

CLEAN AIR ACT AMENDMENTS AND THE 97TH CONGRESS

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ISSUE DEFINITION

The Clean Air Act (CAA) has engendered much controversy. Its provisions to protect and enhance the quality of the nation's air have often proved difficult to administer and have at times appeared to conflict with other national priorities, especially economic growth and energy development. Critics charge that the Act imposes excessive red tape, leads to Federal interference in State and local decisionmaking, and imposes inefficient and unnecessarily stringent regulations.

Authorizations for the CAA expire at the end of fiscal year 1981. The reauthorization process has been seen by the Act's many critics as an opportunity for substantive amendments, although majority spokesmen of the legislating committees generally have spoken in terms of "finetuning" the Act rather than substantially overhauling it.

This issue brief reviews those proposed substantive amendments. It supplements issue brief 80078, Clean Air Act: An Overview, which summarizes the major provisions of the Act and establishes the context of the CAA issues.

BACKGROUND AND POLICY ANALYSIS

At the beginning of 1980, many congressional observers believed that amending the CAA would be one of the half-dozen major issues completed during the first session of the 97th Congress. That belief has vanished -- until now many speculate that the process is likely to extend into the 98th Congress. Nevertheless, the basic approaches to amending the Act are being defined today, and the first substantive amendments have been offered (H.R. 3471, dealing with statutory sources; and H.R. 4400, concerning mobile sources). Contrary to earlier expectations, it now appears the Administration is not going to prepare detailed, comprehensive CAA amendments; instead, the Administration has put forward a series of "principles" which it says should guide Congress in amending the Act.

All the proposals are likely to be judged against the report of the National Commission on Air Quality (NCAQ), which was created by the Clean Air Act Amendments of 1977 to review the working and success of the Act. Its membership included Senators, Congressmen, representatives of environmental groups, labor, industry, States, Indian tribes, and local governments, plus others chosen for their particular expertises. The Commission report, To Breathe Clean Air, contained 109 recommendations, touching every part of the Act and reflecting "a general conclusion that the structure of the Clean Air Act is sound and needs refinement instead of fundamental changes."

More substantive changes are proposed in H.R. 3471, sponsored by Representative Broyhill (an NCAQ commissioner, but he dissented in part from the report).

Major provisions of the NCAQ report and of H.R. 3471 and H.R. 4400 are summarized below. The Administration's principles are noted where appropriate.

NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

The achievement of NAAQS, which set limits on pollution levels in ambient air, is the most basic goal of the CAA. The Act requires the Administrator of EPA to set primary NAAQS at the level that, in his judgment, allows for an adequate margin of safety to protect public health; and similarly, to establish secondary NAAQS at a level to protect the public welfare.

National Commission on Air Quality. NCAQ recommended that the "current statutory criteria and requirements for setting air quality standards at the levels necessary to protect public health without consideration of economic factors should remain unchanged."

NCAQ further recommended that the EPA should continue to prepare analyses of the economic consequences of various levels considered (or of no standard). While these analyses would "include all reasonably identifiable costs and benefits to society together with any assumptions and uncertainties; they should not be used to determine whether or at what level the standards should be established."

H.R. 3471. The Broyhill bill would remove the requirement that primary standards allow "an adequate margin of safety ... requisite to protect the public health" and substitute language requiring primary standards be set at the level "requisite to protect the public health from significant risk of adverse health effects." In addition, the Administrator is to prepare and publish an impact assessment which shall include an analysis of exposure, the consequences of that exposure, and the costs of attainment.

For secondary standards, the Broyhill bill would change the level of protection from one of protecting "the public welfare from any known or anticipated adverse effects" to one of protecting "the public welfare from significant risks of any known or anticipated adverse effects." In addition, the bill would make "a comprehensive evaluation of the incremental costs and improvements in public welfare attributable to establishing such standard at various alternative levels" a basis for the standard chosen.

The CAA provides for an independent scientific review committee (the Clean Air Scientific Advisory Committee) to review the criteria documents on which NAAQS are based and to advise the Administrator on appropriate levels of NAAQS. H.R. 3471 would expand this committee to include representatives of industry and the Chairman of the Council of Economic Advisors and give the committee the power to veto air quality criteria. (The NCAQ would only remove the limit on the number of members of the committee.)

Administration. The Administration would maintain the basic concept of the health-based primary standards in the Act. Cost-benefit analysis should not be included as statutory criteria in setting these standards, but standards should be based on sound scientific data demonstrating where air quality represents real health risks.

Secondary standards would continue to be set at the Federal level.

