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BY THE COMPTROLLER GENERAL Report To The Chairman, Subcommittee On Oversight And Investigations, Committee On Energy And Commerce House Of Representatives OF THE UNITED STATES

# EPA's Sanctions Policy Is Not Consistent With The Clean Air Act

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In mid-1983, in response to congressional and state concerns, the Environmental Protection Agency (EPA) withdrew proposed construction bans on facilities that would create major sources of pollution for areas that were not in compliance with certain national air quality standards. GAO believes that this relaxation of EPA's sanctions policy is inconsistent with the Clean Air Act. It conforms, however, with language in EPA's appropriation for fiscal year 1984 that limited EPA's ability to impose new construction bans in 1984. This inconsistency has created uncertainties regarding EPA's enforcement of the act.

To help clarify this inconsistency, GAO recommends that the EPA Administrator either (1) develop and implement a policy to provide sanctions for areas not attaining air quality standards by the deadlines specified in the Clean Air Act or (2) seek legislative relief from the applicable Clean Air Act provisions which, in GAO's view, require imposition of such sanctions.



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## B-208593

The Honorable John D. Dingell Chairman, Subcommittee on Oversight and Investigations Committee on Energy and Commerce House of Representatives

Dear Mr. Chairman:

As requested in your May 10, 1983, letter and according to our subsequent discussions with your office, this report discusses the Environmental Protection Agency's efforts to implement the Clean Air Act's attainment deadlines and sanctions. We examined the development of policies to enforce the December 31, 1982, attainment deadline and ban the construction of major pollution sources in areas not meeting the deadline or other Clean Air Act requirements.

As arranged with your office, unless you publicly release its contents earlier, we do not plan to distribute this report until 30 days after the issue date. At that time we will send copies to interested parties and make copies available to others upon request.

Sincerely yours,

Charles A. Bowsher Comptroller General of the United States

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COMPTROLLER GENERAL'S REPORT TO THE SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES EPA'S SANCTIONS POLICY IS NOT CONSISTENT WITH THE CLEAN AIR ACT

## <u>DIGEST</u>

According to the Clean Air Act, the Environmental Protection Agency (EPA) and the states are responsible for controlling and preventing harmful air pollution. A significant part of this responsibility has focused on approximately 600 counties or portions thereof that have required additional time to meet one or more of the air quality standards established by EPA. These counties, with a combined population of approximately 150 million people, are called "nonattainment areas."

The Congress amended the Clean Air Act in 1977 to address the nonattainment area problem. For each of these areas, the act required the states to

- --revise and submit to EPA by January 1, 1979, their implementation plans for attaining the standards;
- --have EPA's approval of these plans by June 30, 1979;
- --meet the air quality standards no later than December 31, 1982. Areas with recognized problems in meeting two of the air quality standards (ozone or carbon monoxide) were given until December 31, 1987, to reach attainment.

Nonattainment areas in states not meeting any of these deadlines were subject to economic sanctions, which included (1) banning construction or modification of factories or other facilities that would be major sources of additional pollution and/or (2) a reduction of certain EPA grants and those federal highway grants for activities that might contribute to increased air pollution.

In response to a request from the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, GAO

**Tear Sheet** 

GAO/RCED-85-121 SEPTEMBER 30, 1985 reviewed (1) the legality and appropriateness of EPA's sanctions policy for areas not meeting the air quality standards and (2) the effect of the construction ban in areas where it has been in force for several years. (See ch. 1.)

## ASSESSMENT OF EPA'S SANCTIONS POLICY

In mid-1982, EPA began developing a sanctions policy for nonattainment areas that were facing the December 31, 1982, deadline. EPA reviewed its legal obligations and the consequences for areas not meeting the deadline and classified the areas into two categories according to their likelihood of meeting the December 31, 1982, deadline. (See ch. 1.)

The classification process involved analyzing state implementation plans and the available air quality data for 474 areas that had not met the standards in early 1982. EPA identified 330 areas that it believed could achieve attainment by the deadline and 144 areas that were unlikely to achieve attainment or that had various implementation plan inadequacies. In February 1983 EPA announced that it would impose construction bans against these 144 areas. (See ch. 2.)

However, based on the concerns of Members of the Congress and the affected states, EPA reanalyzed its position and announced a change on June 23, 1983. Instead of imposing sanctions in the 144 areas, EPA said that it would call for revised state implementation plans and approve new deadlines for meeting the standards. (See ch. 2.)

At about the same time, the Congress added a provision to the Department of Housing and Urban Development-Independent Agencies Appropriations Bill for fiscal year 1984 that prohibited EPA from imposing sanctions in areas having approved implementation plans, even if the plans would not result in attainment of the air quality standards. The provision applied only to fiscal year 1984 and did not prohibit sanctions in nonattainment areas that did not have approved implementation plans. (See ch. 2.) EPA's sanctions policy has not changed since June 1983 and continues to be consistent with the specific limitation contained in the Appropriation Act for fiscal year 1984. The policy emphasizes designing and submitting plans that can be approved, as contrasted with implementing the measures necessary to meet the standards.

An unresolved problem remains, however, because, in GAO's view, EPA's current policy conflicts with the provisions of the Clean Air Act that require the automatic imposition of sanctions once it is established that an area is in nonattainment.

## EFFECT OF THE CONSTRUCTION BAN APPEARS TO BE LIMITED IN AREAS STILL UNDER THE BAN

Before the controversy over EPA policy for dealing with areas that did not meet the December 31, 1982, deadline, EPA had imposed sanctions in over 400 nonattainment areas during 1979 and 1980 because Clean Air Act deadlines were not met. As of April 1985, the ban remained in effect in about 75 of the areas where it was imposed. (See ch. 3.) The ban, however, appears to have had little effect on these areas. According to federal and state program officials, this was due primarily to the sluggish economy during the early 1980's when little construction was planned. Other factors that contributed to the limited effect of the ban are:

- EPA originally designed the ban so that it would have limited application by

   (a) making it apply to new rather than pending construction permit applications,
   (b) allowing conditional approval of implementation plans, based upon the state providing additional information or regulations, and (c) narrowly defining the problem pollutants and areas included.
   (See ch. 3.)
- Although the ban applied to facilities that emitted 100 tons or more of a pollutant each year, some companies were still able to construct facilities by designing the size of the construction project so that the emissions would be below the 100-ton level. (See ch. 3.)

Tear Sheet

3. Federal and state program officials advised GAO that the ban has had limited impact on carbon monoxide emissions because it applies to stationary sources, such as factories and plants, and most carbon monoxide comes from mobile sources, such as cars or trucks. (See ch. 3.)

#### RECOMMENDATION TO THE ADMINISTRATOR, EPA

While EPA's current sanctions policy conforms to the direction provided by the Congress in the 1984 Appropriations Act, it is inconsistent with the Clean Air Act. Subsequent appropriations bills have not contained similar direction nor have the sanction provisions of the Clean Air Act been amended. To resolve this inconsistency, GAO recommends that the EPA Administrator either (1) develop and implement a policy to provide sanctions for areas not attaining air quality standards by the deadlines specified in the Clean Air Act or (2) seek legislative relief from the applicable Clean Air Act provisions which, in GAO's view, require imposition of such sanctions.

### AGENCY COMMENTS

GAO discussed the program activities identified in this report with EPA program, state, and local officials. However, GAO did not obtain the views of these officials on the report's conclusions and recommendations, nor did it request official agency comments.

## DIGEST

CHAPTER

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## ABBREVIATIONS

СО	Carbon monoxide
EPA	Environmental Protection Agency
GAO	General Accounting Office
NAAQSs	National Ambient Air Quality Standards
OAQPS	Office of Air Quality Planning and Standards
OMB	Office of Management and Budget
SIP	State Implementation Plan

#### CHAPTER 1

#### INTRODUCTION

Under the Clean Air Act, as amended, the Environmental Protection Agency (EPA) and the states are responsible for controlling and preventing harmful air pollution. EPA establishes air quality standards to protect public health and welfare, conducts research, and provides technical and financial assistance to state and local governments for air pollution control. States develop plans describing how they will control pollutant emissions from vehicles and factories in order to meet and maintain air quality standards. A significant part of the program has been concerned with "nonattainment areas"--approximately 600 counties or portions of counties across the nation that have not achieved one or more of the air quality standards. According to EPA, 150 million people live in such areas.

According to the Clean Air Act Amendments of 1977, states with nonattainment areas must comply with planning and control requirements designed to meet the standards by certain deadlines. If states fail to meet the requirements or the deadlines, they become subject to the act's economic sanctions. The sanctions are directed toward curtailing major industrial expansion and certain EPA grants and those federal highway grants for activities that might contribute to increased air pollution.

EPA has imposed the sanctions in nonattainment areas, and some have remained in effect for several years. Moreover, in early 1983, EPA proposed sanctions against many states because they did not meet the act's December 31, 1982, attainment deadline or because they had not fulfilled some of their planning requirements.

This report addresses EPA's nonattainment area program and the issue of applying and enforcing the act's economic sanctions. The information is being provided at the request of the Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, to assist in its oversight of EPA activities.

### HISTORY OF THE NONATTAINMENT AREA PROGRAM

In the Clean Air Act Amendments of 1970 (Public Law 91-604), the Congress made EPA responsible for administering a combined federal-state program to control air pollution. The heart of the program was EPA's establishing National Ambient Air Quality Standards (NAAQSs) as pollution-level limits necessary to protect

the public health and welfare.<sup>1</sup> Under the 1970 amendments, each state had to submit, for EPA's approval, a state implementation plan (SIP) containing pollution control strategies designed to attain the NAAQSs within 3 years of the SIP's approval. Also, the 1970 amendments required substantial nationwide attainment of the NAAQSs by mid-1975, but not later than mid-1977.

