



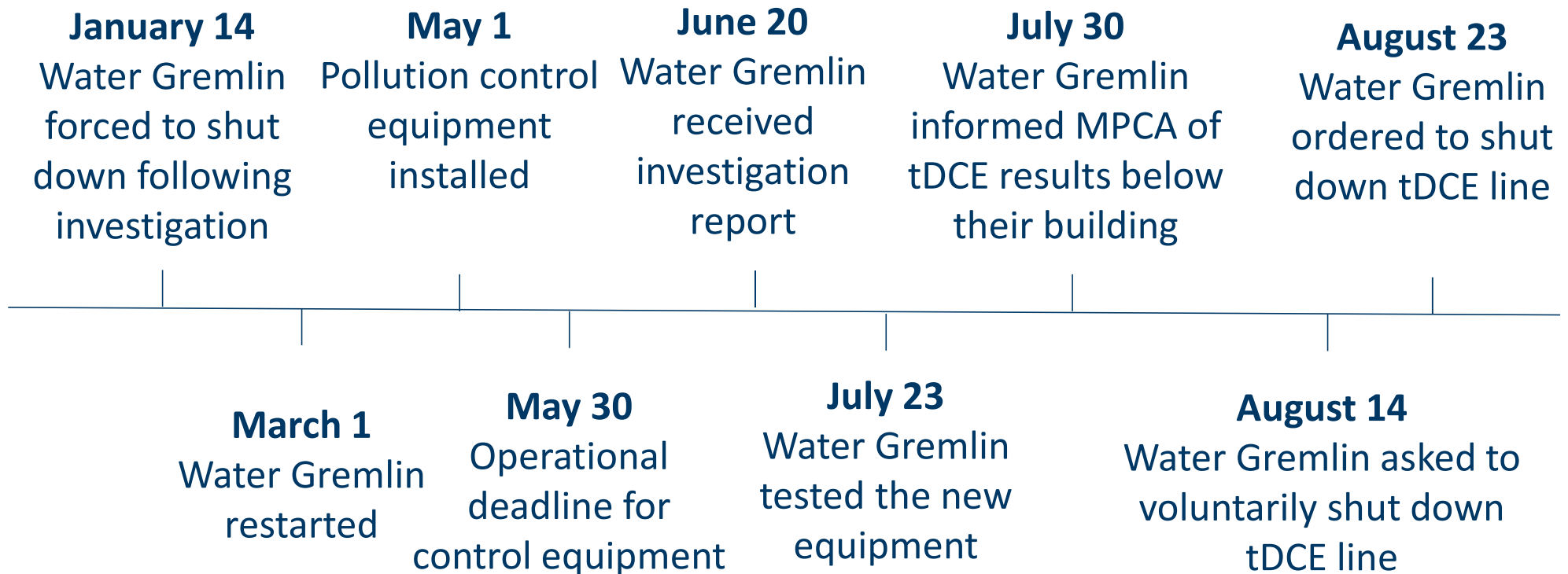
Water Gremlin Community Meeting

August 27, 2019

Holding Water Gremlin accountable

On August 22, 2019, the Minnesota Pollution Control Agency ordered Water Gremlin to halt coating operations using FluoSolv until appropriate corrective actions are taken to prevent further tDCE contamination.

Enforcement timeline



Stipulation agreement requirements

Requirement in stipulation agreement	Status
Discontinue use of TCE	Complete
Replace TCE with a less-toxic alternative (FluoSolv)	Complete
Install new pollution control equipment	Complete
Submit to 24-hour monitoring tests once every three days	Continues
Report daily FluoSolv use	Continues
Report VOC emissions monthly	Continues
Apply for new air permit	Submitted
Coordinate efforts to reduce TCE use at other facilities	In progress
Complete community forestry project	In progress
Pay civil penalty of \$4.5 million	Complete

Stipulation Agreement

March 1 – April 30, 2019

70 micrograms

The company cannot exceed 70 micrograms per cubic meter of tDCE in a 24-hour period. The company must reduce its tDCE use by .10 tons per day, per violation.

