

Summary

Community Air Monitoring Project Little Earth Residential Complex



What we monitored

We monitored air quality for fine particles (PM_{2.5}) and air toxics (carbonyls, metals and volatile organic compounds) quality in the Minneapolis East Phillips neighborhood.

Why is it important?

People exposed to air pollution are at increased risk for adverse health effects. This can include shortness of breath, asthma, heart attacks or stroke. Studies show that low-income communities might be unfairly affected by pollution from industrial, highway or air traffic sources.

Monitoring in these communities can help us to better understand the community's air quality and how it compares to other monitoring sites.

Highlights and key findings

About this study

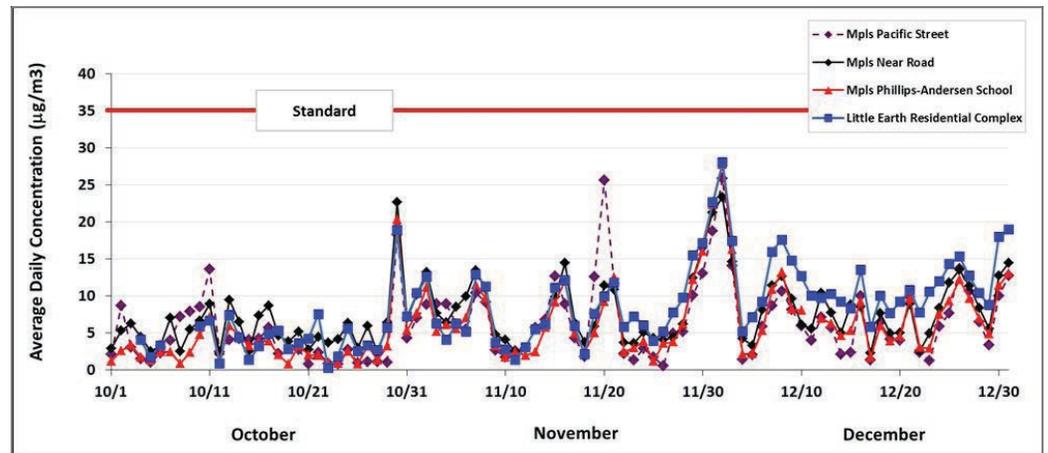
In 2013, the Minnesota Legislature provided funding for a two-year air monitoring study to measure air quality in Minnesota communities where low income communities might be disproportionately impacted by pollution from highway traffic, air traffic, and industrial sources.

- We put an air monitoring station in the Little Earth residential complex.
- This station monitored air quality for three months from October 1, 2013 to December 31, 2013.
- We compared the monitored data with federal and state air quality standards and health benchmarks. We also compared the data with other air data collected during the same time period at other monitors.
- All average daily PM_{2.5} values were below the daily PM_{2.5} standard of 35 micrograms per cubic meter (µg/m³).
- Average daily PM_{2.5} values measured at the Little Earth monitor were generally higher than the values seen at most other sites for a majority of the monitoring days.
- Of the 74 air toxic chemicals measured for this project, the levels of 38 chemicals were so low that they were not detected by the monitor.
- Of those chemicals detected, average values were at or below established health benchmark values.



Fine particles (PM_{2.5})

This graph shows the average daily PM_{2.5} levels for the monitor at the Little Earth Residential complex and other Minneapolis monitoring sites. In general, the average daily values and daily trends of PM_{2.5} are similar to levels measured at other Minneapolis sites. All average daily PM_{2.5} values were below the daily standard of 35 µg/m³ for all days.

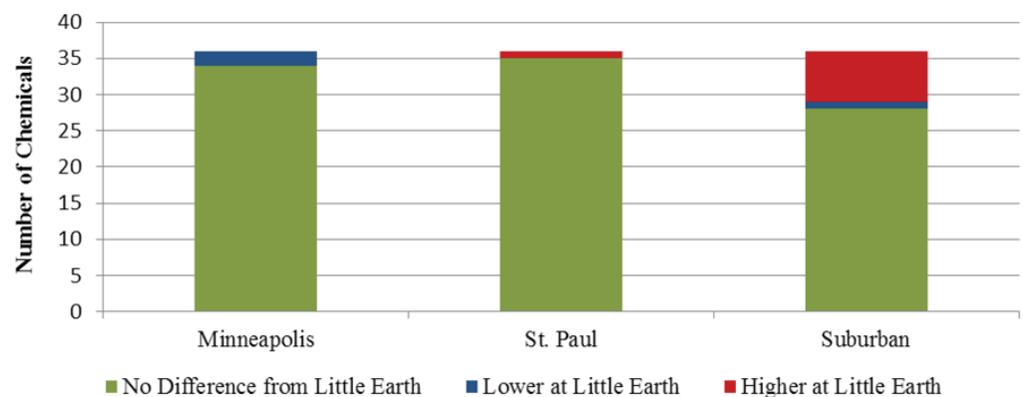


Air toxics

Of the 74 air toxics measured, 36 were detected at the Little Earth monitor. All measured values were at or below the established health benchmark values.

The majority of air toxics measured at Little Earth were not different from levels measured at other Twin Cities monitoring sites.

This graph shows the number of air toxics that differed between the Little Earth monitor and other Twin Cities monitors. Several air toxics measured at Little Earth were higher than levels measured in suburban locations, but were similar to levels measured at other monitoring sites in Minneapolis and St. Paul.



Project website

For more information and to view updates about the Community Air Monitoring Project, please visit www.pca.state.mn.us/9xc4ahc

Contact person

Mary A. Williams
 Minnesota Pollution Control Agency
mary.williams@state.mn.us
 651-757-2478

