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A horizontal banner image showing a blue sky with scattered white clouds. A light blue grid is overlaid on the image.

JONES DAY  
**WHITE PAPER**

**CLIMATE CHANGE REGULATION VIA THE CLEAN AIR ACT:  
EPA'S NEW GREENHOUSE GAS RULE FOR FACILITIES**



# TABLE OF CONTENTS

Page

<b>Introduction</b> .....	5
<b>What Clean Air Act Programs Does the Tailoring Rule Affect?</b> .....	5
<b>How Did We Get Here?</b> .....	6
Endangerment and Contribution Findings for Vehicle Emissions.....	6
The “Jackson Memo” on PSD and Title V Applicability .....	6
The Light-Duty Vehicle Rule.....	7
<b>EPA’s “Tailoring” Approach for Greenhouse Gases</b> .....	7
Calculating Greenhouse Gas Emissions.....	7
Permitting Phase-In.....	8
<b>Implementation Issues</b> .....	8
State Emissions Thresholds.....	9
Grandfathering of Pending Applications.....	9
Potential PSD “Streamlining Mechanisms” .....	10
Ambiguity Regarding Future Steps.....	10
<b>What is BACT for Greenhouse Gases?</b> .....	10
<b>What Legal Issues are Raised by the Tailoring Rule?</b> .....	12
Does EPA Have Authority to Override the Literal Terms of the Statute?.....	12
<i>Absurd Results</i> .....	12
<i>Administrative Necessity</i> .....	13
<i>One Step at a Time</i> .....	13
Does EPA Have Authority to Impose PSD Requirements in the Absence of a NAAQS for Greenhouse Gases? .....	14
Legislative Initiatives Seeking to Limit the Scope of Clean Air Act Regulation.....	14
<b>Conclusion</b> .....	14
<b>Lawyer Contacts</b> .....	15



## INTRODUCTION

On May 13, 2010, the U.S. Environmental Protection Agency announced the first national greenhouse gas emission regulations for stationary sources, such as power plants and manufacturing facilities. Until recently, the conventional wisdom had been that climate change regulation would arrive via new legislation, probably based on a “cap and trade” approach, rather than the 1970s’ Clean Air Act, enacted to fight air pollution, such as smog, on a region-by-region basis.

Although EPA initially took the position that the Clean Air Act was not structurally suited to the global challenge of greenhouse gas regulation, the U.S. Supreme Court ruled in *Massachusetts v. EPA*<sup>1</sup> that emissions of such gases fit within the plain meaning of the Act’s definition of “air pollutant.” Accordingly, the Supreme Court ruled that EPA should assess whether greenhouse gas pollution endangered public health or welfare.

President Obama’s EPA Administrator, Lisa Jackson, made that task her first priority. A series of administrative actions, summarized below, culminated in EPA’s adoption of the “Prevention of Significant Deterioration (PSD) and Title V Greenhouse Gas Tailoring Rule.”<sup>2</sup> The regulation is known as the “Tailoring Rule” because EPA elected to significantly increase (or “tailor”) the Clean Air Act’s regulatory emission thresholds. Administrator Jackson concluded that triggering greenhouse gas regulation at the Act’s relatively low emission thresholds applicable to air pollutants such as lead and carbon monoxide would subject far more stationary sources to permit requirements than Congress ever intended and would overwhelm regulators. Reflecting the controversy surrounding the issue, the first legal challenge to the Tailoring Rule was filed within hours of its publication in the Federal Register.

## WHAT CLEAN AIR ACT PROGRAMS DOES THE TAILORING RULE AFFECT?

The Tailoring Rule revises EPA’s regulations for the “Prevention of Significant Deterioration” (“PSD”) construction permit and Title V operating permit programs.

The PSD program is an integral element of the Clean Air Act’s approach to achieving and maintaining acceptable air quality. When EPA establishes a National Ambient Air Quality Standard (“NAAQS”) for an air pollutant, air monitoring data is used to divide the country, on roughly a county-by-county basis, into areas that have attained the NAAQS and areas that have not. In “nonattainment areas,” stringent standards are imposed to bring down ambient concentrations of the particular pollutant.

In “attainment areas,” the goal is to ensure that new emission sources do not cause significant deterioration of air quality, and that ambient concentrations continue to meet the relevant NAAQS. In areas where air quality meets the NAAQS for a pollutant, a PSD permit is required before actual construction of either a new “major” stationary source of that pollutant or a modification that will cause a “significant” increase in such emissions from an existing major source may begin.<sup>3</sup> The PSD program also applies in “unclassifiable” areas for which there is insufficient data to classify as either attainment or nonattainment.

EPA has elected not to establish a NAAQS for greenhouse gases and will therefore treat the entire U.S. as “unclassifiable.” Thus, regulated greenhouse gas sources will be subject to PSD regardless of their location.

The Clean Air Act defines “major” stationary sources based on facility type and emissions level. For sources in 28 designated industry categories, such as cement plants, the Act defines a major source as one that has the potential to emit 100 tons per year (“tpy”) or more of a regulated pollutant. For all other operations, the statute’s major source threshold is a potential to emit 250 tpy or more of any regulated pollutant. For modifications to existing major sources, PSD requirements are triggered only if the modification increases the source’s potential to emit a pollutant by more than the “significance level” established by EPA for that pollutant.

