



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

Corrective Action at Chemours-Montague Facility

Materials Management Division
Hazardous Waste Program

White River Township Hall
January 25, 2024

5:30 p.m. – 7:00 p.m.

AGENDA

- Welcome
- Attendance Cards
- Introductions
- Corrective Action Process Overview
- Facility Overview
- Additional Work as Part of Corrective Measures Study (CMS)
- Corrective Measures Implementation (CMI)
- Corrective Action Consent Order (CACO)
- Public Participation
- Opportunity for Questions

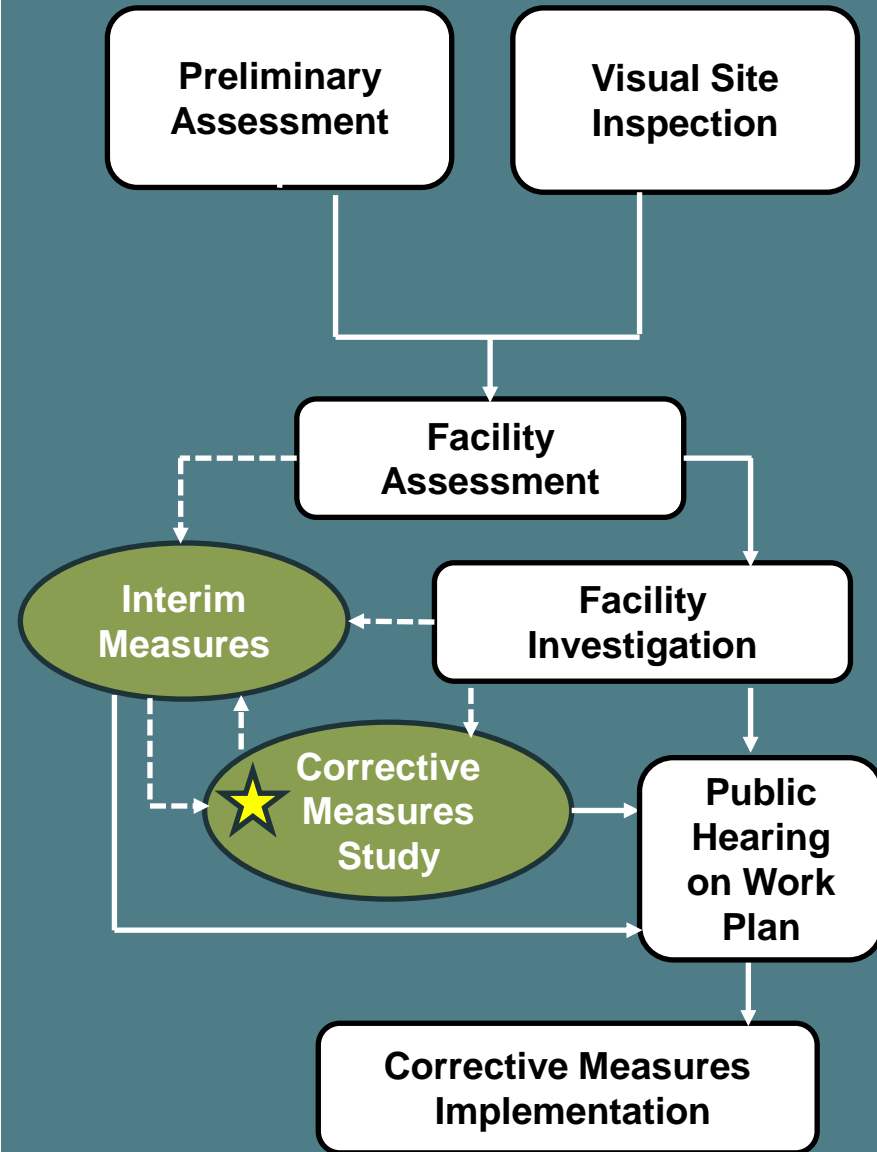
INTRODUCTIONS

- Materials Management Division (MMD) Staff
 - Fred Sellers, Supervisor, Kalamazoo and Grand Rapids Districts
 - Ronda L. Blayer, Environmental Engineer, Hazardous Waste Section (HWS)
 - Sam Cairns, Geologist, HWS
 - Shaun Shields, Environmental Quality Analyst, HWS
 - Elizabeth Garver, Environmental Quality Specialist, Enforcement Section
- Chemours Representatives

