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I. Nature of the Problem

Pollution of ambient air is most often a multi-source problem. Because some of these sources may be located in different jurisdictions subject to different legal standards or constraints, protection of ambient air quality in these circumstances poses unique legal problems. From a legal perspective, the most difficult problems are those involving transnational air pollution since regulators must take account of the different legal systems as well as the different standards. By contrast, interstate problems are, by their nature, more easily susceptible to federal solution. The authors of the Clean Air Act have attempted to address both international and interstate air pollution problems. In each case, they have met with little success.

II. Regulation of International Air Pollution

A. Clean Air Act, § 115: Authorizes the EPA to require states responsible for air pollution that may reasonably be anticipated to endanger public health or welfare in a foreign country, to revise their state implementation plans to prevent such air pollution.

Preconditions that must be met before EPA can act:

1. EPA must have reports, surveys or studies from any duly constituted international agency that support the alleged pollution, OR a request from the Secretary of State to take action alleging that such pollution exists; AND

2. EPA must determine that the foreign country affords the United States "essentially the same rights" with respect to the prevention of air pollution problems that emanate from that country.

B. The only case to date arising under § 115 concerns the impact of sulfur emissions from facilities in the midwestern United States on the acid rain problem of Canada. A brief chronology of events in that case may be helpful to understanding the how § 115 works. This chronology is set forth below.

CHRONOLOGY OF EVENTS: CANADIAN/AMERICAN ACID RAIN DISPUTE

10/80: International Joint Commission (IJC) issues the Seventh Annual Report on Great Lakes water quality, Stating that acid depositions are endangering public welfare in the U.S. and Canada, and both countries contribute to the problems of the neighboring country.

12/17/80: Canada adopts legislation allowing their government to order the abatement of emissions from Canadian sources which contribute to transboundary air pollution. Canadian Clean Air Act Section 21.1.

01/13/81: Days before leaving office, EPA Administrator Douglas Costle notifies Secretary of State Edmund Muskie by letter of the IJC's findings and Canada's new legislation pertaining to transboundary pollution. Costle finds both preconditions to EPA's action under Section 115 have been met.

06/26/85: State of New York v. Thomas, 613 F.Supp 1472 (D.C. D.C. 1985). State of New York and other plaintiffs contend that Costle's findings of 1/13/81 required EPA to invoke Section 115 of the Clean Air Act. District Judge Norma Holloway Johnson finds: (1) that Costle's January 13, 1981 letter to Muskie satisfied both requirements of Section 115 of the Clean Air Act (613 F.Supp at 1482); and (2) that the EPA Administrator has a mandatory duty to act under Section 115 of the Clean Air Act once those requirements are met. Id. at 1477. The District Court ordered Administrator Thomas to give formal notification to the Governors of states where harmful emissions originate, in accordance with Section 115.

10/22/85: Lee M. Thomas, EPA Administrator, issues a memoradum on whether Canada's Clean Air Act meets the reciprocity provision of Section 115. Thomas finds that the Canadian law satisfies the reciprocity requirements of Section 115 insofar as it offers a comparable procedure to the one established in Section 115. Nonetheless, Costle finds that Section 115 further requires a finding that Canada will, in fact, implement a comparable control program if and when the United States is prepared to implement a program to protect Canadian air quality.

09/18/86: Thomas v. New York, 802 F.2d 1443 (D.C. Cir. 1986), cert. denied, 107 S.Ct 3196 (1987). The D.C. Court of Appeals rules that the decision to invoke Section 115 was a rule which required adherence to APA rulemaking procedures before implementation. The opinion was written by Judge (now Justice) Scalia and ends with this statement which may portend future problems for the plaintiff in this controversy: "How and when the Agency (EPA) chooses to proceed to the stage of notification triggered by the findings (supporting invocation of Section 115) is within the agency's discretion and not subject to judicial compulsion." 802 F.2d at 1448.

04/07/86: Province of Ontario, State of New York petitions EPA to publish notice and comment findings by former EPA Administrator Costle in 1981. New York also requests EPA to publish a notice that Canada has enacted reciprocal laws to protect the U.S. from Canadian Pollution.