The central element of the PSD process is a case-by-case review of every proposed project to ensure that it incorporates the “best available control technology” (“BACT”) for any pollutant with potential emissions exceeding either the major source threshold or the applicable significance level.

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1 549 U.S. 497 (2007)

2 75 Fed. Reg. 31514 (June 3, 2010), available at <http://edocket.access.gpo.gov/2010/pdf/2010-11974.pdf>.

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3 40 C.F.R. § 52.21(a)(2).

Historically, the statutory 100/250 tpy emission thresholds and EPA-established significance levels have restricted PSD requirements to a relatively small number of construction projects, currently about 280 per year nationwide.<sup>4</sup>

A Title V operating permit is required for any source with a potential to emit 100 tpy or more of any regulated air pollutant.<sup>5</sup> Title V permits must include terms and conditions to ensure compliance with all “applicable requirements” of the Clean Air Act.<sup>6</sup> EPA interprets these requirements to apply to emissions of pollutants “subject to regulation” under other sections of the Act, including the PSD provisions.

## HOW DID WE GET HERE?

After the U.S. Supreme Court ruled that greenhouse gas emissions met the Clean Air Act’s definition of “air pollutants” in *Massachusetts v. EPA*, the Agency set the stage for the Tailoring Rule with three other greenhouse gas-related actions: (1) a final rule announcing “endangerment and contribution” findings for motor vehicle emissions of greenhouse gases; (2) an interpretive memorandum explaining how and when adoption of vehicle emission standards for greenhouse gases would trigger first-ever PSD and Title V requirements for such gases from stationary sources; and (3) the final rule establishing greenhouse gas standards for emissions from new light-duty motor vehicles. As explained below, EPA has decided these rulemakings mandate its promulgation of the Tailoring Rule.

**Endangerment and Contribution Findings for Vehicle Emissions.** In December 2009, EPA issued two findings for greenhouse gases under section 202(a) of the Clean Air Act, which deals with emission standards for new motor vehicles that cause or contribute to air pollution endangering public health or welfare.<sup>7</sup> First, EPA found that current and projected concentrations of the following six greenhouse gases in the

atmosphere pose an endangerment: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). EPA defined these six well-mixed gases collectively as one “air pollutant.” In a second finding, EPA also concluded that new motor vehicles contribute to an endangerment by emitting four of the six gases (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs). Although neither “endangerment finding” directly imposed any requirements on motor vehicle manufacturers or any other industry, the findings together triggered a statutory obligation for EPA to promulgate greenhouse gas emission standards for motor vehicles under section 202(a) of the Act.

**The “Jackson Memo” on PSD and Title V Applicability.** PSD and Title V requirements automatically apply, under EPA regulations and guidance, to any air pollutant “subject to regulation” under another section of the Clean Air Act.<sup>8</sup> In December 2008, the EPA Administrator at that time, Stephen Johnson, interpreted this language to mean that PSD applies only when a pollutant is subject to requirements for the actual control of its emissions and not simply to monitoring or reporting obligations.<sup>9</sup> Before finalizing vehicle emission standards, current EPA Administrator, Lisa Jackson, decided to reconsider her predecessor’s interpretation.<sup>10</sup> At that time, greenhouse gases were subject only to monitoring and reporting obligations.<sup>11</sup>

In April 2010, Administrator Jackson issued a new interpretive memorandum, the “Jackson Memo,” to clarify EPA’s approach to PSD and Title V applicability for pollutants, particularly for greenhouse gases, as a function of the adoption

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4 See 40 C.F.R. § 52.21(b)(1)(i), (b)(23) (establishing PSD emission thresholds of 100 tons per year and 250 tons per year for new sources, and a default threshold for major modifications of “any emissions rate”).

5 CAA §§ 302(g), 302(j), 501(2)(b).

6 CAA § 504(a).

7 74 Fed. Reg. 66496 (Dec. 15, 2009), available at [http://www.epa.gov/climatechange/endangerment/downloads/Federal\\_Register-EPA-HQ-OAR-2009-0171-Dec.15-09.pdf](http://www.epa.gov/climatechange/endangerment/downloads/Federal_Register-EPA-HQ-OAR-2009-0171-Dec.15-09.pdf).

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8 See 40 C.F.R. § 52.21(b)(50)(iv) (defining “regulated NSR pollutant”); Memorandum from Lydia N. Wegman, Deputy Director, Office of Air Quality Planning and Standards, EPA, “Definition of Regulated Air Pollutant for Purposes of Title V” (Apr. 26, 1993) (“Wegman Memo”), available at <http://www.epa.gov/Region7/air/title5/t5memos/rapdef.pdf>.

9 See Johnson Memorandum to Regional Administrators, “EPA’s Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program,” available at [http://www.epa.gov/nsr/documents/psd\\_interpretive\\_memo\\_12.18.08.pdf](http://www.epa.gov/nsr/documents/psd_interpretive_memo_12.18.08.pdf).