DEADLINE FOR ATTAINMENT OF NAAQS

At present, the CAA provides that the primary NAAQS shall be achieved by

Dec. 31, 1982; except if an air quality control region cannot attain the primary ambient air quality standards for ozone or carbon monoxide by then, the deadline may be extended to Dec. 31, 1987. To qualify for an extension, additional pollution abatement measures, such as vehicle inspection and maintenance programs, are required.

National Commission on Air Quality. The NCAQ would remove the 1982/1987 deadlines and substitute a requirement that each State develop a plan to meet NAAQS "as expeditiously as practicable."

Each State would have to set a deadline for when it intends to meet NAAQS, but that date would not be reviewable or Federally enforceable. Every three years EPA and the State would review the plan and the deadline. EPA could require the adoption of "reasonably available control technology in states not meeting air quality standards and failing to require that technology or equivalent measures."

H.R. 3471. The Broyhill bill would require existing NAAQS to be attained "as expeditiously as practicable, (but no later than December 31, 1990)."

Administration. The Administration principle says that deadlines for achieving primary air quality standards should be adjusted to reflect realities in particular areas.

TECHNOLOGY-BASED STANDARDS--NSPS/BACT/LAER

The CAA sets a series of technology-based standards for new or modified sources of air pollution. These standards include: (1) New Source Performance Standards (NSPS), which are EPA-set generic standards for categories of industries; they represent the best technology of continuous emissions control that, taking costs into account, the Administrator finds adequately demonstrated. (2) Best Available Control Technology (BACT), which is determined by the States on a case-by-case basis and is imposed on sources in "prevention of significant deterioration" (PSD) areas and on new sources for which no NSPS has been set. (3) Lowest Achievable Emission Rates (LAER), which are determined by States and imposed on sources in "nonattainment" areas. BACT and LAER may be more stringent than NSPS, but not less so. The paperwork associated with the case-by-case determinations of BACT and LAER, and the fact that they often differ little from NSPS, have been frequent criticisms of the Act.

In addition, the law specifies in its definition of NSPS that emissions from fossil fuel fired stationary sources must achieve a "percentage reduction" from the emissions that would have occurred from those sources if the fuel had been burned straight from the mine. This requirement means that a source cannot meet its sulfur oxides emission limitation simply by burning low-sulfur coal. Instead, whatever the sulfur content of the fuel, the standard requires that the emissions be reduced by some proportion.

National Commission on Air Quality.

The NCAQ recommended that:

- the "new source performance standards program should be retained" (including the percentage reduction requirement);

- BACT for PSD areas be retained (except that smaller facilities could use NSPS); and
- LAER be eliminated and BACT substituted (except for small facilities which would meet the NSPS standard).

In effect, the three technology standards would be reduced to two -- NSPS and BACT -- and the technology requirements for sources in PSD and nonattainment areas would be made identical.

H.R. 3471. The Broyhill bill would eliminate the BACT and LAER requirements and substitute NSPS requirements for sources in both PSD and nonattainment areas. Only sources for which no NSPS had been set would go through a case-by-case BACT review. Thus the three standards would be reduced to one for all sources for which a NSPS had been set.

In addition, the Broyhill bill would repeal the provisions of the CAA requiring a "percentage reduction" of emissions from fossil fuel fired stationary sources.

Administration. The Administration says that except for needs to protect pristine areas like national parks, protection should be based on uniform technology requirements for pollution control.

In addition, pollution control standards for new coal-fired plants should be based on uniform emissions standards, rather than "percentage reduction," and environmental protection should be the criterion.

10-YEAR GRANDFATHER

The Clean Water Act includes a "grandfather" provision providing that once a new source is in compliance with applicable requirements, it shall not be subjected to more stringent requirements for 10 years or the amortization period, whichever is less. The CAA does not include such a provision.

National Commission on Air Quality. The NCAQ recommended that a 10-year grandfather provision be added to the CAA.

H.R. 3471. The Broyhill bill establishes a 10-year grandfather by adding a new section to the CAA. The amendment would provide that a stationary source meeting all applicable emission limitations and standards in effect at the time of construction or modification would not be subjected to any other emission limitation or standard for 10 years -- except in the cases of a clear and imminent danger to public health or of a new NAAQS being established.

HAZARDOUS AIR POLLUTANTS

The CAA provides for national emissions standards for hazardous air pollutants (NESHAPs) for which NAAQS are not appropriate. Relatively few NESHAPS have been issued, however, and some of these have been controversial. Issues debated include whether the statute's provisions are inefficacious, whether EPA has been lax in implementing its provisions, or, alternatively,

whether EPA has been too stringent and too inflexible in its approach.

