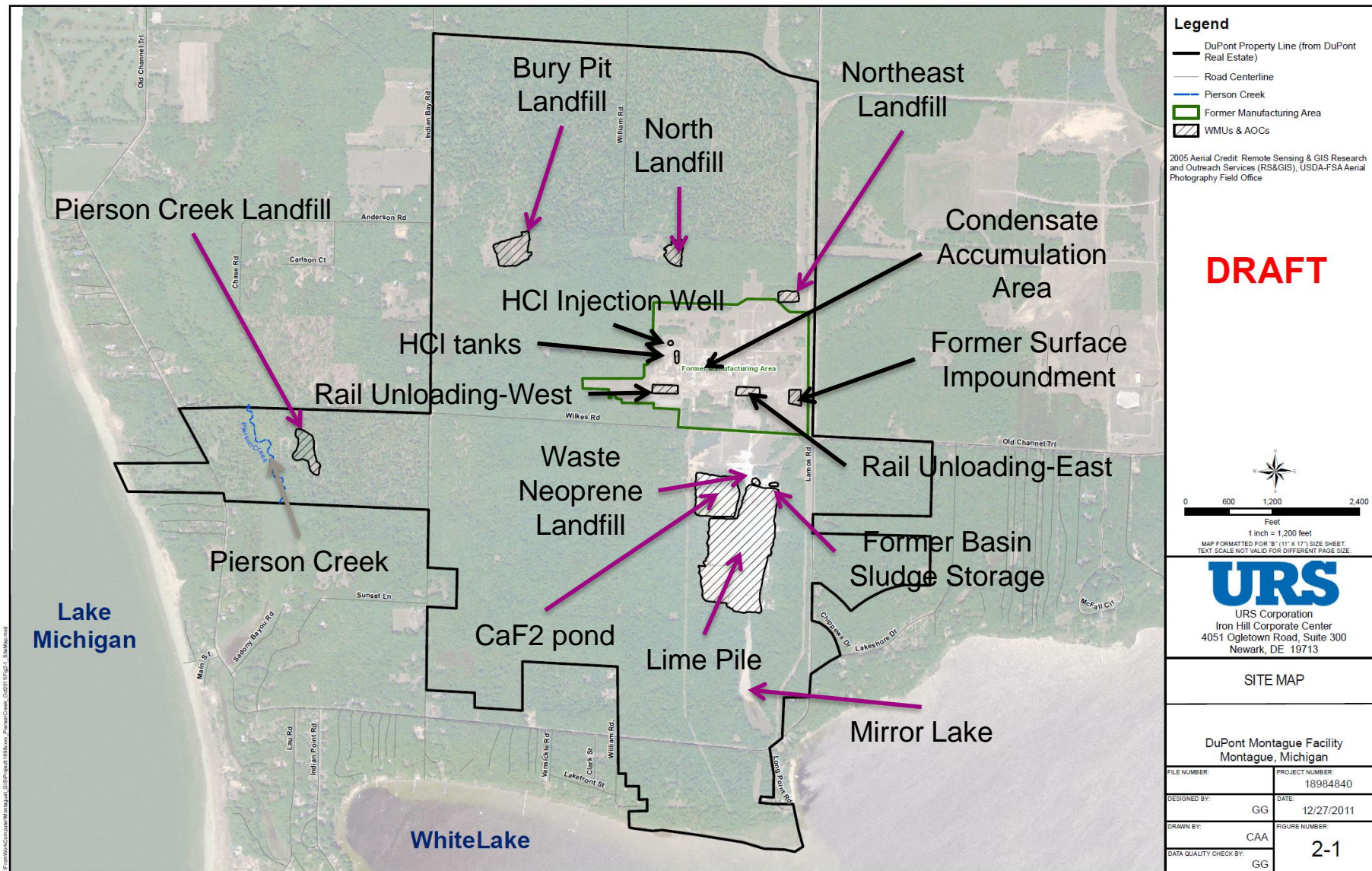
- Review status of all investigation units and discuss what is next
- Discuss Pierson Creek Landfill Area and data needs for mixing zone request
- Discuss proposed plan for sampling for PFAS