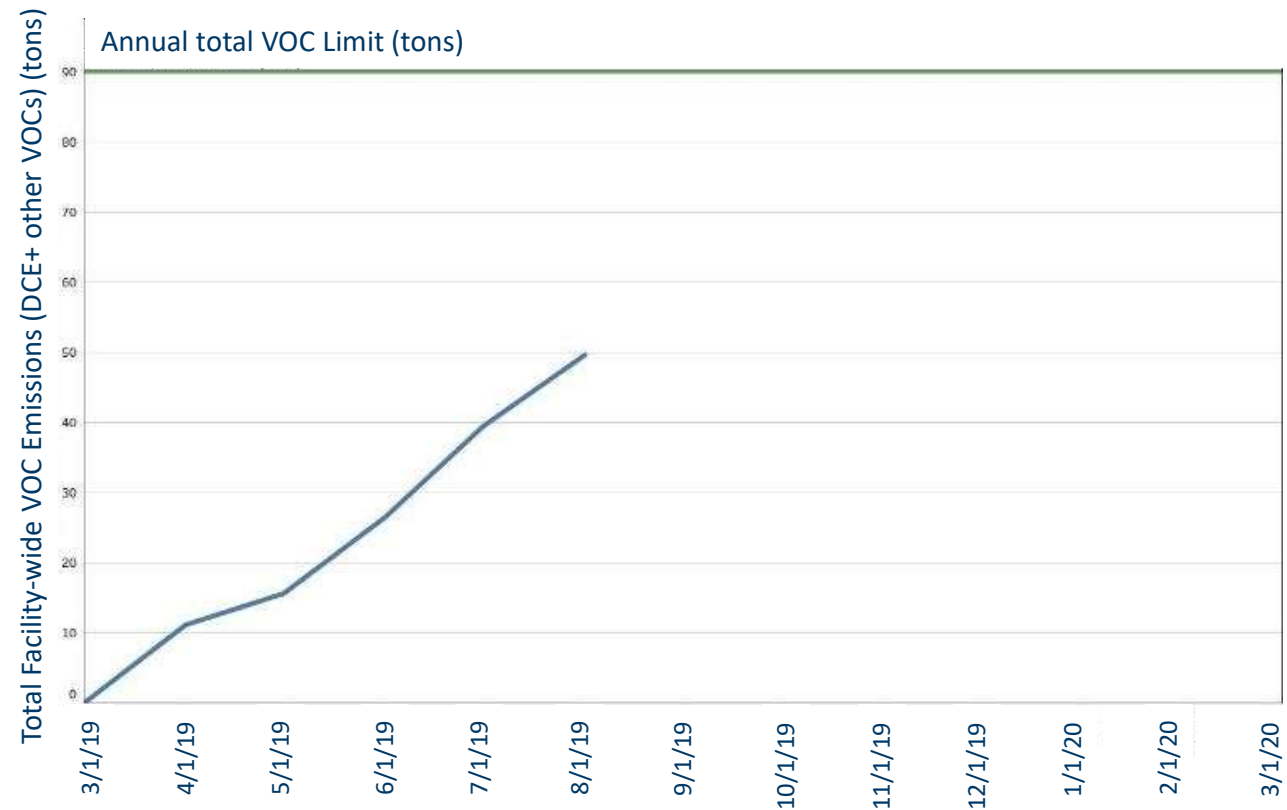
After May 1, 2019

90 tons

The company cannot emit more than 90 tons of Volatile Organic Compounds (VOCs) within a year. The company must reduce operations to stay under this limit.

