



EPA Particulate Matter Proposed Rule Summary

On January 17, 2006, EPA issued a proposed rule in the *Federal Register* to revise the National Ambient Air Quality Standards (NAAQS) of the Clean Air Act. In this proposed rule, EPA is accepting comments on changing the standards for fine particulate matter and for some coarse particulate matter (PM) or dust. EPA also issued a separate but related rule to amend its national air quality monitoring requirements. Both of these proposed rules have the potential to impact dairy producers. NMPF will be submitting comments, which are due April 17, 2006.

Background:

EPA is proposing to update the NAAQS for fine and coarse particulate matter to protect human health associated with both short-term and long-term exposure to particulate matter.

Historically EPA has categorized particulate matter based on the particle size:

- PM_{2.5} – These are fine particles less than 2.5 micrometers in diameter and are believed to pose the largest health risks. Because of their small size, fine particles can lodge deeply into the lungs. Sources of fine particles include all types of combustion (motor vehicles, power plants, wood burning, etc.) and some industrial processes.
- PM₁₀ – These are coarse particles less than 10 micrometers in diameter. This size of PM can pose a health concern because they can be inhaled into and accumulate in the respiratory system.

In agriculture areas, one example of particulate matter that would be regulated under a coarse particulate matter NAAQS is dust produced by tilling soil, planting crops, harvesting crops, driving on dirt roads, spreading nutrients on fields, outdoor storage of bulk materials, feed mixing and cattle moving in dry lots.

Proposed Rule Details:

The proposed revisions address both fine particles and coarse particles. The proposed rule includes the following:

- Establishing a PM_{10-2.5}. These are particles with diameters between 2.5 and 10 micrometers and are referred to as inhalable coarse particles. Sources of inhalable coarse particles include crushing or grinding operations, and dust from paved or unpaved roads.
- Lowering the 24-hour standard for PM_{2.5} from the current level of 65 micrograms per cubic meter to 35 micrograms per cubic meter.

- Setting a limit for how much PM_{10-2.5} can be emitted on a 24-hour average basis.

In a separate *Federal Register* notice, EPA has proposed changes to its national air quality monitoring requirements, which include particulate matter. The purpose of these amendments is to allow EPA to improve their measurement of air quality. These proposed changes include setting up monitoring devices around the country to measure coarse particulate matter.

Key Points:

- EPA does not make any differentiation for regulating PM_{2.5} in urban versus rural areas. There is little data showing the adverse health effects of PM_{2.5} from agriculture sources, so EPA should clarify this in the final rule.
- Rural areas should be excluded from the PM_{10-2.5} NAAQS, as is proposed by EPA.
- Even if rural areas are excluded, dairy operations in or near urban areas could be impacted by the new PM_{10-2.5} standards.
- There is a concern from agriculture groups about where EPA plans to place the air monitoring devices. Current data shows that some PM samplers tend to “over-sample” agricultural particulate matter and would give incorrect readings.
- Adequate sampler technology needs to be made available.
- A coarse particulate matter NAAQS rule should not be promulgated until research based on sound science justifies a health-based standard.
- Significant, long-term, peer-reviewed research should be funded to determine the health impacts of coarse particulate matter for both urban and rural areas.