Air Monitoring in North Minneapolis

The Minnesota Pollution Control Agency (MPCA) will begin a 1 to 3 year study of fine particle ($PM_{2.5}$) levels in the ambient air of North Minneapolis on January 1, 2013. Fine particles are primarily produced during combustion and can impact both lung and heart health. Fine particles are the most common cause of air pollution alert days in Minnesota.

The MPCA has identified a good initial location for a fine particle monitor and is seeking feedback from the public on this site, as well as suggestions on alternative sites. Suggestions on other sites should describe the specific location, how it meets the criteria explained below, and should provide a brief explanation of why fine particle monitoring would be valuable at the location.

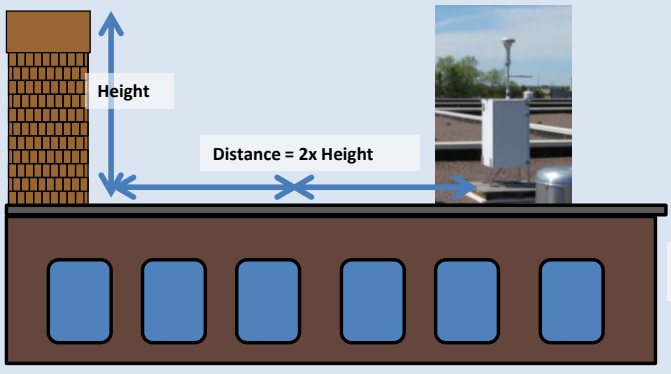
Feedback should be e-mailed to Rick Strassman (rick.strassman@state.mn.us), Air Monitoring Unit Supervisor, by **Monday, November 12th**. The MPCA will consider all suggestions and will provide details about the final monitoring plan in early December.

Fine Particle Monitoring Study

The MPCA will monitor fine particles in North Minneapolis on an hourly basis. This data will be compared to modeled fine particle concentrations for the area and will be used for Air Quality Index (AQI) reporting (http://www.pca.state.mn.us/6u8wq9x) and to determine compliance with federal standards. Residents in North Minneapolis will be able to see what the current air quality is like in this part of Minneapolis, as well as the rest of the Twin Cities, and receive air quality alerts based on this monitor and others. In order for data to be used for these purposes, the monitoring site must meet U.S. Environmental Protection Agency (EPA) siting requirements, which are highlighted below.

Due to the equipment and labor costs associated with monitoring, the MPCA only has one monitor available for this study. If the community desires monitoring in additional locations, moving the monitor to a new location after the completion of a full calendar year of monitoring is a possibility.

$PM_{2.5}$ Monitoring Site Requirements



Requirements

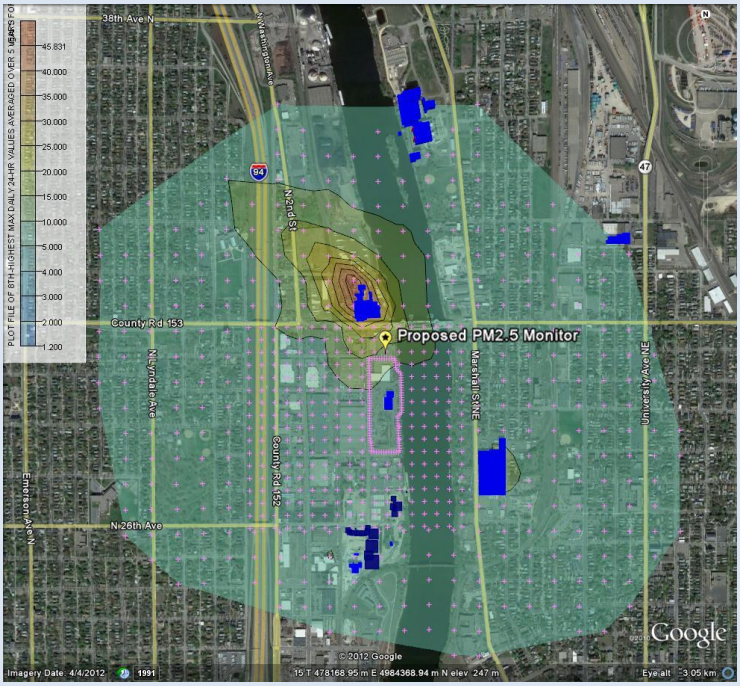
- Near typical breathing level
- No obstructions
- Secure
- Accessible to staff only (no ladders)
- Reliable power source
- Building owner permission