CORRECTIVE ACTION




- Applies to hazardous waste facilities
- Risk-based cleanup criteria
- Zoning considerations
- Future land uses
- Strict liability

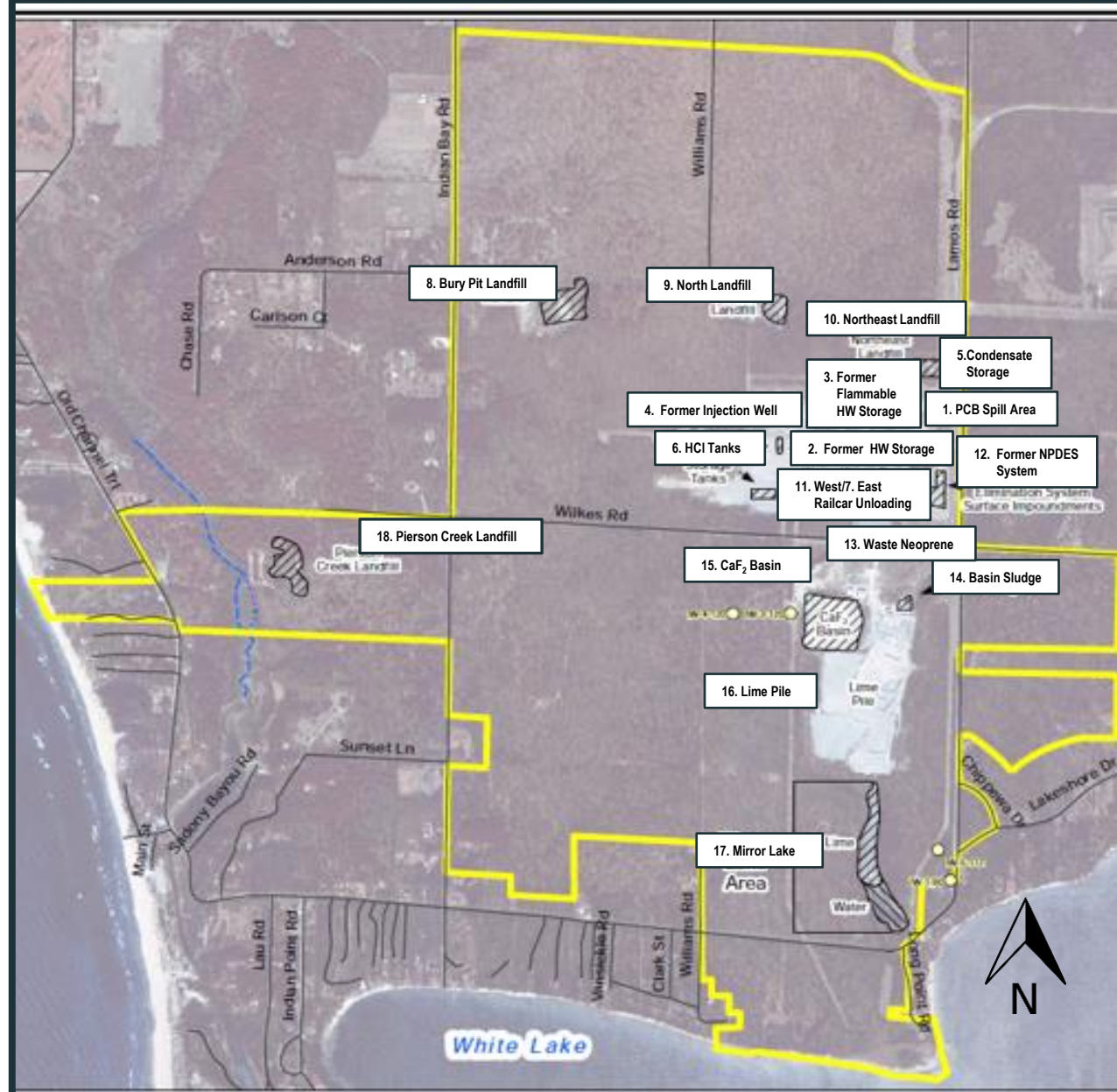
★ Chemours is here



FACILITY OVERVIEW

LEGEND:

-  Facility Boundary
-  Road
-  Pierson Creek
-  Waste Management Unit (WMU) / Area of Concern (AOC)
-  Interceptor Well



NO FURTHER ACTION REQUIRED*

- 1. Former polychlorinated biphenyls (PCB) spill area
- 2. Former hazardous waste (HW) storage
- 3. Former flammable HW storage
- 4. Former injection well
- 5. Air stripper condensate storage
- 6. Former HCl storage tanks
- 7. Former east railcar unloading

*

Meets applicable regulations, unrestricted or restricted with controls

REMAINING WMUs/AOCs

- 8. Bury Pit landfill⁺
- 9. North landfill
- 10. Northeast landfill
- 11. Former west railcar unloading
- 12. Former National Pollution Discharge Elimination System (NPDES) impoundments and corrosive treatment
- 13. Waste neoprene landfill
- 14. Basin sludge
- 15. Calcium Fluoride (CaF₂) basin⁺
- 16. Lime pile⁺
- 17. Mirror Lake⁺
- 18. Pierson Creek landfill

⁺ Investigation largely done; some tasks to be completed in CMS before CMI

ADDITIONAL WORK AS PART OF CORRECTIVE MEASURES STUDY

- Drone survey
- Vapor intrusion to indoor air pathway (VIAP)
- Sadony Bayou sampling