Current VOC limits

**Water Gremlin
continues to
operate below
the 90-ton limit.**



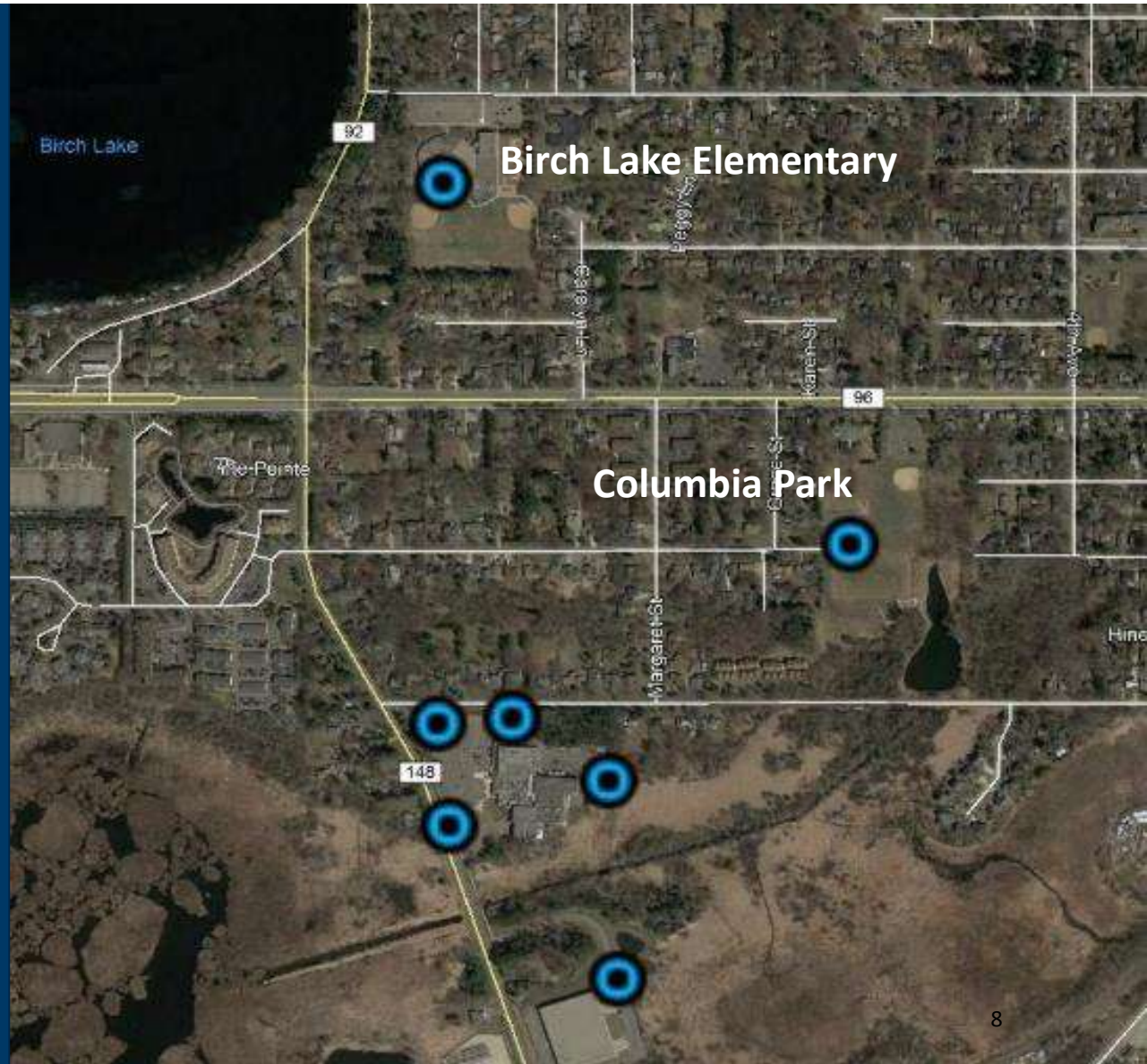
Pollution control equipment

Water Gremlin's pollution control equipment is not meeting expected control outcomes.

Ambient air monitoring

Five monitors currently tracking VOCs on Water Gremlin's facility.

Two new monitors were installed in the neighborhood.