Proposed Initial Monitoring Site

Because modeling conducted for the Northern Metals Recycling Environmental Assessment Worksheet showed a potential exceedance of the federal fine particle standard due to contributions from other industries in the area, the MPCA proposes the first monitoring site be on the roof of a commercial building

at 3100 N. Pacific Street, just south of Lowry Ave. This monitoring site meets all of the siting criteria and the MPCA believes that this site, where the model showed potential high levels of fine particles, will tell us whether the modeling results are realistic and measure the fine particle levels in this industrial part of North Minneapolis. The MPCA recognizes the community's detailed knowledge of the area and interest in knowing more about air quality in areas where people live. Thus, the MPCA is asking for feedback on this proposed site and suggestions for alternative or future sites.

Fine Particle Modeling Results



The proposed monitor location is in the area of highest modeled $PM_{2.5}$ levels identified in the Northern Metals Environmental Assessment Worksheet.

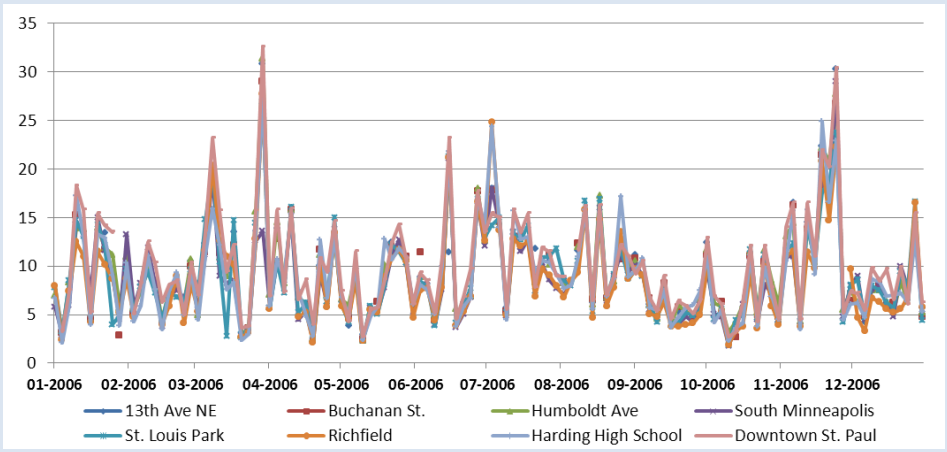
The colored contours on the map describe the gradient of modeled $PM_{2.5}$ concentrations and the blue shaded areas identify the facilities that were included in the model.

The MPCA proposal to begin monitoring at this location will tell us whether the modeling results are realistic and measure the fine particle levels in this industrial part of North Minneapolis.

Past Monitoring

While the MPCA is not currently monitoring for fine particles in North Minneapolis, fine particles were previously monitored at three locations in North Minneapolis. These monitors were located at 4646 Humboldt Ave., 1616 Buchanan St., and 143 13th Ave. N.E. Results from these monitors show that fine particle levels in North Minneapolis are very similar to levels at other sites in the Twin Cities.

Fine Particle Monitoring Results Hennepin and Ramsey Counties, 2006



Monitoring indicates that $PM_{2.5}$ levels are very similar across the Twin Cities.

For example, data from 2006, which includes three monitors in North Minneapolis, highlights the daily similarities in $PM_{2.5}$ levels.