10/14/86: Donald Clay, EPA acting assistant administrator, notifies state of New York that complex questions pertaining to acid rain and deposition must be answered before any action can be taken on New York's April 7, 1986 petition. Clay also informed New York that Costle's 1981 statements did not constitute findings triggering action under Section 115.

11/01/88: The Ontario government petitions U.S. Court of Appeals, D.C. Circuit to order the EPA to begin rule making procedures under Section 115 of the Clean Air Act. Ontario is demanding action based on EPA's refusal to publish Costle's 1981 findings (due to EPA's belief that insufficient evidence exists to support a regulatory program). Ontario contends scientific proof exists that acid rain precursors from smokestacks of the Ohio Valley and adjacent U.S. states are deposited on Ontario's lakes, forests, and cities.

III. Regulation of Interstate Pollution

A. Clean Air Act, § 110(a)(2)(E): Requires each states' state implementation plan (SIP) to contain adequate provisions -- (i) prohibiting any stationary source within the State from emitting any air pollutant in amounts which will

(I) prevent attainment or maintenance by any other state of any ... primary or secondary ambient air quality standard or

(II) interfere with measures required to be included in the applicable implementation plan for any other state under Part C to prevent significant deterioration of air quality or to protect visibility, and

(ii) insuring compliance with the requirements of section 126 relating to interstate pollution abatement.

B. Clean Air Act, § 126(a): Requires each SIP to provide 60 days prior written notice to nearby States of major new sources of air pollution that are either subject to the PSD provisions of the statute, or which may significantly contribute to levels of air pollution in excess of the NAAQS in any AQCR outside the State.

Section 126(b): Authorizes any State to petition the EPA for a finding that any major source emits or will emit any air pollutant in violation of § 110(a)(2)(E)(i). The EPA must act on any such petition within 60 days. But see, Air Pollution Control District v. EPA, 739 F.2d 1071 (6th Cir. 1984), where the Court of Appeals for the Sixth Circuit held that a 22 month delay in acting on a petition was not grounds for granting the petition unless the plaintiff could show that EPA's failure was arbitrary and capricious.

Section 126(c): Provides that it is a violation of a SIP for a major new source to be constructed or operated in violation of § 110(a)(2)(E)(i), notwithstanding that the facility was granted a permit by the State. Further, it is a violation of the SIP for any existing source to continue operations more than three month after a violation of § 110(a)(2(E)(i) has been found. Extensions beyond this three month period may be granted under certain conditions so long as they do not exceed three years.

C. Case Law

Connecticut v. EPA, 696 F.2d 147 (2d Cir. 1982): New York's Long Island Lighting Company's (LILCO) facilities were using 2.8% sulfur fuel under a temporary SIP provision approved by EPA. During this time, Connecticut facilities had been required by their State SIP to use 0.5% sulfur fuel. Subsequently, New York petitioned EPA to allow an indefinite extension of the 2.8% sulfur provision. While New York's request for a permanent extension of its 2.8% sulfur standard was pending, Connecticut petitioned EPA to change its .5% requirement to 1%.[1]

Connecticut also petitioned EPA under § 126 of the Act, alleging that approval of the requested extension by New York would violate § 110(a)(2)(E)(i). New York's sulfur fuel content affected ambient air levels of both SO_2 and total suspended particulates (TSP). Connecticut was an attainment area for SO_2 but a nonattainment area for TSP. Connecticut alleged violations of § 110(a)(2)(E) with respect to both pollutants. The Court's decision addressed each pollutant separately.

