



Head of a bronze statue, "The Hiker," honoring soldiers of the Spanish-American War. One of 50 such statues in the U.S., this one, erected in Allentown, PA, in 1937, has suffered pitting on the face and streaking on the hat due to air pollution.

POLICY AND REGULATIONS

The Clean Air Act and National Parks

The Clean Air Act, 42 U.S.C. §§7401, *et. seq.*, augments the fundamental resource protection responsibilities of the National Park Service Organic Act with respect to the air quality and related values of park areas. Together, these authorities form the basis for the National Park Service's general policy of promoting and pursuing measures to safeguard the resources and values of units of the National Park System from the adverse impacts of air pollution.

The goal of the Clean Air Act (Act) is safe and acceptable ambient air quality through the attainment and maintenance of national ambient air quality standards. The "primary" standards are to protect the public health "with an adequate margin of safety," and the "secondary" standards are to protect the national "welfare"—defined to include the types of resources and values found in park areas—from all "known or anticipated adverse effects." These primary and secondary standards are air pollutant concentration levels set on the basis of scientific "criteria documents." The Environmental Protection Agency (EPA) has set national ambient air quality standards for six widespread pollutants: sulfur dioxide, particulate matter, carbon monoxide, ozone, nitrogen dioxide, and lead. State

and local governments may set additional, and more stringent, standards.

At any time, a particular area may be "cleaner" or "dirtier" than the standards for these pollutants. The Act supplements its nationwide goal of attaining and maintaining these standards with specific goals for these "clean" and "dirty" areas. For the clean areas of the country, the Act seeks to "prevent the significant deterioration" (PSD) of the air quality, particularly in areas of special natural, recreational, scenic, or historic value. For the "dirty" or "nonattainment" areas of the country, the Act demands that "reasonable further progress" be made toward the attainment and maintenance of the primary and secondary standards.

In pursuit of these standards as well as the PSD and nonattainment goals, the Act imposes various performance and emission restrictions on individual sources. The Act uses the State Implementation Plan process as the means to implement and enforce its goals and source restrictions.

The PSD title of the Act deserves particular discussion as a prime authority for protecting the resources of parks. In certain respects, Part C is a resource protection

statute. One of its purposes is "to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value." PSD addresses resource protection through the establishment of ceilings on additional amounts of air pollution over baseline levels in clean air areas, the protection of the air quality related values of certain special areas, and additional protection for the visibility value of certain special areas.

More specifically, Part C reflects Congress' judgment that, among the clean air regions of the country, certain areas—the "class I" areas—deserve the highest level of air quality protection under the Act. Congress designated 158 areas as class I areas, including national parks over 6,000 acres and national wilderness areas over 5,000 acres, in existence on August 7, 1977.

In these class I areas, once "baseline" is triggered by submission of the first permit application from a major new source, Part C allows only the smallest "increment" of certain pollutants—to date, only sulfur dioxide and particulate matter—to be add-

ed to the air. In addition to these increment ceilings, PSD also establishes a site-specific resource test, known as the "adverse impact" test, to determine whether emissions from major new sources will cause an "adverse impact" on the "air quality related values" of the class I area. In the case of a major new source (or expansion), the adverse impact test works as follows:

- If the Federal Land Manager determines, and convinces the permitting authority, that the new source will adversely impact the class I area's resources—even though the new source's emissions will not contribute to an increment violation—a "PSD permit" shall not be issued.
- If the Federal Land Manager certifies that the new source will not adversely impact the class I area's resources—even though the new source's emissions will contribute to an increment violation—the permitting authority may issue a "PSD permit."

The adverse impact test imposes an "affirmative responsibility" on the Federal Land Manager "to protect the air quality related issues (including visibility)" of class I areas, and, as the Senate committee wrote, "[i]n the case of doubt, . . . [to] err on the side of protecting the air quality related values for future generations." "Air quality related values" include all values of an area dependent upon and affected by air quality, such as scenic, cultural, biological, and recreational resources, as well as visibility itself. The current working definition of "adverse impact" is any impact that:

- Diminishes the area's national significance, and/or
- Impairs the structure and functioning of ecosystems, and/or
- Impairs the quality of the visitor experience.

