

## D.C. CIRCUIT COURT OF APPEALS REJECTS EPA CLEAN AIR INTERSTATE RULE

*On July 11, 2008, the D.C. Circuit Court of Appeals (“the Court”), in a sweeping decision, rejected one of the Environmental Protection Agency’s (“EPA” or “the Agency”) major Clean Air Act (“CAA”) rulemaking initiatives—the Clean Air Interstate Rule (“CAIR” or “the Rule”).*

The ruling came as a surprise to both environmental groups and industry alike, and has, at least temporarily, thrown the status of air quality regulation for several key air pollutants in the Eastern United States into disarray. Not only does the ruling all but ensure a delay in the air quality and health benefits EPA sought to achieve beginning next year<sup>1</sup>, but it has created significant uncertainty for industry, as many firms had already begun making substantial capital investments in preparation for compliance obligations under the Rule. States too, are scrambling to determine how the decision will affect their compliance obligations related to several key air pollutant standards. In the aftermath of the decision, the parties to the lawsuit, as well as lawmakers have been actively discussing options for moving forward. The following client advisory discusses CAIR, the Court’s dismissal of the Rule, the current status of EPA’s National Ambient Air Quality Standards (“NAAQS”), and the potential impacts the ruling may have on the future of air quality regulation.

<sup>1</sup> The Agency estimated the Rule would reduce SO<sub>2</sub> emissions by 3.5 million tons in 2010 and NO<sub>x</sub> emissions by 1.2 million tons in 2009. EPA also estimated the Rule would generate \$8-10 billion in health benefits by 2015, with an additional \$2 billion in visibility benefits over the same period.

### THE CAIR RULE

On May 12, 2005, EPA issued the final CAIR rule under its CAA Title I authority that requires states to have adequate plans in place to implement NAAQS<sup>2</sup>. 70 Fed. Reg. 25,162. EPA promulgated CAIR under a specific provision of the CAA that regulates emissions from within an “upwind” state which affect NAAQS attainment in “downwind” states. *See generally* 42 U.S.C. § 7410. Specifically, each state must adopt and submit an implementation plan (“SIP”) containing adequate provisions that, among other things, prohibit any source or other type of emissions activity *within* a state from emitting any air pollutant in amounts that will “*contribute significantly to nonattainment in, or interfere with maintenance by, any other State with respect to any*” NAAQS. 42 U.S.C. § 7410(a)(2)(D)(i)(I) (emphasis added). It is EPA’s interpretation of the emphasized language from section 110(a)(2)(D)(i)(I) at the heart of this case.

EPA designed CAIR to reduce or eliminate the impact of upwind sources on out-of-state downwind non-attainment of NAAQS for fine particulate matter (“PM<sub>2.5</sub>”) and eight-hour ozone (*i.e.*, smog). *See* 72 Fed. Reg. 25,162. Because sulfur dioxide (“SO<sub>2</sub>”) is a precursor to PM<sub>2.5</sub>, and nitrogen dioxide (“NO<sub>x</sub>”) is a precursor to both ozone and PM<sub>2.5</sub>, CAIR required upwind states to revise their SIPs to implement control measures to reduce emissions of both SO<sub>2</sub> and NO<sub>x</sub>. CAIR required states to achieve certain emissions

<sup>2</sup> Section 109 of the CAA requires EPA to set both primary and secondary NAAQS for six criteria pollutants (carbon monoxide, lead, nitrogen dioxide, particulate matter, ozone, and sulfur dioxide). 42 U.S.C. § 7409. The primary standards set limits to protect public health, including the health of sensitive populations (asthmatics, children, and the elderly). Secondary standards set limits to protect public welfare (decreased visibility, damage to animals, crops, vegetation etc.).

reductions by controlling emissions from power plants through an EPA-administered cap-and-trade system or meet an individual state emissions budget through measures of the state's choosing. CAIR applied only to the District of Columbia and the 28 states east of the Mississippi. While the Agency anticipated that states would achieve emissions reductions primarily from the power generation sector, CAIR reductions applied to all sources.