Because of inadequate state regulation and industry violations, many states did not meet the NAAQSs by mid-1977; consequently the Congress amended the Clean Air Act. The Clean Air Act Amendments of 1977 (Public Law 95-95) provided states with nonattainment areas a further opportunity to comply with the NAAQSs by extending the attainment deadline to December 31, 1982. However, the Congress sought to ensure that the NAAQSs would be met by the new deadline by specifying requirements that it believed would most likely result in eventual attainment. The states and EPA had to identify all areas not meeting the NAAQS, and states had to prepare SIP revisions for nonattainment areas that would meet "Part D" requirements of the act that were added to Title I of the Clean Air Act by the 1977 amendments.

Under Part D, EPA required SIP revisions for nonattainment areas from the states by January 1, 1979. The revised SIPs had to provide for attaining NAAQSs "as expeditiously as practicable," and for health-related standards not later than December 31, 1982. Each SIP revision had to provide for, among other things, (1) the adoption of all reasonably available control measures as expeditiously as practicable, (2) reasonable further progress toward attainment during the interim period, (3) the adoption of reasonably available control technology, (4) a comprehensive inventory of the sources emitting the problem pollutant, and (5) a permit system for construction and operation of new or modified major pollution sources.

Nonattainment areas with severe carbon monoxide or ozone problems were granted a December 31, 1987, deadline for either or both of these pollutants if attainment by December 31, 1982, was not possible. If the additional extension for carbon monoxide or ozone was not necessary, however, then the attainment deadline for these pollutants was also December 31, 1982.

To ensure against jeopardizing the new attainment deadlines by further delays in planning and implementation, the Congress specified a precise schedule to be followed. The nonattainment areas were to be identified and listed by early 1978; SIP revisions for nonattainment areas were required from the states by

<sup>&#</sup>x27;NAAQSS subject to the Clean Air Act's attainment deadlines are for carbon monoxide, ozone, nitrogen dioxide, sulfur dioxide, and total suspended particulates. EPA established an NAAQS for lead in October 1978, for which attainment deadlines are being separately established. (See app. I.)

January 1, 1979; and the revisions were to be approved by EPA and implementation begun not later than July 1, 1979.

The Clean Air Act also imposed a construction moratorium on states that failed to either prepare adequate nonattainment area SIP revision or implement approved SIP provisions. The moratorium applied to major new construction or modification of sources of pollutants in nonattainment areas. The Congress also provided for the withholding of certain EPA and federal highway grants from nonattainment areas that failed to meet the act's Part D requirements.

EPA imposed the sanctions in nonattainment areas during 1979 and 1980 because the plan revision deadlines were not met and because two states were not making reasonable efforts to develop adequate plans.

## EPA's efforts to administer the act's December 1982 attainment deadline

In mid-1982 EPA considered how it would administer sanctions in nonattainment areas that would not meet the December 31, 1982, deadline. EPA proceeded on the basis of what was described as a "two-tier" approach.

Under the two-tier approach, counties that EPA judged likely to be in compliance could avoid the sanctions, while other counties judged likely to not be in compliance would be subject to the sanctions. On this basis, EPA announced its policy and proposed sanctions against many states in January-February 1983. This generated widespread concern among the affected states and the Congress about whether EPA had interpreted the act's requirements too strictly or whether the agency could have adopted a more flexible approach.

Because of the concern, EPA reviewed its sanctions policy for nonattainment areas in mid-1983. The agency subsequently modified its position and gave the states additional time to correct their planning or implementation deficiencies and establish revised attainment deadlines.

#### OBJECTIVES, SCOPE, AND METHODOLOGY

In a May 10, 1983, letter, the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, asked us to examine EPA's authority and procedures for determining whether nonattainment areas could demonstrate attainment by December 31, 1982, and EPA's enforcement of the construction moratorium where it had been imposed and remained in effect. The specific objectives of our examination were to

- --review the legal basis for and provide our opinion on EPA's two-tier approach to nonattainment areas, including an examination of the technical and other procedures EPA followed, to determine the adequacy and reasonableness of EPA's determinations on attainment;
- --review EPA's actions since December 1982 concerning enforcement of the December 1982 attainment deadline, noting particularly the role of the Office of Management and Budget (OMB) in EPA's efforts to enforce the law and impose sanctions and the role of past and new senior EPA officials in this matter; and
- --examine the effectiveness of EPA's enforcement of the construction moratorium in areas of 13 states EPA listed in February 1983 as still being under the construction ban.

We performed our work primarily at EPA's headquarters in Washington, D.C.; its Office of Air Quality Planning and Standards in Durham, North Carolina; and its regional offices in Atlanta, Georgia, and Chicago, Illinois. (EPA has 10 regional offices.) We also performed work at seven States--Alabama, Georgia, Illinois, Indiana, Kentucky, Michigan, and Ohio--and held telephone interviews with other EPA regional office and state and local officials as we considered appropriate. We selected the two EPA regions for our field work because of their proximity to our regional staffs and because they would allow us to get a first-hand verification and analysis of regional office participation in the two-tier process and review a cross-section of nonattainment areas. From the cross-section of nonattainment areas, we randomly selected 24 in each region for detailed examination. We selected the areas in each region in proportion to the number of areas EPA classified in the two-tier process. This procedure allows our analysis to be generalized across the two regions, but these results cannot be projected to all regions.

To review the legal basis and procedures for EPA's two-tier process, we examined EPA's guidance, rules, and proposals for the nonattainment program, and the development and implementation of the process for classifying areas into two categories. We also examined other public and internal EPA materials made available on the program and interviewed EPA program managers and officials. We visited states and local jurisdictions to gather information on and perceptions of EPA's nonattainment program and the two-tier process. In gathering and examining the information and data, we considered the impacts of enforcement of the December 1982 deadline and the roles of the OMB and different EPA senior officials.

To examine EPA's enforcement of the construction moratorium, we met with EPA's Director, Stationary Source Compliance Division, in Washington, D.C., and his regional counterparts in Atlanta (EPA Region IV) and Chicago (EPA Region V) to discuss EPA's general policies and procedures governing the enforcement of the construction ban. In addition, we collected similar information through telephone interviews with the appropriate regional air enforcement officials in the other eight EPA regions. Our objectives at the state/local levels were to determine how the ban is being enforced where it has been imposed and to gather information on (1) whether permits have been denied as a result of the ban or (2) whether permits have been issued in violation of the ban. On the basis of our audit work in this area, we also updated the status of the construction ban to April 1985. At the time of our review the ban was in effect in about 85 areas nationwide, and 56 of these areas were in Regions IV and V.

In discussing ban enforcement with EPA and state officials, they often mentioned that a slow economy had lessened the impact of the construction ban on new construction in areas where it remains in effect. We did not attempt to measure that impact because such an analysis would be beyond the scope of this report. Nevertheless, we have summarized in the report the views of those officials.

We discussed the EPA activities covered in the report with agency program officials and with state and local officials and have included their comments where appropriate. However, in accordance with the requester's wishes, we did not obtain the views of responsible officials on our conclusions and recommendations, nor did we request official agency comments on a draft of this report. Except as noted above, our work was performed in accordance with generally accepted government auditing standards. We conducted our review from mid-1983 through December 1984.

#### CHAPTER 2

#### ASSESSMENT OF EPA'S SANCTIONS POLICY

### FOR ENFORCING ATTAINMENT DEADLINES

As the June 30, 1979, deadline for having approved SIP revisions approached, EPA realized that very few of the states were going to meet it. Therefore, EPA published a rule imposing the Clean Air Act's construction moratorium on all affected nonattainment areas effective on July 1, 1979. Later, EPA also determined that two states were not making reasonable efforts to fully develop their 1979 SIP revisions and imposed federal funding restrictions on those states until reasonable progress was demonstrated.

Prior to 1982, however, neither the act nor EPA had established a process to determine whether the nonattainment areas had achieved attainment by the act's December 31, 1982, deadline. Thus, in mid-1982, EPA began developing a sanctions policy and rules for nonattainment areas facing the deadline. This activity included (1) deciding on the legal obligations and consequences for areas not meeting the deadline and (2) classifying the areas according to the extent of their compliance with program requirements. The policy and rules were published in early 1983 and were generally in accord with the act's requirements.

EPA's early 1983 sanctions policy received much public and congressional criticism because it proposed a construction moratorium on areas which did not meet attainment by the December 1982 deadline but had SIPs that were fully approved. Many commenters on EPA's sanctions policy, including the Congress, believed that it penalized those states and areas that had made good-faith efforts and that the proposed construction moratorium would damage them economically. Hence, in mid-1983, the Congress passed an act that prohibited EPA from using appropriated funds in fiscal year 1984 to impose the construction moratorium on nonattainment areas with approved SIPs. Also in mid-1983, a new EPA administration reassessed its policy and decided to give the nonattainment areas more time to correct their problems and avoid the act's economic restrictions. The essence of EPA's revised policy will be to extend the attainment deadline for all nonattainment areas to 1987 or later. The revised policy, published in the Federal Register on November 2, 1983, is currently governing the administration of the nonattainment area program.

## EPA'S CONSTRUCTION BAN POLICY FOR EARLY PROPOSED MANDATORY SANCTIONS ON THE BASIS OF PREDICTED NONATTAINMENT

EPA's sanctions policy for nonattainment areas facing the December 31, 1982, deadline was based on EPA legal guidance provided in 1982 and a process for predicting nonattainment status after the deadline. In our analysis provided to the Subcommittee Chairman in April 1983,<sup>2</sup> we concluded that the EPA policy and proposed rules regarding the construction moratorium were generally in accord with the Clean Air Act.