National Commission on Air Quality. The NCAQ recommended that EPA accelerate its program of identifying hazardous air pollutants and of determining whether they should be regulated. It further recommended that Congress investigate how to speed up the process, and in addition recommended that EPA be authorized to require immediate implementation of economical, readily available controls and set technology-based standards.

H.R. 3471. The Broyhill bill would require that the Clean Air Scientific Advisory Committee review the evidence upon which a hazardous emission was proposed to be listed for regulation.

Administration. The Administration's principle says that a more effective hazardous pollutant program should be established to allow, for the first time, efficient control of the serious health hazards posed by airborne toxic pollutants.

PREVENTION OF SIGNIFICANT DETERIORATION

The CAA provides for the "prevention of significant deterioration" (PSD) of air quality in areas where the air is cleaner than required by the NAAQS. At present, PSD applies only to particulates and sulfur dioxide, but the CAA provides for the future PSD regulation of other criteria pollutants. The Act regulates PSD by requiring such areas to be designated into three classes and specifying increments of pollution that can be emitted into each, ranging from very little (Class I) up to essentially the secondary NAAQS (Class III). Major new and modified sources must undergo preconstruction review and obtain a permit to ensure emissions will not exceed the area's increment. Sources subject to review are determined by their potential to emit. Major issues include the complexity of the requirement, the delays it may cause, and the possibility it would foreclose construction of needed energy facilities.

National Commission on Air Quality. The NCAQ made numerous recommendations for simplifying and reducing the impacts of the PSD process. These include:

- decreasing the number of modified facilities that would be subject to PSD review by raising the level of emissions triggering review;
- making discretionary the requirement for one-year's monitoring during preconstruction review;
- retaining BACT, but allowing NSPS for smaller facilities;
- revising the PSD classes as follows: Class III would be eliminated, and only limited areas would be included in Class II (those which cannot be redesignated as Class III under the current Act -- e.g., large national monuments--and those which States or Indian tribes designate). Thus lands classified for PSD regulations would be limited to "special" areas. Short-term Class II increments would no longer be tracked, although major sources subject to PSD review would have to demonstrate they would exceed neither the short-term increments nor the annual increment. The existing Class I increment system would be retained, with additional authority for

Federal land managers in Class I areas to monitor for effects of new pollution sources on air quality.

- retaining the current visibility protection requirements, and adding coal surface mining to the sources subject to visibility standards.

H.R. 3471. The Broyhill bill would implement some of the NCAQ's PSD recommendations, such as making discretionary the monitoring required for preconstruction review, but in many cases it would go further in the effort to reduce paperwork and to ease the burden of the PSD program. The bill proposes:

- raising the level at which emissions would trigger PSD review of modified sources even higher than recommended by NCAQ;
- equating BACT with NSPS, as previously described;
- eliminating most increments in a two-Class PSD system (retain Class I, but eliminate the short-term increments; classify all other areas Class II and make the upper level of allowable pollution equal to NAAQS) -- plus adding a provision permitting the violation of NAAQS in certain cases where the risks are small and the costs of additional controls would be significant;
- adding a provision allowing "enforceable emission offset credits or other enforceable alternative control measures" which result in net emissions being no higher than if the source itself met emission requirements;
- Repealing the requirement that PSD regulations for criteria pollutants other than sulfur dioxide and particulates contain specific measures at least as effective as the class-increment system; and
- prohibiting visibility regulations until EPA submits a study to Congress on the causes and extent of visibility impairment.

Administration. The Administration's principle is that while the current program for the prevention of significant air quality deterioration should be maintained for the protection of park and wilderness areas (Class I), in other areas, protection should be based on uniform technology requirements for pollution control (presumably NSPS). NONATTAINMENT

The CAA establishes additional requirements for air pollution control in nonattainment areas -- those in which one or more NAAQS is not yet attained. These requirements include annual incremental progress through the imposition on existing sources of reasonably available control technology; preconstruction review of major new or modified sources and imposition of LAER; and, for areas seeking a deadline extended to 1987, establishment of vehicle inspection and maintenance programs.

