

**LADCO FACT SHEET**  
**March 1, 2004**

## **Regional Monitoring Strategy**

Air pollution affects everyone. Every day, the average adult breathes over 3,000 gallons of air. Children breathe even more air per pound of body weight and are thus more susceptible to air pollution. To provide the public with information about the quality of the air that they breathe, state and local air pollution control agencies are responsible for measuring air pollution levels.

Across the upper Midwest, from Minnesota to Michigan and from Illinois to Ohio, there are more than 500 locations where measurements are made for a variety of pollutants, including fine particles, ozone (or smog), and certain air toxics.



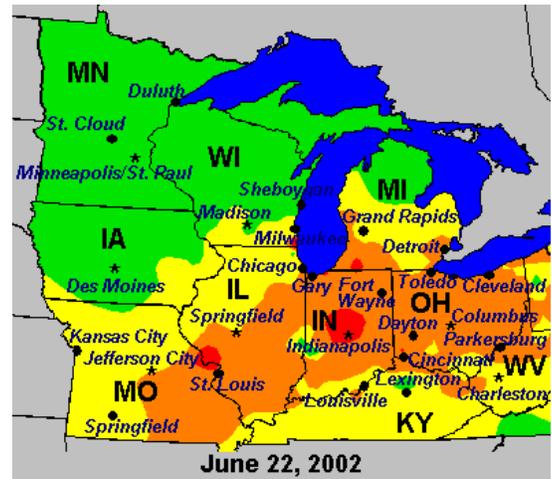
*Air Monitoring Site in Mayville, WI*

State and local agencies have conducted air pollution monitoring since the 1970s. During this time, the air pollution picture has changed significantly, as control programs have been successful in reducing emissions of many pollutants and as science has identified new issues of concern.

- With the exception of fine particles (PM<sub>2.5</sub>) and ozone, many existing monitoring sites are now measuring levels well below the national ambient air quality standards for pollutants like sulfur dioxide, carbon monoxide, lead, and PM<sub>10</sub>. For example, in the past 20 years, ambient levels of lead have decreased by 98%, and carbon monoxide by 61%.
- Emerging health science, showing that fine particles are the source of serious health concerns, has caused us to refocus our regulatory programs.
- Recent information shows that air toxic pollutants are causing excess cancers and other health effects.
- New technology to allow the continuous monitoring and mapping of air pollutants to inform the public better about local air quality.

To ensure that they are providing the most relevant, complete, and timely air pollution information, state and local agencies in the upper Midwest recently conducted a comprehensive review of their monitoring programs. This review resulted in the development of a **regional monitoring strategy**, which includes a number of important changes in the current programs:

- Make the best use of taxpayer dollars by more efficiently using available resources to target the air pollutants that pose the greatest threat to public health, including fine particles, ozone, and certain toxic air pollutants, like benzene, formaldehyde, and acrolein.
- Establish new “core” multi-pollutant monitoring sites to provide information on a wide variety of pollutants at the same location in major metropolitan and rural areas.
- Provide real-time reporting of air quality information by conducting continuous monitoring for ozone and fine particles, and making this information available on the internet (see, for example, [www.epa.gov/AIRNOW](http://www.epa.gov/AIRNOW)) and media weather broadcasts.



**Map of 8-Hour Ozone Concentrations  
(from AIRNOW)**

- Expand the use of new technology that can provide information on the chemical constituents of air pollution, not merely record the levels of the pollution.
- Ensure that the monitoring programs are responsive to local needs by allowing each state and local agency discretion in designing their monitoring networks to address local issues and concerns.
- Eliminate parts of the network for pollutants that are no longer a problem, but retain a subset of these monitors to collect data to ensure that these pollutants do not become a problem again in the future.

The state and local agencies plan to phase-in these changes over the next several years. On-going data assessments will determine the need for additional changes.

For more information on the Regional Air Monitoring Strategy, please visit the LADCO website at <http://www.ladco.org> or contact Michael Koerber, LADCO, [koerber@ladco.org](mailto:koerber@ladco.org), 847-291-2181.