EPA's legal guidance in 1982 allowed administrative discretion

In connection with EPA's 1982 sanctions policy, EPA's Office of Air and Radiation (air office) obtained guidance from EPA's Office of Legal and Enforcement Counsel on the legal consequences for areas not meeting the December 1982 deadline and on the obligations the act imposed on EPA in these circumstances. A memorandum to the Assistant Administrator dated December 22, 1982, which gave the air office legal guidance, concluded that:

- --If the air quality standards have not been met in an area by the end of 1982, the area would be determined to be in nonattainment and EPA would have to impose the construction moratorium.
- --The federal funding sanctions would come into play after December 1982 if EPA determined (1) that nonattainment resulted from a state or local government's failure to implement any requirement of an approved SIP or (2) that a state was not making reasonable efforts to submit a required SIP.

Although the conclusions seemed firm and straightforward, the legal guidance gave EPA discretion as to when and how it would trigger the sanctions. For example, the legal guidance did not state that the construction moratorium would be required for all areas simply because they remained on the official nonattainment area list at December 31, 1982. Rather, the legal guidance recognized that the issue of applying the sanctions would rest upon the agency's conjecture as to whether a nonattainment area could reach attainment by the deadline. In that regard, the December 1982 memorandum acknowledged in a footnote that the air quality data needed to determine whether standards had been met would not be available until mid-1983, and that the air office had developed a policy explaining how EPA would make its initial attainment status predictions on the basis of earlier air quality data. Also, the legal guidance did not address whether EPA had to make immediate attainment status determinations relative to the December 1982 attainment deadline or whether it could wait for available air quality data in 1983 to show whether violations occurred after the deadline.

<sup>&</sup>lt;sup>2</sup>Letter from the Comptroller General to the Honorable John D. Dingell, Chairman, Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, B-208593, Apr. 21, 1983.

In summary, the legal guidance did not require sanctions quickly after the attainment deadline; instead, EPA's discretion was the basic factor.

# EPA developed a two-tier approach to classify nonattainment areas

As stated above, the new air quality data needed to show whether nonattainment areas met the December 1982 deadline would not become available until mid-1983 or later. Therefore, in mid-1982, EPA began developing an approach to classify areas for its nonattainment area policy. This approach was to examine all areas' air quality data available through early 1982, and their SIP approval status, and determine whether violations would likely occur after the December 1982 deadline. Under this approach, EPA was to classify affected nonattainment areas into three categories: (1) those unlikely to attain the standards, (2) those unlikely to attain the standards but "too close to call," indicating EPA's intention to review 1983 air quality data at the earliest opportunity, and (3) areas EPA believed could demonstrate compliance with all requirements. EPA later narrowed the three categories down to two: (1) areas determined likely to meet the deadline, which would be designated as tier I areas and encouraged to seek redesignation to attainment status as soon as possible, and (2) areas determined not likely to meet the deadline, which would be designated as tier II areas and made subject to the act's sanctions.

## EPA's process for predicting whether areas would achieve attainment

In late-1982 EPA assessed whether all nonattainment areas would reach attainment by the December 31, 1982, deadline. The technical criteria and guidance for the assessment were developed by EPA's Office of Air Quality Planning and Standards (OAQPS), which also coordinated the overall effort. EPA's regional offices made the actual assessments for each nonattainment area.

The technical criteria for the assessments comprised the NAAQSs for each pollutant and specified pollution levels--called cutpoints--above the NAAQSs for the regions to use to divide the nonattainment areas into tier I and tier II levels. OAQPS established the pollutant cutpoints on the premise that planned pollution emission controls implemented in specific nonattainment areas over the 3-year period 1980-82 should produce improvements in air quality at least as good as the average percentage reduction across the country.

For example, according to EPA, carbon monoxide (CO) levels had improved nationally about 7 percent annually since the late 1970's and OAQPS thought that CO nonattainment areas should improve CO levels by 21 percent for the 3-year period ending December 31, 1982. Thus, for the health-related CO standard equivalent of 9 parts per million parts of air, the cutpoint was set 21 percent higher--at 10.9 parts per million. For the regional office assessments, any area exceeding the national standard of 9 parts per million, but less than the cutpoint of 10.9 parts per million, could be placed in tier I and considered likely to reach attainment by December 31, 1982. Areas with monitored CO data at or higher than 10.9 parts per million were to be placed in tier II.

EPA subsequently spelled out two deficiencies related to the cutpoints established. First, they did not account for the likelihood that areas' improvement trends could be different from the national average. A second problem was that the cutpoints were incorrectly calculated; they were based on a 3-year average and did not reflect the cumulative impact of a percentage reduction each year. Potential difficulties from these deficiencies did not arise, however, because the subsequent policy and proposed actions were not implemented as planned, as will be described later.

The cutpoint criteria was not the only means for giving an area a tier II classification. Some states, even though required to complete their SIP revisions by January 1, 1979, and have them approved by EPA by June 30, 1979, still had not submitted an adequate SIP by 1982. In other cases, states had not fulfilled conditions, such as requirements for additional regulations or information, on which EPA's approval of their SIP had been contingent. Where either of these SIP deficiencies existed, the areas were also to be placed in tier II and become subject to sanctions, regardless of their attainment status.

## Results of EPA's regional office assessments of nonattainment areas' likely attainment status

In late 1982 each EPA regional office reviewed air quality data available through early 1982 and the existing SIP status for each nonattainment area to prepare its tier I and tier II lists. The regions reviewed data for about 470 nonattainment counties facing the December 1982 deadline. They determined that about 330 counties in 42 states and 2 trust territories (1) had their SIP revisions fully approved, (2) would likely meet all their attainment deadlines, and (3) could have their nonattainment areas designated as attainment areas during 1983. This tier I group would not be subject to any sanctions. The regions also determined that 111 counties in 28 states and the Territory of Guam would not likely meet the deadline for one or more pollutants, and that 33 other counties in 13 states still had not fulfilled all the 1979 SIP revision requirements. This tier II group would be subject to sanctions. OAQPS consolidated the regional office determinations into a composite tier I and tier II list and published it along with EPA's policy and proposed determinations and sanctions for nonattainment areas.

We examined EPA's development of the two-tier process and the counties listed by OAQPS and two EPA regional offices. Of the more than 470 nonattainment counties covered in the regional office reviews--which excludes the extension areas for carbon monoxide and ozone--we determined that 215 were in 14 states: 63 were in the 8 states of EPA Region IV (Atlanta) and 152 were in the 6 states of EPA Region V (Chicago). These two EPA regions determined that 153 of the 215 counties (71 percent) would likely meet all their December 1982 attainment deadlines and, for these counties, that the 14 states had fulfilled all their SIP revision requirements. They determined that 62 of the 215 counties (29 percent) were not likely to meet one or more of their attainment deadlines and that several of these counties also did not have fully approved SIPs.

On the basis of our review of available files and discussions with responsible EPA officials, we concluded that the regional office personnel generally followed the cutpoint criteria provided by OAQPS for making tier I and tier II determinations. All areas were placed in tier I unless they met one of the criteria for being placed in tier II. For all areas placed into tier II, EPA developed a technical support document to show which of the tier II criteria were applicable to each area.<sup>3</sup>

The following examples from EPA's technical support document illustrate EPA's reasons for listing areas in tier II:

- --Georgia, Atlanta area: At the Dekalb County air-monitoring site, seven ozone criteria exceedances occurred in 1979, seven in 1980, four in 1981, and one during the first quarter of 1982. At the Rockdale County site, 11 exceedances occurred in 1979, 8 in 1981, and 1 during the first quarter of 1982. EPA listed 11 counties contiguous to the Atlanta area that it believed contributed volatile organic compound emissions to the area's ozone concentrations.
- --Indiana, Lake, LaPorte, and Marion Counties: Failure to fulfill conditions on modeled attainment demonstrations and any needed modification of sulfur dioxide regulations by November 1982 to fulfill the requirements of EPA's conditional approval of part of the state's SIP.

<sup>&</sup>lt;sup>3</sup>We selected 48 of the nonattainment counties in two EPA regions in proportion to the regional offices' tier I and tier II determinations, for detailed examination. We examined the regional offices' determinations for 35 counties determined likely to be in compliance and 13 counties determined not likely to meet all requirements. Based on our sample results we can conclude, at the 90 percent level of confidence, that the misclassification rate in the regions we reviewed was less than 10 percent.

--<u>Tennessee</u>, Shelby County: Failure to submit a necessary SIP, with continued violations of the annual primary particulate standard at two sites.

### EPA's enforcement of the attainment deadline

EPA first announced its policy for enforcing the act's deadline on December 29, 1982, in an internal memorandum from the Assistant Administrator for Air, Noise, and Radiation to all EPA regional administrators. The public was notified in the <u>Federal</u> <u>Register</u> on January 25, 1983. EPA held a national press conference on January 31, 1983, to announce its tier I and tier II process, and the list of counties and EPA's proposals were published in the <u>Federal Register</u> on February 3, 1983. EPA proposed the construction moratorium for the 144 tier II counties listed.

Although states and other interested parties were given until March 21, 1983, to comment on EPA's proposed actions, the comment period was extended to May 5, 1983. Once the comments on its proposed rules had been analyzed, EPA would publish final lists. EPA's proposed rules stated that a construction moratorium would automatically go into effect on all major sources of the pollutant in question in counties failing to meet the act's requirements. Other sanctions required by the Clean Air Act, such as restricting federal highway funds and funds for federal air program grants, must be imposed by the agency on a county-by-county basis if criteria contained in the act are not met.

Although EPA did not establish a schedule showing when the construction bans would take effect, it published its policy and proposed determinations for nonattainment areas quickly after the December 1982 deadline. In addition, a May 1983 EPA letter responding to a congressional inquiry stated that it wanted to respond fully to all comments received and that it might publish final actions against some nonattainment areas within 6 months, i.e., by late 1983. EPA's May 1983 letter also stated that the new EPA Administrator-designate had promised a Senate committee during hearings on his nomination that he would conduct a full review of the sanctions issues and that his review could affect EPA's policies and schedules.