10 See 74 Fed. Reg. 51535 (Oct. 7, 2009), available at <http://edocket.access.gpo.gov/2009/pdf/E9-24196.pdf>.

11 See, e.g., 40 C.F.R. § 75.13 (CO<sub>2</sub> continuous emissions monitoring).

of vehicle emission standards.<sup>12</sup> The Jackson Memo continued the previous interpretation with one twist—EPA decided that PSD and Title V permitting requirements “take effect” for newly regulated air pollutants only when actual compliance with emission control requirements for those pollutants is first required, rather than on the earlier dates of (i) signature of a rule establishing control requirements, (ii) publication of the rule in the Federal Register, or (iii) the formal effective date of the rule, typically 60 days after publication.

**The Light-Duty Vehicle Rule.** On April 1, 2010, citing the endangerment and contribution findings for vehicle emissions, EPA joined with the National Highway Traffic Safety Administration in issuing final limits for the four greenhouse gases—CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and HFCs—emitted from cars and light-duty trucks, for model years 2012 through 2016.<sup>13</sup> Applying the Jackson Memo, EPA decided that the Light-Duty Vehicle Rule (“LDV Rule”) will trigger PSD and Title V coverage for greenhouse gas emissions from stationary sources when the LDV Rule’s compliance obligations “take effect” on January 2, 2011, the first day that model year 2012 vehicles may be introduced into commerce.

## EPA’S “TAILORING” APPROACH FOR GREENHOUSE GASES

As described above, the Clean Air Act defines a “major stationary source” for PSD purposes as one that has a potential to emit either 100 or 250 tpy of a regulated pollutant, and for Title V purposes as one that has a potential to emit 100 tpy of such a pollutant. In the case of greenhouse gases, however, EPA estimates that applying the statutory thresholds would dramatically expand the number of facilities subject to PSD and Title V permitting requirements beginning on January 2, 2011, when the LDV Rule first “takes effect.”

According to EPA, applying the statutory thresholds to greenhouse gas sources would increase the number of construction projects covered by PSD from the current

rate of about 280 per year to almost 82,000 per year, and the number of facilities requiring a Title V operating permit from 14,700 to about 6.1 million. The flood of PSD and Title V permit applications triggered by the new requirements would overwhelm state and local regulators, who issue the bulk of Clean Air Act permits under authority delegated to them by EPA.

According to EPA, the final Tailoring Rule is designed to avoid these disruptive effects on PSD and Title V permitting. Rather than allowing PSD and Title V to apply as specified in the statute on January 2, 2011, EPA has decided to proceed with several phases of regulation, beginning with much higher regulatory thresholds intended to limit greenhouse gas requirements to the largest U.S. sources of such emissions.

**Calculating Greenhouse Gas Emissions.** The Tailoring Rule defines the pollutant known as “greenhouse gases” as an aggregate group of all six gases covered by the “endangerment” finding.<sup>14</sup> For the purpose of applying statutory thresholds for regulation, EPA will initially look at all greenhouse gas emissions on an aggregate mass basis. For example, if a modification project results in an increase in emissions of one greenhouse gas but also leads to a larger decrease in mass emissions of another greenhouse gas, the project may not be subject to regulation.

For other regulatory purposes, EPA uses the table developed for purposes of its October 2009 greenhouse gas reporting rule to assign each of the six regulated greenhouse gases a “carbon dioxide equivalent” or “CO<sub>2</sub>e” based on EPA’s view of its potential to contribute to global warming when compared to carbon dioxide. The tpy of each greenhouse gas emitted by a particular source are multiplied by their CO<sub>2</sub>e values and then added together to determine if the source’s overall greenhouse gas emissions exceed the various permitting thresholds discussed below. The use of CO<sub>2</sub>e values can significantly increase a source’s “regulated” greenhouse gas emissions, because some greenhouse gases have CO<sub>2</sub>e values more than 10,000 times that of carbon dioxide.

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12 75 Fed. Reg. 17004 (April 2, 2010), available at <http://edocket.access.gpo.gov/2010/pdf/2010-7536.pdf>.

13 75 Fed. Reg. 25324 (May 7, 2010), available at <http://www.regulations.gov/search/Regs/home.html#documentDetail?R=0900006480ae8a38>.

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14 Although triggered by the LDV Rule, the Tailoring Rule covers one greenhouse gas (SF<sub>6</sub>) and one class of greenhouse gases (PFCs) not regulated by the LDV Rule.

**Permitting Phase-In.** Given EPA's conclusion that immediate regulation of all greenhouse gas emissions through the PSD and Title V programs on the same basis as other Clean Air Act pollutants is not administratively feasible, the Agency has developed the following phased approach:

Effective Dates	Greenhouse Gas Sources Covered by PSD Program	Greenhouse Gas Sources Covered by Title V Program
<p>Step One</p> <p>January 2, 2011 through June 30, 2011</p>	<p>Construction of new and modified sources that are required to obtain a PSD permit based on their potential to emit non-greenhouse gas pollutants <i>that also</i> will result in a net increase of potential greenhouse gas emissions (calculated without using greenhouse gas equivalencies) <i>and will</i> increase potential greenhouse gas emissions by at least 75,000 tpy CO<sub>2</sub>e.</p>	<p>New and modified sources that must obtain a Title V operating permit based on their potential to emit non-greenhouse gas pollutants only.</p>
<p>Step Two</p> <p>July 1, 2011 through June 30, 2013</p>	<p>(1) Any sources covered by Step 1; and</p> <p>(2) Regardless of emissions of other pollutants, sources must obtain a PSD permit for construction of:</p> <p style="padding-left: 40px;">(a) a new major source of greenhouse gas emissions, meaning its potential to emit greenhouse gases exceeds <i>both</i> the applicable statutory threshold of 100 or 250 tpy (without applying equivalencies) <i>and</i> 100,000 tpy on a CO<sub>2</sub>e basis; or</p> <p style="padding-left: 40px;">(b) a modification of an existing major source of greenhouse gases that will increase the source's potential to emit greenhouse gases by 75,000 tpy CO<sub>2</sub>e or more.</p>	<p>(1) Any sources covered by Step 1; and</p> <p>(2) Regardless of emissions of other pollutants, sources must obtain a Title V operating permit if the facility is a major source for greenhouse gases, meaning it has the potential to emit 100 tpy of greenhouse gases (without applying equivalencies) <i>and</i> the potential to emit at least 100,000 tpy on a CO<sub>2</sub>e basis.</p>

As a practical matter, sources subject to each phase of the program will be required to incorporate BACT for greenhouse gas emissions if they obtain a PSD permit. Title V sources subject to each phase will need to address greenhouse gas emissions as part of the permitting process, but no new substantive control requirements will be triggered. For example, Title V permit applications will need to disclose greenhouse gas emissions, but installation of greenhouse gas controls will not be required unless such controls are required under some other regulatory provision.

In addition to finalizing the requirements for the first two steps outlined above, the Tailoring Rule also commits EPA to propose a third step in the phase-in process. Although, as discussed above, EPA does not yet know how these future rules will regulate greenhouse gases, Step 3 is expected to lower the PSD and Title V permitting thresholds established

during the first two steps. It may also permanently exclude certain smaller sources from PSD and Title V permitting requirements for greenhouse gases. Finally, EPA has excluded from PSD and Title V permitting requirements all new and modified sources whose potential to emit is less than 50,000 tpy CO<sub>2</sub>e until at least April 30, 2016.

## IMPLEMENTATION ISSUES

EPA has identified a number of implementation issues related to the Tailoring Rule. We discuss four of the more important issues below.

**State Emissions Thresholds.** Under the Jackson Memo, absent some regulatory change, sources emitting greenhouse gases at the 100/250 tpy level will be subject to



existing PSD and Title V regulations on and after January 2, 2011. At these thresholds, the number of sources subject to these thresholds would overwhelm permit issuance programs. For EPA-issued permits, the Agency has addressed this issue through the Tailoring Rule.

However, most PSD and Title V permits are issued by state agencies applying state law. To be approved by EPA, these “state implementation plans” were previously required to adhere to EPA’s definition of “major stationary source,” including its 100 and 250 tpy thresholds.<sup>15</sup> Thus, depending on how explicitly they incorporated the numerical thresholds into their laws, some delegated states must modify state regulations or statutes to implement EPA’s higher Tailoring Rule thresholds and avoid an otherwise massive demand for new or modified permits. There is insufficient time, however, for many states to amend their law by January 2, 2011. To resolve this issue, EPA maintains that states may adopt the phase-in approach reflected in the Tailoring Rule through an interpretation of their existing regulations.

Here is how it is supposed to work. PSD regulations generally define “major stationary source” by reference to the emission of “any regulated NSR pollutant,” which in turn is defined to include “any pollutant that otherwise is subject to regulation under the Act.”<sup>16</sup> In similar fashion, Title V regulations define a “major source” by reference to the potential to emit “any air pollutant.”<sup>17</sup> EPA’s longstanding practice has been to interpret “any air pollutant” to mean only pollutants “subject to regulation,” and many states historically have used this same interpretation. In the Tailoring Rule, EPA has defined the term “subject to regulation” to include only greenhouse gas sources whose potential to emit exceeds the special, higher greenhouse gas thresholds. EPA has concluded that states may interpret the term “subject to regulation” in their PSD and Title V programs to have the same meaning assigned to the phrase in the Tailoring Rule, and thereby incorporate the concepts of Steps 1 and 2 into their existing state air programs.

EPA has requested that each state submit a letter explaining, among other things, whether the state can and will implement the higher greenhouse gas thresholds through

interpretation of its existing law. EPA is delaying the action proposed in the October 27, 2009 proposed rule to limit and/or “correct” its prior approval of state PSD and Title V provisions so that they match EPA’s tailored thresholds, until EPA better understands how the states will implement the Tailoring Rule. State responses to the request will help with this understanding and will be an initial test of whether or not states accept the interpretation approach.

**Grandfathering of Pending Applications.** The Tailoring Rule will affect the regulated community well before 2011, because EPA has decided not to grandfather pending PSD applications. Thus, permit applications submitted before January 2, 2011 but still pending on that date will not be exempt from the Tailoring Rule, and any PSD permits issued to Step 1 sources on or after January 2, 2011 must address greenhouse gases. On the flip side, final PSD permits issued before January 2, 2011 will not need to be reopened or amended to incorporate requirements for greenhouse gases, even if construction occurs after January 2, 2011, provided the permit has not expired. Since PSD permits are construction permits, EPA will not require updates to PSD permits in the same manner as is typically required for operating permits.