Sulfur Dioxide: Among other things, the Court found that the New York proposal could be approved "only if it would not cause a violation of primary or secondary standards for sulfur dioxide in Connecticut, given Connecticut's then prevailing emission limitations on its own sources of pollution." (Emphasis added.) Two important conclusions follow. First, EPA was not, as a matter of law, required to consider the impact of Connecticut's proposed revision (from 0.5% sulfur to 1%) before approving the New York proposal. Second, no violation of § 110(a)(2)(E)(i)(I) exists merely because pollution from one state has a "substantial impact" on the

[1] A separate and unsuccessful challenge to EPA's approval of Connecticut's change was filed by the Connecticut Fund for the Environment (CFE). Connecticut Fund for the Environment v. EPA, 696 F.2d 169 (2d Cir. 1982). CFE was a co-plaintiff with the State of Connecticut in the principal case.

ambient air quality of another state. Each of these conclusions is discussed below.

The first conclusion was not thoroughly analyzed by the court because EPA had subsequently approved Connecticut's proposal and in the course of that decision had concluded that the combined effect of the New York and Connecticut decisions would not cause a violation of Connecticut's SO_2 standards. Had it been more thoroughly analyzed, this conclusion would not have withstood scrutiny. In Ashbacker Radio Corp. v. FCC, 326 U.S. 327 (1945) the United States Supreme Court held that mutually exclusive permit applications for radio broadcasting licenses which are pending at the same time must be considered together in order to satisfy due process requirements. Likewise, two SIP revisions which are mutually exclusive (in the sense that both could not be approved without causing a violation of the NAAQS) ought to be considered concurrently in order to insure that the agency makes a concrete choice from between alternative proposals. Thus, where State X is facing SIP revisions from State Y which may adversely affect the ambient air in State X, State X might reasonably propose a revision that would allow its own sources to utilize the available increments of clean air and demand that EPA consider the proposals of State X and Y concurrently. To the extent that current law encourages this negative form of competition for pollution rights, it should be changed.

The second conclusion which obtains from the court's findings is that a state cannot establish a violation of § 110(a)(2)(E)(i)(I), merely by showing that pollution from another state has a substantial impact on ambient air in the receiving state. The court reaches this conclusion from a direct application of the language of § 110(a)(2)(E)(i)(I) which, by it terms, applies only where a source from one state will "prevent the attainment or maintenance of any...national primary or secondary ambient air quality standard in any other state." Id. Since Connecticut was an attainment area for SO_2, no possible violation of the cited provision could be shown. Interestingly, EPA argued and the court found, that substantial impacts from interstate air pollution could be addressed under § 110(a)(2)(E)(i)(II). That provision prohibits sources in one state from interfering with "measures required to be included in the applicable implementation plan for any other State under part C to prevent the significant deterioration of air quality or to protect visibility." Unfortunately, this provision is wholly useless where as in the Connecticut case, a state seeks to maintain an existing practice. This is because the PSD provisions are designed not to improve air quality, but rather to limit additional contributions of air pollution into the area.

Total Suspended Particulates: As noted previously, Connecticut

was a nonattainment area for particulates. Unfortunately, the equities which might have worked in Connecticut's favor with respect to SO_2 had Connecticut been a nonattainment area for SO_2, did not exist with particulates. Unlike the SO_2 standards for the two states, New York's TSP standards were more stringent than those of Connecticut. Moreover, the LILCO plants were all equipped with electrostatic precipitators. Although, New York did contribute a small amount of particulate matter to Connecticut's air, the contributions were found to be de minimis. Accordingly, the Court held that they did not "prevent the attainment or maintenance" of the NAAQS within the meaning of the law.[2]

Air Pollution Control District v. EPA 702 F.2d 1071 (6th Cir. 1984): The Air Pollution Control District of Jefferson County, Kentucky (Louisville area) filed a petition under § 126 alleging violations of § 110(a)(2)(E)(i) by the Gallagher Power Station in Floyd County in southern Indiana. Jefferson County was a nonattainment area for SO_2. The Kentucky SIP imposed an SO_2 standard of 1.2 lbs/MBTU on its sources in Jefferson County. Indiana originally proposed to require that the Gallagher Station meet the same standard but later obtained EPA approval for a standard of 6 lbs/MBTU -- 5 times the amount allowed from sources in neighboring Jefferson County. The effect was to allow Gallagher to operate without any SO_2 pollution controls. Louisville Gas and Electric, the primary producer of SO_2 in Jefferson County, had spent $138 million dollars to comply with the Kentucky SIP requirement for SO_2 reductions.

