



Insight

EPA Proposes New Methane Regulations on Oil and Natural Gas Industries

DAN BOSCH | NOVEMBER 3, 2021

EXECUTIVE SUMMARY

- The Environmental Protection Agency (EPA) released the text of a proposed rule regulating methane emissions from the oil and natural gas industries.
- EPA's proposal would, for the first time, regulate existing facilities; it would also add additional requirements to newly built or modified facilities, which were previously regulated.
- While the proposed rule promises significant emissions reductions, it will likely be subject to litigation once finalized; it also raises questions about what will happen to a proposed methane emissions fee being considered in Congress.

INTRODUCTION

As President Biden joined world leaders in announcing a global methane pledge to reduce worldwide methane emissions by 30 percent by 2030, the Environmental Protection Agency (EPA) unveiled a [proposed rule](#) that would underpin the United States' efforts to cut emissions of the greenhouse gas.

For the first time, EPA will set guidelines for reducing emissions from existing oil and natural gas production and distribution facilities. The proposed rule also updates standards for new and modified facilities that were previously regulated under a 2016 rule.

This analysis explains the structure of the proposed rule and reviews EPA's estimates of the economic impact and emissions reductions. It will also explore the outlook for the proposal given likely litigation from states that may oppose the rule, and the current consideration of a methane emissions fee in the Build Back Better Act.

STRUCTURE OF THE PROPOSED RULE

EPA's proposal is made up of three components. The first updates standards for new and modified sources that will apply to sources that go online after the final rule is published, likely the end of 2022. These standards build off a 2016 final rule that was reinstated earlier this year following the passage of a [Congressional Review Act](#) (CRA) resolution that overturned a Trump Administration effort to limit methane regulation. A second, minor, component makes modifications to the 2016 rule to help resolve inconsistencies deriving from that CRA resolution.

The third component is the crux of the rule. For the first time, EPA is proposing "emissions guidelines" that would set out a model regulatory policy that states would have to implement on existing sources. Under the Clean Air Act, while the federal government can directly regulate new sources, states are given the authority to

regulate existing sources (subject to minimum standards set by EPA). According to the proposal, there are more than 800,000 existing facilities that would be newly subject to federal minimum standards. States would have some flexibility in how they regulate these facilities, but states must submit their plans to EPA for approval – so in essence the guidelines act as a federal regulatory floor.

While some had anticipated that abandoned wells would be included in the proposal, they were not covered at this time. EPA, however, asked for ideas on other methane sources the agency should regulate – opening the door to future action.

ECONOMIC IMPACT OF THE PROPOSED RULE

EPA’s analysis estimates the total compliance costs of the proposed rule to be \$10 billion (at a 7 percent discount rate) from 2023-2035. The costs, however, are offset somewhat by product recovery requirements that will enable operators to sell or otherwise use methane that previously would have been lost through various leaks and intentional release. EPA estimates the value of such recovery at about \$3.9 billion over the same period, resulting in a net cost of \$6.3 billion (costs do not sum correctly due to rounding from EPA). The agency presents a primary estimate of the climate benefits of the proposal at \$55 billion using the [social cost of methane](#) at a 3 percent discount rate, though it notes that depending on the discount rate used such benefits range from \$22 billion to \$150 billion.

ESTIMATED EMISSIONS REDUCTIONS

EPA estimates that from 2023-2035 methane emissions will have been reduced by the equivalent of 920 million metric tons of carbon dioxide (MMT CO₂e) from a no-action baseline. Unfortunately, EPA does not include its projection baseline in either the proposed rule or its accompanying regulatory impact analysis, so it is not possible to know the scope of methane emissions reduced by the rule relative to the projection of methane emissions economy wide, or even within the sectors covered by the rule.

The largest annual emissions reductions occur in 2026 and 2027, the first and second years that the agency expects existing sources to be covered, with 100 million MMT CO₂e fewer emissions. For some context, in 2019 (the most recent year data is available) EPA estimates emissions from oil and natural gas facilities were 187 MMT CO₂e. EPA’s year-by-year emissions reduction estimates are presented in the table below.

Year	Emissions Reductions (MMT CO ₂ e)
2023	3.1
2024	4.5
2025	5.9
2026*	100
2027	100
2028	97
2029	94
2030	92
2031	89

2032	87
2033	85
2034	83
2035	81

*2026 is the first year existing sources are expected to be covered. Prior to that year, estimated reductions are from new and modified sources only.

OUTLOOK

As a proposed rule, EPA’s action is subject to a public comment period prior to finalization. While some of the details of the proposal may change, EPA is likely to finalize the rule in substantially the same form by the end of 2022.

The rule may be subject to legal challenge from certain states, industry, or both – depending how the rulemaking process plays out. Questions persist from unresolved challenges to the 2016 final rule about EPA’s authority, and state governments in particular may push back about what they perceive as EPA overreach on existing facilities. Such challenges could delay implementation, or even nullify, the rule.

A larger question in the near term is how the proposal affects a methane emissions fee currently being considered as part of the Build Back Better Act. As it stands, that legislation would impose a fee to start at \$900 a ton in 2023, increasing to \$1,500 a ton in 2025, and would apply to methane emissions that exceed certain percentage thresholds of gas sold. It is possible that EPA’s proposed rule softens support for keeping the fee in the final version of the legislation. It is also possible that the fee is enacted, subjecting operators to both new regulation and fees on emissions. Indeed, some view the fee as a hedge against possible regulation-delaying litigation.