

BEFORE THE
ENVIRONMENTAL QUALITY COUNCIL
STATE OF WYOMING

IN THE MATTER OF THE PROPOSED)
ADOPTION OF AMBIENT AIR QUALITY)
STANDARDS FOR PARTICULATE MATTER)
CALLED "PM₁₀" AND THE RETENTION)
OF THE STATE'S CURRENT 24 HOUR)
"TSP" PARTICULATE STANDARD.)

STATEMENT OF
PRINCIPAL REASONS
FOR ADOPTION

1. In reviewing the basis and purpose for the adoption of any regulation, cognizance of pertinent sections of the Wyoming Environmental Quality Act, W.S. 35-11-101 et seq. is essential.

a. Section 35-11-102 sets forth the Policy and Purpose of the Act as follows:

"Whereas pollution of the air, water and land of this state will imperil public health and welfare, create public or private nuisances, be harmful to wildlife, fish and aquatic life, and impair domestic, agricultural, industrial, recreational and other beneficial uses; it is hereby declared to be the policy and purpose of this act to enable the state to prevent, reduce and eliminate pollution; to preserve, and enhance the air, water and reclaim the land of Wyoming; to plan the development, use, reclamation, preservation and enhancement of the air, land and water resources of the state; to preserve and exercise the primary responsibilities and rights of the State of Wyoming; to retain for the state the control over its air, land and water and to secure cooperation between agencies of the state, agencies of other states, interstate agencies, and the federal government in carrying out these objectives."

b. In addition, Section 35-11-114 states:

"(a) The advisory boards shall recommend to the council through the administrator and director, comprehensive plans and programs for the prevention, control and abatement of air, water and land pollution and the protection of public water supplies.

(b) The advisory boards shall recommend to the council through the administrator and director the adoption of rules, regulations and standards to implement and carry out the provisions and purposes of this act which relate to their divisions, and variances therefrom."

c. Section 35-11-202 further provides that:

"(a) Without limiting the authority of the administrator as set out in Section 35-502.10 (Section 35-11-110) of the statutes, he shall, after consultation with the advisory board, recommend to the director such ambient air standards of emission control requirements by rule or regulation, as may be necessary to prevent, abate, or control pollution. Such standards or requirements may be for the state as a whole or may vary from area to area, as may be appropriate to facilitate accomplishment of the purposes of this act and in order to take account of varying local conditions.

(b) In recommending such standards or requirements the administrator shall:

(i) Consider all the facts and circumstances bearing upon the reasonableness of the emissions involved, including:

(A) The character and degree of injury or interference with the health and physical well being of the people, animals, wildlife and plant life;

- (B) The social and economic value of the source of pollution;
 - (C) The priority of location in the area involved; and
 - (D) The technical practicability and economic reasonableness of reducing or eliminating the pollution;
 - (E) The social welfare and aesthetic value.
- (ii) Grant such time as he shall find to be reasonable and necessary for owners and operators of air contaminant sources to comply with applicable standards or requirements."
- d. Section 35-11-112 establishes the Council's rule making authority with the provisions that:
- "(a) The council shall act as the hearing examiner for the department and shall hear and determine all cases of issues arising under the laws, rules, regulations, standards or orders issued or administered by the department or any division thereof. The council shall:
- (i) Promulgate rules and regulations necessary for the administration of this act, after recommendation from the director of the department, the administrators of the various divisions and their respective advisory boards;
 - (ii) Conduct hearings as required by the Wyoming Administrative Procedure Act for the adoption, amendment or repeal of rules, regulations, standards or orders recommended by the advisory boards through the administrators and the director. The council shall approve all rules, regulations, standards or orders of the department before they become final."
2. The Environmental Quality Council through the promulgation of rules and regulations is responsible for the prevention, reduction, and elimination of pollution, the preservation and enhancement of the air quality, and the planning of the development, use, reclamation, preservation, and enhancement of the clean air resource of Wyoming.
3. The Environmental Quality Council (the Council) adopted "PM₁₀" ambient particulate standards as Wyoming's primary health related standard on December 13, 1988. In addition, the Council voted to retain Wyoming's current 24 hour "TSP" standard as the State's secondary welfare related standard.
4. "PM₁₀" means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by a reference method described as part of the standards.
5. "TSP" (total suspended particulate) means particulate matter as measured by the "high volume" sampler and described as part of the standards and generally includes particles in a sub-micron size range up to a nominal size of 25 to 45 microns.
6. "Particulate matter" means any airborne finely divided solid or liquid material with an aerodynamic diameter smaller than 100 microns.
7. Adoption of the Federal PM₁₀ standards was required of all states as a result of the Environmental Protection Agency's (EPA) promulgation of the standards on July 1, 1987. EPA's regulations require the states to adopt these standards as part of their regulations and submit implementation plans to EPA for approval by a certain date. In order to retain control of its own air quality program, adoption of these standards by the State of Wyoming was required.