Status of Units

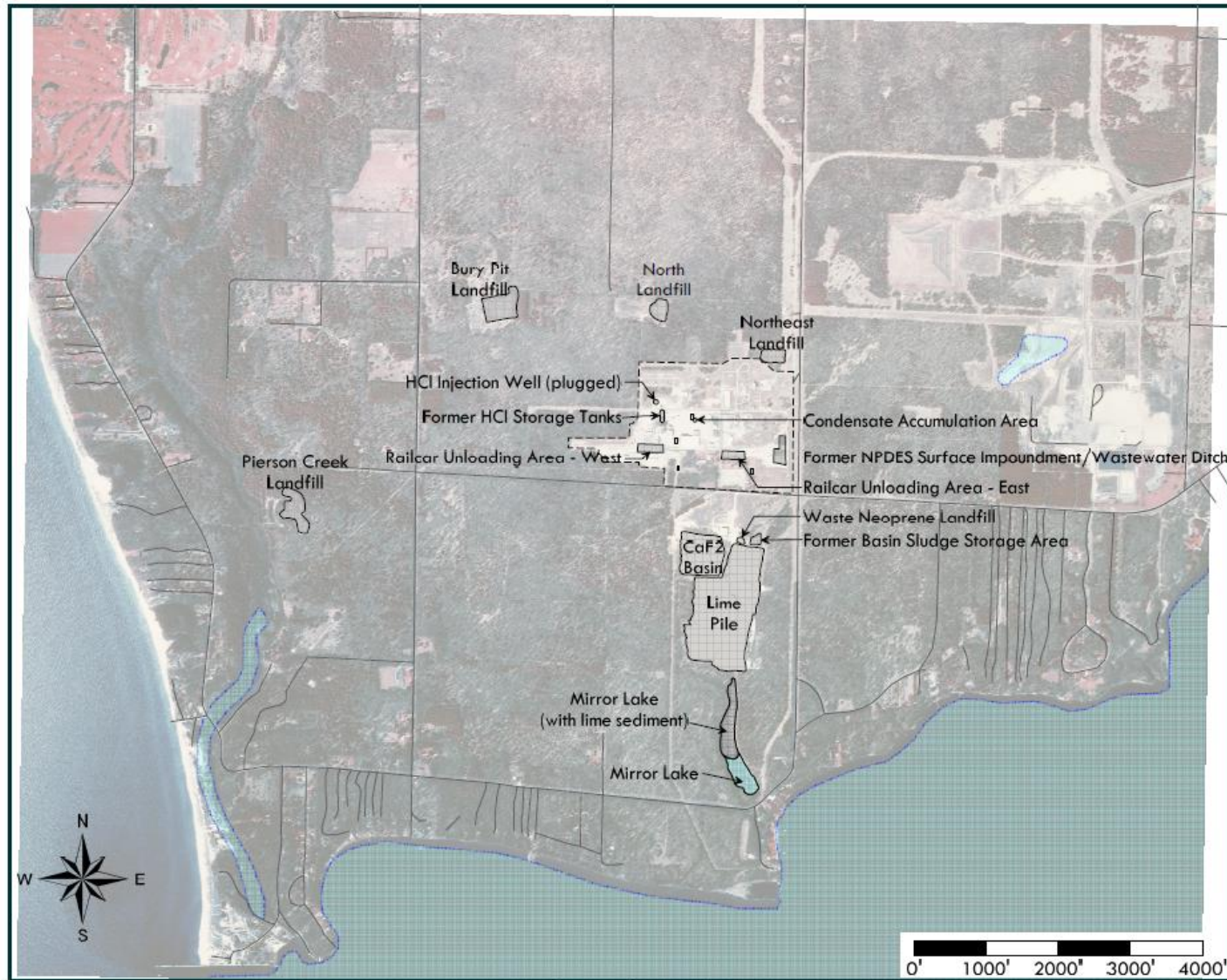
Status of Units

Unit	Site Investigation		Corrective Measures Study	
	No Further Investigation	Reports documenting data	No Further Actions Needed	Proceed to CMS
Northeast Landfill	✓	2012 Investigation Report		✓
North Landfill	✓	2012 Investigation Report		✓
Bury Pit Landfill	✓	2014 Addendum No. 3		✓
Pierson Creek Landfill	✓	2014 Addendum No. 2		✓
Pierson Creek	pending MDEQ	2017 Annual Report ¹		✓
Former Basin Sludge Storage Area	✓	2014 Addendum No. 1		✓
Waste Neoprene Landfill	✓	2014 Addendum No. 1		✓
Lime Pile	✓	2006 Prioritization Report		✓
Mirror Lake	✓	2012 Investigation Report		✓
Calcium Fluoride Basin	✓	2006 Prioritization Report		✓
Railcar Unloading Area East	✓	2012 Investigation Report	✓	
Railcar Unloading Area West	✓	2012 Investigation Report	✓	
Former HCl Storage Tanks	✓	2012 Investigation Report	✓	
HCl Injection Well	✓	2006 Prioritization Report	✓	
Former NPDES Surface Impoundment/Wastewater Ditch	✓	2012 Investigation Report	✓	
Condensate Accumulation Area	✓	2006 Prioritization Report	✓	
Notes:				
✓ : Proposed path forward is denoted with a checkmark.				
2006 Prioritization Report:	Prioritization of Waste Management Units and Areas of Concern. November 2006			
2012 RI Report:	Draft 2010/2011 Remedial Investigation Report. June 29, 2012.			
2014 Addendum No. 1	Remedial Investigation Report - Addendum No. 1 Supplemental Investigation – Former Waste Neoprene Landfill and Former Basin Sludge Storage Area. March 19, 2014.			
2014 Addendum No. 2	Remedial Investigation Report - Addendum No. 2 Supplemental Investigation – Pierson Creek Landfill Area. May 16, 2014.			
2014 Addendum No. 3	2014.			
2017 Annual Report	2017 Groundwater Monitoring Results . March 9, 2018.			
1: Have been asked by MDEQ in email to demonstrate that PCL-007 well has not been compromised.				