EPA did not submit its December 29, 1982, policy for enforcing the 1982 attainment deadline and its notice of proposed enforcement rules, both published in the <u>Federal Register</u> on February 3, 1983, as discussed above, for OMB's review. According to an EPA official, EPA defined the activity as a policy development matter not requiring OMB review under Executive Order 12291.

EPA did submit two other proposed regulations to OMB for review under Executive Order 12291. One was part of its notice in the February 3, 1983, Federal Register proposing to disapprove 1982 SIPs submitted for attaining ozone and carbon monoxide standards by the 1987 attainment deadline. The other was its notice of proposed rules for sanctions against states not implementing motor vehicle inspection and maintenance programs as required by their 1979 SIPs. OMB's Desk Officer for EPA matters told us that OMB did not provide any written comments on these proposed regulations.

## EPA's proposed construction moratorium in February 1983 was in accord with the Clean Air Act

Relative to EPA's two-tier approach to nonattainment areas and its February 1983 policy, we provided an analysis to the Subcommittee Chairman on April 21, 1983,<sup>4</sup> addressing whether the December 31, 1982, attainment deadline set by Part D of the act activated the construction moratorium. We concluded that the sanction was activated if the deadline had not been met and we generally agreed with the formal rule proposal effort EPA was using to determine and establish attainment or nonattainment status. We also stated that once the nonattainment status was established, the construction moratorium would be automatic. An excerpt of the construction moratorium section of our April 1983 analysis is reproduced in appendix II.

Although EPA's actions were generally in accord with the act, they did generate widespread concern and disagreements about EPA's interpretation of the act. For example, many of the affected states and many legislators believed EPA was too strict by proposing the construction moratorium as quickly as possible or that EPA could have adopted a more flexible approach under the law. EPA defended its proposed actions, largely along the lines of its December 22, 1982, legal guidance on the Clean Air Act's requirements and its December 29, 1982, policy memorandum described earlier. Nevertheless, EPA did not implement its early 1983 policy later in 1983, because of congressional action and new leadership at EPA, as discussed below.

## EPA REVISED ITS POLICY AND RELAXED ITS PROPOSED SANCTIONS BECAUSE OF CONGRESSIONAL ACTION AND NEW LEADERSHIP

Because of congressional and EPA concern over EPA's sanctions policy in mid-1983, the Congress enacted a provision in EPA's appropriation for fiscal year 1984 prohibiting the Agency from applying sanctions, and EPA's new Administrator initiated action to revise and relax the Agency's sanctions policy.

<sup>4</sup>See footnote on p. 9.

### Act of Congress

The Congress included a provision in the Department of Housing and Urban Development-Independent Agencies Appropriations Bill for fiscal year 1984 prohibiting EPA from using funds to impose the construction moratorium in areas with approved SIPs that nonetheless failed to reach attainment by the December 31, 1982, deadline. According to EPA, the legislative history shows that the Congress enacted this measure largely as a response to EPA's February 1983 proposal to penalize nonattainment areas whose approved and implemented plans had failed to bring about attainment by the end of 1982. The congressional provision, however, was not intended to prohibit sanctions for areas whose SIPs were not fully approved, which had also been proposed by EPA.

## New EPA leadership in mid-1983 decided to change the proposed sanctions policies

On June 23, 1983, the EPA's new Administrator announced that the Agency was changing its position on sanctions. The key changes announced included (1) a different interpretation of Clean Air Act requirements and (2) a shift from the earlier nonattainment policy of imposing sanctions as quickly as possible to a focus on cooperative planning with the states to allow additional time to solve their air problems.

### EPA's different interpretation of Clean Air Act requirements

In connection with the decision to change the announced policy, EPA's Office of General Counsel provided new legal guidance in a memorandum to the Administrator dated July 12, 1983. The new legal guidance essentially reversed the legal guidance that had been provided in 1982, which had been the basis for EPA's initial policy. The discussion of the construction moratorium requirement was summarized in the July 1983 legal guidance with the following question and answer:

- --"Must EPA impose the construction moratorium in areas that have fully carried out implementation plans that EPA approved as meeting Part D requirements, but that nevertheless did not meet the standards by the statutory date of December 31, 1982?" [Footnote omitted.]
- --"No. While automatic imposition rests on a tenable reading of the statute, the statutory language, legislative history, and purposes do not compel it. You [the Administrator] are therefore free to decide not to impose the construction moratorium in such cases."

## Key shifts from the earlier nonattainment policy

The sanctions policy change announced on June 23, 1983, by the new EPA Administrator represented a major change in direction from EPA's February 3, 1983, proposal. The key to that change was EPA's decision not to impose the ban in nonattainment areas that had approved Part D plans, even though the areas failed to meet air quality standards by the 1982 attainment deadline despite their efforts.

The EPA Administrator believed this revised policy gave EPA the flexibility it needed to achieve the Clean Air Act's objectives and protect the public's health. Basically, EPA wanted the states to correct deficient SIPs for areas where standards had not been met, and then to fully implement their plans. The EPA Administrator also believed this policy was consistent with the congressional action taken to prohibit EPA from using funds during fiscal year 1984 to impose sanctions against areas that did not reach attainment by the end of 1982.

Instead of banning construction as proposed earlier, EPA's revised policy provided for notifying the state that its plan was inadequate under section 110(a)(2)(H) of the act and calling for the state to submit a revised plan within 1 year. If the state failed to submit an adequate revision within its deadline, EPA would find that the state had not "implemented" the provision in its plan that requires SIP revisions when EPA calls for them under section 110(a)(2)(H). EPA would also propose construction and funding restrictions under sections 173(4) and 176(b) of the act. These restrictions would also apply if EPA found that a state had not implemented its plan.

Many nonattainment areas subject to the 1982 deadline had deficiencies other than nonattainment. For example, many states failed to meet conditions, such as requirements for additional regulations or information, that EPA set when it conditionally approved their plans. Other states never submitted plans for EPA's review. Finally, some states submitted plans but failed to implement them. In those cases, EPA planned to propose appropriate construction and funding restrictions but postpone final action for up to a year to provide the state a reasonable opportunity to correct its deficiency. If, however, a state submitted, in a timely fashion, a plan containing draft attainment regulations, EPA said it would retain discretion to continue postponing action if the state needed more time to adopt final regulations.

EPA formally published its revised nonattainment area policy in the <u>Federal Register</u> on November 2, 1983. The clean air program is now being administered under this policy, which was supplemented with a detailed guidance document to EPA regions and states on January 27, 1984.

Under the guidance, EPA's policy calls for a new round of SIP revisions, which can extend attainment deadlines to 1987 or even later. EPA will require areas to attain standards as expeditiously as practicable, and intends to closely scrutinize any SIP attainment demonstration that extends beyond 1987. Under the revised policy, letters from the EPA regional administrators were sent to the Governors of 15 states on February 14, 1984, calling for 27 SIP revisions. Eighteen calls were for ozone plans, 6 for carbon monoxide, 2 for sulfur dioxide, and 1 for nitrogen dioxide. Twenty-one of the calls for SIP revisions were for areas with an approved SIP that did not attain the standards by December 31, 1982. The remaining six areas had not submitted a SIP or a portion of a SIP. SIP revisions for nonattainment of total suspended particulates were not called for because EPA had a pending proposal to change that standard. EPA's guidance generally required that the SIP revisions called for be submitted to EPA in February 1985. EPA's call for the SIP revisions was published in the Federal Register on May 3, 1984. Later in 1984, on the basis of air quality data collected through the end of 1983, EPA made calls for 10 more SIP revisions in nine states: for ozone, 4 for sulfur dioxide, and 3 for carbon monoxide. These SIP revisions, in most cases, are due in September 1985. These additional calls were shown in the Federal Register on December 5, 1984.

EPA's current policy and detailed guidance establish the framework for imposing the act's economic sanctions, but this would largely take place in the future and would primarily be related to whether states meet EPA's timetable for submitting the called for SIP revisions. In the meantime, the policy postpones any sanctions for nonattainment of standards and does not clearly address the issue of sanctions for 1987 or later attainment deadlines. Thus, EPA's current policy sets a precedent for a new round of SIP revisions in 1988 or later if any areas fail to meet their new attainment deadlines.

#### CONCLUSIONS

From 1977 to 1982 the nonattainment area program clearly envisioned that the Clean Air Act, as amended, established December 31, 1982, as an attainment deadline for areas not granted the additional extension to December 31, 1987, for carbon monoxide and ozone. Further, EPA's policy from mid-1982 to early 1983 was that a construction moratorium would be applied for continued nonattainment after the 1982 deadline. In our view, EPA's development of the two-tier approach to nonattainment in 1982 and its policy and proposed construction bans in early 1983 were fully in accord with the act and with EPA's duty to promulgate implementing regulations. Moreover, they were in agreement, we believe, with the underlying public health purpose of the Clean Air Act.

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Nevertheless, through an amendment to EPA's appropriation, the Congress restricted EPA's ability to take final actions during fiscal year 1984 to impose the construction moratorium as proposed. Moreover, during that period EPA changed its interpretation of the Clean Air Act's requirements and promulgated new regulations to give states more time to correct problems and reach attainment. EPA's different interpretations of the Clean Air Act, in our view, reflect different EPA emphases on public health and economic well-being. The current EPA policy delays the sanctions, which were designed primarily as additional measures to protect public health, while also delaying any economic consequence of the sanctions.

#### RECOMMENDATION TO THE ADMINISTRATOR, EPA

GAO recommends that the EPA Administrator either (1) develop and implement a policy to provide sanctions for areas not attaining air quality standards by the deadlines specified in the Clean Air Act or (2) seek relief through proposed legislation from the applicable Clean Air Act provisions which, in GAO's view, require imposition of such sanctions.

