Statewide 12-Month Study of PFAS in Ambient Air

Summer Streets

Minnesota Pollution Control Agency

11/12/20

Project overview

Ambient air

Wet deposition

Dry deposition

Total oxidizable precursors (TOP) in snow

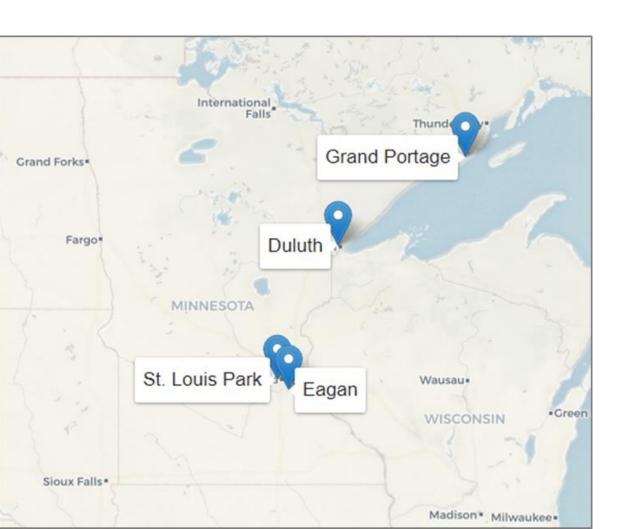
Samples collected every 14 days for 12 months

Sites in 3 urban areas + 1 remote site

Suite of 33 PFAS analyzed by SGS Axys

Partially funded by EPA

Site selection



Sites with existing air monitors

Duluth and Eagan

Proximity to potential PFAS sources according to MPCA Remediation project using NAICS codes

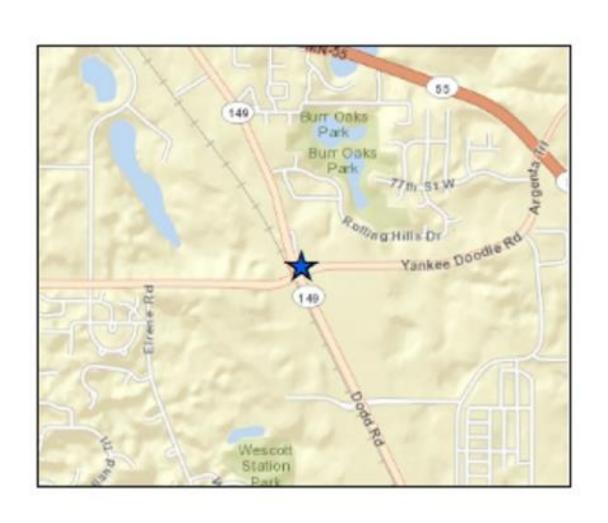
St. Louis Park

Known source – chrome plating on plastic

Grand Portage

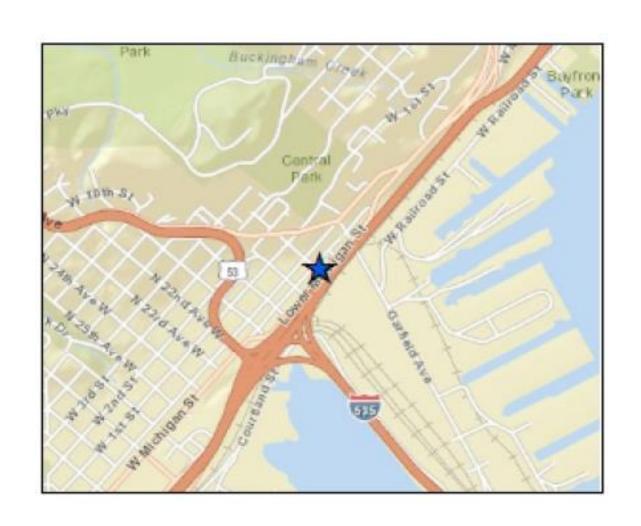
Remote "background" location

Eagan



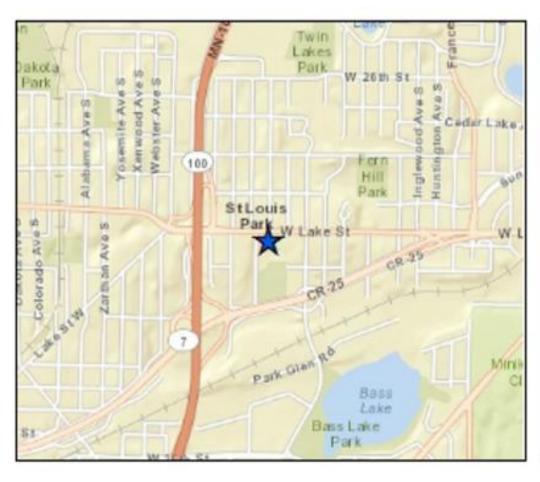


Duluth





St. Louis Park





Grand Portage





A few more details

Sampling runs July 2020 through June 2021

Final report to EPA due in September 2021

Ambient air collected using high volume samplers, 72-hr run time, PUF/XAD/PUF

Wet and dry deposition samples collection method based on North Carolina's work

TOP samples - TBD

Intended data usage

Investigate extent and magnitude of PFAS contamination in the sampled air

Understand potential public health risks associated with PFAS contamination in air

Compare ambient air concentrations near potential/known sources to air concentrations in remote areas

Better understanding of fate and transport in air, including how air concentrations/deposition may contribute to surface water and fish tissue impairments

Potentially illustrate need for stack testing, adding PFAS to air permits

Teaser

We have a small amount of wet and dry deposition data back from the St. Louis Park and Grand Portage sites

Most compounds were not detected at either location

St. Louis Park – several "hits" of 6:2 FTS in both wet and dry dep. Samples

6:2 FTS is known to be the primary PFAS used in chrome plating