National Commission on Air Quality The NCAQ would repeal the 1982/1987

deadlines and substitute a process in which each State sets its own, nonreviewable, deadline; and every three years EPA and the State would assess progress towards achievement of NAAQS (see the discussion above under DEADLINES). LAER would be replaced by NSPS, as previously noted. In addition, the NCAQ recommended

- requiring vehicle inspection and maintenance only in urban areas with populations greater than 500,000 and where peak 1981 air pollution levels exceed ozone and CO standards by 50%;
- making discretionary (instead of mandatory) transportation control measures in ozone and CO plan revisions;
- replacing the present system of sanctions through withholding grants in areas not meeting the Act's requirements by a graduated system of sanctions, with EPA having discretion in their imposition; and
- allowing new sources in nonattainment areas to pay a fee in lieu of obtaining an offset, with the fee to pay for reductions in other emissions of the same pollutant.

H.R. 3471. Although the Broyhill bill would extend the date for achieving NAAQS (to December 31, 1990) instead of eliminating the deadline as recommended by NCAQ, it generally goes further in reducing requirements. The bill proposes

- repealing LAER, as described previously;
- repealing the requirement that State Implementation Plans be approved before new or modified sources can be constructed in nonattainment areas;
- specifying that cost be considered in determining "reasonably available control technology" required on existing sources in nonattainment areas;
- repealing the sanctions of withholding various Federal grants (sewer, highway) for failure to achieve NAAQS or to prepare an approved plan; and
- repealing the requirement that transportation controls be imposed, and permit transportation controls and vehicle inspection and maintenance programs in approved implementation plans to be dropped by the governor of a State without any penalty.

Administration. While none of the principles specifically refer to nonattainment areas, three of them are relevant: the adjustment of deadlines to reflect realities in particular areas, the basing of protection on uniform technology requirements (presumably replacing LAER with NSPS), and the general exhortation that statutes and regulations should be reasonable and should be related to the economic and physical realities of the particular areas involved.

STATE IMPLEMENTATION PLANS

The mechanism for carrying out the achievement of NAAQS and the PSD and nonattainment programs is the State Implementation Plan (SIP). The CAA is quite specific about what a SIP must contain and how it is to be approved. Many of the procedures and requirements have been criticized as ineffective, unnecessarily complex, or requiring duplicative efforts of Federal and State governments.

National Commission on Air Quality. The NCAQ recommended that EPA, together with State and local agencies, should submit to Congress "an analysis of whether all current state implementation plan requirements should continue to be subject to Federal rulemaking and enforceability. Congress should then consider appropriate revisions...."

Specific NCAQ recommendations include

- where State requirements are consistent with Federal requirements for notification and hearing procedures, requiring EPA to base its assessment of a SIP revision on the State hearing record and making EPA's failure to act on a SIP revision within 90 days automatic approval (no deadline under current law);
- allowing States that establish a permit program to do so in a generic regulation; and
- limiting EPA's review of permits issued under generic regulations, and making failure to act within 90 days constitute automatic approval.

H.R. 3471 The Broyhill bill not only contains provisions similar to the specific NCAQ ones, but also adds several others designed to give the States greater authority and flexibility:

- extending from 90 days to 3 years the time a State may develop a SIP for a new pollutant;
- permitting the State in emergencies to suspend SIP requirements for 14 days without EPA approval;
- allowing the governor of a State to delete transportation control and vehicle inspection and maintenance programs from approved SIPs without penalty; and
- establishing a new State permitting program.

Administration. The Administration's principle is that States should be accorded a full partnership in implementing the nation's standards, and the Federal Government should monitor State achievement of national health and welfare standards. MOBILE SOURCES

The Clean Air Act establishes emission limitations for automobiles and other mobile sources.

National Commission on Air Quality. The NCAQ recommended that most existing mobile source standards be retained. The only significant modification would be increasing the automobile carbon monoxide standard from 3.4 grams per mile to 7.0 grams per mile through 1986, and giving EPA discretion on the appropriate level between 3.4 and 7.0 grams after that date.

The NCAQ recommended that the "high altitude" provisions of the Act be continued with revisions, including extending high altitude standards to light trucks.

H.R. 4400. The Traxler bill is a comprehensive revision of the mobile source provisions of the CAA (Title II). Major effects of its amendments are the easing of emissions standards, providing more opportunities for innovative technology waivers, ensuring manufacturers' leadtime to meet standards, and establishing a two-car strategy for meeting standards at high altitudes.