#### CHAPTER 3

## ENFORCEMENT OF THE CONSTRUCTION BAN AND VIEWS

### ON THE BAN'S EFFECT ON INDUSTRIAL GROWTH

On July 1, 1979, EPA imposed construction bans for one or more pollutants in more than 400 nonattainment areas because they did not have an approved SIP in effect by the June 30, 1979, statutory deadline. (See p. 8.) This ban prohibited the construction of large factories or other major stationary sources of pollution--those which emit more than 100 tons of pollution--in these areas. About 6 years later this ban is still in effect because of continuing SIP problems in about 75 areas (counties) in 17 states and Guam.

Until 1984, EPA did not maintain routine information on the number of areas under construction bans. Instead, it generated the data on certain occasions when requested by congressional committees or others. Each regional office maintained its own data and decided how to enforce the ban. In the two regions we visited, EPA regional staffs primarily relied on state and/or local officials to enforce the ban when they issued construction permits. EPA, in turn, periodically checked a sample of issued construction permits to determine if ban violations had occurred. However, the reviews' frequency and depth varied from region to region until 1984, when more consistent national audit guidelines were followed by all the regions. EPA officials told us that they had not observed any violations of the ban in one region we reviewed and could recall only one violation of the construction ban in the other region.

Our audit work indicates that while the ban was effective in encouraging most states to submit SIPs, the construction ban has reportedly had limited impact in the 75 areas where it remains in effect, for a number of reasons. For example, numerous state environmental and EPA officials told us that the ban had limited impact owing to the sluggish economy; however, some commented that the ban may have greater impact in the future if the economy continues to improve. Some state officials noted that in those few cases where construction was desired, some states found ways to get the ban lifted or scaled down the size of the construction project so that it would not be subject to the ban.

In addition, many state and local officials believe that very little construction, if any, has been halted as a result of the ban because EPA initially designed it to have minimal and gradual impact. Several state and local officials noted that construction bans on facilities emitting carbon monoxide have very limited applications because this pollutant is principally emitted from cars and trucks. Others pointed out that the ban prevented companies from replacing older equipment with newer, less pollution-emitting equipment. Despite these limitations, a few believed, however, that the ban is still needed to encourage states to comply with the Clean Air Act.

#### ENFORCEMENT OF THE BAN

EPA's Director, Stationary Source Compliance Division, who is responsible for enforcing the construction ban, relies on each EPA regional office to know what areas are under construction bans and to deal directly with sources and states to ensure that violations do not occur. However, at the time of our review, his office had not issued any overall guidance documents to the regions concerning enforcing the ban. As a result, enforcement rests primarily on the EPA regional air offices and the state or local permitting jurisdictions' (1) cognizance that the ban is in effect in an area and (2) compliance with the ban when issuing construction permits.

During the initial phases of our audit work (late 1983), we found that EPA did not have a complete national listing of areas under construction bans because it was considered a low priority and EPA headquarters expected the regions to maintain the data. Because we believed that a complete national listing was necessary for comprehensive audit coverage, we developed a list on the basis of (1) EPA's partial listing of areas in 13 states under the ban as of February 1983, (2) telephone calls to all 10 EPA regional offices, and (3) field visits to EPA Region IV and V offices.

We found that in January 1984, there were about 85 counties or portions of counties in 19 states and Guam under construction bans for one or more pollutants. By April 1985, due to SIP approvals and redesignations to attainment, approximately 75 counties or portions of counties in 17 states and Guam were still under the ban. (A detailed listing of areas under construction bans appears in app. III.) In mid-1984, EPA decided to track this information on a regular basis and presented it for the first time in its July 1984 Quarterly Status of SIP report.

Of the 85 areas under the construction ban in January 1984, 3 were in EPA's Region  $IV^5$  and 53 were in Region  $V.^6$  To monitor the states' activities, the EPA regional staffs periodically review a sample of construction permits to determine whether ban violations have occurred; however, the frequency, depth, and procedures used varied from region to region within EPA. For example, one region conducted semi-annual audits while another conducted annual audits.

EPA recently recognized that better and more consistent monitoring of state activities was needed. Accordingly, the National Air Audit System Guidelines for fiscal year 1984 were

<sup>&</sup>lt;sup>5</sup>EPA Region IV includes: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

<sup>&</sup>lt;sup>6</sup>EPA Region V includes: Illinois, Indiana, Ohio, Michigan, Minnesota, and Wisconsin.

developed through the joint efforts of EPA and state and local air pollution control associations to ensure audit consistency of state activities by the EPA regional office. Because these audits have only been done for 1 year, it is too early to determine their effectiveness.

### Enforcement of the ban in EPA Region IV

The Clean Air Act's construction ban on major stationary source construction and modification was in effect in three areas of Region IV at the time of our review: (1) Jefferson and Etowah Counties in Alabama and (2) portions of Shelby County in Tennessee. The bans had been imposed in these areas since July 1979 for failure to submit an adequate SIP for particulate matter. Although the ban remains in effect in two areas in Alabama, it was lifted in Shelby County, Tennessee, in July 1984.

EPA's Chief, Air Compliance Section, in Region IV had delegated enforcement of the construction bans in the three areas to the state and local offices responsible for issuing area permits for new construction or expansion. EPA regional officials told us that they use four methods to oversee state and local activities. First, EPA conducts a mid-year review of each state office that issues permits. EPA stated that while this review does not focus on construction bans, it does involve reviewing permit files. Such a review would detect new construction or major modification of facilities in ban areas. Second, Region IV annually inspects a number of facilities to determine their compliance status. These inspections are one means of identifying new construction that violates the ban. Third, Region IV receives copies of all preliminary and final approval determinations on permits issued or denied by the states for new source and major modification construction and reviews them on an on-going basis. This assures that no major sources are built in an area under a construction ban. Fourth, citizens and environmental groups would protest to the EPA region if construction was occurring in any of these ban areas.

In addition, EPA's Acting Chief, Air Engineering Section, in Region IV said the states are very aware of areas where construction bans are in effect. He said the obviousness of major construction makes it rather easily detectable by the state. He noted that this, coupled with the knowledge that EPA could seek an injunction to halt unauthorized construction, has made violations unlikely.

Region IV officials said they have not observed any violations in the areas under the ban. Additionally, we reviewed 1983 and early 1984 permit files at the Alabama Department of Environmental Management and interviewed the Chief of the Air Division and found no violations. Although permits were issued for some smaller sources, our review did not reveal any

major-source permits being issued in either Jefferson or Etowah Counties. Thus, our review of the permit files did not indicate any violations of the construction bans in these areas. In December 1983, EPA stated that the ban would be lifted in Shelby County, Tennessee, in a few months. Although we did not visit Tennessee, the Chief of the state's Air Pollution Control Technical Services Program in March 1984 told us there had not been any violations of the ban in Shelby County while it had been imposed. The ban was lifted in Shelby County in July 1984.

# Enforcement of the ban in Region V

According to EPA Region V officials, before the National Air Audit Guidelines were first used in 1984, no specific program was in place to review construction permits for violations and enforcement of the ban was given low priority. Instead, enforcement in Region V was carried out as part of annual 2- or 3-day audits of the state's air program activities.

The Clean Air Act's construction ban was in effect in 53 areas in five states in Region V at the time of our review in January 1984. Michigan had no construction bans. All nonattainment areas in Illinois and Minnesota--a total of 24 areas--remained under the July 1979 ban for not having an approved new-source review program, as well as 20 areas in Ohio for not having an approved total-suspended-particulate SIP. Indiana and Wisconsin had six and three areas, respectively, under the ban for SIP failures relating to a variety of pollutants. As of April 1985, the ban had been lifted in three areas in Illinois and in one area in each of the following states: Indiana and Wisconsin. Meanwhile, most of these states are developing SIP revisions for EPA approval in order to get the bans lifted and to avoid additional sanctions.

The Chief, Air Compliance Branch, in EPA's Region V told us his principal responsibility is to resolve cases of significant violations of air quality standards. He said this task consumes most of his Branch's time and effort and, therefore, he has given low priority to construction ban enforcement. As a result, he relies, as does his counterpart in Region IV, on the states to enforce the ban. In turn, the EPA regional staff monitors the state activity as part of its annual 2- to 3-day broad audit of the state air program. He said that, generally, this would include (1) determining if the state agency has a list of "banned" areas, (2) inquiring as to whether the state permitting staff understands the sanctions process, and (3) reviewing a sample of permits issued to determine, among other things, whether state personnel are issuing permits in compliance with the ban.

We discussed enforcement of the ban with key state air officials in Illinois, Indiana, Minnesota, Ohio, and Wisconsin. We found that Illinois and Indiana publish lists of major

. . construction permit applications for public comment and also send the lists to EPA for review and/or comment. In addition, some states assist a pollution source in processing a permit application to avoid violating the ban. For example, the Illinois EPA presents options that may enable a source to avoid being classified as "major" and hence subject to sanctions. EPA believes this kind of assistance should be respected and encouraged provided it does not, in effect, circumvent federal requirements or objectives.

Two state officials in Region V said they had not denied any permits for major construction in areas under the ban. Other state officials said that generally companies would not apply for a permit for major construction in a ban area so that it is unlikely that they would have to consider denying permits in areas under the ban. In addition, several state officials commented that applications for major construction constitute a small share (5 percent in one case) of all permit applications.

The Chief, Air Compliance Branch, said that besides receiving referrals of potential ban violations from other EPA organizational units, he may also become aware of ban violations through discussions with state officials, or his Branch staff may come across violations of the ban during field visits. When violations of the ban occur, EPA is authorized to administratively prohibit the construction or modification of any major stationary source in any area to which the ban applies, or to bring a court action for injunction or civil penalty against attempted construction or modification of a source in the area.

EPA officials could recall only one violation in Region V from mid-1982 to mid-1984. In this case EPA issued a finding of violation in January 1984 against an Illinois drafting film manufacturer located in an area under a construction ban. This company had been issued a permit in September 1980 to construct a new facility; however, because the new facility was considered a "major" new source--having potential annual emissions of over 100 tons--it violated the ban. In October 1984, an Illinois EPA official told us that the company submitted a revised permit application showing reduced emissions levels which should resolve the problems. Although the total liability for past violations has not yet been determined, EPA expects that company to pay some monetary penalties.

