48217 ZIP Code Project

Residents in the 48217 Zip code are concerned about impacts from industry and traffic on their air quality and health. A community-led outdoor air study was done from September 2016 to September 2017. This study was the result of collaboration between community members, DEQ, EPA, and academic partners. One of the results was the formation of important relationships which will benefit future work and communications within the community.



Sampled every six days (sent to laboratories):

- Acids: hydrochloric acid, sulfuric acid, and hydrogen cyanide
- Polyaromatic hydrocarbons (PAHs): 66 different compounds
- Volatile organic compounds (VOCs): 67 different compounds
- Metals: 13 different compounds

Sampled continuously

(real-time results at www.deqmiair.org):

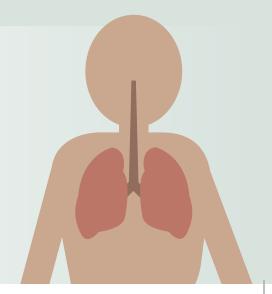
- Fine particulate matter (PM_{2.5})
- Sulfur dioxide (SO₂)

Results

Non-carcinogens: PM_{2.5}, SO₂, and lead were all below the level of the health-based national standards. Other non-cancer causing pollutants were not high enough to cause a health concern except for 2 days with elevated sulfuric acid levels.

Sulfuric acid exposure risks:

- Nose, throat and lung irritation
- Changes in lung function



Carcinogens: Pollutants known to cause cancer were below levels of concern except for arsenic, naphthalene, and hexavalent chromium. These 3 pollutants were found at levels that would increase the lifetime risk of developing cancer by **8 in 1,000,000** which is similar to other urban areas.

Future Monitoring

- Sampling will continue in 2018 for PM_{2.5}, SO₂, lead, arsenic, cadmium, nickel, and manganese.
- Decision for future monitoring will be made as part of the annual network review.

Protect Yourself



Be aware of Clean Air Action Days in your area Avoid prolonged, strenuous work or exercise when air pollution is elevated

Stay in the Know

Mlair: Information on current air quality www.deqmiair.org

Air NOW www.airnow.gov

Get involved in the air permitting process

www.epaejtraining.org/OAQPS/past-trainings/clean-air-actrulemaking-and-permitting-training-detroit-mi/

Community Action to Promote Healthy Environments: Public Health Action Plan

caphedetroit.sph.umich.edu





If you have concerns or complaints about a regulated source in this area, contact the MDEQ-AQD Detroit District Office at 313-456-4700.

For more information about this project, please contact:

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Website: www.michigan.gov/48217monitoring

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.