Federal and State Enforcement: Report from the Regulators (Handout)

By

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Split Responsibilities Between EPA & States

- CAA §§ 107-109: EPA is responsible for promulgating the National Ambient Air Quality Standards (NAAQS) for certain criteria pollutants:
  - Particulate Matter (PM)
  - Sulfur Oxides
  - Ground-level Ozone
  - Nitrogen Oxides
  - Carbon Monoxide
  - Lead

- CAA §§ 107(a);110: States have “primary responsibility for assuring air quality.” Each state must submit a state implementation plan (“SIP”) that “provides for implementation, maintenance, and enforcement of” the NAAQS. Limited to regulating and enforcing against in-state stationary sources (with the exception of California which may adopt more stringent standards for automobiles).
Overlapping Enforcement Jurisdiction

- MOUs between EPA and individual States on enforcement of all federal environmental programs.

  - EPA and the State agency to jointly decide which agency is to take the lead – based on resource availability.

State Enforcement

- Through SIP approved regulations.

- Through authorized and delegated federal programs.

- CAA § 116: States may adopt emission limitations and enforcement standards that are more stringent than those required under the Clean Air Act.
The SIP Process and State Enforcement

- What is a SIP? The state’s blueprint for attaining and maintaining the NAAQS.
  - Permit requirements
  - Enforceable emission limitations imposed on existing sources.
  - Inspection requirements.
  - Enforcement provisions: Administrative or judicial.
    - ECL §§ 71-2103, 71-2109: Injunctive relief and penalty provisions (between $375-$15,000 for first day of violation, & $15,000 for each day thereafter).
    ⇒ All requirements imposed by state law and regulations.
  - Air quality modeling forecast.

Authorized & Delegated Federal Programs

- Most States have authorized or delegated federal programs
  - Authorized = EPA’s finding that the State’s own regulatory requirements and procedures in SIP meet the requirements specified under the federal program.
  - Delegated = The State implements the federal program requirements as spelled out in the C.F.R.

- Federal Programs
  - New Source Performance Standards/CAA § 111: Also apply to new construction or modified sources.
  - Standards for Hazardous Air Pollutants/CAA § 112: Standards for 189 toxic air pollutants emitted by industrial sources. Require existing and new sources to install controls that are the Maximum Achievable Control Technology or MACT.
Federal Enforcement

- **Notice Requirement/CAA §113(a):** If EPA finds that any person is in violation of “any requirement or prohibition of an applicable implementation plan or permit,” it first must notify “the person and the State in which the plan applies of such finding.”
  - After expiration of 30-days, EPA may (i) commence an administrative action or (ii) bring a civil action.
- **Civil Judicial Enforcement/CAA §113(b):** EPA may “commence a civil action for a permanent or temporary injunction, or to assess a civil penalty of not more than $25,000 per day.”

Federally Enforceable Programs

- **State Implementation Plans:** Include State regulations for meeting the NAAQS that are approved and *enforceable* by EPA.
- **New Source Review**
- **New Source Performance Standards**
- **Standards for Hazardous Air Pollutants**
- **Mobile Sources Programs/CAA §§ 202-250**
Citizen Suit Enforcement

- CAA § 304(a): Any person (including a state) may commence a civil action on his own behalf against:
  - (1) any person that is violating an emission standard or EPA administrative order,
  - (2) against EPA with respect to a mandatory duty, or
  - (3) against any person who proposed to construct or constructs any new or modified major emitting facility.
- CAA § 304(b)(1): 60-day notice requirement to EPA and alleged violator. Applies specifically only to (a)(1) and (2).
- CAA § 304(b)(2): No action may be commenced if EPA and/or the appropriate state agency is “diligently prosecuting” the claim.

Progress Report

<table>
<thead>
<tr>
<th>NAAQS</th>
<th>Number of Counties in Non-attainment</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{2.5}$</td>
<td>208</td>
<td>88,394,361</td>
</tr>
<tr>
<td>8-Hour Ozone</td>
<td>282</td>
<td>126,831,848</td>
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</tbody>
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(as of July 31, 2009)
PM-2.5 Nonattainment Areas (1997 Standard)

Nonattainment areas are indicated by color. When only a portion of a county is shown in color, it indicates that only that part of the county is within a nonattainment area boundary.

7/2009

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8-Hour Ozone Nonattainment Areas (1997 Standard)

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7/2009

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Interstate Nature of Pollution

- While the U.S. air quality management system is largely managed on a state level, many air quality problems are regional in nature.

- Over 72% of both peak ozone and PM$_{2.5}$ concentrations within each of 27 Eastern States are caused by emissions from other states. Bergin et al., *Regional Air Quality: Local & Regional Impacts of NO$_X$ and SO$_2$ Emissions on Ozone and Fine Particulate Matter in the Eastern United States*, Envtl. Sci. Tech. 4677-89 (July 1, 2007).