In addition to increment ceilings and the adverse impact test, Congress enacted one more resource protection measure for class I areas, namely, "visibility protection" for the 156 (of 158) statutory class I areas where visibility is an "important value." In Part C of the Act, "Congress . . . declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I federal areas which impairment results from manmade air pollution." In this provision, Congress expressed the national desire to preserve, for its own sake, the ability to see long distances, entire panoramas, and specific features in the statutory class I areas. EPA is still developing the regulatory program to assure "reasonable progress" toward the national visibility goal. EPA has already issued regulations concerning new source review and visibility monitoring requirements, and is now working on regulations concerning "best available retrofit technology" for major existing sources that impair visibility in statutory class I areas as well as "long-term (10-15 year) strategies" for moving toward the national visibility goal. To date, EPA's rulemaking proposals have addressed only "plume blight" and

other visibility impairment "reasonably attributable" to a specific source or sources. EPA has not yet proposed regulations to address visibility impairment from "regional haze."

As the above discussion demonstrates, the Act creates several opportunities and tools for protecting the resources and values of class I areas. New pollution after baseline in class I areas is generally limited to the small class I increment, the Federal Land Manager must determine whether major new sources will adversely impact the areas, and measures must be developed to protect the visibility of class I areas from manmade pollution impairment. The States must develop their PSD plans with Federal Land Manager consultation and a public hearing. Major new sources must undergo an equally public permit review, involving air quality monitoring; analysis of resource impacts; application of "best available control technology;" and effective emission ceilings based on the class I increment, national ambient standards, adverse impacts threshold, or possibly visibility impairment threshold, whichever is the lowest. Existing sources may be regulated to protect visibility or to remedy a violation of an increment, national ambient standard, or arguably class I resource protection.

Part C's concern for resource protection, however, is not limited to class I areas. Congress designated all other clean air regions of the country "class II." Congress further prohibited redesignation not only of statutory class I areas to any other classification, but also of certain class II areas to the "dirtier" class III classification. These so-called class II "floor" areas include the following areas when greater than ten thousand acres: national monuments, national primitive areas, national preserves, national recreation areas, national wild and scenic rivers, national wildlife refuges, national lakeshores and seashores; as well as national parks and wilderness areas established since August 7, 1977. Class II increment ceilings on additional pollution over baseline concentrations allow for moderate development in class II areas. Class II increments constitute an absolute ceiling on additional pollution in these areas, because Congress did not qualify the class II increment with an adverse impact test.

Although the Act does not create as many resource protection tools for class II areas as for class I areas, it nevertheless creates opportunities. The Federal Land Manager can participate in State Implementation Plan proceedings, new source reviews, and other federal, State, and local activities that potentially affect the air quality of their areas. As appropriate, the land manager can undertake or encourage efforts to redesignate the area to class I. Also, for units of the National Park System, the land manager can turn to the Organic Act for protection of park purposes and values from adverse air pollution impacts.

At this time, there are no "class III" areas. States or Indian governing bodies have the authority to redesignate to class III any clean air area except a statutory class I or class II "floor" area. Class III designation could allow for substantial air pollution increases over baseline in the area. The redesignation process itself, as well as subsequent new source reviews, provide opportunities for land managers to have their air quality concerns considered.

For parks that are in, or affected by, the "dirty regions" of the country where the national ambient air quality standards have not yet been met, the PSD provisions do not apply. Instead, the "nonattainment" requirements apply. As with class II and III areas, the Act does not establish an explicit role (other than consultation) for the land manager, but it does require public proceedings at various times. For example, the State must hold a public hearing prior to promulgating a nonattainment implementation plan, which is a plan for attaining all national ambient air quality standards "as expeditiously as practicable," most primary standards by 1982, and primary standards for ozone and carbon monoxide by 1987. The nonattainment plan must demonstrate "reasonable further progress" toward the national ambient standards in the interim; provide for reasonable available control technology on sources in the area; analyze effects on air quality, welfare, health, society, and economics; and require a public hearing prior to issuing a permit for a new source. To obtain a permit, new sources in urban areas must secure from other facilities "emission offsets" greater than the new source's proposed emissions; in addition, a new source's control technology must comply with the "lowest achievable emission rate" for such a source.

As a final word about the Clean Air Act, the above discussion suggests many provisions that, directly or indirectly, can address many air quality concerns in parks. However, the Act—at least as currently interpreted or implemented—does not address all such resource protection concerns. For example, the Act often does not deal effectively with the following concerns:

- The individual and cumulative air quality impacts of sources not subject to PSD permit requirements, such as "minor" sources, sources located in nonattainment areas, existing sources, and sources located in foreign countries;
- Regional loadings of air pollutants; and
- Long-range transport of air pollutants.

Despite these problems, the Act provides several effective approaches to park resource protection. Essential to making the existing statutory authority work for the protection of the resources, however, is the gathering and development of the relevant scientific and technical information on which the legal system depends.

Molly Ross
Air Quality Division
Washington, D.C.