Site Units



Site Units



SWMUs and AOCs
Chemours Montague Site
Montague, Michigan

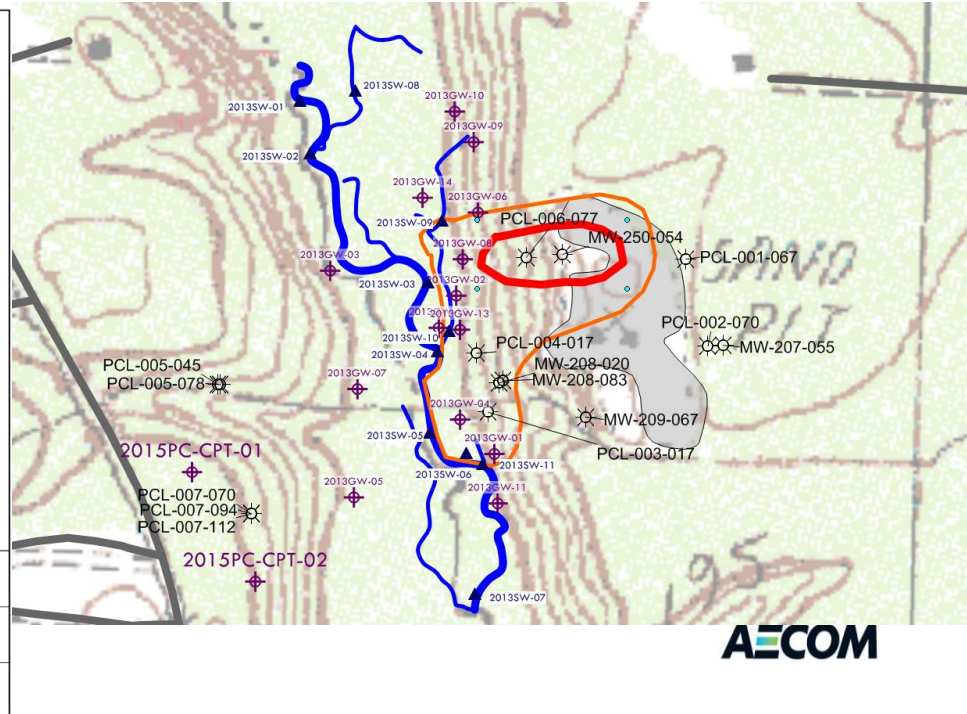
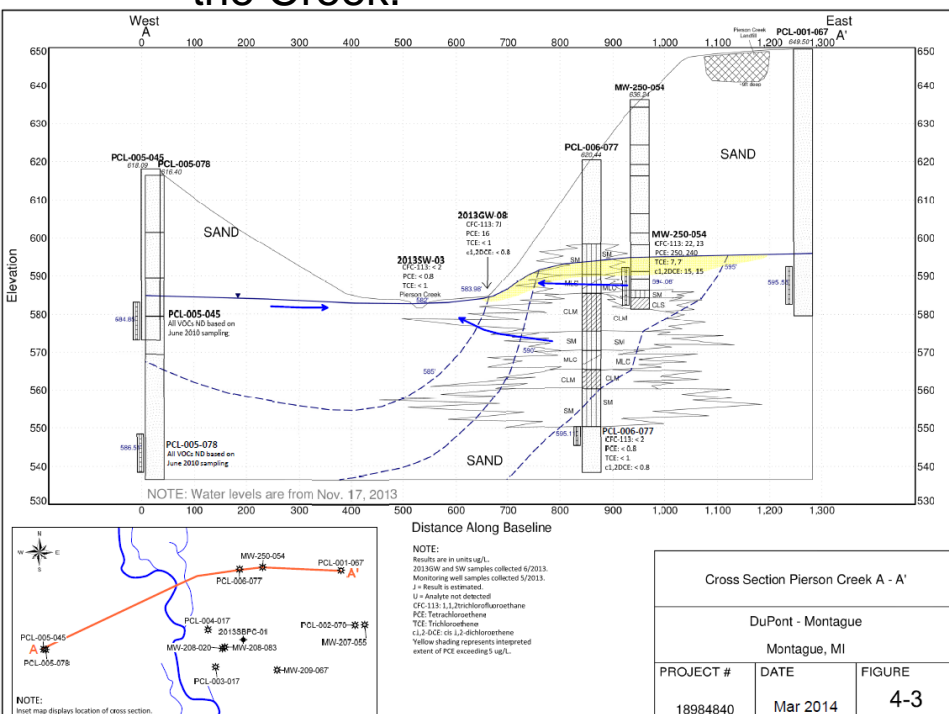
□ Solid waste management unit or Area of Concern

