In the world of air-quality regulations, each year seems more eventful than the last, and 2013 was no exception. From the many proposed and finalized regulations (and reconsiderations of new regulations) to several critical court decisions, 2013 was yet another transformative and controversial year. The year 2014 promises to be equally remarkable. In 2014, the US Environmental Protection Agency (EPA) will continue to be in active rulemaking mode, and the US Supreme Court will hear two high-profile Clean Air Act cases.

What follows is a short summary of what to watch as 2014 unfolds.

**GREENHOUSE GAS PERFORMANCE STANDARDS**

The most headline-worthy event in 2014 will likely be the EPA’s continued effort to impose numeric greenhouse gas emission standards on the electric utility industry. To meet...
the objectives of the Obama administration’s new “Climate Action Plan,” which the president announced in July and hopes to complete before leaving office, the EPA will have to both finalize its “new unit” standards and begin the effort to regulate “existing units” in 2014.1

EPA to Finalize CO2 Standard for New Power Plants
The EPA’s effort to directly impose nationwide performance standards for greenhouse gas emissions from the electric utility industry actually began in 2012. In April of that year, the EPA issued a proposed standard that would have combined all coal- and natural gas–fired units into a single category to impose the same emission limit on all “new units” using either fuel type—1,000 pounds of carbon dioxide (CO2) per megawatt-hour. For new coal-fired units to meet this standard, some form of carbon capture and sequestration (CCS) would have been required, while the EPA expected that new natural gas–fired units would be able to comply without CCS.

Perhaps seeing the potential legal flaws associated with regulating two very different types of units under a single standard that only one can readily meet, the EPA reproposed the standard in September 2013 to split coal and gas units into separate categories. However, the 2013 reproposal changed little for coal-fired facilities because the EPA only increased the coal-specific limit to 1,100 pounds per megawatt-hour. At that level, the standard will still require at least “partial” CCS technology (i.e., a CCS system that captures less than 90 percent of the CO2 generated by treating only a portion of a facility’s exhaust).

Of course, the primary concern of coal-fired generators is that no facility has ever successfully implemented CCS at the commercial scale, not even with a “partial” system like the one described in the EPA’s proposal. Two CCS systems are currently under construction and may even be operational by the time the EPA finalizes its rule next year, although both involve unique circumstances that cannot be replicated across the industry. The EPA still claims that its proposal provides coal “a path forward” by allowing coal units an 84-month averaging period, apparently so utilities can gamble that CCS might be commercially available by then and begin constructing multibillion-dollar units today.

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But even the EPA does not believe that will happen, and asserts that no new coal units will be constructed until 2023, either with or without its new standard. The EPA thus admits that its proposal is a “no cost, no benefit, no emission reduction” rule, although that argument simply raises the question of why the standard is needed in the first place.

The government shutdown delayed official publication of the new unit proposal. Consequently, the EPA will still be accepting comments on the proposal when this article goes to press. That delay means that the EPA will spend 2014 reviewing those comments and preparing to finalize the new unit standards. Despite the millions of comments that will be submitted, there appears to be little chance that the agency will veer significantly from its 2013 proposal.

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Even if some minor changes are made, the standard for new coal-fired units will still require CCS, and new gas units will still face a stringent new CO2 limit that will act as an efficiency limit in disguise, given the limit’s electric output-based formulation.

EPA to Propose CO2 Standard for Existing Power Plants
As controversial as the EPA’s “new unit” standards have been and will be, in 2014 the focus will shift to “existing units.”

Under the president’s Climate Action Plan, the EPA has promised to issue an existing-
pushing the EPA to follow the “cap-and-trade” model, but an EPA-developed “cap-and-trade” program would be quite remarkable in light of Congress’s repeated rejection of “cap-and-trade” legislation in recent years.

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NEW NATIONAL AMBIENT AIR QUALITY STANDARDS

Even with all the attention the EPA will devote to greenhouse gases in 2014, the EPA also has a full agenda planned for more “traditional” air-quality issues.