The policy and purpose of the act is to enable the State to prevent, reduce and eliminate pollution. Elimination of the State's TSP standard with replacement by the PM₁₀ standard would allow an increase in pollution. This is because, measured side by side, ambient PM₁₀ levels are a fraction of TSP levels for most areas of the State. Since the allowed 24 hour mass concentration is the same for both the TSP and PM₁₀ standards, the former is obviously the more restrictive.

The Federal Clean Air Act requires the EPA Administrator to set primary standards for ambient particulate matter which are protective of public health with an adequate margin of safety and to set secondary ambient particulate levels to protect the public welfare. EPA in setting the new PM₁₀ standards made the secondary standards identical in every respect to the primary health standard. The basis for their conclusion is that a secondary standard different from the primary standard is not required to protect the public welfare against soiling and nuisance. EPA also relied on a supporting conclusion from the Clean Air Scientific Advisory Committee which stated that there is no scientific support for a TSP-based secondary standard. In addition, EPA elected to delay addressing other welfare aspects of particulate matter which includes impairment of visibility. The Council was not satisfied that the PM₁₀ standard, alone, would prevent further impairment of Wyoming's visibility. Increased PM₁₀ concentrations resulting from elimination of the more restrictive TSP cap would also include more particles in the size range of 2.5 microns and smaller. It is these smaller particles which contribute most to visibility reduction. The Council received comments establishing that the public at large believes visibility is a very important aspect of Wyoming's air quality and one that the citizens of Wyoming are not willing to sacrifice in the interim while awaiting action by EPA. Most of the comments submitted by the public expressed concern about protecting Wyoming's current visibility.

0. Because the vigor and frequency with which some control technologies are applied can significantly alter their effectiveness, any increase in allowed pollution would eventually occur. The Council determined that current regulations and permits which require the application of best available control technology in controlling emissions of fugitive dust from various industrial facilities would not be a sufficient deterrent to an increase in PM₁₀ and TSP ambient particulate concentrations if TSP standards and TSP monitoring requirements were eliminated from the regulations.
11. Although the PSD program continues to require some TSP monitoring, with or without a TSP standard, the Council is concerned that monitoring for two standards may be costly and duplicative. However, there is not sufficient data currently available to determine whether an adjustment to proposed PM₁₀ standards could be applied uniformly across the State and still maintain the State's air quality and visibility at current levels. This concern is outweighed by the larger concern that adoption of PM₁₀ as a secondary standard will result in substantial air quality degradation during the time needed to gather the additional data necessary to adjust the PM₁₀ 24 hour standard.
12. In addition to the above stated reasons, the Council's decision to retain the current 24 hour TSP standard also took into consideration the large amount of public comment which unanimously disagreed with doing away with TSP standards. The Council's decision was also based on the fact that sufficient evidence was not presented to justify a change from the existing secondary standard.

APPROVED:

Date: 7 Feb 1989


John Schiffer, Chairman
Environmental Quality Council