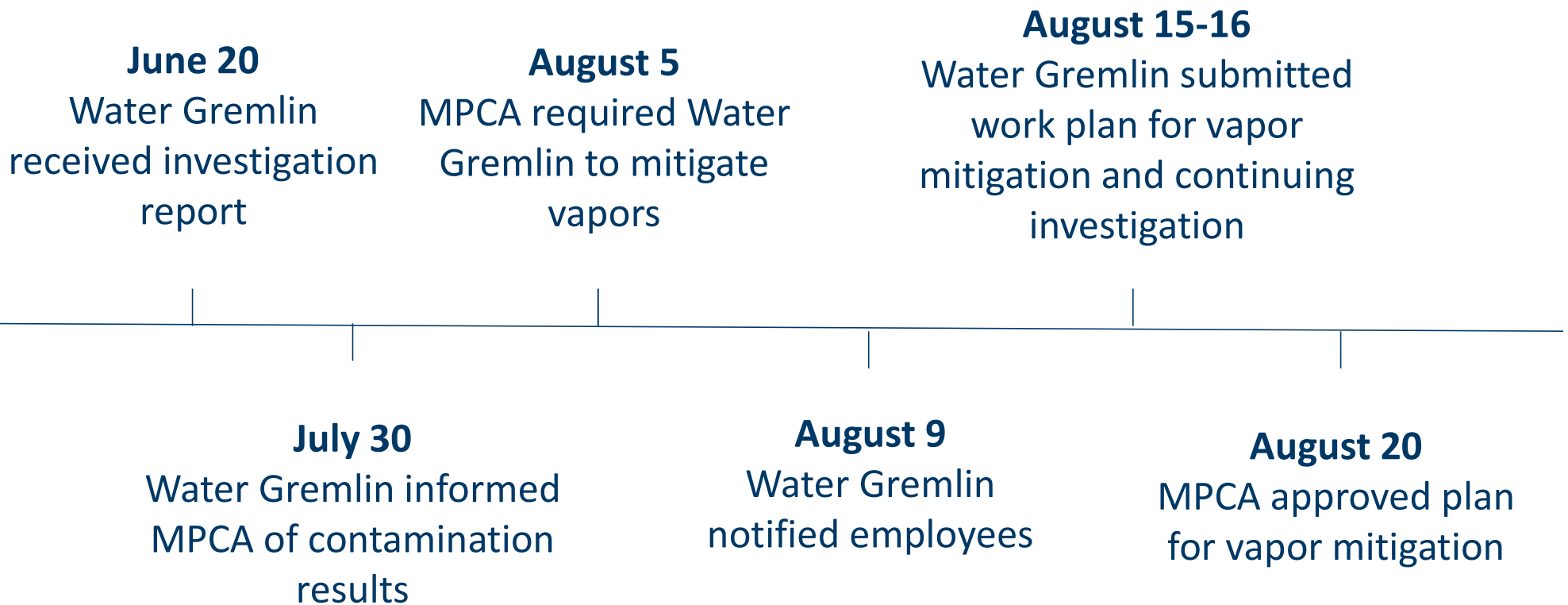
Estimated air permit timeline



Water Gremlin must further investigate the pollution they caused.

- Conduct Remedial Investigation for surface/subsurface contamination on-site
- Define extent and magnitude (how much pollution is present and where it is)
- Clean up contamination if needed

Remediation assessment timeline



1994-1997

Investigation of lead pollution in soil



1997-2004

Investigation of VOCs in groundwater



2019 site investigation

Water Gremlin was required to investigate lead and volatile organic compounds (VOC) contamination:

- Groundwater (VOCs)
- Soil (VOCs and lead)
- Surface water (VOCs and lead)
- Sediment (VOCs and lead)
- Soil vapor (VOCs)

