

## **ABSTRACT**

The Fairbanks North Star Borough operates a local air quality control program that concentrates on ambient air monitoring, enforcement of visible emissions and dust control regulations, and local control measures to reduce vehicle carbon monoxide emissions. Since its designation in 2002 as a “small-urbanized area”, Fairbanks has had difficulty complying with Clean Air Act requirements. The State Government has worked with the EPA to designate areas for the revised fine particle air quality standard (PM<sub>2.5</sub>) and compliance with annual and 24-hour attainment/non-attainment requirements. Despite these efforts, Fairbanks continues to have periods where the standards are not being met. Summer 2008 increases in home heating oil prices drove a significant rise in the use of wood burning stoves throughout the Borough. In particular, many residences began using outdoor wood stoves which are not efficient and may be a big contributor to this winter’s failure to reach attainment status. A number of federal funding programs are tied to Fairbank’s ability to meet federal air quality standards. The Borough is aware of the timeline to reach attainment status but has a number of unanswered questions such as:

- What are the major particulate generators in the Fairbanks area?
- How much of a problem are outdoor wood burning stoves? And what can be done about it? (i.e. buy-back program, after market retrofits, etc...)
- What standards should be enforced? Where should they be enforced and how?
- What are possible ways to move forward and meet federal deadlines?

Our group will research the history behind current air quality requirements for the Fairbanks area, examine available information on sources that are contributing to poor air quality, and make a report and presentation on possible ways that Fairbanks can move forward in meeting federal timelines for attainment of Clean Air Act standards.