- Many of the most heavily impacted areas (e.g., NJ, Md., Del., NY) are not dominant source states and thus have limited options available to reduce in-state pollution.

SO$_2$ Emissions Comparison for Power Plants

- NY, NJ, Connecticut 132,979 tons SO$_2$ (31.5 million people)
- Ohio: 709,444 tons SO$_2$
- Pennsylvania: 831,915 tons SO$_2$
- Indiana: 593,154 tons SO$_2$
- West Va.: 301,574 tons SO$_2$

TOTAL: 2,436,087 tons SO$_2$ (32.9 million people)

States’ Legal Strategies to Address Interstate Air Pollution

1. New Source Review: Lawsuits against “modified” power plants.

2. Public Nuisance: An old and new strategy to address interstate pollution.

3. CAA §§ 110(a)(2)(D) and 126: Update on state petitions and CAIR.

1. New Source Review

- Claims: That companies undertook “modifications” of existing power plant units without (i) obtaining the required permits and (ii) installing controls to reduce emissions of SO₂ and NOₓ.
- CAA § 111(a)(4): “Modification” means “any physical change in . . . a stationary source which increases the amount of any air pollutant emitted by such source”
- Physical change not defined in regulation but liberally construed.
- Routine Maintenance not defined in regulation but defined by EPA in a 1988 applicability determination as a fact-intensive examination of a project’s cost, frequency, nature & extent, and purpose.

- Significant Net Emissions Increase
  - Significant = 40 tons per year for SO₂ and NOₓ
  - Net = Emissions increase at one unit can be offset by an emissions decrease at another unit.
  - Emissions Increase: “[A]ny increase in actual emissions from a particular physical change,” measured in “tons per year.”
United States v. Ohio Edison, Co., 

- Unit 5/300 MWs: Persistent boiler tube leaks caused the unit to be shut-down a total of 2,134 hours over 2-year period because of forced outages. The company replaced $18 million worth of boiler components, taking close to a year to complete the work. The increased hours of operation projected by the company to result from replacing the failed boiler components was equivalent to 5,200 tons per year of increased SO₂ emissions – 130 times significance levels. *Id.* at 869-70.

WEPCo. v. Reilly, 893 F.2d 901 (7th Cir. 1990)

- Context: Direct challenge to EPA applicability determination.
- Facts: Replacement of steel drums and air heaters.
  - Life extension project.
  - Unprecedented: WEPCO did not identify even a single instance of renovation work at any plant that approached the project.
- Routine Maintenance: Affirmed EPA’s 4-factor routine maintenance test + application of test.
  - Frequency factor not an issue because of unprecedented nature of project.
- Emissions Test: EPA applied actual-to-potential test – same test for new units.
  - Based on theory that a modified unit should be treated as if it had “not begun normal operations.”
  - Vacated EPA application of emissions test, finding that the CAA requires EPA to adopt the most “realistic assessment of [a change’s] impact on ambient air quality levels;” *i.e.*, actual-to-projected actual test required.
  - Resulted in EPA’s 1992 regulations making clear that actual-to-actual test applies.
Routine Maintenance

- *WEPCo. v. Reilly*, 893 F.2d 901 (7th Cir. 1990): Affirmed EPA’s 4-factor routine maintenance test + application of test.

- *New York II*, 443 F.3d 880 (D.C. Cir. 2006): Under plain language of statute, routine maintenance exemption is limited to “de minimis circumstances” + exemption can only apply to the kinds of physical changes that categorically do not increase emissions.

- Application of Frequency Factor: Split in districts on how to apply frequency factor. No Courts of Appeals have dealt with frequency factor yet.

Emissions Test


  - NSPS regulation was not incorporated into NSR provisions of CAA when statute was amended in 1977.
  - EPA is authorized to apply different regulatory emissions tests under NSPS and NSR.
  - Company must consider increased hours of operation resulting from a physical change in determining emissions increase.
Summary of NSR Cases

- **Eight Cases Have Settled:** Over 30 power plants in total.

- **Ongoing Cases:** Concerns 9 power plants.
  - Pennsylvania v. Allegheny Energy, (W.D. Pa.)
  - United States v. Cinergy, (S.D. Ind.)
  - New Jersey v. Reliant Energy, (E.D. Pa.)

- **Ongoing Investigations re: Cement Kilns**

2. **Public Nuisance:**

   *North Carolina ex. rel. Cooper v. TVA (W.D.N.C.)*

- **Theory of Case:** Emissions of SO$_2$, NO$_X$, and mercury from 9 power plants located in AL, KY, and TN are causing an unreasonable interference with the State’s public health and environment.