2019 site investigation: initial findings

TCE in groundwater on company property

- Drinking water is not at risk

TCE and tDCE in soil vapors below building floor

- Building is being mitigated for vapor intrusion

Lead in soil, sediments and surface water on company property

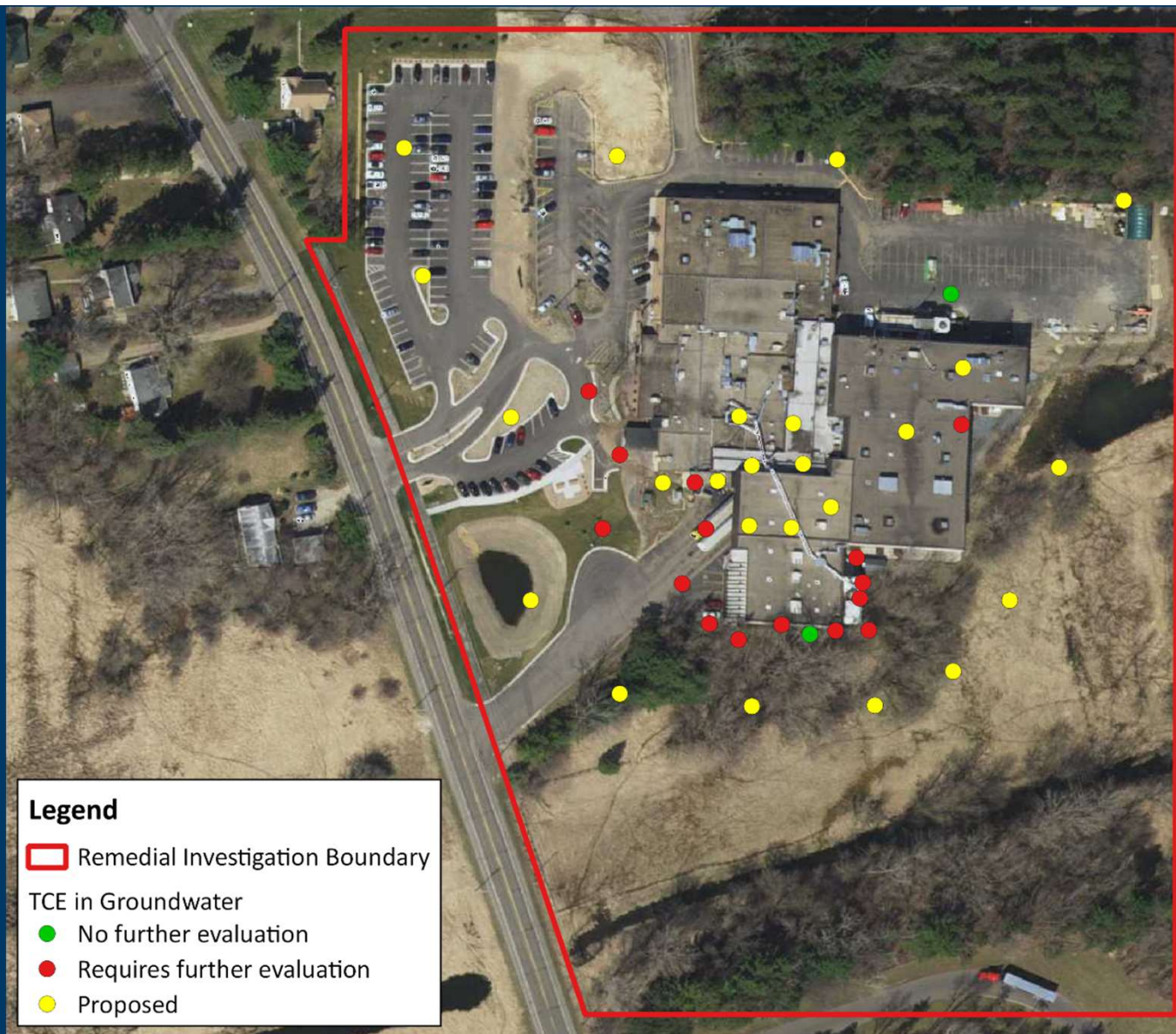
TCE found in groundwater samples

Drinking water is not at risk.



Next step for TCE in groundwater

*Water Gremlin is
required to define how
far TCE has moved in
groundwater*



Vapor intrusion

VOC vapors were discovered underneath the building.

- “Vapor intrusion” occurs when subsurface vapors move into buildings.
- Water Gremlin is required to promptly install a mitigation system.
- The system will pull VOC vapors from the soil and treat them by carbon filtration.



