

## PROJECT NAME

# Cumulative Levels and Effects Analysis in the Context of Air Permitting

## PERFORMANCE MEASURE BASELINE

The Minnesota Legislature enacted a new requirement in 2008 for the MPCA to analyze and consider cumulative levels and effects of proposed air permit actions within a specific geographic area of South Minneapolis; at the time of enactment, there was no available method to comply with this new requirement.

## THE IDENTIFIED PROBLEM

- » Available data suggested that cumulative effects of pollutants presented a potential environmental justice concern.
- » A defensible, repeatable method was needed to comply with the new review requirement for projects in the designated area of South Minneapolis.
- » There was no national guidance or model to draw on to develop such a method; to our knowledge, this remains a nationally unique requirement.

## VOICE OF THE CUSTOMER

- » With input from diverse stakeholders, the MPCA developed a methodology to implement a cumulative levels and effects analysis. A Process Document was created defining explicit steps.
- » The stakeholder engagement/input included informal technical check-ins, large public meeting and open house for discussion and input, extended formal public comment period, and e-mail updates.

## RESULTS

- » The MPCA developed technical expertise in the analysis of cumulative risk and the communication of cumulative risks to potentially impacted communities.
- » The new analysis method allows MPCA to consider the potential impacts from a proposed project with an expanded look at all existing impacts in an area, including chemical and non-chemical stressors on a neighborhood, including access to health care, socioeconomic factors, existing health issues such as asthma incidence, etc.
- » The method and case studies were accepted for peer reviewed publication
- » There is increased understanding among the interested South Minneapolis community regarding the role of the MPCA in environmental protection, the differences between modeling and monitoring and the value of modeling, and the significance of mobile sources as a contribution to existing conditions.
- » A scientifically defensible process was developed that can be used in South Minneapolis
- » The MPCA is able to meet its statutory duty when issuing air permits in South Minneapolis.
- » Outreach elements that can be used in South Minneapolis and in other areas as needed
- » Two permits have used the method: one permit is in final review, one permit has been issued. The allowable limits of the issued permit are below those set by MPCA air registration permit rules and the review process yielded reduced emissions from the project proposers.