One of the most important items on that agenda will be to revise and implement the National Ambient Air Quality Standards (NAAQS), which set the standards for clean air throughout the country. Areas with higher levels of pollution than the NAAQS are deemed to be in “nonattainment,” while areas with lower levels of pollution are deemed to have clean air and to be in “attainment” of the NAAQS. Over the last several years, the EPA has revised five of the six NAAQS, and its efforts to implement those new standards, or revise them even further, will continue in 2014.

The NAAQS are a critical component of the Clean Air Act structure. Areas in nonattainment are required to develop detailed plans for achieving attainment by specific deadlines or face sanctions. Even worse, these areas are also saddled with more onerous new source permitting requirements that can significantly inhibit or even entirely freeze the growth of significant industrial activities.

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The most anticipated NAAQS rulemaking for 2014 will be the EPA’s decision on whether...
to strengthen the NAAQS for ground-level ozone.

A short history of the EPA’s ozone standard helps set the stage. In 2008, the Bush administration revised the standard from its 1997 level of 80 parts per billion down to 75 parts per billion but rejected the range of 60–70 parts per billion recommended by the EPA’s own scientific committee. A few months later, the Obama administration took office and immediately began work on a proposal to adopt a standard within the scientific committee’s recommended range, promising to put science over politics.

The Obama EPA released a proposal for a new NAAQS in the 60-to-70-parts-per-billion range in January 2010. But when the final rule went to the White House in mid-2011 for approval, that rule was rejected. Instead, the president directed the EPA to table the proposal until the next periodic review, due in 2013.

With 2013 now drawing to a close without the promised standard, a lawsuit filed against the EPA in the wake of the 2008 standard will continue to put pressure on the EPA to reconsider the Bush administration’s 75-parts-per-billion standard. As a result, the EPA is expected to release a new proposed ozone NAAQS either very late this year or early next year.

Consistent with the Obama administration’s 2010 proposal, look for a proposal that offers a range of between 60 and 70 parts per billion. Previous analyses have indicated that as much as 97 percent of the country could be in violation of a 60-parts-per-billion standard. But even a revision to 70 parts per billion would impose high costs for the significant number of new areas that would be forced into the “nonattainment” ranks.

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Ozone aside, in 2014 the EPA is also expected to take several important steps to implement other recently revised standards. For instance, the EPA revised its fine particulate matter (PM$_{2.5}$) standard in December 2012, only to begin 2013 with two significant court losses on its rules for implementing the previous 2006 PM$_{2.5}$ standard. In 2014, the EPA will likely begin the process of implementing its new 2012 PM$_{2.5}$ standard and may attempt to rewrite the implementing regulations rejected by the court.

In addition, the EPA is long overdue for beginning the implementation process for its 2010 sulfur dioxide (SO$_2$) NAAQS. Typically, the EPA must make “attainment” and “nonattainment” designations within three years, or classify areas as “unclassifiable” where insufficient information is available to make the designations. The deadline for taking that action on the 2010 SO$_2$ NAAQS passed on the third anniversary of the standard in June 2013, but the EPA continues to claim that it has the discretion to wait until additional data is collected to make its designations.

In 2014, the EPA will face lawsuits from industry seeking “unclassifiable” designations (which have the same regulatory significance as an “attainment” designation), and has promised to issue additional guidance on how it plans to proceed.

**METHANE REGULATIONS FOR OIL AND GAS PRODUCERS?**

The year 2014 may also become the year of methane emission regulations for natural gas producers. Just a few weeks ago, Colorado became the first state in the nation to propose strict regulations for methane emissions from the oil and gas producing sector, and its proposal could be the start of a new trend.

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Colorado’s rules are an expansion of the New Source Performance Standards that the EPA revised in 2012. Although the EPA has regulated the industry’s air emissions since 1985, WildEarth Guardians filed suit against
the EPA in 2009, asserting that updates were long overdue and seeking new standards for methane, now designated by the EPA as a greenhouse gas. Admitting its tardiness, the EPA agreed to propose and revise the standards on an expedited schedule.