With regard to Step 2, EPA will not require a source for which PSD permitting requirements begin to apply in Step 2 to obtain a PSD permit for the source to continue construction that begins before July 1, 2011. However, such sources that begin actual construction on or after July 1, 2011 must obtain a PSD permit that addresses greenhouse gases, even if the source had received all preconstruction approvals that were necessary to authorize construction prior to Step 2. This difference between Step 1 and Step 2 is based on the particular wording of existing PSD regulations. EPA indicates that it may initiate further regulatory or administrative action to address the difference depending upon the practical impact of the issue. EPA also notes that the difference in approaches does not appear to be unreasonable, because non-PSD sources will not trigger permitting for greenhouse gases until Step 2.

Title V sources will be governed by existing Title V regulations, which provide that a Title V source applying for the first time must submit its permit application within 12 months after the source becomes subject to the operating permit

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15 40 C.F.R. § 51.166(b)(1) and 40 C.F.R. § 70.2.

16 See, e.g., 40 C.F.R. § 51.166(b)(1)(i), and 40 C.F.R. § 51.166(b)(49)(iv).

17 40 C.F.R. § 70.2.

program. Title V regulations also provide that if a source already has a Title V permit, but becomes subject to additional requirements, the permitting authority must reopen the permit to add the applicable requirements if the permit term has three or more remaining years.

**Potential PSD “Streamlining Mechanisms.”** To supplement the phased approach represented by Steps 1 and 2, EPA commits to exploring potential permit streamlining mechanisms prior to the Step 3 rulemaking. The preamble to the final rule identifies five techniques that the Agency intends to consider. One approach is to define “potential to emit” for various source categories so that emissions occurring during actual operation are considered, as opposed to the level of emissions from the source assuming continuous operation. This option is discussed more fully in EPA’s October 27, 2009 proposal, which cites as examples defining certain sources to include equipment that impose operational constraints (e.g., furnaces with thermostats) and promulgating regulations that restrict the hours of operation of specified sources.

The preamble identifies additional streamlining mechanisms that could accelerate permit processing times. The first is to establish presumptive BACT for various source categories, which could significantly expedite the often lengthy case-by-case process of determining BACT. A second potential mechanism is to develop one or more general permits, or a permit-by-rule program, rather than issue individual permits to each source. General permits under the NPDES program have been used by EPA in the context of stormwater discharges, and permit-by-rule has been used in California for California-only hazardous waste. The last two streamlining mechanisms identified by EPA are electronic permitting and using “lean techniques” to eliminate unnecessary permit steps. EPA does not commit to ultimately adopt any of the proposed mechanisms and, in any event, does not believe such mechanisms could be in place before the beginning of 2013.

**Ambiguity Regarding Future Steps.** Although EPA has established permitting thresholds for Steps 1 and 2, the Agency has not decided what kind of thresholds and other provisions will be part of Step 3, and it has not decided if there will be steps beyond Step 3. Much will depend upon the experience under Steps 1 and 2 and upon further

evaluation of potential streamlining options. EPA will also consider whether certain sources should be excluded from PSD and/or Title V based on EPA’s “absurd results” rationale (discussed below), and whether sources should be excluded from Title V if they would have an “empty permit.” An empty permit is one that would not contain any substantive requirements, because there are none that apply to the source. As EPA frankly admits in the Tailoring Rule, it cannot predict at this time what form its future rulemaking actions will take.

EPA is committing to the following timeline:

- **2011:** Begin Step 3 rulemaking. As part of this effort, EPA will take comments on streamlining approaches and may also solicit comments on the permanent exclusion of certain sources.
- **July 1, 2012:** Complete Step 3 rulemaking. Step 3 may establish a new major source threshold, but in no event will it be lower than 50,000 tpy of CO<sub>2</sub>e.
- **July 1, 2013:** Step 3 takes effect.
- **April 30, 2015:** Complete an assessment of threshold levels and decide if the PSD and Title V programs should apply to smaller sources.
- **April 30, 2016:** Complete another round of rulemaking addressing smaller sources. This could be a Step 4, subjecting additional sources to regulation, or it could be a final step. Whatever action is taken will supersede the current six-year exclusion for sources and modifications below 50,000 tpy CO<sub>2</sub>e.
- **Post-2016:** EPA may continue the phased process toward the statutory 100/250 tpy thresholds with further rulemaking(s) or it may make a final determination to end the process.

## WHAT IS BACT FOR GREENHOUSE GASES?

As described above, the core function of the PSD process is to ensure that designs of new and modified emission sources incorporate the “best achievable control technology” for regulated air pollutants. After decades of experience implementing the Clean Air Act, most permit writers (generally state regulators) and applicants have a relatively good understanding of what constitutes BACT for conventional pollutants such as particulates and sulfur dioxides.

However, the prospect of applying the BACT requirement to greenhouse gas emissions in less than eight months has created widespread anxiety among regulators and industry, because in the words of one regulator, “[i]n terms of GHG emissions, there are no known technologies, processes, or equipment that would meet the BACT analysis for most sources.”<sup>18</sup> While carbon capture and sequestration is the most obvious candidate for BACT, that technology is not expected to achieve commercial viability anytime soon, maybe not within the next decade.