AECOM

Pierson Creek Landfill Area

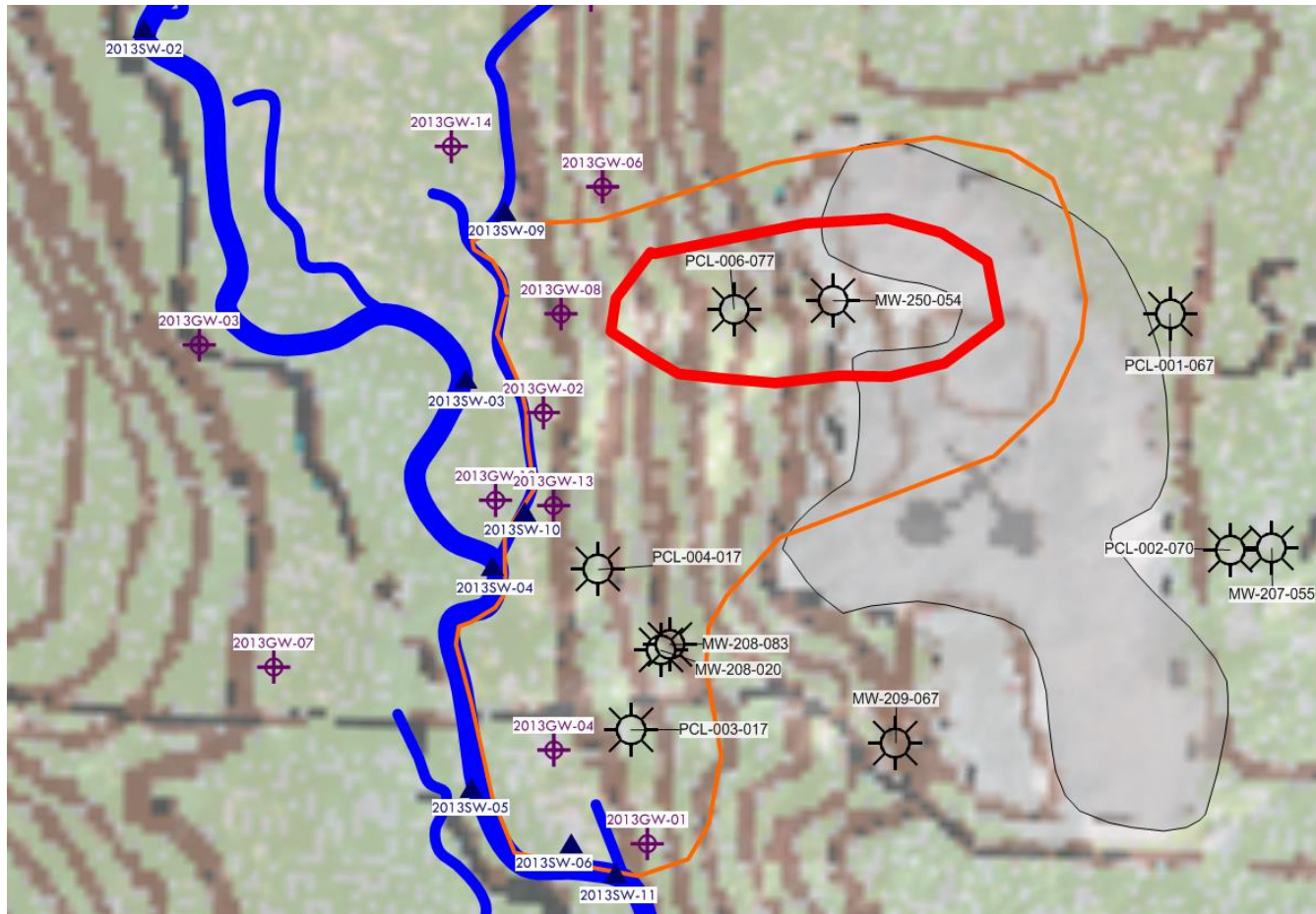
Pierson Creek Area – Summary of Investigation

- Waste in the Pierson Creek Landfill: waste water treatment sludge (north, fenced part) and spent catalyst (south part).
- Hydrogeology & Nature and Extent
 - Groundwater flows west-southwest. Lithology is stratified and there is an upward hydraulic gradient under Pierson Creek.
 - Shallow groundwater contains VOC constituents from the north part of the landfill. Extent is limited to the area between the landfill and Pierson Creek (where it discharges). There is no evidence of constituents in the deeper aquifer or west of the Creek.



Pierson Creek Area – Mixing Zone Data Needs

- Acute and chronic concentration and mass flux limits for PCE, its daughter products, and CFC-113.
- Vertical and lateral monitoring of concentrations
- Accurate measurement of hydraulic gradient (within flowpath of the COCs).



