

**DIVISION OF AIR QUALITY
DIRECTOR'S OFFICE**

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Environmental Protection Agency
Mailcode: 6102T, 1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Ms. Lydia Wegman
Director, Health and Environmental Impacts Division
EPA Office of Air Quality Planning and Standards
Research Triangle Park, NC 27711

Dear Ms. Wegman and Docket Manager:

The Alaska Department of Environmental Conservation (ADEC) welcomes the opportunity to provide comments on the Environmental Protection Agency's proposed revisions to the National Ambient Air Quality Standards for particulate matter. ADEC is concerned that these rules, if finalized as proposed, would not provide adequate protection of public health.

ADEC has serious concerns regarding EPA's revocation of the current PM₁₀ standard and the proposed health standard for thoracic coarse particles (PM_{10-2.5}). In the recent past, EPA acknowledged that epidemiologic studies show a relationship between short-term exposure to coarse particles and respiratory morbidity, cardiovascular effects, and possibly mortality (70 FR 2655). However, now EPA is making a sweeping conclusion based on limited data that little health impact occurs from coarse particulate matter derived from crustal material. EPA proposes to apply a new coarse particle standard only to areas dominated by re-suspended dust from high-density traffic on paved roads and industrial and construction sources. The proposal also specifically exempts material from mining and agriculture sources.

We think this proposal is seriously flawed and request that EPA reconsider its approach on the coarse particle standard. There is very limited scientific data available and uncertainty as to the relative toxicity of different components of coarse PM originating from different sources. We believe EPA's proposal for the coarse particle standard inappropriately weighs too heavily upon a scant and selective set of medical research studies upon which EPA is drawing conclusions that are not well founded and do not meet the standard set out in Section 109(b) of the Clean Air Act for protecting the public health of all Americans with an adequate margin of safety.

In Alaska, we have small communities like Kotzebue, Nome, and Bethel with extremely high dust levels associated with both paved and unpaved roads. The proposed standard will not protect the health of these rural citizens. Anchorage, our largest city, will be subject to the proposed standard even though all neighborhoods will have less coarse particulate impact than the towns of Kotzebue, Nome, or Bethel.

The respirable dust that is exempted from EPA's proposed standard may have health impacts on citizens in rural and moderately sized communities. Agricultural dust may contain fertilizers or pesticides that are harmful to humans. Mineral mining operations may result in dust emissions that contain metals. Respirable

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dust from crustal material may contain asbestos, iron, silica, and antigens. We find it very hard to conclude that airborne respirable particles should be treated uniformly as non-toxic in all but our large cities across the nation without adequate research proving its benign character. It is Alaska's belief that existing particulate monitoring data neither proves nor disproves the toxicity of coarse airborne particles in rural areas and moderate sized communities.

We suggest EPA conduct more monitoring and health studies with a rural and small town focus. In particular, rather than assume rural dust is non-toxic, it would be of use to perform speciation studies, describing the components of rural dust from farm and mining lands, small towns, and other land uses. Studies should also be performed looking into health effects. Rural areas and small communities seem to have been ignored because it is difficult to study a population large enough to satisfy statistical needs. Regrettably, this leads to a lack of data showing health impacts in non-urban areas. However, this does not mean health impacts do not exist. While we understand that there is ongoing research designed to address the impacts of particulate subspecies, we can find no basis to conclude that public health is best served and protected by EPA's sweeping assumption that relies on limited data to conclude low toxicity for particulate in non-urban areas. In 1988 and in 1998, EPA said there were health problems associated with exposures to PM₁₀. Without compelling research to the contrary, we believe EPA is legally obligated under the CAA to maintain protections for rural areas and moderate sized communities.

ADEC is perplexed by EPA's proposal that "Agricultural and mining sources, and other similar sources of crustal material shall not be subject to control in meeting this standard." If exemptions are valid from a scientific health basis, it seems the implementation rules would be proper mechanism to accomplish the change – not in the actual setting of health standards. Alaska has some of the nation's largest mineral mines. Using the existing standard, DEC has worked proactively and successfully with mining companies to prevent potential pollution problems from mineral dust. As explained in the enclosure, we are concerned that the proposed exemption would undermine our ability to work with Alaska's mineral industry in what is simply good environmental stewardship to preserve clean air and clean water in the proximity of mining operations.

In summary, after careful review of the proposal, ADEC provides the following general recommendations:

1. EPA should maintain a standard for coarse particulate applicable in both urban and rural areas.
2. EPA should conduct additional rural monitoring and health research studies for coarse particle composition and health impacts.
3. EPA should not exclude mining from this rule.

If you need additional information or clarification, please contact me at (907) 269-7686.

Sincerely,

Tom Chapple
Air Quality Director

Enclosure

cc: Rick Albright, EPA Region 10
Kurt Fredriksson, Commissioner, ADEC
Richard Mandsager, Alaska Division of Public Health
Beverly Wooley, Director, Anchorage Department of Health and Human Services
Glenn Miller, Transportation Director, Fairbanks North Star Borough