However, the final rule that the EPA adopted in 2012 was widely criticized by both industry and environmental groups, prompting multiple petitions for reconsideration and lawsuits from both sides. The environmentalist’s primary complaint with the EPA’s standards was that they continue to lack restrictions on methane emissions. In apparent agreement, the Colorado Department of Public Health and Environment announced on November 18, 2013, that it plans to adopt the EPA’s new standards and take them a step further to regulate methane.

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Colorado’s proposed standards also expand on the EPA’s standards by covering a larger number of emission sources in the oil and gas production chain. Whereas the EPA focused on natural gas processing plants, Colorado’s proposed regulations would cover both natural gas and oil producers and also extend to compressor stations, pipelines, storage tanks, and drilling wells. If other states follow Colorado’s lead in 2014, it could put pressure on the EPA to expand its nationally applicable regulation to avoid a patchwork of inconsistent regulatory requirements from state to state.

**STARTUP, SHUTDOWN, AND MALFUNCTION EXEMPTIONS IN 36 STATES**

In one of the more unusual actions that the EPA took in 2013, the agency proposed to eliminate exemptions for unavoidable emissions that occur during startup, shutdown, or malfunction (SSM) events. The unusual aspect of the EPA’s proposal is that those SSM exemptions are found not in the EPA’s regulations, but in the regulations for 36 individual states. The EPA had approved those provisions years ago—literally decades ago for most of them—as part of the State Implementation Plans (SIPs) that all states must develop and implement to comply with the Clean Air Act. The EPA has promised to take final action on its so-called SSM SIP Call proposal in May 2014, which will set in motion an 18-month clock for states to begin the arduous process of deciding how to fill the gaps that will be left in their state regulations as a result. Depending on how the states fill those gaps, many sources could face significant compliance challenges.

The EPA’s proposed SSM SIP Call is also unprecedented in that it both changes the EPA’s policy and condemns inconsistent state regulations simultaneously. In the past, the EPA had allowed at least a qualified “affirmative defense” during SSM events, in recognition that compliance with some emission limits may be difficult or impossible at those times. For example, units equipped with selective catalytic reduction systems or electrostatic precipitators often cannot operate that equipment during startup until flue gas temperatures reach a certain level. In addition, certain pollutants are emitted at much higher rates during the unstable combustion conditions that inevitably exist during startups and shutdowns, such as nitrogen oxides and carbon monoxide.

However, the EPA’s newly proposed policy would consider startups and shutdowns to be “planned events” that must be treated as “normal operations,” and therefore subject to any “otherwise applicable” emission limitations. The EPA will continue to recognize a limited affirmative defense for malfunctions only, but even that defense does not extend to claims for “injunctive relief.” Thus, potential plaintiffs (including the EPA, states, and environmental interest groups)
will still be able to seek the installation of any new emissions control equipment following any malfunction.

Because of this new policy regarding startups and shutdowns, even some states with very recently approved SSM provisions are also covered by the EPA’s proposed SSM SIP Call. For instance, New Mexico rewrote its SSM regulations in 2008 to comply with EPA policy in place at that time. The EPA approved that revision in September 2009, but because of its newly proposed change in policy, now claims—just four years later—that New Mexico’s new SSM regulation is illegal. Further illustrating the inconsistency of the EPA’s newly proposed SSM policy is the fact that the EPA itself has continued adopting its own SSM exemptions in some of its recent rulemaking actions, including the Mercury and Air Toxics Standards adopted in 2012 and the Industrial Boiler Maximum Achievable Control Technology Standards in 2013.

The SSM SIP Call will require states to eliminate, revise, or replace the current SSM provisions in their state plans within 18 months, or else the EPA will step in and do the job for them.

If finalized in May 2014 as promised, the SSM SIP Call will require states to eliminate, revise, or replace the current SSM provisions in their state plans within 18 months, or else the EPA will step in and do the job for them with a federal plan. The best option for states may be to adopt alternative work practices that will apply in lieu of the emission limits designed for normal operations, although the EPA will have the authority to approve or reject each state’s new plan for addressing SSM events.

TWO KEY SUPREME COURT DECISIONS—CSAPR AND GREENHOUSE GAS PERMITTING

The EPA will not be the only source of new air-quality law in 2014. The US Supreme Court has decided to hear two cases addressing important issues under the Clean Air Act in 2014.