- **Authority/Standing**
  - **Savings Clause/CAA § 304(e):** “Nothing in this section shall restrict any right which any person [including a State] may have under any statute or common law . . . to seek any other relief.”
  - **Georgia v. Tennessee Copper Co.,** 206 U.S. 230 (1907)
    “[T]he State has an interest independent of and behind the titles of its citizens, in all the earth and air within its domain. It has the last word as to whether its mountains shall be stripped of their forests and its inhabitants shall breathe pure air.”
General Authority of States to Act in Areas of Environmental Concern

  - **Sovereign**: Involves the exercise of power over individuals/companies within its own jurisdiction; *e.g.*, adopting and enforcing envl laws and regulations.
  - **Proprietary**: Like private parties, states own land and/or business ventures; *e.g.*, acting to protect state forests.
  - **State’s pursuit of private interests as a nominal party**.
  - **Quasi-Sovereign**: Acting as *parens patriae* (“parent of the country”) on behalf of citizens at large; *e.g.*, in bringing public nuisance causes of action to protect the public health.

TVA’s Motion for Summary Judgment Denied

549 F. Supp. 2d 725 (W.D.N.C. 2008)

  - State public nuisance claims under Clean Water Act not preempted but law of the source state must be applied.
  - *International Paper* applies to Clean Air Act claims also.
  - Note: Preemption issue raised in a footnote. TVA’s main argument was that NC’s pursuit of similar relief in the context of a CAA § 126 precluded public nuisance suit.

- **Lawful Actions Defense**: Emissions from state-permitted facilities can constitute a public nuisance.

- **NAAQS Defense**: Nuisance claims made out even if area is meeting NAAQS.
Ruling: Pollution from 4-plants (22 units) located within 100 miles of North Carolina constitutes a public nuisance.

- Plants collectively contributed 0.4-0.5 µg/m³ of PM$_{2.5}$ – compared to total annual PM$_{2.5}$ concentrations ranging from 12.6-15.2 µg/m³ (3-4% of total).
- Plants collectively contributed 4-8 ppb to peak 8-hour ozone concentrations in western NC – compared to avg. 8-hour concentrations ranging between 73-94 ppb (4-8.5% of total).
- Both PM$_{2.5}$ and ozone exposure contribute to adverse public health effects, including mortality.
- “PM$_{2.5}$ contributes significantly to the phenomenon of acid deposition, including wet, dry, and cloudwater deposition.”

- Emissions from 5 other plants too insignificant to constitute nuisance.

Remedy: Full level controls on all units.

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TVA’s Appeal to Fourth Circuit

- TVA does not appeal any findings of fact.
- Instead, TVA’s appeal focuses on all legal issues, including:
  - Whether district court erred in applying NC law, instead of law of source state.
  - Whether permitted emissions can constitute a public nuisance.
  - Whether Alabama & Tennessee law allow another state, in its capacity as a state, to bring a public nuisance suit.
  - Whether the CAA Interstate Provisions Preempt North Carolina’s public nuisance claims.
    - CAA 304(e): “Nothing in this section shall restrict any right which any person . . . may have under any statute or common law . . .” Virtually identical to CWA savings clause.
    - No reason that International Paper should not be applied.
3. Petitions Under CAA § 126

- **CAA §110(a)(2)(D)(i)(I):** As part of its SIP obligations, each state must ensure that in-state sources are not “emitting any air pollutant in amounts which will contribute significantly to nonattainment in . . . any other State with respect to [the NAAQS].”

- **CAA § 126:** (b) Any State “may petition the Administrator for a finding that any major source or group of stationary sources emits or would emit any air pollutant in violation of the prohibition of section [110(a)(2)(D)(i)(I)].”

  (c) The Administrator may permit the continued operation of a source subject to such finding only if it complies with emissions limitations and compliance schedules as may be provided by the Administrator to bring about compliance with the requirements of section 110(a)(2)(D)(i) “as expeditiously as practicable, but in no case later than three years after the date of such finding.”

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**EPA Actions to Deal with Interstate Pollution**


- **Clean Air Interstate Rule,** 70 Fed. Reg. 25,162 (5/12/05)
  - Resulted, in part, from State pressure & NSR cases.
  - Cap & Trade: Addresses PM2.5 and Ozone NAAQS through SO2/NOX cap and trade program in 28-Eastern States and D.C. Each state provided with annual budget of SO2/NOX allowances for power plants. Done in two phases: 2009/10 and 2015.

- **North Carolina v. EPA,** 531 F.3d 896, rehearing granted in part, 550 F.3d 1176 (D.C. Cir. 2008): Found to violate CAA for variety of reasons AND remanded without being vacated.

- **Pending § 126 Petitions:** North Carolina & Delaware.
Strengths and Weaknesses of Each Approach

- New Source Review
  - Strengths: Cases rely on theoretically objective standards + BACT as remedy.
  - Weaknesses: Case-by-case basis + Not all of the worst pollution plants have been modified.

- Public Nuisance:
  - Strength: Should apply to all plants irrespective of whether modified.
  - Weaknesses: Case-by-case basis + how much is enough pollution to constitute a nuisance? + Potential legal bars.

- CAA § 126:
  - Strengths: Should apply to all state sources.
  - Weaknesses: Relies on EPA finding.