- Standards: hydrocarbons - change present 0.41 grams/mile to 0.39, but exclude methane emissions from consideration; carbon monoxide - raise present 3.4 grams/mile (with some waivers possible for 1981-1982 models) to 7.0; nitrogen oxides - raise present 1.0 grams/mile (with some waivers for innovative technology and diesels available to 1985) to 2.0.
- Waivers: expands the opportunities for waivers, providing that upon petition of any manufacturer, the Administration "shall" issue a waiver of any standard for up to four years as necessary for use of innovative technology (provided public health would not be endangered). The waiver could apply to as many as 500,000 vehicles or engines of each such model.
- Leadtime: adds a provision giving a manufacturer a three-year leadtime between issuance of a standard and compliance date for autos and light trucks and a four-year leadtime for heavy duty vehicles.
- High altitude requirements: prohibits any requirement that special pollution control technologies on cars certified for high altitude areas be placed on all cars; and eases the level of emissions that high-altitude cars must meet (by making the standard a percentage reduction of what the high-altitude emission would be rather than the level that a low-altitude car would achieve).

Administration. The Administration's principle concerning mobile source controls says that automobile standards should be adjusted to more reasonable levels, as suggested by the NCAQ -- with the note that the limit for nitrogen oxide could be raised to a level slightly higher than that suggested by the NCAQ without affecting air quality goals.

The CAA does not provide for the regulation of indoor air pollution.

National Commission on Air Quality. The NCAQ recommends statutory clarification of Federal jurisdictions over research, monitoring, and regulation of indoor air quality in non-industrial settings.

H.R. 3471. The Broyhill bill does not address this issue.

ATMOSPHERIC TRANSPORT

The interstate transport of air pollution has become an increasingly difficult issue, as some States gather evidence that their failure to achieve NAAQS results from pollution emitted from beyond their borders. Also, long-range transport of pollutants is believed to contribute significantly to the "acid rain" problem.

National Commission on Air Quality. The NCAQ made several recommendations to strengthen the CAA with respect to interstate pollution. It recommended modifying sections 110(a)(2)(E) and 126 to provide additional authority for identifying and controlling interstate pollution; congressional consideration of regional secondary standards; expanded monitoring; and a "significant reduction in the current level of sulfur dioxide emissions in the Eastern United States."

H.R. 3471. The Broyhill bill would change the present acid precipitation study program mandated in the Energy Security Act from 10 years to 5 years.

Administration. The Administration's principle is that research on acid deposition should be accelerated.

SUMMARY

The Administration's "basic principles" concerning amendments to the CAA are very general for the most part, implying greater flexibility, and more reliance on the States, and simpler requirements. It would appear that H.R. 3471 and H.R. 4400 are consistent with the tenor of the Administration principles, though the Administration has not endorsed any specific bills or legislative language yet.

While both the NCAQ recommendations and the H.R. 3471 amendments focus on simplifying and easing the regulatory burden of the CAA, there are some significant differences between them in approach and in how far they go.

Except for eliminating the deadlines for achieving NAAQS, the NCAQ recommendations generally make more modest changes in the Act. For several stringent requirements -- e.g., the sanction of withholding from States selected Federal grants if certain CAA provisions are not met -- the NCAQ recommended giving EPA discretion on their use while H.R. 3471 would repeal the requirements entirely. Where the NCAQ retained the NAAQS-setting process with its "margin of safety," H.R. 3471 repeals the "margin of safety" language and makes protection against "significant risk" the standard. Where the NCAQ recommended keeping BACT and retaining the NSPS "percentage reduction" requirement, H.R. 3471 would eliminate both (keeping BACT only for

sources for which NSPS have not been set). Where NCAQ would require transportation controls in limited circumstances, H.R. 3471 would eliminate the transportation control requirement. H.R. 4400 appears to go somewhat further than the NCAQ's recommendations concerning mobile source controls, for example in the easing of the NOx standard.

LEGISLATION

H.R. 3471 (Broyhill, et al.)

Amends the Clean Air Act to revise air pollution control standards and procedures. Authorizes appropriations to carry out such Act. Amends the Energy Security Act to revise acid precipitation research plan provisions. Introduced May 6, 1981; referred to House Committee on Energy and Commerce; referred to Subcommittee on Health and the Environment May 7, 1981.

H.R. 4400 (Traxler et al.)

Amends the Clean Air Act. Introduced Aug. 4, 1981; referred to Committee on Energy and Commerce.

REPORTS AND CONGRESSIONAL DOCUMENTS

U.S. National Commission on Air Quality. To breath clean air.
Washington, U.S. Govt. Print. Off., 1981. 356 p.

CHRONOLOGY OF EVENTS

03/01/81 -- National Commission on Air Quality issued its report,
To Breath Clean Air.

08/07/77 -- Clean Air Act Amendments of 1977 -- P.L. 95-95.

12/31/70 -- Clean Air Act Amendments of 1970 -- P.L. 91-604.