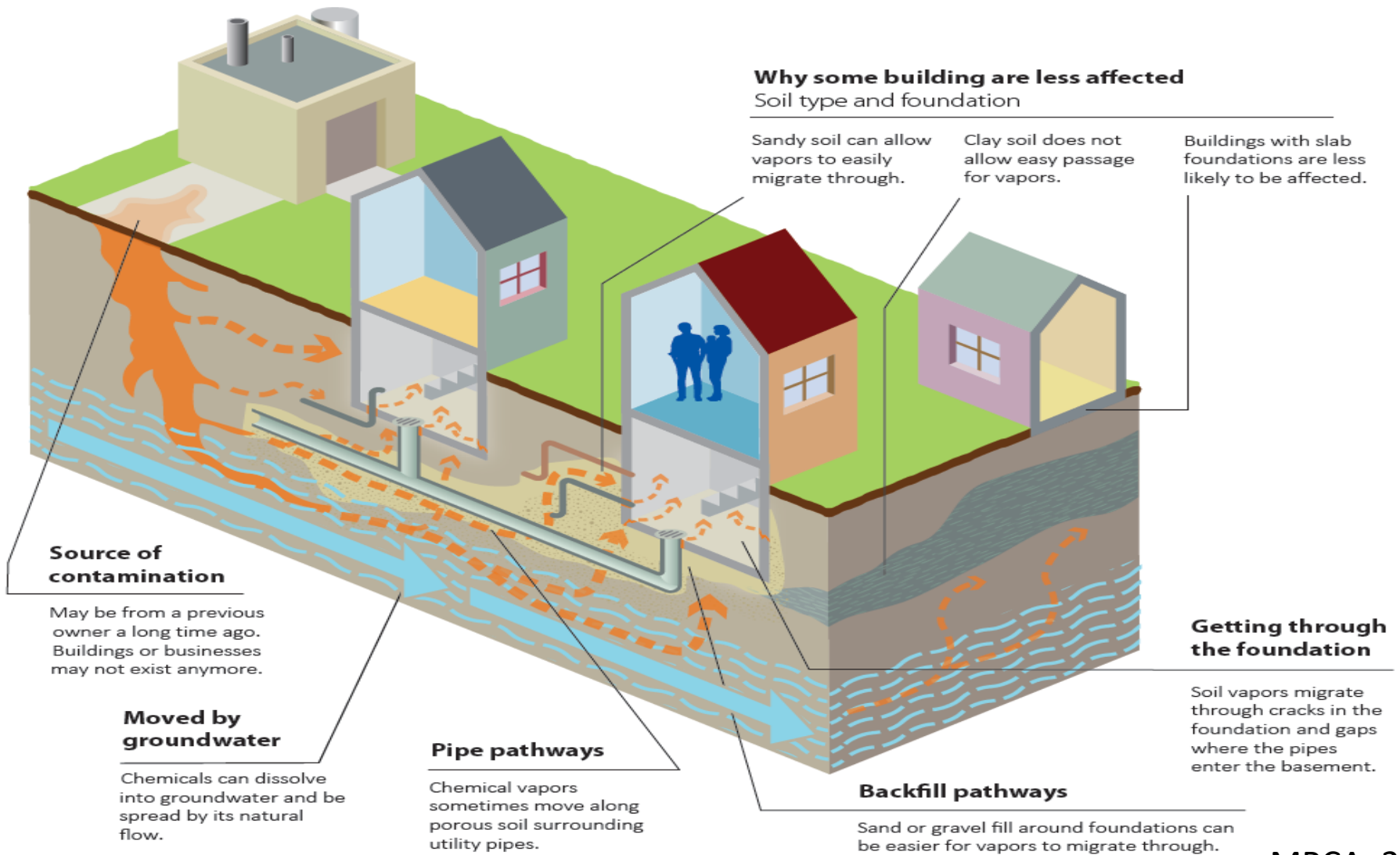
DRONE SURVEY

- Purpose 1: High-resolution aerial imagery of former plant area:
 - Resource in corrective action toolbox
 - Coupled with an on-ground walk over of area
 - Assist with overlay of information from NearMap and facility
- Purpose 2: Volume estimate of lime remaining:
 - Goal was to create a digital elevation model (DEM) to estimate lime volume
 - Encountered difficulties with establishing ground level control points
 - Estimated 540,000 cubic yards remaining
- ~750+ images were taken and stitched together in total

VIAP CONSIDERATIONS

- General explanation of pathway
 - Vapor Source + Migration Route + Receptor = Completed Pathway
- How to evaluate pathway:
 - Define criteria
 - Develop a Conceptual Site Model (CSM)
 - Define vapor source(s)
 - Investigate potentially impacted buildings
 - Mitigate if necessary
- Work plan submittal, content, and review
- Work to be completed in spring
- May impact CMI
- More information can be found at [EGLE's Vapor Intrusion Homepage](#) or epa.gov/vaporintrusion