EPA conducted a study which showed that the Gallagher Plant contributed only 3% of the SO_2 concentration in those particular areas in Jefferson County where the NAAQS were actually being violated. In other parts of the County, however, Gallagher contributed as much as 34.5% of the primary NAAQS and 47% of the secondary NAAQS. Nonetheless, after 22 months, EPA denied the petition on the grounds that "the Gallagher plant does not cause or substantially contribute to a violation of the SO_2 NAAQS."

Jefferson County made two principal arguments.[3] First,

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[2] In reaching this conclusion, the Court specifically deferred ruling on EPA's claim that § 110(a)(2)(E)(i)(I) prohibits only those SIP revisions which "significantly contribute" to the ambient air quality in the affected state.

[3] The County also argued that § 301(a)(2)(A), which requires EPA "to assure fairness and uniformity in the criteria, procedures and policies....", required the court to balance interstate equities. The court found, however, that this provision related

they claimed that the interstate pollution provisions of the statute should be construed to allow a state to reserve for itself a margin of growth. EPA had originally taken the position (Carter Administration) that one state could not interfere with another state's margin of growth. Following the change in administrations, EPA backed off from this position. The court defers to the agency on this. As a strict legal matter, the court found that the language of the Act prohibiting sources in one state from preventing the attainment or maintenance of the NAAQS in any other State did not protect a state's margin for growth. Arguably, however, an area projected to grow, needs some margin if it is going to maintain its ambient air quality. Given the inequity that existed between Gallagher and the sources of SO_2 in Jefferson County, the court might have used this argument to impose some controls on Gallagher. Jefferson County also argued that Gallagher was preventing the attainment of the NAAQS for SO_2 because it was contributing SO_2 to an SO_2 nonattainment area. EPA argued that this did not establish a violation of § 110(a)(2)(E)(i)(I) because it did not substantially contribute to the SO_2 problem in Jefferson County. To support this claim, EPA pointed to a study which showed that Gallagher contributed only 3% of the SO_2 in those areas of Jefferson County where the NAAQS were actually being violated. In other parts of the County, the Gallagher's contribution consumed as much as 34% of the primary SO_2 standard and 47% of secondary standard. The court accepted EPA's substantial contribution argument, relying on similar language used at § 126(a) of the Act. That provision requires states to provide notice to other states of those sources that would "significantly contribute" to air pollution in excess of the NAAQS. The court reasoned that this provision suggested congressional concern only with such sources.

D. **Restoring Interstate Equities.** Whatever the legal merits of the Connecticut and Air Pollution Control District decisions, they plainly do not achieve the congressional policy underlying the interstate air pollution provisions of the law. On the contrary, these decisions, actually encourage states to allow polluting industries along their borders to consume as much of the pollution increments as are available in both the home state and the neighboring state. The first state to consume these increments will apparently be protected, irrespective of the relative efforts of the two states to control their sources of pollution, so long as the polluting state can show that it has not substantially contributed to violations of the NAAQS. The result in the Air Pollution Control District case is particularly troublesome

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only to the administration of the Act and did not implicate substantive decisions.

because it makes a mockery of Kentucky's efforts to control the pollution problem in that state.

What can be done? **EPA Regulations:** The easiest and most logical place to resolve this problem is from within the EPA itself. The Supreme Court has shown a great willingness to defer to EPA's interpretation of its laws[4], and the language of § 110(a)(2)(E) is sufficiently ambiguous to afford the agency ample discretion to implement the law in a manner that will encourage pollution control. Two specific suggestions are offered here.