TCE found in soil vapor samples

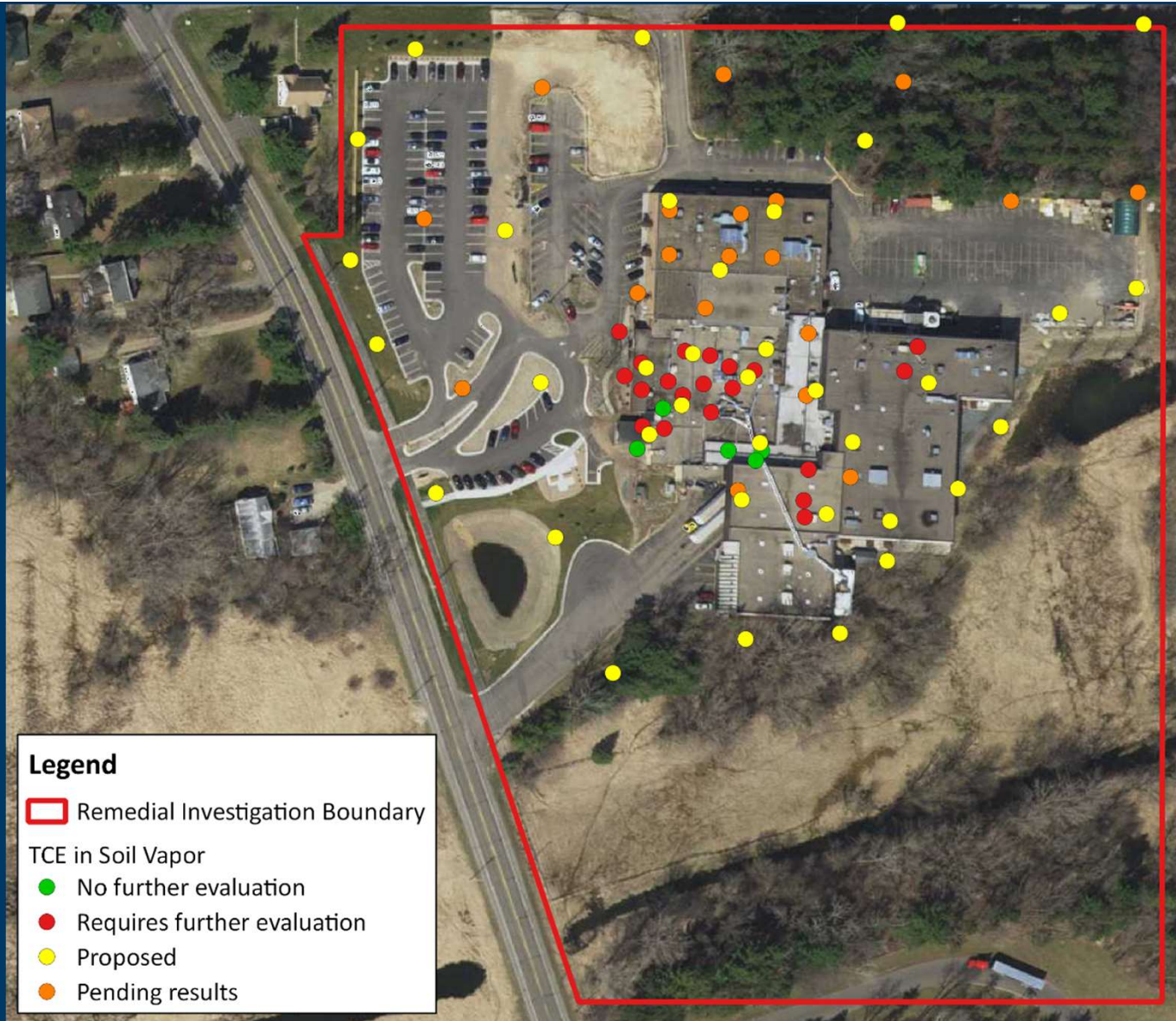
Vapor levels under the slab were high enough to warrant immediate action.



Next steps for TCE in soil vapor

Water Gremlin is required to:

- *Promptly mitigate the building*
- *Further define vapor impacts*



tDCE found in soil vapor

Water Gremlin is required to:

- *Stop using tDCE*
- *Address the release to the ground*



Lead found in soil near building

*Four samples were
above screening
values for human
health.*



Lead found in surface water and sediment

Four sediment samples, and two surface water samples, exceed the screening value.



Next steps for lead in soil, surface water and sediment

Water Gremlin is required to further investigate where, and how much, lead contamination is present



Ongoing actions

Water Gremlin is required to immediately install a building mitigation system to address current vapors contamination.

Water Gremlin must also stop further tDCE contamination on the property.

MPCA will be monitoring airborne lead levels near the Water Gremlin property.

Questions?

www.pca.state.mn.us/air/water-gremlin