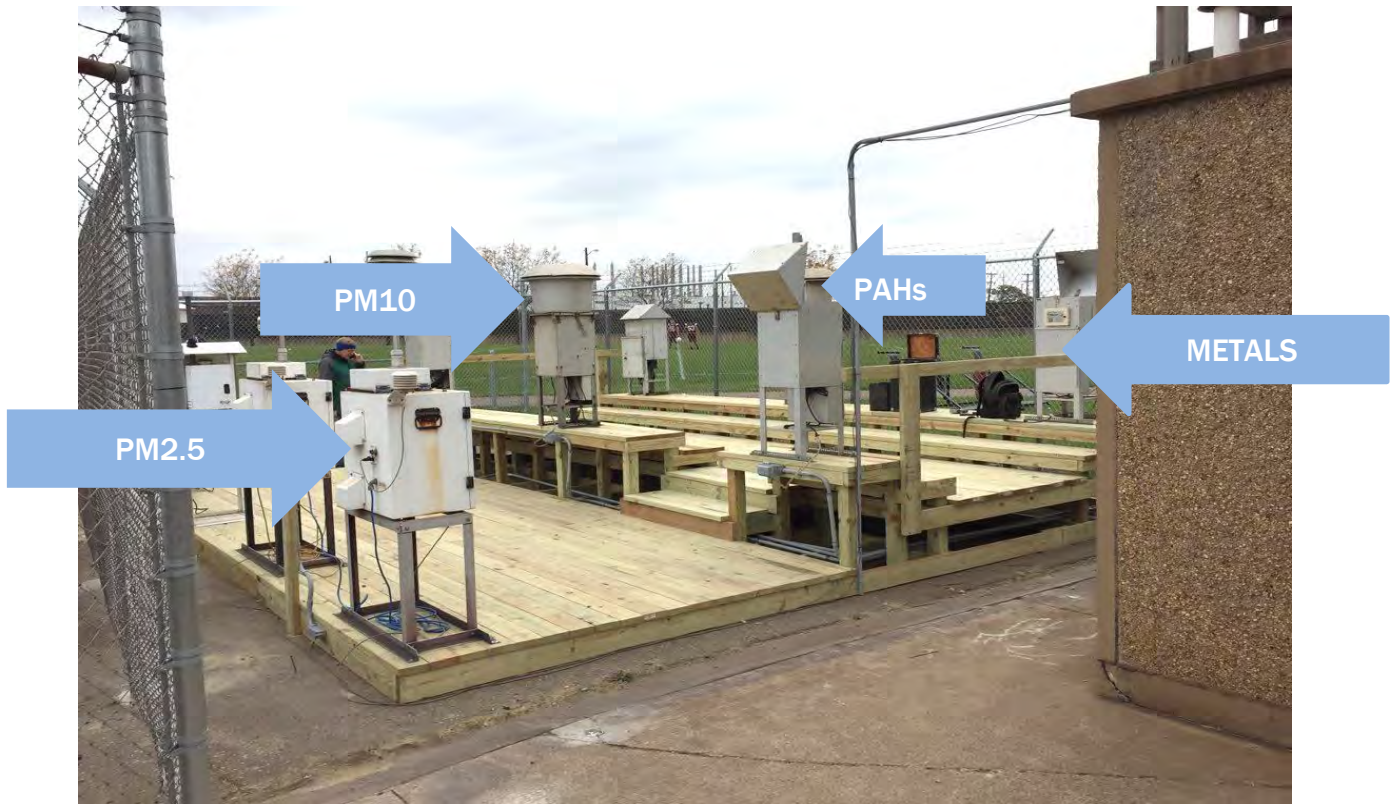


AMBIENT AIR MONITORING – Dearborn

Salina Elementary School | 2018

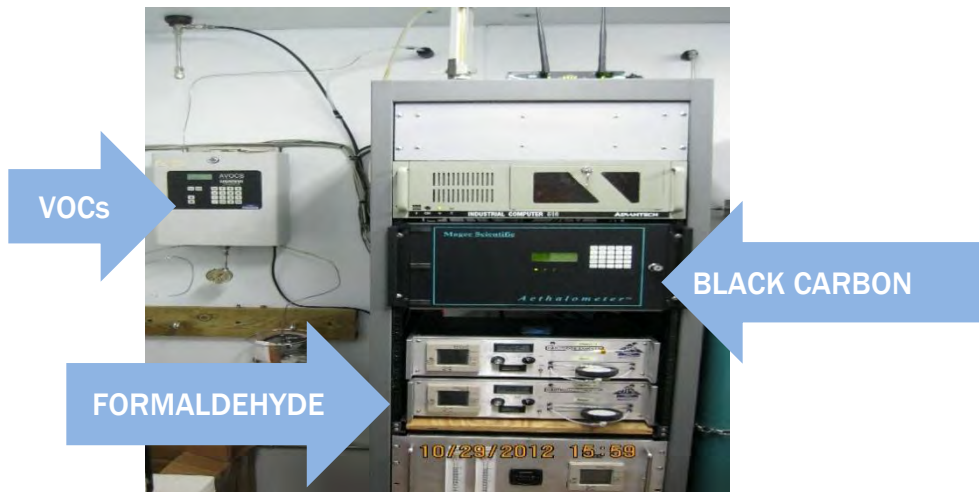
Overview

Since the early 1970's, air pollution measurements have been made near the Salina Elementary School. Currently, the Michigan Department of Environmental Quality (MDEQ) is monitoring the ambient, or outdoor air, for fine particulate matter (PM2.5 and PM10), metals, volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), black carbon, and carbonyls (such as formaldehyde).



What is used to collect samples?

In the above photo, the samplers on the left side of the deck are used to sample for fine particulate (PM2.5), the rounded samplers in the middle collect the PM10 size particulates, and the gray square samplers on the right are used to collect metals and PAHs. In the photo to the right, equipment is used to measure VOCs, black carbon, and formaldehyde.



How are the samples collected?

MDEQ's Air Monitoring Unit staff collect the filters, canisters, and cartridges from the different pieces of monitoring equipment and conduct quality assurance checks each month. Most samplers are audited every 6-months to ensure proper operation.

How often are pollutants sampled?

PM2.5:

- Sampled continuously, 24-hours a day, 365 days per year.
- Sampled with a filter every 3-days. Filter is sent to lab for testing.

PM10:

- Sampled continuously, 24-hours a day, 365 days per year.
- Sampled with a filter every 6-days. Filter is sent to lab for testing.

VOCs:

