

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

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## RULEMAKING PROPOSAL CONCEPT PAPER VISIBILITY AND TOTAL SUSPENDED PARTICULATES

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### VISIBILITY

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The air quality attribute of visibility has been declining in the Southwest since the 1960's. While visibility in rural areas ranges from 65-80 miles, visibility in urban areas is approximately 30-35 miles with potential continued impairment accompanying urban growth. The need for visibility protection is a high priority for areas designated by the Federal Government for protection of visibility. These high priority, or Class I areas, are defined as International Parks, National Parks over 6,000 acres and Wilderness Areas over 5,000 acres which were specified in the Clean Air Act amendments of 1977. The Act also provides a procedure for reclassifying areas as Class I, though no additional Class I areas have been nominated in Arizona since 1977.

The Arizona Department of Environmental Quality utilizes two approaches to alleviate visibility impairment of Class I areas:

1. For new major sources of air pollution (over 100 tons per year for categorical sources in all areas; for non-categorical sources, 250 tons per year in attainment areas, 100 tons per year in nonattainment areas) within 100 kilometers of a Class I area, the prevention of deterioration

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(PSD) and new source review (NSR) processes incorporate requirements that involve the Federal Land Manager of the affected Class I area. The manager reviews the impact of the New Source on air quality related values including visibility and makes recommendations to the Department for appropriate action.

2. For existing sources, the State Implementation Plan (SIP) will include particulate matter 10 microns or less in diameter (PM10) allowable emission rates for stationary sources in addition to the limits for current criteria pollutants.

The Department intends to adopt Federal Regulations regarding visibility in Class I areas (See 40 CFR 52.21(p), 52.27, and 52.28, 50 FR 28551, July 12, 1985; 40 CFR Part 51, Subpart P, 45 FR 80089, December 2, 1980).

The following wording is proposed:

"Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment and how these factors correlate with:

- a) times of visitor use of the Federal Class I area, and
- b) the frequency and timing of natural conditions that reduce visibility.

### **Visibility Protection**

A. For any new major stationary source or major modification subject to the provisions of this Chapter, no Class A installation permit shall be issued to a person proposing to construct or modify the source unless the applicant has provided:

1. An analysis of the anticipated impact of the emissions of the proposed source on visibility in any Class I area which may be affected; and

2. Evidence of monitoring of visibility in any Class I area near the proposed source for such purposes and by such means as the Director determines is necessary and appropriate.

B. The Director shall not issue a Class A installation permit for any new major stationary source or major modification subject to this Chapter unless the following requirements have been met:

1. The Director shall provide written notification of the permit application for a source, the emissions from which may affect a Class I area, to the Federal Land Manager, and the Federal official charged with direct responsibility for management of any lands within any such area. The Director shall provide such notice within ten working days after receipt of the application. The notice shall include a copy of all information relevant to the application, shall include an analysis of the proposed source's anticipated impacts on visibility in any Class I area which may be affected by the source's emissions, and shall provide for no less than a 60 day period within which written comment may be submitted.

2. The Director shall provide the Federal Land Manager and such Federal official with a copy of the preliminary determination, and shall make available to them any materials used in making that determination, within ten working days after reaching such determination;

3. The Director shall notify all affected Federal Land Managers and Federal officials within 30 days of receipt of any advance notification of any such permit application; and

4. The Director shall consider any analysis, provided by the Federal Land Manager within 30 days of the notification of preliminary determination required by this Section, that a proposed source may have an adverse impact on visibility in any Class I area.

C. When the Director finds that the analysis provided by the Federal Land Manager demonstrates to the satisfaction of the Director that an adverse impact on visibility will result in the Class I area, the Director shall not issue a Class A installation permit for the proposed major new source or major modification. The Director shall, within the public notice required by R18-2-301.K., either explain his decision or specify where the explanation can be obtained.

The Department recognizes that the form of visibility impairment in urban areas as well as its causes are frequently different than the problems facing Class I areas. The Department will soon be

adopting the Federal PM10 rules and, through SIP development, will be implementing control strategies that will affect urban visibility. The Department intends to study the change in urban visibility and continually evaluate the effects of the control strategies.

TOTAL SUSPENDED PARTICULATES

The Department intends to adopt the Federal standards for particulate matter 10 microns or less in diameter (PM10). The Department also intends to retain the current Total Suspended Particulates (TSP) rule as a secondary standard. Control of TSP sources will also result in control of PM10 and associated visible emissions. Retaining the TSP standard can result in savings to the Department and permitted sources, largely because the cost of ambient monitoring equipment and sampling for TSP is considerably less expensive than for PM10.