Under CAIR, upwind states were required to reduce their emissions in two phases: (1) NO<sub>x</sub> reductions start in 2009, and SO<sub>2</sub> in 2010; and (2) a second reduction phase for each pollutant to start in 2015. The Rule provided optional interstate cap-and-trade programs for each pollutant, revised the acid rain (SO<sub>2</sub>) cap-and-trade regulations under Title IV of the CAA, and replaced previous EPA NO<sub>x</sub> regulations (the NO<sub>x</sub> SIP Call). Importantly, EPA took a region-wide approach to capping CAIR emissions under the assumption that capping emissions on a state-by-state basis would not be as cost-effective.

Under CAIR, whether one state's air quality "contributes significantly" to another's non-attainment was determined by a number of factors, the most important of which were the cost of "highly cost-effective" emissions controls, fairness, and equity in the balance between regional and local controls. States deemed to "contribute significantly" to non-attainment for either ozone or PM<sub>2.5</sub> were subject to CAIR's annual emissions limits (caps) for either NO<sub>x</sub>, SO<sub>2</sub>, or both. Regulated states choosing to participate in the allowance trading portion of CAIR were allocated a budget of allowances (calculated by formula) for SO<sub>2</sub> and NO<sub>x</sub>, which they could then trade to meet the caps. Just as the Agency did in setting caps, EPA set the budget for SO<sub>2</sub> and NO<sub>x</sub> allowances on a region-wide basis assuming this would facilitate emissions trading.

Before an upwind state would be required to comply with CAIR, EPA had to make an initial determination regarding that state's level of contribution. Measuring each state's air quality, then, became the threshold determination. While various interest groups challenged

different provisions of CAIR, the most common theme throughout all challenges centered on how EPA defined and interpreted the phrase "contribute significantly" in determining what threshold amount of emissions constituted a significant contribution to another state's non-attainment problem.

### THE D.C. CIRCUIT'S OPINION

Petitioners challenging the Rule ran the spectrum from those that argued CAIR's emissions limits were too strict to those that claimed the Rule did not go far enough to protect public health in downwind states. The most prominent challenge came from North Carolina, which argued that CAIR did not go far enough in regulating upwind states. The state argued that EPA's management of the emissions trading program provided insufficient protection for downwind regions and would cause these regions to fall short of air quality attainment levels.

Several electric utilities in various upwind states also sued, but argued that the Agency overstepped its statutory authority in various respects when it capped emissions. Still other utilities contested EPA's authority in the method the Agency chose to set certain states' NO<sub>x</sub> budgets. The Court, in a solid rebuke of the Rule, stated "we find more than several fatal flaws in the rule." Because EPA adopted CAIR as one major rule, the Court vacated the Rule in its entirety and remanded it to the Agency.

### North Carolina's Petition

Regarding North Carolina's petition, the Court largely agreed with the state, finding several errors with the Agency's interpretation of the language in section 110(a)(2)(D)(i)(I). First, because EPA evaluated whether proposed emissions reductions were highly cost-effective at the *region-wide* level, the Court found that the Agency did not measure the "significant contribution" from sources within an *individual state* to downwind non-attainment areas as required under section 110(a)(2)(D)(i)(I).<sup>3</sup> For EPA to properly

<sup>3</sup> The court cited the example that under the region-wide approach of CAIR, sources in Alabama, which contribute to non-attainment of PM<sub>2.5</sub> in Davidson County, North Carolina, would

exercise its statutory duty in this respect, the Court said it must promulgate a rule that achieves something measurable toward the goal of prohibiting sources “within a State” from contributing to non-attainment or interfering with maintenance<sup>4</sup> “in any other State.”

The Court, however, went one step further stating that because CAIR was designed as a complete remedy to section 110(a)(2)(D)(i)(I), EPA “must actually require elimination of emissions from sources that contribute significantly and interfere with maintenance in downwind states” (*i.e.*, EPA must take a state-specific and source-specific approach and actually require emissions reductions). EPA’s lack of a state-specific focus would become a recurring shortfall in the eyes of the Court across many provisions of the CAIR.