## OFFICIALS' COMMENTS CONCERNING THE BAN'S EFFECT

Although the construction ban was effective in getting most states to comply with the Clean Air Act requirements to revise SIPs, many officials commented that its actual influence in getting SIP revisions done may have been limited in some cases (particularly where it continues to remain in effect after 6 years) largely because of poor economic conditions. However, the

ease with which small-scale construction can continue and other factors discussed below also diminished the effect of the ban. Despite these limitations, a few officials favored continuation of the ban as a means of encouraging Clean Air Act compliance.

# Air officials believe a poor economic climate minimized the the ban's effect

According to numerous EPA officials and state environmental officials we spoke with in Regions IV and V, the construction ban has little effect on construction when the economy is on the decline as it was the early 1980's because fewer companies could afford to undertake new construction. They also said, however, that when the economy is expanding, construction bans can cause major economic disruption. For example, officials of Indiana's Air Pollution Control Division, where six areas were under the ban at the time of our review, said that up to 1984 the ban has not been a problem because of the slow economy. They said, however, that with the economy improving the ban could have a significant future impact. According to a section chief at the Wisconsin Department of Natural Resources, the construction ban had no economic impact in that state during the early 1980's because of no interest in major construction or modifications owing to the slow economy. A Kentucky state and an Alabama local air official similarly commented that the construction ban has had limited effect because the downturn in the economy had already limited major new construction.

In addition, three other officials--EPA's Director of the Stationary Source Compliance Division, an EPA attorney considered to be a "sanctions expert," and a top OAQPS official--also told us that until 1983 the ban had little effect on construction because very little construction was planned because of a poor economic The air compliance official stated that construction climate. bans have not had an influence because the economy was in a downturn during the last 2 to 3 years and few localities wanted to undertake any major construction. He noted, however, that because one or two areas wanted construction badly enough, SIP revisions were made and submitted to EPA so that the ban would be lifted. The EPA attorney's comments generally agreed with those of the air compliance official discussed above. The OAQPS official also agreed that the construction sanctions have had limited effect because of a poor economy during the early 1980's and because of the lengthy permitting process.

## EPA originally designed the ban to have limited application

Recognizing that few, if any, SIP revisions would be approved by the July 1, 1979, statutory deadline and that construction moratoria would, therefore, automatically be imposed, EPA issued a policy guidance memorandum on June 8, 1979, specifically addressing the impact of the bans. In this memorandum, EPA informed its regional administrators that EPA did not anticipate construction of major air pollution sources to halt when the ban was imposed because it expected the ban's impact to be gradual; hence, some construction could continue. In addition, the policy memorandum introduced the concepts of "grandfathering" certain permit applications, conditional approvals, and other limiting provisions.

More specifically, the memorandum limited the application of the ban by making it:

- (1) Applicable only to large ("major") stationary sources of pollution, such as factories, and exempting smaller sources from the ban. EPA defines "major" as those sources that add more than 100 tons of pollution in a year.
- (2) Applicable to only the pollutant(s) that is already a health problem in the community. By making the ban "pollutant specific," new construction or expansion of facilities that emit pollutants and that are in compliance with the NAAQSs could continue and fewer facilities would be affected by the ban.
- (3) <u>Area specific</u> or restricted to the boundaries of the officially designated nonattainment area. EPA recognized that many nonattainment areas were quite small, some covering only a few blocks.

In addition, the memorandum "grandfathered" permits by stating that the ban applied only to construction permits applied for after June 30, 1979. Because a typical permit requires approximately 3 months or longer for processing, EPA told its regions that the ban's effect would be gradual. According to the 1981 report of the National Commission on Air Quality,<sup>7</sup> the July 1979 construction ban had no serious effects until late 1980 because of this "grandfather" provision.

Further, EPA introduced the concept of conditional SIP approval in the June 1979 memorandum, which meant that EPA could approve certain portions of a plan and agree to lift the construction ban but required the state to bring the remainder of the plan into acceptable status by a specified date. According to the National Commission on Air Quality Report, EPA's decision to grant conditional approval of SIPs in more than 30 states helped to avoid construction delays. As of April 1985, 17 states had conditionally approved SIPs.

<sup>&</sup>lt;sup>7</sup>The National Commission on Air Quality was established under Section 323 of the 1977 Amendments to the Clean Air Act. Its purpose was to evaluate the act and examine alternative ways to achieving its goals of protecting public health and public welfare, and to present its findings and recommendations to the Congress in a final report at the conclusion of a 3-year study.

### Sizing construction projects to meet emission limits

Several key officials at EPA, state and local air offices, and at an environmental association told us ways construction could continue even though the ban had been imposed in a particular area. The principal means they discussed was the splitting of one large project into several smaller projects or sizing projects below a 100-ton-per-year emission level to avoid being classified as a "major source" and thus not subject to the ban. Our audit work revealed two instances where projects were designed to fall just under the 100-ton-per-year limit.

A company in St. Joseph County, Indiana, wishing to renovate a facility to produce a multi-purpose military vehicle, estimated potential hydrocarbon emissions--a precursor to ozone--of 99 tons per year--just 1 ton under the "major" classification. (St. Joseph County was under an ozone construction ban at the time.) As a result, the project was considered "minor" rather than "major" and not subject to the ban. Under these circumstances, the Clean Air Act would allow the company to manufacture the vehicles as long as the increase in emissions remained below 100 tons per year. The company had informed EPA in October 1983 (before the permit was granted) that emissions would likely increase above 99 tons in late 1985 or 1986 because the facility's activity would increase to full production levels. As of April 1985, the ban was still in effect. EPA plans to closely monitor the facility's operations to ensure against violations.

Another instance involved a Tazewell County, Illinois, company that was issued a permit in October 1982 restricting sulfur dioxide emissions to 99.9 tons as an interim measure to allow construction to proceed while the ban was in effect. EPA could not issue the company's subsequent request for an 892-ton-per-year permit because of the construction ban. (The company stated later that in all probability only about 290 tons of sulfur dioxide would be released per year, which is above the 100-ton limit.)

On the other hand, the results of EPA's first national air audits conducted during 1984 showed a limited potential for splitting one large construction project into several smaller projects, as reflected by the responses to the question: "Can a source divide its construction plans into a series of applications in order to avoid 'major' review?" Less than 10 percent of the audited agencies identified this as a potential problem. EPA noted further that it had found no cases of this actually occurring.

According to several state officials with areas under construction bans, some states under construction bans have little incentive to get the ban lifted because few companies are requesting permits for major construction or modification. One state official said that the only real incentive for a state to get the ban lifted is to remove the stigma which may be associated with it or avoid additional sanctions, such as the withholding of highway funding, which EPA has threatened to impose on occasion.

## Carbon monoxide bans have very few applications

In some cases the construction ban, which is only applicable to large stationary sources such as factories and plants, has been imposed for carbon monoxide, which is principally emitted from mobile sources, such as cars and trucks. As a result, several EPA and state officials view carbon monoxide construction bans as having very limited application and therefore little effect on construction or improving air quality. As of April 1985, there were 15 carbon monoxide bans in 5 states (accounting for almost 15 percent of the bans still in effect).

We spoke with EPA's Chief, Plans and Analysis Section in North Carolina, an EPA environmental specialist responsible for the state of Nebraska, and a key Minnesota Pollution Control Agency official. (A total of 12 areas in Nebraska and Minnesota are under carbon monoxide bans.) They told us that because the ban affects only stationary sources, and more than 90 percent of the carbon monoxide problem stems from mobile sources, the carbon monoxide bans have had very little application and very little, if any, impact on constructing stationary sources such as buildings and factories in these areas. The EPA official responsible for Nebraska said that although the bans have had very little effect, Nebraska is now taking actions to get the ban lifted to avoid possible funding sanctions. Further, EPA and the Minnesota official told us that very few stationary sources (generally foundries or petroleum refineries) emit carbon monoxide and those few that do, do not emit significant amounts of this pollutant because it goes through a more complete combustion process than in mobile sources.

# Other comments concerning the construction ban

According to several state and other air program officials, the construction ban was not an effective tool for reducing air pollution emissions. For example, an Illinois EPA official told us that the ban prevents a company from replacing older equipment with newer, less pollution-emitting equipment. He believed this impeded progress toward cleaning up the air and was inappropriate. A Minnesota Pollution Control Agency official generally agreed with this but recommended that fines or other monetary penalties be imposed rather than construction permit restrictions because the ban is counterproductive to the goal of attaining cleaner air.

#### CONCLUSIONS

The issue of whether Clean Air Act construction ban provisions should be imposed and understanding the conditions that trigger them and how they are enforced is complex and controversial. Further, determining the impact of construction bans is difficult, if not impossible, because it hinges on a number of factors such as (1) the national and local economies, (2) the type of ban, (3) the geographic size of the area under a ban, (4) the kind and size of industries already in the area, and (5) the attitudes and enforcement philosophies of EPA and state representatives.