PFAS Sampling

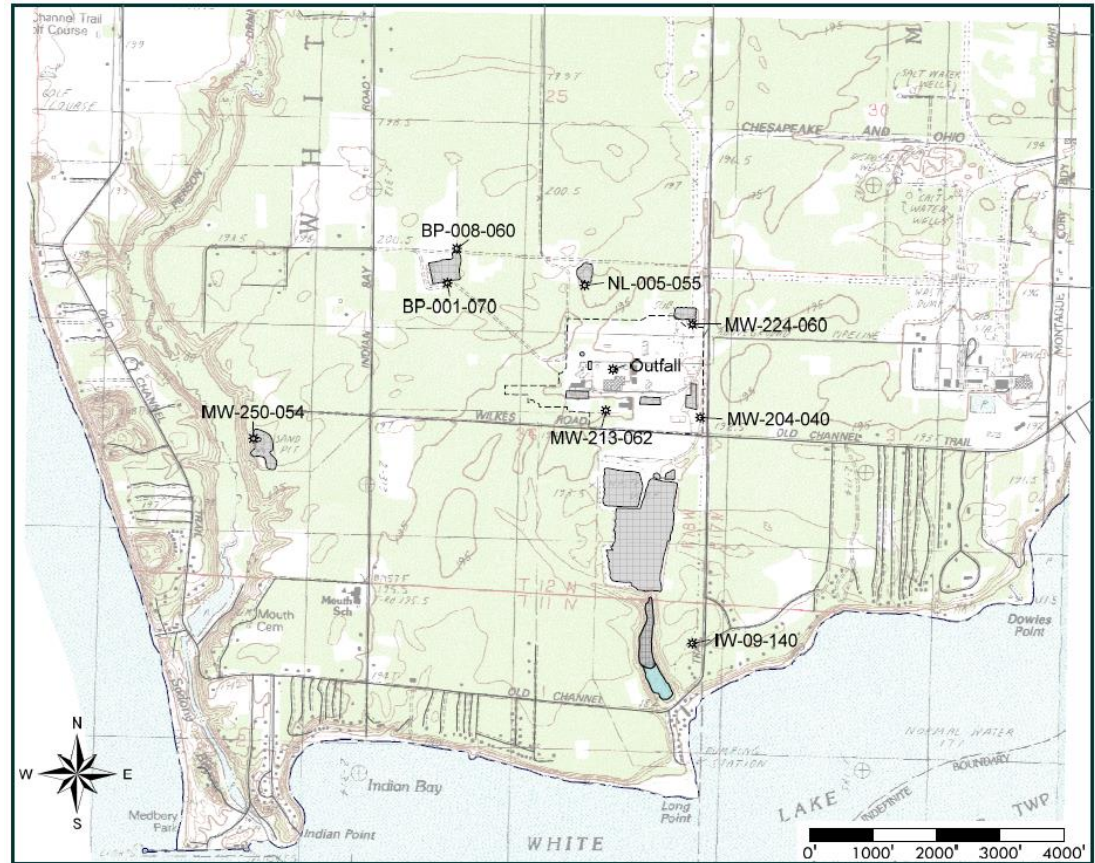
PFAS Sampling

- MDEQs request:

- MDEQ recommends that sampling and analysis for PFOA and PFOS be performed to determine if there are any issues regarding those compounds that would need to be addressed pursuant to Part 201. Develop a focused sampling strategy to provide coverage to the areas that have the highest potential to have these compounds.
- MDEQ requested: a well downgradient of each of the site landfills, downgradient of the wastewater surface impoundment, the NPDES Outfall prior to discharge to the conveyance pipe and a background well.

- Proposal

- Four monitoring wells downgradient of each of the landfills. One well downgradient of the former surface impoundment.
- We have also added MW-213-062 (downgradient and slightly downwind of Freon Manufacturing Area), and IW-09-140 (downgradient of Lime Pile).
- Background well (BP-008-060)
- Outfall sample



Proposed Samples for PFASs
Chemours Montague Site
Montague, Michigan

* Proposed sample location
Note that suffix number in a monitoring well is the depth of the well.
e.g., "-060" indicates a well that is completed 60 feet below ground surface.

SWMU or AOC

PFAS Sampling - Locations

- Locations and description of each.
- Each of the wells near landfills were selected as the closest and (typically) shallowest.
- IW-09-140 selected because it draws in water from a very wide area.
- MW-123-062 was added because it is downgradient and east of the former Freon Manufacturing Area.

Well ID	X	Y	General Location
MW-250-054	12576795.62	696691.87	Pierson Creek Landfill
MW-224-060	12583714.56	698483.95	Northeast Landfill
MW-204-040	12583834.08	697020.71	Downgradient of former Surface Impoundment
NL-005-055	12582016.05	699095.44	North Landfill
BP-001-070	12579851.81	699131.37	Bury Pit Landfill
BP-008-060	12580001.56	699674.11	Upgradient well
Outfall	12582460.00	697777.00	NPDES Outfall Piping
IW-09-140	12583707.30	693470.70	Downgradient IW for Lime Pile
MW-213-062	12582347.71	697125.97	Downgradient/downwind of the former Freon Manufacturing Area

Thank You