1. Section 110(a)(2)(E)(i)(I) prohibits foreign states from preventing the "attainment or maintenance" of the ambient air quality standards. EPA and the courts have shown little interest in giving meaning to the word "maintenance". Although, that word might be construed to address attainment or PSD areas, such areas are more specifically, and more stringently addressed at § 110(a)(2)(E)(i)(II) which prohibits states from interfering with another state's PSD program.[5] Arguably,

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[4] See e.g., Chevron, USA v. Natural Resources Defense Council, 467 U.S. 837 (1984)

[5] See, Connecticut v. EPA, 696 F.2d 147 (2d Cir. 1982): "[EPA] correctly points out that § [110(a)(2)(E)(i)(II)] incorporates the provisions of Part C [the PSD program] into this section of the statute, designed to achieve interstate pollution abatement.... Accordingly, the EPA reasonably concluded that § [110(a)(2)(E)(i)(I) was not intended to do more than prohibit the agency from approving state implementation plan revisions which will cause violations of the NAAQSs in nearby states." Emphasis added. The upshot of this language is that § 110(a)(2)(E)(i)(I) applies to nonattainment areas (or those areas that would be out of attainment if a SIP revision is approved), and that § 110(a)(2)(E)(i)II) applies to PSD areas. Since the PSD program requires states to manage ambient air quality so that increases in ambient pollution levels do not exceed a specified limit below the NAAQS, this seems a reasonable construction which insures comprehensive coverage of all areas. There are, however, two potential problems with this interpretation. First, the pollution increments that are mandated by the PSD program do not apply until a major emitting facility has been approved in a PSD area, thus establishing a baseline from which the PSD increments can be measured. See Alabama Power Co. v. Costle, 636 F.2d 323 (D.C.Cir. 1979). Second, despite a congressional mandate to do so, EPA has not promulgated pollution increments for certain criteria pollutants. § 166. See also, Sierra Club v. Thomas, 658 F.2d 165 (D.Cal. 1987). Thus, for these pollutants, the PSD program may afford no protection beyond that established by the NAAQS.

then the word "maintenance" was intended to address the long-term trends in ambient air quality in a specific region. Thus, if a region projects a certain amount of growth which will bring with it associated air pollution, a state that contributes significant quantities of air pollution to an area that is currently in attainment, may nonetheless prevent the long-range "maintenance" of ambient air quality in that region. By defining the word "maintenance", as used in § 110(a)(2)(E)(i)(I), to require protection of the NAAQS against projected increases in ambient pollution, EPA could reclaim its authority to control significant sources of pollution from other states.

2. Even assuming, as the 6th Circuit does, that substantial contribution is the test for determining violations of § 110(a)(2)(E)(i)(I), EPA could and should insist that the phrase be defined to take account of interstate equities. Thus, in the Air Pollution Control District case, the Gallagher plant's contributions to Jefferson County should have been treated as substantial, even though only 3% in those areas of violation, because Gallagher had no controls on its stacks, while Kentucky's facilities had substantial controls. It is grossly unfair to insist, as the court's decision does, that the Kentucky facilities, which have already expended $138 million on air pollution equipment, bear an additional burden of control.

CONCLUSION

The international and interstate air pollution provisions of the Clean Air Act were a reasonable attempt to achieve progress in confronting transboundary air pollution problems. Unfortunately, EPA has shown no leadership in implementing these provisions. While courts might have been expected to demand stronger initiatives by EPA, the current deferential mood in the courts made such relief unlikely. If EPA continues to hinder progress on transboundary pollution abatement, Congress should respond with more specific language. In the case of international air pollution, Congress should disapprove of the reciprocity determination by Administrator Thomas which requires a showing that a foreign country has taken substantive action under its provision that parallels § 115 of the Clean Air Act. This should not be necessary unless the United States can reasonably claim that the conditions for invoking the parallel provision of foreign law have been met. Regarding interstate pollution, Congress should insist that EPA encourage states which hope to clean their air beyond the NAAQS, by allowing those states to protect the margin for growth that they have created from unreasonable intrusions by foreign states. In addition, Congress should demand that EPA treat states equitably. Where one state contributes to a nonattainment problem in another state, EPA should compare the efforts that each state has made to control the air pollution before assessing the substantiality of each state's contribution.

Interstate Pollution Abatement Petition Process

Section 126; 42 U.S.C. § 7426