Fine Particulate Monitoring

FY2002 Request: $477,200
Reference No: 33827

AP/AL: Appropriation
Category: Health/Safety
Location: Statewide
Election District: Statewide
Estimated Project Dates: 07/01/2001 - 06/30/2004

Project Type: Health and Safety
Recipient: Statewide
Contact: Tom Chapple
Contact Phone: (907)269-7634

Brief Summary and Statement of Need:
Fine particulate matter is a by product of combustion and has been linked to respiratory ailments and various cancers. This federally mandated project provides installation and operation of fine particulate monitoring equipment throughout the state to evaluate the risk to public health in Alaska.

Funding:

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<td>Fed Rcpts</td>
<td>$477,200</td>
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Operating & Maintenance Costs:

- Total Operating Impact: 108,700
- One-Time Startup Costs: 0
- Additional Estimated Annual O&M: 0

Prior Funding History / Additional Information:
Prior appropriations were made in FY2000 for 494.5, FY1999 for 778.8, and FY2001 for 350.0.
FINE PARTICULATE MONITORING

Airborne particulate matter of less than 2.5 microns in diameter (PM2.5) is primarily a by-product of combustion. It is created during the burning of fossil fuels (for example, in car engines, off-road engines, and power plants), forest and vegetation wildfires and controlled burns, and even campfires and backyard burning of woody debris. PM 2.5 has been linked to numerous long-term health problems, such as asthma and other respiratory ailments, and various cancers. The U.S. Environmental Protection Agency (40 CFR 50, 51, 53 & 58) requires the state to install and operate PM 2.5 monitoring equipment throughout Alaska in order to gauge levels of fine particulate matter and evaluate the associated risks to public health.

During the first two years of this project, DEC developed a statewide network design which identified potential monitoring sites and necessary instrumentation; prepared a timeline for receipt and installation of PM 2.5 monitors; upgraded the air quality laboratory equipment in order to comply with the new requirements associated with the PM 2.5 program; ordered equipment/software; revised the state's quality assurance (QA/QC) plan for the collection and evaluation of PM 2.5 data, and installed and operated air quality samplers throughout the state.

During FY2001, DEC started the PM 2.5 monitoring network to collect and evaluate data, implement the state's new QA/QC program, review the network to investigate other areas with potential fine particulate problems, and work with local governments to assess levels of fine particulates and associated health risks in those communities.

In FY2002, DEC will continue to operate the PM 2.5 monitoring network to collect and evaluate data, implement the state's new QA/QC program, review the network to investigate other areas with potential fine particulate problems, and work with local governments to assess levels of fine particulates and associated health risks in those communities. The project is continuing because at least three years of measurement data is necessary to ascertain if Alaska is meeting the new public standard for fine particulate pollution. If exposure to PM2.5 are found to occur above the value of the standard, actions would be necessary to protect public health by reducing pollution sources.