Thus far, EPA has provided little to allay the anxiety. In the preamble to the proposed Tailoring Rule, EPA stated that “on or before EPA completes an action that triggers PSD for [greenhouse gases],” it would provide state regulators with various sorts of information that would assist in making greenhouse gas BACT determinations.<sup>19</sup> To that end, EPA charged a special “Climate Change Work Group” with preparing by March 30, 2009 a report that would, among other things, “identify and discuss approaches to enable state and local permitting authorities to apply the BACT criteria in a consistent, practical and efficient manner.” EPA did not meet the deadline it set in the proposed rule. Although the Work Group issued an interim report in February 2010 that identified a long list of issues that required further consideration, it has yet to issue a final report.

Given the lack of available technologies to capture or destroy greenhouse gas emissions, BACT evaluations will likely look very different than in the past. The Clean Air Act defines BACT as

an emission limitation based on the maximum degree of reduction ... which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, *clean fuels*, or treatment or *innovative fuel combustion techniques* for control of each such pollutant.<sup>20</sup>

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18 Comments of the Ohio Environmental Protection Agency on proposed Tailoring Rule at 7 (December 22, 2009).

19 74 Fed. Reg. 55292, 55348 (Oct. 27, 2009).

20 42 U.S.C. § 7479(3) (emphasis added).

In the absence of feasible “bolt-on” emission control options, the highlighted terms suggest approaches that have been advanced by some to address the unique challenges presented by fossil fuel combustion: the use of “cleaner” (*i.e.*, lower-emitting) fuels and the use of “cleaner” combustion technologies. Indeed, several recent PSD decisions involving proposed power plants present the possibility that some regulators might use the PSD process to limit and, in the long run, eliminate coal as a fuel for regulated sources.

In two recent cases in which an applicant had proposed to construct a conventional coal-fired power plant, the Environmental Appeals Board (“EAB”)<sup>21</sup> and EPA Administrator Lisa Jackson<sup>22</sup> ordered that a technology known as “integrated gasification combined cycle” (“IGCC”), in which coal is converted to a gas known as “syngas” and cleaned prior to combustion, should be considered a potential BACT option for fossil fuel pollutants such as sulfur dioxide. Although IGCC requires significantly different equipment and expertise to process the coal, the EAB and the Administrator concluded that requiring such changes would not exceed the legally permissible scope of BACT by “redefining the source.”

On the same day that Administrator Jackson issued her order in the *American Electric Power Service Corp.* matter, she issued a separate PSD determination<sup>23</sup> that appeared to take the analysis a step further. In reviewing the state of Kentucky’s BACT determination for a proposed IGCC power plant, Jackson noted that IGCC turbines can be fueled by *either* syngas derived from coal or natural gas, and noted that the proposed power plant actually intended to operate temporarily on natural gas during its startup period. Since the proposed IGCC facility clearly could operate on either coal or natural gas, the EPA Administrator determined that the BACT analysis should have considered requiring the new power plant to exclusively use natural gas, a less polluting fuel source.

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21 *In re: Desert Rock Energy Company, LLC*, PSD Appeal No. 08-03 *et al.* (Sept. 24, 2009).

22 *In the Matter of: American Electric Power Service Corp.*, Petition No. VI-2008-01 (Dec. 15, 2009).

23 *In the Matter of: Cash Creek Generation, LLC*, Petition No. IV-2008-1 *et al.* (December 15, 2009).

Taken together, these cases arguably lead to a fuel-switching BACT determination—first by requiring the cleaner IGCC technology, which is designed to use either coal or natural gas, and then by requiring use of the cleaner fuel option. It should be noted that each of these recent cases addressed the preliminary issue of what technologies should be considered in the BACT analysis. Thus, it is possible that IGCC or natural gas might be excluded by a permit writer at the step where factors such as economics may be considered.

Beyond the relatively extreme options of requiring a change in combustion technology and/or fuel, other greenhouse gas BACT candidates are biomass co-firing, a technique that is already being used or phased-in for some coal-fired boilers, and “energy efficiency” requirements. The latter approach has often been mentioned by EPA but has not yet been explained to a practical degree. For example, is it sufficient for an applicant to select the most energy-efficient design for the specific emission source being permitted or must the applicant look more broadly at energy reduction opportunities across the entire facility within which the new or modified source operates?

In the final rulemaking, EPA again acknowledged the continued need for greenhouse gas BACT guidance. The Agency’s new schedule is to use input from the Climate Change Work Group to issue “technical guidance and database tools” by June 2010 and “policy guidance” by the end of 2010.

## WHAT LEGAL ISSUES ARE RAISED BY THE TAILORING RULE?

**Does EPA Have Authority to Override the Literal Terms of the Statute?** EPA devotes more than 300 pages, about three-quarters of the final Tailoring Rule preamble, to presenting the Agency’s legal justification for overriding the Clean Air Act’s explicit 100/250 tpy “major source” emission thresholds. This unusually lengthy—if not unprecedented—effort to defend the legality of its action likely reflected EPA’s well-founded anticipation that the Tailoring Rule would be challenged in the U.S. Court of Appeals for the D.C. Circuit. In fact, the first such challenge was filed on the same day the rule was published in the Federal Register.

