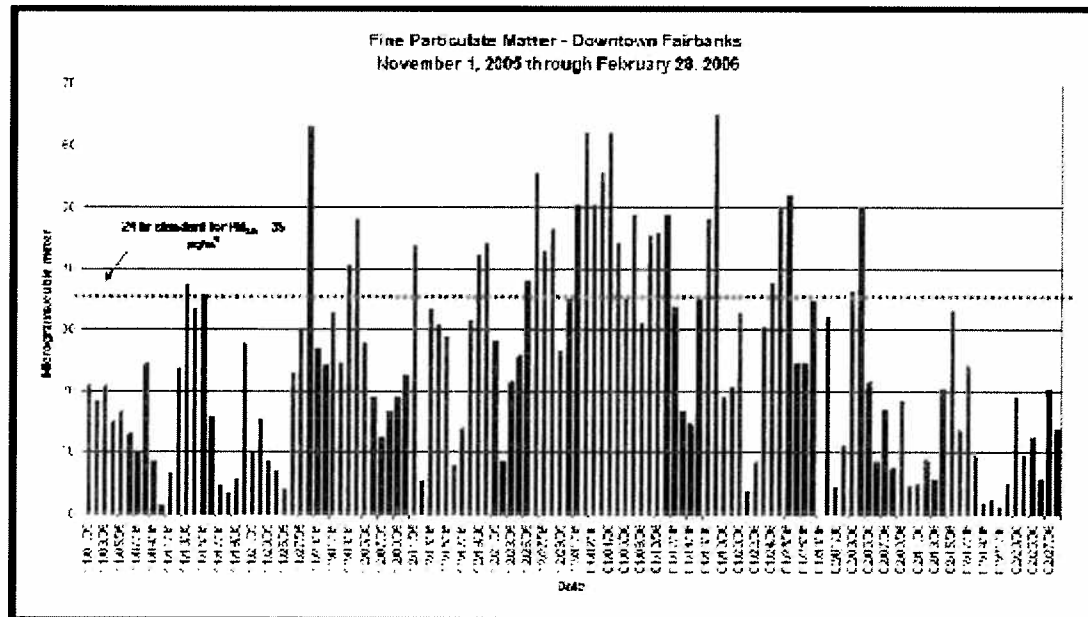


## PM2.5 and Fairbanks

Fairbanks already has years of experience with programs associated with being in nonattainment for carbon monoxide. The reasons for Fairbanks problems with PM 2.5 may be similar. Surrounded by hills on three sides, Fairbanks is susceptible to temperature inversions which trap a layer of cold air close to the ground. Even relatively small amounts of pollution can be trapped for days, even weeks, at a time. This leads to episodes of poor air quality. Cold weather (below -10 or -15F) also seems to increase the PM2.5 levels. Fine particulates are products of combustion - burning more fuel, be it fuel oil or wood, when it is colder produces more PM2.5.

Fairbanks can be pro-active during the non-attainment process. The community can conduct studies, determine how to decrease the PM2.5 levels, and work to come into compliance prior to the attainment deadline. Should Fairbanks come into compliance, the community would not have to add control measures. This would avoid the need for the PM conformity process for federal projects.

The graph below shows the number of times PM2.5 levels in Fairbanks exceeded the September 2006 revised EPA particulate matter standard during the winter of 2005-2006. Fairbanks will likely exceed the PM2.5 standard in the years to come. Population growth, and a likely increase in use of woodstoves, seem responsible for the increasing number of PM2.5 violations.



The following chart shows the number of days the September 2006 PM2.5 Standard was exceeded in Fairbanks over the past five calendar years.