- Sampled with a canister every 6-days. Canister is sent to lab for testing.

PAHs:

- Sampled with a filter and sorbent cartridge every 6-days. Filter and cartridge is sent to the lab for testing.

Metals:

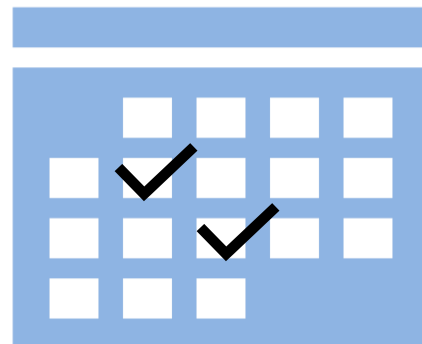
- Sampled with a filter every 6-days. Filter is sent to lab for testing.

Black Carbon:

- Sampled continuously, 24-hours a day, 365 days per year.
- Black Carbon is a component of diesel exhaust

Carbonyl Compounds:

- Sampled with a sorbent cartridge every 6-days. Cartridge is sent to lab for testing.



More Information

- Michigan Air Monitoring Information: www.michigan.gov/air, then choose “Monitoring”.
- Air Quality forecast and information on Clean Air Action Days: www.deqmiair.org
- The National Ambient Air Quality Standards: www.epa.gov/naaqs

Contact Information

- Air Monitoring: Susan Kilmer, kilmers@michigan.gov
- Air Toxics: Bob Sills, sillsr@michigan.gov
- Environmental Assistance Center, (800) 662-9278

Michigan's Environmental Justice Policy promotes the fair, non-discriminatory treatment and meaningful involvement of Michigan's residents regarding the development, implementation, and enforcement of environmental laws, regulations, and policies by this state. Fair, non-discriminatory treatment intends that no group of people, including racial, ethnic, or low-income populations, will bear a disproportionately greater burden resulting from environmental laws, regulations, policies, and decision-making. Meaningful involvement of residents ensures an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health.