EPA’s legal explanation begins with an acknowledgement that under the Supreme Court’s landmark decision in *Chevron U.S.A., Inc. v. NRDC*,<sup>24</sup> although administrative agencies are entitled to great deference in construing the statutes they administer, the threshold question always is “whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”<sup>25</sup> However, EPA invokes three so-called “doctrines” to argue that the literal meanings of the terms “100 tons” and “250 tons” do not unambiguously express the intent of Congress with respect to the regulation of greenhouse gases.<sup>26</sup>

**Absurd Results.** First, the Agency asserts that the literal meaning of statutory provisions need not be applied if such meaning would produce absurd results that are inconsistent with the drafters’ intent and would actually undermine the intended operation of the provision. EPA argues that the drafters of the Clean Air Act never intended to subject “small” sources (such as schools, hospitals, and commercial facilities) to the PSD or Title V permit processes, and thought that they were establishing statutory emission thresholds that would only regulate the largest polluters.<sup>27</sup>

According to the Agency, however, applying the statutory thresholds to greenhouse gases emitted by such small, nonindustrial sources would result in a nearly 300-fold increase in the number of construction projects subject to PSD, and a more than 400-fold increase in the number of facilities requiring Title V operating permits. Moreover, such a dramatic surge in required permit applications would overwhelm state permit writers, which EPA says would delay proj-

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24 467 U.S. 837 (1984).

25 *Id.* at 842-43.

26 The preamble’s introductory overview of the new rule identifies a second basis for the rule: “EPA also has authority for this Tailoring Rule under CAA section 301(a)(1), which authorizes the Administrator ‘to prescribe such regulations as are necessary to carry out his functions under [the CAA].’” Since this single sentence represents the entire discussion of the Administrator’s authority under Section 301, it is unclear whether this reference was meant to suggest independent authority to “tailor” the statutory thresholds, or merely to invoke the Administrator’s authority to implement the Act.

27 Nevertheless, EPA asserts multiple times in the preamble that there was “clear congressional intent” to regulate greenhouse gases under the Clean Air Act, including via the PSD and Title V programs.

ects for decades and thwart the drafters' intent to reduce air pollution in a manner that would not cripple the economy.

**Administrative Necessity.** Next, EPA argues that it is entitled to “depart from” statutory provisions that are impossible to administer as written, as long as the Agency departs no more than necessary to make them administrable. In this case, the administrative “impossibility” arises from EPA’s estimates that to process the flood of applications that would occur under the statutory thresholds, regulators would have to increase PSD staffing by 9,772 full-time employees and increase state budgets by almost \$1.5 billion, while increasing Title V staffing by 229,118 employees and budgets by almost \$21 billion.

**One Step at a Time.** Finally, EPA argues that its phased approach is an example of permissible “incremental” rule-making, in which the statutory objective is achieved through a series of steps, with the experience gained through each step used to craft the next step. Although the preamble characterizes the Tailoring Rule as a reasonable “first step toward a complete solution,” it does not identify or commit to any ultimate major source thresholds, and states that EPA may never phase in the statute’s 100/250 tpy standards.

EPA’s three-pronged strategy to neutralize *Chevron’s* threshold question of “whether Congress has directly spoken to the precise question at issue” is largely built on case law developed in the lower courts, so it’s far from clear that the Supreme Court will accept the Agency’s formulation. In recent years, the Court’s decisions in environmental cases involving statutory interpretation, from the scope of Superfund’s contribution right to the meaning of “navigable waters” under the Clean Water Act, have increasingly rested on the side of the plain meaning of the statute.

Indeed, strict adherence to literal terms of the Clean Air Act was urged by the successful litigants in *Massachusetts v. EPA*, the decision that established EPA’s jurisdiction to regulate greenhouse gases:

We believe that the science is clear that EPA should act. But whatever one believes on this point, the executive branch cannot ignore the clear instructions of the legislative branch in determining how best to address such an important issue. Congress has not ordained the

EPA or any other part of the executive branch a “super legislature” to decide how climate change should be addressed. Congress instead enacted a law, the Clean Air Act, that established a framework for addressing new air pollution problems, as they appeared, including through regulating emissions from motor vehicles. It is incumbent upon the executive branch to adhere strictly to the law’s terms. If the executive branch believes there is a reason to depart from that existing statutory framework, its sole recourse is to persuade Congress to amend the law. For that reason, the lower court fundamentally erred in sanctioning the executive branch’s bald attempt to refashion the law by administrative fiat.<sup>28</sup>

The argument proved successful. The Supreme Court rejected the former EPA Administrator’s argument that Congress did not “intend” to regulate greenhouse gases under the Clean Air Act, finding instead that the statute’s definition of “air pollutant” was “unambiguous.”<sup>29</sup> The question will be whether the current administration can persuade the D.C. Circuit (and possibly the Supreme Court) that the very same argument does not apply again.<sup>30</sup>

A larger question may be what practical results a challenger would hope to accomplish. While EPA’s tailoring of the statutory thresholds may be legally vulnerable, a judicial decision that merely forces EPA to apply PSD and Title V according to the plain language of the Act would only serve to spread the burden among a much larger regulated community, while dramatically increasing the time necessary for all applicants to obtain a permit.

Although it is possible that an environmental group might bring such a challenge because it believes EPA has set the tailored thresholds too high, other challengers might act on the assumption that enforcement of the statutory thresholds would generate such regulatory upheaval that Congress would be forced to legislatively override

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28 Reply Brief of Petitioners Commonwealth of Massachusetts, et al. at 2-3 (May 24, 2006).