North Carolina also challenged EPA’s timing under the CAIR, arguing that the Agency erred when it set 2015 as the deadline for upwind states to eliminate their “significant contribution” to downwind non-attainment. The State argued it was unduly burdened because CAIR gave upwind states until 2015 to eliminate significant contributions while under Title I, North Carolina would be required to comply with PM<sub>2.5</sub> NAAQS requirements by 2010, and ozone by at least 2010, but possibly earlier. The Court agreed, finding that EPA ignored its statutory mandate to harmonize CAIR with existing provisions in Title I (*i.e.*, NAAQS requirements). In sum, the Court granted the majority of North Carolina’s challenges.

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not need to reduce emissions, because sources in Alabama could purchase enough NO<sub>x</sub> and SO<sub>2</sub> allowances to cover all current emissions resulting in no change to Alabama’s “contribution” to Davidson County’s non-attainment.

4 The Court also took issue with EPA’s interpretation of what it means to “interfere” with downwind maintenance. An upwind state can interfere with the maintenance of a downwind state where an area(s) in a downwind state barely meets attainment, and would be at risk of returning to non-attainment due to emissions growth or other relevant factors in the upwind state. The Court faulted EPA for not giving independent significance to the “interfere with maintenance” provision of 110(a)(2)(D)(i)(I) to separately identify upwind states subject to CAIR.

### Utility Challenges to NO<sub>x</sub> and SO<sub>2</sub> Budgets

A number of utilities in upwind states (but not the states themselves) challenged EPA’s methods in selecting CAIR’s NO<sub>x</sub> and SO<sub>2</sub> allowance levels. The Court found that EPA improperly chose the budgets for NO<sub>x</sub> and SO<sub>2</sub>. Significantly, the Court rejected both EPA’s attempt to base the SO<sub>2</sub> budgets on the Title IV acid rain trading program budgets (EPA used data from 1985–1987) and its use of cost (or lack thereof) in establishing and allocating the SO<sub>2</sub> budgets. The Court also granted claims that EPA unlawfully limited or terminated Title IV acid rain SO<sub>2</sub> allowances when it “harmonized” CAIR’s regulation of SO<sub>2</sub> with trading under the acid rain program.

Regarding the NO<sub>x</sub> budget, the Court found that in distributing NO<sub>x</sub> emissions allowances to states based on each state’s proportionate share of a region-wide level, EPA impermissibly injected a “fairness” factor into determining which states had CAIR obligations and which did not.<sup>5</sup> Following a familiar theme, the Court again stated that EPA failed to explain how its planned NO<sub>x</sub> emissions allowances related to each individual state’s significant contributions to downwind non-attainment. This particular portion of the opinion also seriously calls into question whether EPA can regulate under section 110 through a regional cap-and-trade mechanism.

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5 EPA based NO<sub>x</sub> allowances on the heat input for the mix of fuels each states’ power plants used (*e.g.*, a coal fired plant contributed full heat input, an oil fired plant counted for 60% of its heat input, and a gas fired plant counted for only 40% of its heat input). For example, Louisiana’s plants use more gas and oil than most states’ plants, and thus, received less NO<sub>x</sub> allowances than other states with more coal fired plants. The Court believed that this “fairness” allocation resulted in an outcome where states like Louisiana with more oil and gas fired plants would subsidize reductions in states with more coal-fired plants because the coal-fired states receive a bigger budget and can sell them to states with less allowances to recoup investment in reductions. This, said the court, contravenes 110(a)(2)(D)(i)(I)’s requirement that *each* state prohibit “contributing” emissions from within the state.

### Texas, Florida, and Minnesota Challenges

Utilities (and one municipality) in Texas, Florida, and Minnesota challenged CAIR's inclusion of these states as "upwind" (*i.e.*, above the threshold air quality quantity of 0.2  $\mu\text{g}/\text{m}^3$ ). The Court denied the Texas and Florida challenges, but granted Minnesota's. Minnesota Power challenged the inclusion of the state for PM<sub>2.5</sub>, arguing the Agency's analysis contained flawed data resulting in an overstatement of emissions. The Court agreed, finding that EPA over-projected emissions for the State in 2010, and misallocated energy production or heat input projections for individual units.

