Davis Polk

President Biden announces proposed stricter methane emissions rule at 2022 UN Climate Conference

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On November 11, 2022, at the United Nations Climate Conference, President Biden announced EPA's supplemental proposal to broaden, clarify and strengthen its November 2021 proposed regulation of methane and volatile organic compounds emissions from the oil and gas sector. This client update provides an overview of the noteworthy changes that the supplemental proposal makes to the November 2021 proposal, discusses additional Biden administration methane initiatives, and provides our key takeaways.

Background

On November 11, 2022, at the 27th UN Climate Change Conference in Sharm El Sheikh, Egypt, known as COP27, President Joe Biden announced the U.S. Environmental Protection Agency's (EPA) release of a supplemental proposal (the Supplemental Proposal) to broaden, clarify and strengthen EPA's November 2021 proposed standards (the November 2021 Proposal). The Supplemental Proposal is intended to reduce methane emissions and other air pollutants from both existing and new, modified and reconstructed facilities in the oil and gas industry. The Supplemental Proposal reflects consultation with various stakeholders during EPA's public comment period on the November 2021 Proposal. A key feature of the Supplemental Proposal is the introduction of a new third-party monitoring program, known as the "Super-Emitter Response Program," to identify and address large methane emission events from oil and gas facilities.

The Supplemental Proposal is a significant regulatory development that comes in the context of the Biden administration's major investment in clean energy with the signing of the Inflation Reduction Act (the IRA) in August 2022. As part of its climate change agenda, the Biden administration has been especially focused on reducing methane, a "super-pollutant" greenhouse gas said to have more than 80 times the global warming potential relative to carbon dioxide over a 20-year period. The Supplemental Proposal is said to help ensure the United States will meet its goal to cut methane emissions by 30% from 2020 levels by 2030. According to EPA, the oil and gas sector is the nation's largest industrial source of methane, and EPA projects the Supplemental Proposal will reduce methane emissions from covered existing oil and gas facilities by 87 percent from 2005 levels by 2030. Overall, EPA's analysis estimates the average annual compliance costs of the Supplemental Proposal to be \$1.8 billion from 2023 to 2035¹ compared to \$1.1 billion for the November 2021 Proposal for the same period, though notably, these estimates do not account for the impact of the Super-Emitter Response Program. EPA will take further public input on the Supplemental Proposal until February 13, 2023 and plans to finalize it later that year.

Key provisions

Extending scope of the rule to certain wells, equipment and sources

The Supplemental Proposal expands the scope of the November 2021 Proposal in the following respects:

- All well sites. The Supplemental Proposal would extend methane monitoring and obligations to all well sites, including wellhead-only sites and well sites with low emissions (emitting less than three tons of methane per year), which were not subject to leak monitoring under the November 2021 Proposal. Additionally, small well sites will now be required to conduct quarterly audio, visual and olfactory inspections. The EPA estimates that 95,000 well sites meet the current definition of "small well sites" under the Supplemental Proposal. The frequency and type of the monitoring required will depend on the amount and types of leaks at the site, rather than on estimated emissions as proposed in the November 2021 Proposal.
- Abandoned and unplugged wells. The Supplemental Proposal would impose requirements on abandoned and unplugged wells, which were not the subject of regulation in the November 2021 Proposal. The Supplemental Proposal includes a requirement for continued monitoring at all well sites until the wells are "properly" plugged and a final survey shows that there are no further emissions. Owners and operators will be required to make repairs and resurvey a site prior to closure if additional emissions are detected. Additionally, the Supplemental Proposal requires owners and operators to submit well closure plans and annual reports documenting ownership of sites to EPA.
- Dry seal compressors. The Supplemental Proposal includes regulations regarding dry seal compressors, which were not the subject of regulation under the November 2021 Proposal. Owners and operators of dry seal compressors will now need to maintain the volumetric flow rate at or below 3 standard cubic feet per minute to prevent emissions.

Use of new technology for emissions monitoring

The Supplemental Proposal fleshes out the protocols for the use of advanced methane detection methods that were the subject of requests for comment under the November 2021 Proposal. Under the Supplemental Proposal, advanced technologies may be used for leak detection, subject to EPA approval, in place of other established methods such as optical gas imaging. Once approved, the frequency of monitoring and timeline for repairs would depend on the detection capacity of the alternative technology. The Supplemental Proposal also provides a pathway for the use of continuous monitoring technologies, subject to EPA approval.

Establishment of the Super-Emitter Response Program to increase accountability for super-emitter events

An important – and novel – element of the Supplemental Proposal is the establishment of the Super-Emitter Response Program. In the November 2021 Proposal, EPA discussed the significance of the contribution of "super-emitter" events to overall methane emissions. EPA also noted that nongovernmental and other organizations have already independently used innovative methods to monitor oil and gas facilities, and EPA sought comment on ways to leverage these efforts to identify and address super-emitter events. Under the Super-Emitter Response Program, qualified third parties may document super-emitter events, defined as events emitting 100 kg/hr or more of methane, using EPA approved remote detection technologies such as satellite detection, remote-sensing equipment on aircraft or mobile monitoring platforms. Third parties could then notify owners and operators of affected sites, and upon receipt of certified notification, the owner or operator would be required to investigate and take measures to mitigate the methane emissions. EPA is proposing to post the notices and responses by owners and operators to a public website.