29 549 U.S. at 528-29.

30 Ironically, Lisa Heinzerling, the lead author of the winning briefs for Massachusetts and other petitioners, now serves as Senior Policy Counsel on climate change to the current EPA Administrator.

EPA's regulation of greenhouse gas emissions under the Clean Air Act. However, relying on specific action from a gridlocked legislature would be a high-stakes strategy. Accordingly, anyone considering a challenge to the Tailoring Rule should be sure that its legal strategy and the potential relief available match its long-term objectives.

#### **Does EPA Have Authority to Impose PSD Requirements in the Absence of a NAAQS for Greenhouse Gases?**

As described above, the PSD program is both logically and practically linked to EPA's establishment of National Ambient Air Quality Standards, with the PSD process intended to preserve air quality in areas where a NAAQS has been attained. However, EPA has not established a NAAQS for greenhouse gases and has indicated that it has no intention of doing so.

Indeed, because greenhouse gases are well-mixed within the atmosphere, the concentration at any given time is uniform across the U.S. This means not only that all areas would receive the same designation for a greenhouse gas NAAQS—either all would be attainment or all would be non-attainment—but also that the sort of regional control programs that have traditionally been effective in addressing pollutants such as smog would be useless, if not nonsensical, in addressing global greenhouse gas concentrations.

EPA correctly notes that PSD requirements also apply in “unclassifiable” areas. However, some may argue that such a designation was designed to address temporary conditions based on the absence of monitoring data, not to create a permanent condition reflecting the inability to establish a rational NAAQS to address a global atmospheric condition.

**Legislative Initiatives Seeking to Limit the Scope of Clean Air Act Regulation.** Legislators from both major parties already have introduced or are publicly considering legislative measures that would effectively delay or kill the sort of Clean Air Act regulation represented by the Tailoring Rule. Both the House-passed American Clean Energy and Security Act, authored by Representatives Henry Waxman (D-CA) and Edward Markey (D-MA), and the American Power Act, recently introduced by Senators John Kerry (D-MA) and Joseph Lieberman (I-CT), would exclude facilities subject to those bills' “cap and trade” programs (which would encompass most or all of the facilities covered by

the Tailoring Rule) from New Source Review requirements, including PSD.

Senator Lisa Murkowski (R-AK) is leading an effort under the somewhat obscure Congressional Review Act to invalidate EPA's greenhouse gas “endangerment finding,” which would eliminate the jurisdictional basis for regulating such emissions under the Clean Air Act. Senator Murkowski's resolution, which will be voted on by the Senate on June 10, 2010, requires only a simple majority to pass and is not subject to filibuster, but the House of Representatives has no plans to allow a vote on the measure. A less prescriptive approach, led by Senator Jay Rockefeller (D-WV), would simply defer Clean Air Act jurisdiction for two years to allow Congress more time to adopt climate change legislation.

Finally, Senators Robert Casey (D-PA) and Thomas Carper (D-DE) are reportedly considering drafting legislation that would amend the Clean Air Act's statutory thresholds to match the Tailoring Rule's higher levels for greenhouse gases. The proposal is described as a measure to ensure that agriculture and smaller emissions sources are not regulated, but such a bill would likely also moot the most significant legal challenges to the new rule. In the end, however, all of these legislative approaches face the political hurdle of a gridlocked Congress, in which each party seems capable of blocking the efforts of the other.

## **CONCLUSION**

Although the Tailoring Rule is being challenged in court, as have each of the preceding greenhouse gas rulemakings described above, absent a judicial stay (which is rarely granted), such a challenge will not prevent the rule from taking effect. Therefore, the regulated community should immediately begin to factor the rule's requirements into capital project planning. Since the rule will apply to PSD permit applications pending at the end of 2010, the greenhouse gas BACT issue has, as a practical matter, already arrived. Hopefully, EPA will promptly meet its commitment to provide both regulators and the regulated with practical guidance on how to address that issue.

## LAWYER CONTACTS

For further information, please contact your principal Firm representative or one of the lawyers listed below. General email messages may be sent using our “Contact Us” form, which can be found at [www.jonesday.com](http://www.jonesday.com).

**Thomas M. Donnelly**

San Francisco

+1.415.875.5880

[tmdonnelly@jonesday.com](mailto:tmdonnelly@jonesday.com)

**G. Graham Holden**

Atlanta

+1.404.581.8220

[ggholden@jonesday.com](mailto:ggholden@jonesday.com)

**John A. Rego**

Cleveland

+1.216.586.7542

[jregojonesday.com](mailto:jregojonesday.com)

**Charles T. Wehland**

Chicago

+1.312.269.4388

[ctwehland@jonesday.com](mailto:ctwehland@jonesday.com)

**Charles Hungerford**

San Francisco

Silicon Valley

+1.415.875.5843

+1.650.687.4127

[chungerford@jonesday.com](mailto:chungerford@jonesday.com)

**Jane K. Murphy**

Chicago

+1.312.269.4239

[jkmurphy@jonesday.com](mailto:jkmurphy@jonesday.com)

**Casey M. Fernung**

Atlanta

+1.404.581.8119

[cfernung@jonesday.com](mailto:cfernung@jonesday.com)

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