Many officials associated with environmental issues at the federal, state, and local level believe very little, if any, planned construction has been halted or prohibited as a result of the ban. Some have pointed out that "... delayed construction has been the ban's biggest accomplishment." Most agree, however, that the ban has encouraged states to prepare SIP revisions that will help control and/or reduce pollution problems in the affected areas. Some states responded quicker than others and submitted SIP revisions to get the ban lifted; however, about 75 areas still do not have approved SIPs in effect.
#### NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS)

POLLUTANT	Primary (healt	th related)	Secondary (wel	fare_related)
	Averaging time	Concentration <sup>a</sup>	Averaging time	Concentration
Total suspended particulate	Annual geometric mean	75 ug/m <sup>3</sup>	Annual geometric mean	60 ug/m3b
(TSP)	24-hour	260 ug/m <sup>3</sup>	24-hour	150 ug/m <sup>3</sup>
Sulfur dioxide (SO <sub>2</sub> )	Annual arithmetic mean	(0.03 ppm) 80 ug/m <sup>3</sup>	3-hour	1300 ug∕m <sup>3</sup> (0.50 ppm)
	24-hour	(0.14 ppm) 365 ug/m <sup>3</sup>		
Carbon monoxide (CO)	8-hour	(9 ppm) 10 mg/m <sup>3</sup>	с	с
	1-hour	(35 ppm) 40 mg/m <sup>3</sup>	с	с
Nitrogen dioxide (NO <sub>2</sub> )	Annual arithmetic mean	(0.053 ppm) 100 ug/m <sup>3</sup>	с	с
Ozone (0 <sub>3</sub> )	Maximum daily 1-hour average	(0.12 ppm) 235 ug/m <sup>3</sup>	с	с
Lead (Pb)	Maximum quarterly average	1.5 ug/m <sup>3</sup>	с	с

<sup>a</sup>Concentrations indicated are micrograms per cubic meter of air  $(ug/m^3)$ , milligrams per cubic meter  $(mg/m^3)$ , or parts per million (ppm).

<sup>b</sup>This annual geometric mean is a guide to be used in assessing implementation plans to achieve the 24-hour standard of 150  $ug/m^3$ .

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<sup>C</sup>Same as primary.

Source: National Air Quality and Emissions Trends Report, 1983, EPA, April 1985.

#### EXCERPT FROM GAO'S APRIL 21, 1983, ANALYSIS FOR THE

#### CHAIRMAN, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,

#### HOUSE COMMITTEE ON ENERGY AND COMMERCE

#### D. Construction Moratorium

Prior to the passage of the 1977 amendments, the Clean Air Act prohibited construction or modification of any major stationary source in a nonattainment area if that construction would contribute to concentrations for a pollutant for which a primary NAAQS was exceeded in that area. Requirements for SIPs in the earlier version of the act were nearly identical to the present formula. SIPs were to provide for attainment within 3 years of their approval. An EPA interpretive ruling under the earlier act (commonly called the "Offset Ruling") allowed construction only if the builder could show that the new facility would actually reduce concentrations of the pollutant. 41 Fed. Reg. 55524-30. One of the goals of the 1977 amendments was to allow economic growth while assuring attainment of the NAAQSs by a reasonable specified deadline. H.R. Rep. No. 95-564, 95th Cong., 1st Sess., 156-57 (Joint Explanatory Statement of the Committee of Conference). To accomplish this, section 110 was amended to provide that no construction would be permitted in nonattainment areas after June 30, 1979,

". . . unless, as of the time of application . . [the applicable SIP] meets the requirements of part D (relating to nonattainment areas) . . . ." Act, section 110(a)(2)(I).

The construction moratorium is automatic and mandatory any time a SIP revision is not in full compliance with all Part D requirements. <u>Connecticut Fund for the Environment v. EPA, 672</u> F. 2d 998, 1008 (2d Cir. 1982); B-208593, December 30, 1982. The question which remains unresolved is whether the construction moratorium was activated by the expiration of the December 31, 1982, attainment deadline set by Part D. We think it was.

The mortarium automatically<sup>1</sup> goes into effect any time a SIP does not meet the requirements of Part D. Part D spells out the elements of the SIP revisions and the time frame for attainment. SIP revisions

<sup>1</sup>Despite the fact that the moratorium is automatic, we do not generally disagree with EPA's use of a formal rulemaking effort to determine attainment or nonattainment status. Once that status is established, the moratorium is automatic in nonattainment areas. ". . . shall provide for attainment of each such national ambient air quality standard in each such area as expeditiously as practicable, but, in the case of national primary ambient air quality standards, not later than December 31, 1982." Act, section 172(a)(2).

To meet the requirements of Part D, we think a SIP revision must "provide for attainment" in the real sense, not just on paper. Put more simply, a SIP which did not produce attainment did not sufficiently "provide for" attainment and therefore does not meet the requirements of Part D. We do not think our analysis here is at all inconsistent with our previous statements about section 176(b) (clean air grants cut off to nonimplementing states) because that section applies to the enforcement of the strategies for reaching attainment, not attainment itself.

Arguments that nonattainment status after the deadline does not trigger the moratorium place great emphasis on the word "provide for." Any EPA-approved SIP, according to the arguments, had to "provide for" attainment. Otherwise, it would not have been approved. We discussed earlier our opinion that EPA approval of a SIP revision may not mean that all the statutory elements have been addressed. B-208593, December 30, 1982. However, the main argument against this position is that it is the states, not EPA, which are mainly responsible for planning. The Administrator "shall approve" SIPs which meet the minimum statutory requirements. Act, section 110(a)(2). The burden is clearly on the state to determine whether more than the minimum efforts are necessary and to develop a plan adequate to achieve the NAAQSs within the time allowed. Act, section 107(a); Train v. Natural Resources Defense Council, 421 U.S. 60, 79 (1975). A too literal interpretation of the words "provide for attainment" impermissibly shifts the whole burden to EPA.

Another argument that the words "provide for attainment" do not require achieving attainment centers on the language in section 110(a)(2)(H). That section provides that the Administrator may require a SIP revision at any time if the existing SIP is substantially inadequate to reach attainment. This position also shifts all the responsibility for nonattainment to EPA. Moreover, subparagraph H applies only to "substantially inadequate" plans. The existence of substantially adequate plans does not guarantee attainment, but the Administrator cannot compel their revision under this section. We also note that section 113 (a)(5) of the act allows the Adminstrator to invoke the construction moratorium any time a state is not acting in compliance with any plan provisions required under section 110(a)(2)(I) and Part D. The option to use the construction moratorium to encourage any noncomplying state to come into compliance negates the argument that mandatory plan revision is the exclusive remedy for plans which fail to reach attainment.

There is further evidence in the statutory language that the requirement that SIP revisions ". . . provide for attainment. . . [by] December 31, 1982" meant that plans must actually result in attainment. Section 172(a)(2) extended to 1987 the time for attainment of the primary NAAQSs for two auto-produced pollutants. To obtain an extension, states had to show that "attainment [was] not possible . . . within the period prior to December 31, 1982 . . . " The mere fact that an extension was made available indicates clearly that without the extension, attainment by the original deadline was required, not merely hoped for.

Another statutory reference to December 31, 1982, as an attainment deadline occurs in the Part D definitions section. Each year they are in effect, Part D SIP revisions are required to secure "reasonable further progress" toward clean air standards. "Reasonable further progress" in turn is defined as

". . . annual incremental reductions in emissions. . . which are sufficient . . . to provide for attainment of the applicable national ambient air quality standard by the date required in section 172(a) [i.e., Dec. 31, 1982]." Act, Section 171(1). [Emphasis added.]

This definition assumes that the schedule for attainment is intended to produce clean air by a certain date.

The whole historical context of the 1977 amendments also militates against the conclusion that full compliance with Part D can be attained by planning for, but not producing, healthful air. The amendments were at least partly a response to the disappointing results achieved under the 1970 clean air legislation. A recent circuit court decision elaborated on this theme and held that the construction moratorium was an integral part of the whole nonattainment scheme, and that:

"The nonattainment program's <u>raison d'etre</u> is to ameliorate the air's quality in nonattainment areas sufficiently to achieve expeditious compliance with the NAAQSs." <u>Natural Resources Defense Council v. Gorsuch</u>, 685 F.2d 718, 726-27 (D.C. Cir. 1982).

We are further convinced that December 31, 1982, was a deadline for results by the fact that the 1970 Clean Air Act Amendments contained very similar language. In the 1970 version, a SIP had to be approved if it

". . . provide[d] for the attainment [of the primary NAAQSs] as expeditiously as practicable but . . . in no case later than three years from the date of approval of such plan . . . " Public Law No. 91-604, §4(a), 84 Stat. 1680.

Analyzing this language in the context of the availability of postponements of some of the act's requirements, the Supreme Court found that 3-year period to be a mandatory deadline. It said:

"We believe that . . . analysis of the structure and legislative history of the [1970] Clean Air Amendments shows that Congress intended to impose national ambient air standards to be attained within a specific period of time. . . . " <u>Train v. Natural Resources Defense</u> Council, 421 U.S. 60, 86 (1975).

In the <u>Train</u> case, no one even considered the possibility that the 3-year time frame might have been merely a procedural matter--a criterion by which to determine whether an SIP met statutory requirements. Rather, the assumption was that the deadline was real, and that nonattainment status on the deadline would violate the act. We also note that the consequences of violation then and now were the same, a construction ban.

In light of the foregoing, it is plain that the December 31, 1982, expiration date was a deadline for attainment, not a target or a goal. We cannot accept the notion that the Congress mentioned the date merely as an aid to planning, nor can we assume that, in spite of its express determination to provide a reasonable framework for attainment, the Congress intended no consequences to flow from failure to "provide for" healthful air. Since we determined that the funding sanctions are not appropriate to use in the nonattainment context, the construction moratorium is the only sanction available to place any economic pressure on states to continue to seek attainment. Unlike the restriction of funds for nonimplementation (act, section 176(b)), it does not handicap states in their efforts to continue seeking attainment. Instead, the moratorium has the added advantages of preventing any further deterioration of air quality while it remains in effect, and encouraging further attainment-seeking activities, because only attainment (or amending the act) will lift the ban.