Strengthened requirements for equipment

The Supplemental Proposal seeks to strengthen the standards for methane emissions from certain types of equipment, including pneumatic pumps, pneumatic controllers, and wet seal compressors. The key revisions include:

- Pneumatic pumps. The Supplemental Proposal would set a zero methane and volatile organic compounds (VOC) emissions standard for sites with pneumatic pumps that have access to electricity or solar power, meaning that natural gas-driven pneumatic pumps may not be used at such sites. At sites that do not have electricity, natural gas-driven pneumatic pumps will be allowed if it is demonstrated that it is not technically feasible to use non-natural gas pneumatic pumps and the emissions are routed to a process on site, or if not feasible to route, the emissions will have to be controlled. This is a more stringent requirement than the one in the November 2021 Proposal, which only required emissions from sites with pneumatic pumps to be routed to a control or to a process if the site had an existing control or process.
- Pneumatic controllers. The Supplemental Proposal would remove exemptions for some natural gas-driven controllers and self-contained controllers from the November 2021 Proposal requirement that facilities with pneumatic controllers have zero methane and VOC emissions, except for sites in Alaska that do not have access to grid electricity and controllers that function as emergency shutdown devices.
- Wet seal compressors. The Supplemental Proposal requires that emissions from new, modified, and reconstructed wet seal centrifugal compressors reduce methane and VOC emissions by 95%. Additionally, it includes a presumptive standard for existing compressors.

Strengthened requirements for flares

Flares are a topic of focus for EPA's methane emissions regulation agenda. The Supplemental Proposal imposes stricter rules on the use of flares by the oil and gas industry. These stricter rules limit the use of flares for associated gas venting from oil wells and impose additional compliance requirements for good flare performance, such as continuous monitoring requirements, and a requirement that owners and operators take immediate corrective action if a superemitter event is caused by a flare. In addition, EPA is seeking comments on steps to ban the indefinite continuation of routine flaring, as well as whether it would be appropriate to require "more rigorous consideration of alternatives to flaring" once a threshold is met. Going forward, the oil and gas industry will likely be exposed to additional compliance risk related to its use of flares.

Updated requirements for implementation of state plans

Under Section 111(d) of the Clean Air Act (CAA), existing emissions sources are regulated pursuant to standards established by the states that must meet emissions guidelines set by EPA. As with the November 2021 Proposal, the Supplemental Proposal provides that, as a general matter, state standards for existing oil and gas facilities that meet EPA's performance standards for new sources will be presumptively acceptable. However, reflecting EPA's increased focus on environmental justice concerns, the Supplemental Proposal expands on the November 2021 Proposal's requirement for states to conduct "meaningful engagement" regarding their plans for existing sources by adding that states must engage with "pertinent stakeholders" (including impacted communities). The Supplemental Proposal also fleshes out how states can justify proposing less stringent standards to a particular type of facility, which would include consideration of impacts of emissions on impacted communities. Under the Supplemental Proposal, states will be required to enforce a compliance deadline on existing sources no later than 36 months after the state plan is due to the EPA.²

Interplay with the IRA's Methane Fee

As noted in our prior <u>client update</u>, the IRA established the Methane Emissions Reduction Program which, starting in 2025, imposes fees on methane emissions from onshore and offshore oil and natural gas facilities that exceed certain

defined thresholds (the "Methane Fee"). This includes many of the same categories of facilities that are subject to the standards contained in the Supplemental Proposal. Notably, the IRA established a "safe harbor" whereby facilities would be exempt from the Methane Fee if they comply with methane standards established by EPA under Section 111(b) or (d) of the CAA that are in effect in all states and where such regulations achieve equivalent or greater emissions reductions compared to those set forth in the November 2021 Proposal. Effectively, this means that the facilities can only take advantage of this safe harbor if the Supplemental Proposal results in final rules that are at least as strict as those in the November 2021 Proposal. While EPA noted in the Supplemental Proposal that the proposed changes in the Supplemental Proposal once fully implemented will ultimately lead to greater methane emissions reductions than the November 2021 Proposal, EPA also acknowledged that it is unable to make any quantitative assessment of such a comparison and that its analysis is purely qualitative. EPA stated that the statutory language does not indicate how EPA should conduct an equivalency determination, and it is therefore soliciting comments on different approaches for how such determination should be made. The design and administration of the Methane Emissions Reduction Program itself is the subject of a separate EPA rulemaking.