Cross-State Air Pollution Rule

First, the Supreme Court has agreed to review the DC Circuit’s decision to vacate the EPA’s Cross-State Air Pollution Rule (CSAPR)—often pronounced “Casper.” CSAPR was the Obama EPA’s attempt to revise the Bush administration’s Clean Air Interstate Rule (CAIR). Both rules were designed to reduce the “transport” of pollution from fossil-fuel-fired electric-generating units in the eastern half of the United States, in accordance with a portion of the Clean Air Act that requires states to eliminate emissions that cause or contribute to unhealthy air in another state. CAIR was rejected by the DC Circuit in 2008, but the court recognized that the rule provided at least some environmental benefits and allowed CAIR to remain in place while the EPA sought to remedy its shortcomings. CSAPR was the EPA’s response to the rejection of CAIR, but it too was rejected by the same court in 2012.4

According to the DC Circuit, CSAPR suffered from two critical flaws: (1) the emission caps that the EPA imposed required greater reductions than necessary to eliminate each state’s contributions to another state’s air-quality problems, and (2) the EPA sought to impose the new requirements without first giving states an opportunity to decide for themselves how best to address the “transport” issue. The Supreme Court has agreed to review both issues and should issue a decision next summer.

Greenhouse Gas Permitting

The second case that the Supreme Court will hear in 2014 involves the DC Circuit’s decision to uphold the EPA’s permitting requirements for greenhouse gas emissions under the Prevention of Significant Deterioration (PSD) program. However, the Supreme Court’s decision could have much broader implications for the PSD program as a whole, given the precise issue that the Supreme Court will consider.
PSD typically requires facilities to obtain a preconstruction permit prior to construction of a new emitting unit or performing a major modification on an existing unit. Those permitting requirements can be quite onerous. Often they require 18 months or more to complete and impose additional state-of-the-art emission control requirements that can be quite expensive.

According to the EPA, PSD requirements automatically began to cover greenhouse gases once the EPA’s greenhouse gas regulations for light-duty vehicles took effect in 2011. The EPA interpreted the Clean Air Act to require PSD permitting for “any air pollutant” subject to regulation at stationary sources, like power plants, even if the only regulation in place is for an entirely different type of source, like cars. Given that greenhouse gas emissions are emitted in vastly more significant quantities than other pollutants, the EPA realized that its interpretation would lead to the “absurd consequences” of requiring a PSD permit for relatively insignificant emission sources like office buildings and shopping malls. To avoid that consequence, the EPA adopted a 75,000-tons-per-year permitting threshold, even though the Clean Air Act itself sets the permitting trigger for PSD at 250 tons per year.

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In 2012, the DC Circuit upheld the combination of rules that led to the EPA’s new PSD permitting program for greenhouse gases and even denied requests by various parties in the case to reconsider its decision.5 However, one judge on the DC Circuit prepared a long opinion to dissent from the court’s decision in the case.6

In his dissenting opinion, Judge Brett M. Kavanaugh pondered whether the EPA has misinterpreted the Clean Air Act from the beginning—that instead of applying PSD requirements to all air pollutants, Congress really only intended the EPA to apply PSD to pollutants for which a NAAQS had already been established. If so, PSD would not apply to greenhouse gases because the EPA has not established a greenhouse gas NAAQS. The judge’s reasoning is relatively straightforward: If the EPA is faced with two reasonable interpretations of the Clean Air Act, should it not be required to follow the one that avoids any “absurd results” in the first place?

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That argument may be what the Supreme Court would like to consider, given that it only agreed to review the following question in the case: “Whether EPA permissibly determined that its regulation of greenhouse gas emissions from new motor vehicles triggered permitting requirements under the Clean Air Act for stationary sources that emit greenhouse gases.” If the Supreme Court’s answer to that question is no, it could mean that PSD permitting requirements will only be triggered by the six NAAQS pollutants, which would represent a fundamental shift in the PSD program.

NOTES
4. EME Homer City v. EPA, 696 F.3d 7 (D.C. Cir. 2012).