### Remedy

As one would imagine, given the variety of petitioners, the Court had before it multiple remedy requests, ranging from a demand to vacate only individual aspects of the CAIR, to requests to remand larger portions of the Rule. No party, however, requested that the Court vacate the Rule in its entirety. Because EPA promulgated the Rule as a single, regional program, the Court stated "its components must stand or fall together." Even though the Court recognized the "threat of disruptive consequences" stemming from its decision, it found CAIR to have such fundamental flaws (*i.e.*, region-wide caps and allowances with no state-specific quantitative contribution determinations or emissions requirements) to warrant vacating the Rule (and associated federal implementation plan) and remanding to EPA.

### NAAQS STATUS

The unrest created by the *North Carolina* decision is likely to have significant impacts in many respects over the next several years (see *infra*, section V). One area where the court decision will surely be felt is in relation to ongoing NAAQS reviews and states' ability to meet corresponding attainment goals based on updated NAAQS levels. The CAA requires EPA to regularly review and update NAAQS for criteria pollutants, including NO<sub>x</sub> and SO<sub>2</sub>, and PM and ozone. Based on these standards, each state must submit implementation

plans ("SIPs") demonstrating how it will meet (or not meet) attainment requirements.

Virtually all of the upwind and downwind states implicated by CAIR were depending on the reductions achieved under the Rule to meet attainment requirements, or at least affect their attainment status. Now that CAIR has, for the time being, been vacated, it is unclear how states, which were relying on CAIR reductions, will meet upcoming attainment requirements. This issue is especially relevant because EPA is rapidly moving forward on multiple NAAQS reviews and tightening NAAQS levels. The following summarizes relevant NAAQS status and EPA's proposed deadlines for each pollutant.

### Particulate Matter

EPA revised the NAAQS for PM<sub>2.5</sub> in 2006. The Agency tightened the 24-hour standard for PM<sub>2.5</sub> from 65  $\mu\text{g}/\text{m}^3$  to 35  $\mu\text{g}/\text{m}^3$ , and retained the annual PM<sub>2.5</sub> standard at 15  $\mu\text{g}/\text{m}^3$ . Based on the more stringent 24-hour standard, EPA expects to make final non-attainment designations in December 2008 (no later than December 2009), effective April 2010. SIPs detailing how states will meet attainment will be due April 2013.

### Ozone

On March 18, 2008, EPA issued a final rule setting ozone NAAQS at 0.075 parts per million ("ppm") based on an eight-hour average; a reduction from the 1997 standard of 0.08 ppm. The current level has been controversial as it is higher than was recommended by the Clean Air Science Advisory Committee ("CASAC"). State SIP obligations for ozone are somewhat complicated as some states still were not in compliance with the 1997 standard when the 2008 standard was promulgated. States must make recommendations to EPA regarding attainment, non-attainment, and unclassifiable designations for the 2008 ozone NAAQS by March 2009. EPA plans to issue final designations by March 2010 (no later than March 2011), and states will have three years to submit SIPs.

## NO<sub>x</sub> and SO<sub>2</sub>

EPA last reviewed primary and secondary NAAQS for NO<sub>x</sub> and SO<sub>2</sub> in 1996. The primary and secondary NAAQS for NO<sub>x</sub><sup>6</sup> is currently 0.053 ppm. Primary NAAQS for SO<sub>2</sub> is 0.03 ppm per annual average, and 0.14 ppm per 24-hour period. The secondary NAAQS level for SO<sub>2</sub> is 0.5 ppm based on a three-hour averaging time.

The Agency initiated a primary NO<sub>x</sub> NAAQS review on December 9, 2005, and issued a final integrated review plan for primary NO<sub>x</sub> NAAQS in August, 2007. This review will be the second, following lead, to implement EPA's new NAAQS review process. The process is ongoing, with a goal of publishing an Advanced Notice of Proposed Rulemaking ("ANPR") by December 2008. Following that, CASAC will review the ANPR and there will be a public comment period. A proposed rule is expected in 2009, and a final rule for December 2009 with SIPs to follow.

EPA has also initiated a primary SO<sub>2</sub> NAAQS review. An ANPR is scheduled for February 2009, followed by CASAC review and public comment. Proposed rulemaking will take place in July 2009, with a final rule set for March 2010 with SIPs to follow.