SUMMARY	OF	NONEXTENSION	NONATTAINMENT	AREAS	UNDER	THE	CONSTRUCTION BA	N

JANUARY	1984	то	APRTI.	1985	
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EPA Region	<u>State</u>	City/county	Part or whole area	Pollutant	Date ban was imposed	Reason ban was imposed	Status of the Has the ban been lifted?	ban as of 04/85 Date the ban was lifted
I	None	-	-	-	-	-		-
II	N.Y.	Erie	Part	TSP	July 1, 1979	FTSAS	No	-
		Niagara Frontier AQCR <sup>a</sup>	Whole	so2	June 16, 1982	FTSAS	Yes	Jan. 26, 1984
		Central New York Genesse-Finger Lakes, Hudson Valley and Niagara Frontier AQCRs <sup>a</sup>	Whole	03	June 16, 1982	FTSAS	Yes	Jan. 26, 1984
111	None	-	-	-	-	-	-	-
IV	Ala.	Etowah	Part	TSP	July 1, 1979	FTSAS	No	-
		Jefferson	Part	TSP	July 1, 1979	FTSAS	No	-
	Tenn.	Shelby	Part	TSP	July 1, 1979	FTSAS	Yes	July 23, 1984
v	11.	Peoria <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Part	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Part	CO	July 1, 1979	NSR	Yes	July 12, 1984
		Tazewell <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Part	so <sub>2</sub>	July 1, 1979	NSR	No	-

#### Legend:

FTSAS - Failure to submit an adequate SIP
NSR - New Source Review.
a - These areas did not appear on EPA's Feb. 3, 1983, Tier II list as areas under the construction ban.
b - In Jan. and June 1984 the bans were lifted in parts of these areas.
c - Two different areas within this county are nonattainment for TSP and are under construction bans.

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Summary o	f Construction	Ban Areas	(Con't.)

EPA Region	State	City/county	Part or whole area	Pollutant	Date ban was imposed	Reason ban was imposed	Status of the Has the ban been lifted?	ban as of 04/85 Date the ban was lifted
V (con't.)	Il.	Cook <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	_
(con c.)			Whole	03	July 1, 1979	NSR	No	-
			Part	CO	July 1, 1979	NSR	Nob	-
			Part	NO <sub>x</sub>	July 1, 1979	NSR	Yes	July 12, 1984
		Dupage <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Whole	03	July 1, 1979	NSR	No	-
		Will <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
		Rock Island <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Part	CO	July 1, 1979	NSR	Yes	Mar. 30, 1984
		Madison <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Whole	03	July 1, 1979	NSR	No	-
		LaSalle <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
		Macon <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
		Kane <sup>a</sup>	Whole	0 <sub>3</sub>	July 1, 1979	NSR	No	-
		Lake <sup>a</sup>	Whole	oз	July 1, 1979	NSR	No	-
		Monroe <sup>a</sup>	Whole	0 <sub>3</sub>	July 1, 1979	NSR	No	-
		St. Clair <sup>a</sup>	Whole	03	July 1, 1979	NSR	No	-
			Part	TSP	July 1, 1979	NSR	No	-
		Macoupin <sup>a</sup>	Whole	0 <sub>3</sub>	July 1, 1979	NSR	No	-

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EPA Region	State	City/county	Part or whole area	Pollutant	Date ban was imposed	Reason ban was imposed	Status of the Has the ban been lifted?	ban as of 04/85 Date the ban was lifted
(con't.)	Ind.	Marion	Part	TSP	July 1, 1979	FTSAS	No	-
(con c+)		Lake	Part	TSP	July 1, 1979	FTSAS	No	-
		Wayne	Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
		St. Joseph	Whole	03	July 1, 1979	FTSAS	No	-
		Elkhart	Whole	03	July 1, 1979	FTSAS	No	-
		Allen	Whole	03	July 1, 1979	FTSAS	Yes	May 4, 1984
	Minn.	Anoka <sup>a</sup>	Whole	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Whole	CO	July 1, 1979	NSR	No	-
		Carver <sup>a</sup>	Whole	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Whole	CO	July 1, 1979	NSR	No	-
		Dakota <sup>a</sup>	Whole	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Whole	CO	July 1, 1979	NSR	No	-
		Hennepin <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Whole	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Whole	CO	July 1, 1979	NSR	No	-
		Olmstead <sup>a</sup>	Part	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Part	co	July 1, 1979	NSR	No	-
		Ramsey <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Whole	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Whole	CO	July 1, 1979	NSR	No	-
		St. Louis <sup>a</sup>	Part	TSP	July 1, 1979	NSR	No	-
			Part	CO	July 1, 1979	NSR	No	-

Summary of Construction Ban Areas (Con't.)

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 $(z_{i})_{i} \in [0,\infty]^{2}$ 

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EPA Region	State	<u>City/county</u>	Part or whole area	Pollutant	Date ban was imposed	Reason ban was imposed	Status of the Has the ban been lifted?	ban as of 04/85 Date the ban was lifted
v con't.)	Minn.	Scott <sup>a</sup>	Whole	so <sub>2</sub>	July 1, 1979	NSR	No	~
cou 1.)			Whole	CO	July 1, 1979	NSR	No	~
		Sherbourne <sup>a</sup>	Part	CO	July 1, 1979	NSR	No	-
		Washington <sup>a</sup>	Whole	so <sub>2</sub>	July 1, 1979	NSR	No	-
			Whole	CO	July 1, 1979	NSR	No	-
	Ohio	Belmont <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Columbiana	Part	TSP	July 1, 1979	FTSAS	No	-
		Cuyahoga	Part	TSP	July 1, 1979	FTSAS	No	-
		Franklin <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Hamilton <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Jefferson	Part	TSP	July 1, 1979	FTSAS	No	-
		Lake <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	~
		Lawrence <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Logan <sup>a</sup>	Whole	TSP	July 1, 1979	FTSAS	No	-
		Lorain <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Mahoning	Part	TSP	July 1, 1979	FTSAS	Nob	-
		Miami <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Monroe <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Montgomery <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Richland	Whole	TSP	July 1, 1979	FTSAS	No	-
		Sandusky	Whole	TSP	July 1, 1979	FTSAS	No	-
		Scioto <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-

### Summary of Construction Ban Areas (Con't.)

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EPA Region	State	City/county	Part or whole area	Pollutant	Date ban was imposed	Reason ban was imposed	Status of the Has the ban been lifted?	ban as of 04/85 Date the ban was lifted
V.	Ohio	Starka	Part	TSP	July 1, 1979	FTSAS	No	-
con't.)		Summita	Part	TSP	July 1, 1979	FTSAS	No	-
		Trumbull <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
	Wis.	Brown	Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
		Milwaukee <sup>a</sup>	Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
			Part	TSP	Mar. 9, 1983	FTSAS	No	-
		Columbia <sup>a</sup>	Part	TSP	Mar. 9, 1983	FTSAS	Yes	Dec. 20, 1984
VI	Tex.	Harris	Part	TSP	July 1, 1979	FTSAS	No	-
VII	Iowa	Polk <sup>a</sup>	Part	CO	July 1, 1979	FTSAS	No	-
	Mo.	Buchanan <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
	Nebr.	Lancaster	Part	CO	July 1, 1979	FTSAS	No	-
		Douglas <sup>C</sup>	Part	TSP	July 1, 1979	FTSAS	Yes	Aug. 22, 1984
			Part	TSP	July 1, 1979	FTSAS	Yes	June 4, 1984
			Part	CO	July 1, 1979	FTSAS	No	-
		Cass <sup>c</sup>	Part	TSP	July 1, 1979	FTSAS	Yes	Aug. 22, 1984
			Part	TSP	July 1, 1979	FTSAS	Yes	June 4, 1984
VIII	Mont.	Missoula	Part	CO	July 1, 1979	FTSAS	No	-
	Utah	Salt Lake	Part	TSP	July 1, 1979	FTSAS	Yes	Sept. 10, 1984
			Whole	so <sub>2</sub>	July 1, 1979	FTSAS	Yes	Mar. 22, 1985
		Tooele	Part	so <sub>2</sub>	July 1, 1979	FTSAS	Yes	Mar. 22, 1985

Summary of Construction Ban Areas (Con't.)

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APPENDIX III

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 $\sum_{\substack{i=1,\dots,N\\ i=1,\dots,N\\ i=1,\dots,N\\ i=1,\dots,N}} \frac{T_{i+1}}{T_{i+1}} \sum_{\substack{i=1,\dots,N\\ i=1,\dots,N\\ i=1,\dots,N}} \frac{T_{i+1}}{T_{i+1}} \sum_{i=1,\dots,N} \frac{T_{i+1}}{T_{i+1}} \sum_{i=1,\dots,$ 

EPA Region	State	City/county	Part or whole area	Pollutant	Date ban was imposed	Reason ban was imposed	Has the ban been lifted?	Date the ban was lifted
IX	Ariz.	Maricopa	Part	TSP	July 1, 1979	FTSAS	No	-
		Pima	Part	TSP	July 1, 1979	FTSAS	No	-
			Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
		Pinal	Part	TSP	July 1, 1979	FTSAS	No	-
			Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	_
		Gila	Part	TSP	July 1, 1979	FTSAS	No	-
			Part	so2	July 1, 1979	FTSAS	No	-
		Greenlee	Part	TSP	July 1, 1979	FTSAS	No	-
				so <sub>2</sub>	July 1, 1979	FTSAS	No	-
		Cochise <sup>C</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
			Part	TSP	July 1, 1979	FTSAS	No	-
			Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
		Coconino <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Navajo <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	_
	Calif.	San Bernadino	Part	TSP	July 1, 1979	FTSAS	No	_
	Nev.	White Pine <sup>a</sup>	Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
	Hi.	0ahu <sup>a</sup>	Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	-
		Maui <sup>a</sup>	Part	so <sub>2</sub>	July 1, 1979	FTSAS	No	
			Part	TSP	July 1, 1979	FTSAS	No	_
	Guam	Piti <sup>a</sup>	Part	TSP	July 1, 1979	FTSAS	No	-
		Tanguisson	Part	SO2	July 1, 1979	FTSAS	No	-
X	Oreg.	Jackson	Whole	TSP	June 10, 1981	FTSAS	No	-

Summary of Construction Ban Areas (Con't.)



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