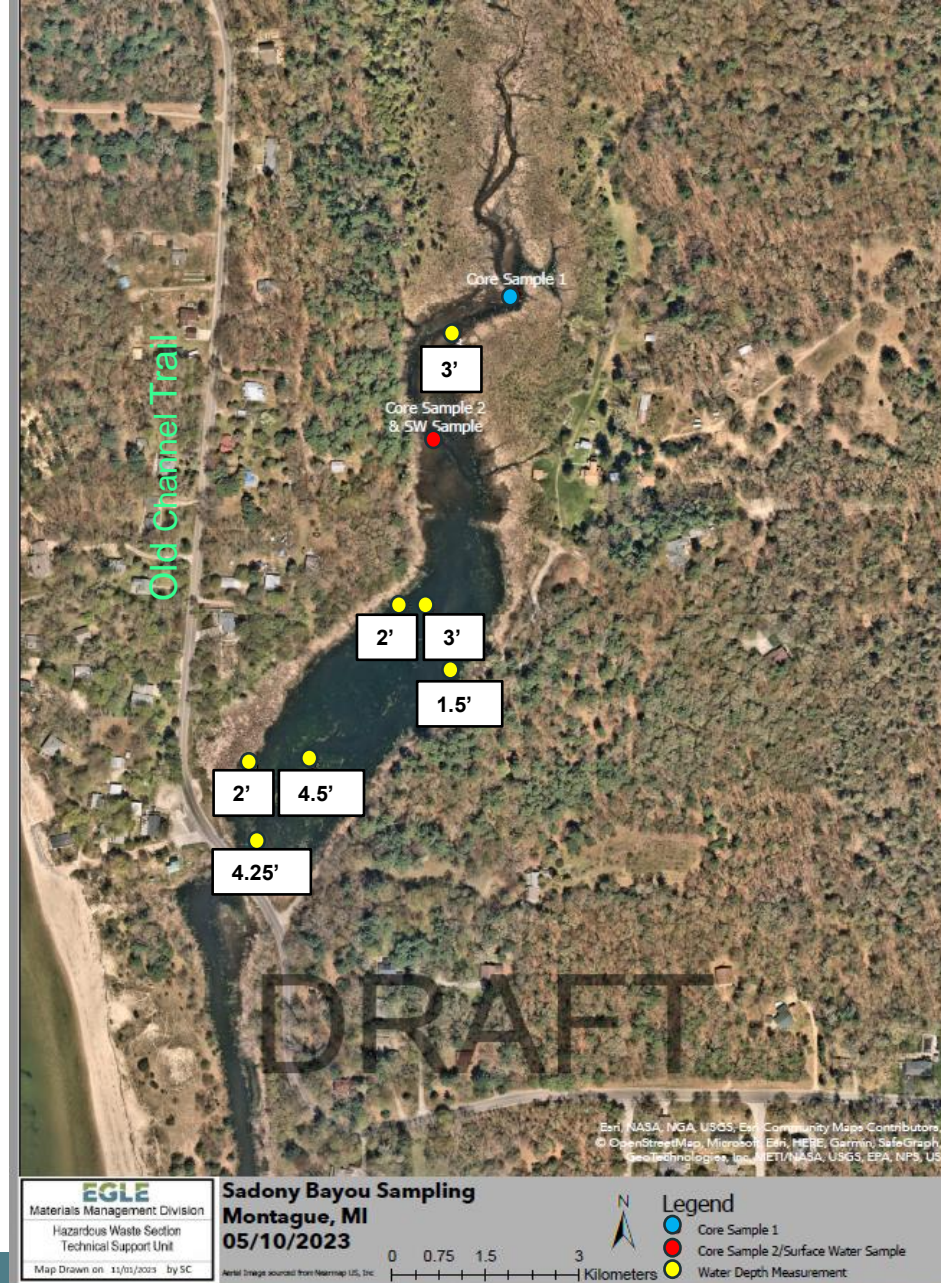
VAPOR INTRUSION PATHWAY



MPCA, 2016

SADONY BAYOU SAMPLING

- MMD conducted in May 2023:
 - Sediment sampling biased toward transitional zone between bayou and creek
 - Surface water samples tested for PFAS, VOCs, SVOCs, metals, toxicity, etc.
 - Surface water measurements
- Data provided to CEIC
- Sampling data did not exceed water quality criteria or sediment screening values



CMI WORK PLAN

- Details corrective measures for each WMU and AOC
 - Technical requirements
 - Schedules
 - Institutional and administrative controls
 - Effectiveness
 - Reporting
 - Costs and financial assurance
- Subject to public participation
- Requires entrance into an enforceable document

PUBLIC PARTICIPATION

- Ongoing public engagement
 - Chemours corrective action page on EGLE's [website](#)
 - Virtual and in-person meetings
 - Email, telephone, and Freedom of Information Act communications
- Formal public hearing on CMI Work Plan
- 45-day comment period (30 days before, 15 days after public hearing)
- Response to comments

CORRECTIVE ACTION CONSENT ORDER

- Enforceable document required at CMI phase
- Negotiated between EGLE and Chemours
- Identifies:
 - Corrective action process steps
 - Document submittal requirements
 - Schedule for submittals and work
 - Provisions for identification of new WMUs/AOCs
 - Provisions for resolution and penalties
 - Provisions for public participation pursuant to Part 111

MMD STAFF CONTACTS

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QUESTIONS