EPA is also undertaking a joint NO<sub>x</sub> and SO<sub>2</sub> secondary NAAQS review. Secondary NO<sub>x</sub> NAAQS are identical to the primary, and have not been revised since 1971. The current secondary SO<sub>2</sub> NAAQS is 0.5 ppm. The final Integrated Science Assessment ("ISA") is due December 2008, with an ANPR to follow in August 2009, and a final rule expected by October 2010 with SIPs to follow.

## Lead

The current lead NAAQS is set at 1.5 µg/m<sup>3</sup>, where it has been since 1978. The lead NAAQS review is the first to implement EPA's new NAAQS review process. In December 2007, EPA issued an ANPR as part of

its lead NAAQS review process, seeking comment on scientific evidence concerning the primary and secondary effects of current and past lead emissions, and proposing a potential tightening of the standard to anywhere between 0.02 and 1.5 µg/m<sup>3</sup>.

On May 20, 2008, EPA published a proposed rule significantly tightening the standard, proposing a NAAQS between 0.10 µg/m<sup>3</sup> and 0.30 µg/m<sup>3</sup>. The proposed rule also invites comment on alternative levels up to 0.50 µg/m<sup>3</sup> and below 0.10 µg/m<sup>3</sup>. EPA proposed to revise the secondary standard to be identical to the primary standard. The rule also proposes revisions not only to the NAAQS level, but also to other NAAQS measurement methods, namely indicator, averaging time, and form. Based on the final lead NAAQS, expected in September 2008, states will make recommendations regarding attainment, non-attainment, and unclassifiable designations by September 2009. State SIPs are expected to be due in the spring of 2013, with an attainment deadline no later than Fall 2016.

## Carbon Monoxide

In March 2008, EPA issued a draft plan for review of the primary NAAQS for carbon monoxide ("CO"), calling for the evaluation of the relevant scientific information on human exposure to ambient CO. The Agency plans to issue a draft risk/exposure assessment by January 2010, a final ISA by May 2010, and an ANPR by February 2011. A proposed rulemaking is scheduled to be out in October 2011, with a final rulemaking to follow in July 2012 and SIPs to follow.

## DISCUSSION

The D.C. Circuit's *North Carolina* decision represents a stunning, and sweeping rebuke of one of the Bush Administration's major CAA rulemaking initiatives, and signals a growing trend of judicial dissatisfaction with the Agency. The decision assures that legislation and regulation over criteria pollutants will once again take center stage, alongside the ongoing debate about how to regulate greenhouse gases. One irony of the D.C. Circuit's decision is that virtually no one, from

<sup>6</sup> Air quality criteria for NO<sub>x</sub> are based on the standard of using NO<sub>2</sub> as the indicator for the broader mix of gaseous NO<sub>x</sub> in the ambient air, and as a result, the primary and secondary NAAQS for NO<sub>x</sub> specifically apply to NO<sub>2</sub>.

environmental groups to industry to lawmakers, is satisfied with the outcome. By vacating the entire rule (including the NO<sub>x</sub> program, which no party asked for) and sending EPA back to the drawing board, the health benefits set to be realized under CAIR beginning next year risk significant delay. Environmental groups have called the decision “terribly unfortunate.”

Industry, by in large, was also disappointed with the decision. Many of the largest affected utilities had already begun investing significant time and capital into retrofitting equipment or structuring and budgeting allowance trading strategies in order to comply with what would have been CAIR’s first round of NO<sub>x</sub> implementation next year. PPL estimates it lost approximately \$100 million after the emissions credit market plummeted immediately following the *North Carolina* decision. Meanwhile, officials at EPA are reeling at the prospect of having to abandon or at least completely retool major provisions of the most significant CAA rule the Agency has completed in the past decade.

The decision’s impact has also reverberated throughout the halls of Congress. Senator Thomas Carper (D-Del.) views the decision as an opportunity to pass a “strong, comprehensive clean air bill” and has actively begun to push his Clean Air Planning Act (“CAPA”), which would impose a mandatory cap-and-trade program on electric power plants and reduce power plant emissions of NO<sub>x</sub> by 68 percent, SO<sub>2</sub> by 82 percent, and mercury by 90 percent by 2015. Carper’s bill is more ambitious than CAIR, and the Senator has long indicated that he would like his bill rolled into a more comprehensive, economy-wide greenhouse gas cap-and-trade bill. Whether Carper will be successful in advancing any form of his bill is highly speculative.