Other legislative and regulatory initiatives on methane

In addition to the Supplemental Proposal, the Biden administration is planning several other initiatives under its updated U.S. Methane Emissions Reduction Action Plan. The key initiatives include:

- Additional funding and incentives. Under the IRA, EPA is allocating \$1.55 billion in financial and technical assistance to monitor and mitigate methane emissions from the oil and gas industry. EPA may administer a portion of this funding in the form of grants, loans, and contracts. Additionally, the Department of the Interior is spending approximately \$5 billion to plug abandoned, unplugged wells under the 2021 Infrastructure Investment and Jobs Act. These funding sources may assist the industry in alleviating some of the compliance costs related to strengthened regulations.
- Initiatives to improve pipeline safety. The Biden administration has prioritized improving pipeline safety, dedicating \$1 billion to reduce the risk of methane leaks from municipality or community-owned legacy gas distribution pipelines. Additionally, the Department of Transportation's Pipeline and Hazardous Materials Safety Administration has implemented several strengthened pipeline safety rules, including a requirement for updated inspection and maintenance plans to address methane leaks, a requirement to install remotely controlled or automatic shut-off valves on certain pipelines, and more stringent safety requirements for gas transmission pipelines.
- Modernizing methane rules by the Bureau of Land Management. The Bureau of Land Management is currently in the process of strengthening its regulations on flaring, venting, and leaks from oil and gas production on Federal and Indian lands.

Key takeaways

Third-party monitoring of super-emitter events could lead to increased compliance costs, as well as enforcement and reputational risk. The Super-Emitter Response Program is likely to incentivize communities to partner with advocacy groups to invest in remote methane emissions monitoring programs to investigate nearby oil and gas operations. Any actual or alleged super-emitter events will require companies to incur costs to conduct an investigation and take any necessary remedial action, and could potentially lead to enforcement action or litigation. Moreover, because reports of super-emitter events and company responses will be made public, companies could be the subject of negative press. Public interest groups can also be expected to collect this information and potentially use it as part of advocacy campaigns against individual oil and gas companies or their investors and lenders. Notably, industry groups, while expressing support for the November 2021 Proposal in general, expressed skepticism regarding the appropriateness and legal basis of EPA's reliance on third-party monitoring as a compliance tool.

- Interplay with the IRA's Methane Fee remains an open question. While EPA is signaling that it believes the Supplemental Proposal will achieve greater emission reductions than the November 2021 Proposal, the current ambiguity around how this will eventually be determined, as well as the tight timeline for state plans to be in effect in time for the 2025 date when facilities become subject to the Methane Fee, calls into question whether the Supplemental Proposal will indeed provide an exemption to facilities from the Methane Fee. This determination will be critical for companies seeking to avoid duplicative regulatory requirements and costs.
- Cautious response from industry, but a willingness to work with the administration's agenda. The Supplemental Proposal expands the scope of the November 2021 Proposal in meaningful ways, translating into approximately 60% increase in annual compliance costs compared to the November 2021 Proposal according to EPA estimates. However, similar to the November 2021 Proposal, key industry groups appear to be taking a 'wait and see' approach when it comes to evaluating the Supplemental Proposal while expressing general support for methane emissions reduction, possibly reflecting efforts voluntarily taken by industry to address methane emissions. That said, as noted above, industry groups have expressed opposition to the notion of EPA's reliance on independent third-party emissions monitoring. It remains to be seen whether this will translate into industry opposition to the Super-Emitter Response Program. The expansion of the Supplemental Proposal to all well sites may also garner opposition from smaller operators who may have been less aggressive in adopting voluntary measures to reduce methane emissions.
- Political and legal challenges remain likely. Given that federal climate change regulation has been the subject of significant legal and political instability over the past decade, the Supplemental Proposal may be similarly vulnerable to challenges, once finalized. It would appear that EPA's efforts to regulate methane emissions from the oil and gas industry would likely survive a challenge based on the Supreme Court's decision overturning the Clean Power Plan in West Virginia v. EPA, as that decision did not revoke EPA's authority to regulate greenhouse gas emissions under the CAA. Instead, the Supreme Court held that regulations that constituted "major questions," such as the Clean Power Plan, required specific Congressional authorization. We expect that opponents of any final rule would have difficulty characterizing EPA's relatively modest rulemaking efforts in the Supplemental Proposal as amounting to a "major question" under the majority opinion in West Virginia v. EPA. Nonetheless, legal challenges to a final rule, perhaps focusing on particular elements such as the Super-Emitter Response Program, should be expected. On the political front, considerable opposition to methane regulation is likely to remain among certain Congressional members, who criticized the November 2021 Proposal as weakening the American energy sector. While the final rule is expected to be issued in 2023, as with any agency regulation, a future EPA under a different Presidential administration could repeal it, depending on the outcome of the 2024 election. However, if the final rule has the support of industry and in particular if it is determined to satisfy the safe harbor provision of the IRA, thereby protecting oil and gas companies from the Methane Fee, a future Presidential administration may hesitate to scrap it.

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- Note that this estimate does not factor in the offset of product recovery requirements that will enable operators to sell or otherwise use methane that previously would have been lost through leaks and intentional release.
- ² Under the Supplemental Proposal, state plans are due to the EPA 18 months after EPA's final rule is published in the Federal Register.