Others have urged lawmakers to consider a narrower fix of section 110 of the CAA, remedying the specific deficiencies cited in the decision. Of particular concern is the effect of the decision with respect to SO<sub>2</sub>. The Court rejected EPA’s attempt to harmonize CAIR SO<sub>2</sub> regulations with the existing acid rain SO<sub>2</sub> trading program and in doing so created significant doubt as to

whether any future SO<sub>2</sub> regulation that relies on a cap-and-trade scheme can coexist with the current acid rain program. Some critics have stated that the only way EPA can address SO<sub>2</sub> in the wake of the decision is if Congress acts first. Narrow legislative remedies such as this will no doubt be entertained over the coming months.

Other experts have mentioned the possibility of a settlement. Because this case is unique in that all sides seem to be unhappy with the decision in some respect, it is possible that the parties could reach an agreement to leave major portions of the program intact. It is unclear, however, how a settlement could be structured that does not run afoul of the legal deficiencies found in the opinion.

One thing the decision has made clear is that the future of air pollutant regulation, and concomitant compliance obligations under the CAA, is uncertain. EPA has until August 25th to decide whether to appeal the decision (either to seek a re-hearing by the D.C. Circuit or appeal to the U.S. Supreme Court). The opinion, however, may create more questions regarding how EPA can regulate air pollutants than it provides answers, and the Agency is still trying to come to terms with the full implications of the decision. Most notable among these questions is how the EPA may regulate air pollutants, including how and whether the Agency may regulate greenhouse gases under the CAA. The literal reading of the CAA by the Court creates substantial uncertainty regarding the Agency’s legal authority to establish cap-and-trade programs for reducing air pollutants under 110(a)(2)(D)(i)(I). Under section 110, EPA cannot consider “fairness” in allocating pollutant allowances, and cannot create a program that is region-wide in scope to meet emissions goals.

In short, the decision has taken away much of EPA’s perceived flexibility to craft cap-and-trade regulatory programs to combat air emissions. Not only will this impact the regulation of criteria pollutants, but given the “global” nature of CO<sub>2</sub>, and the fact that most all greenhouse gas cap-and-trade systems currently being contemplated are either regional or national in

scope (*i.e.*, the northeast's Regional Greenhouse Gas Initiative), the negative implications for the Agency's ability to address greenhouse gases through a cap-and-trade mechanism under the CAA are a real concern.

The decision also casts doubt over affected state SIPs that have already been submitted, or are in the final stages of development, and which relied on reductions under the CAIR program to meet attainment goals. These plans will likely have to be revisited. Given that PM, ozone, NO<sub>x</sub> and SO<sub>2</sub> NAAQS all have rapidly impending deadlines, states and industries within those states, are now thrust into a highly uncertain regulatory environment with respect to control of these pollutants. In the wake of this decision, it will be important to monitor new judicial, legislative, and regulatory developments related to criteria pollutant NAAQS.

Yet, with all the chaos created by the recent CAIR ruling, a sense of urgency has emerged by all interested parties, including regulated entities, federal lawmakers, and individual states. It is likely that Congress will introduce some type of CAA legislation designed to deal with some of the deficiencies noted by the Court. A change in administration will undoubtedly affect not only congressional time frames, but the decisions coming out of EPA, and the Agency's approach to regulating all pollutants; and particularly CO<sub>2</sub>. The ultimate impact of the *North Carolina* decision is far from certain (or even settled), but one thing is clear – the regulation of air pollutants remains an amazingly complex patchwork of federal and state laws and regulations that, at times, are difficult to reconcile. In the coming months and years, the regulation of criteria pollutants will once again be a major focus at both the state and federal level. Such regulation will undoubtedly be influenced by attempts at all levels, local, regional, state, and federal, to regulate greenhouse gases. While no one can predict what the ultimate outcome will be, the D.C. Circuit's rejection of EPA's CAIR has certainly made the future of air quality regulation more interesting.

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