

## EPA's Supplemental Proposal to Reduce Climate- and Health-Harming Pollution from Oil and Natural Gas Operations: Fact Sheet for Communities

### Summary

- November 11, 2022 The U.S. Environmental Protection Agency (EPA) is proposing to update, strengthen and expand its November 2021 proposed rules for the oil and natural gas industry. That proposal would secure major climate and health benefits for all Americans by reducing emissions of methane and other harmful air pollution from both new and existing oil and natural gas operations. The Agency's supplemental proposal would make emissions reductions from oil and natural gas operations more comprehensive. It would do that by improving some of the standards proposed in 2021 and by adding proposed requirements for sources not previously covered by the rules.
- The supplemental proposal would give stakeholders including communities -- a stronger voice as states and Tribal Nations develop plans to reduce methane from existing oil and natural gas sources. It also includes updated requirements that will ensure that existing source plans provide more rigorous and consistent protection for public health and the environment.
- The Clean Air Act standards in the supplemental proposal will work hand-in-hand with new resources and programs in the Inflation Reduction Act (IRA), which will incentivize early implementation of innovative methane reduction technologies and support methane mitigation and monitoring activities. These complementary efforts will allow the United States to achieve greater methane emissions reductions more quickly.
- EPA's supplemental proposal promotes innovation, reflecting input and information the Agency received from a diverse range of perspectives during the public comment period on the November 2021 proposal. EPA received more than 470,000 comments on the proposal, held government-to-government consultation with several Tribal Nations and held a threeday public hearing.

# The Supplemental Proposal Would Sharply Reduce Methane and Other Air Pollution from Oil and Natural Gas Operations

- In 2030 alone, the supplemental proposal would reduce methane emissions from covered sources by 87 percent, compared to 2005 levels. The November 2021 proposal would have reduced emissions from covered sources to 74 percent below 2005 levels in 2030.
- To ensure that its Regulatory Impact Analysis (RIA) is as informative as possible, EPA has developed an improved modeling approach to conduct a new analysis of the costs and benefits of the proposed standards. The new analysis reflects improved estimates of the

number of facilities covered by the supplemental proposal and the amount of methane and VOCs they emit. The supplemental proposal also would sharply reduce emissions of VOCs and hazardous air pollutants that can harm health and air quality in nearby communities.

- Using the new analysis approach, EPA estimates that the supplemental proposal would:
  - Avoid an estimated 36 million tons of methane emissions from 2023 to 2035, the
    equivalent of 810 million metric tons of carbon dioxide nearly the same as all
    greenhouse gases emitted from coal-fired electricity generation in the U.S. in 2020.
  - Avoid 9.7 million tons of smog-forming VOC emissions from 2023 to 2035, along with 390,000 tons of toxic air pollutants like benzene and toluene, among others.
  - Yield \$3.1 to \$3.2 billion in climate benefits per year, with total net benefits (after taking the costs of the rule into account) valued at \$34 to \$36 billion from 2023 through 2035.
  - Increase recovery of natural gas -- valued at \$3.3 to \$4.6 billion from 2023 through
     2035 (based on forecasted prices) that otherwise would go to waste.
- Reductions from EPA's proposed Super-Emitter Response Program are likely to be substantial. However, because the quantity of reductions is uncertain, they were not estimated for the RIA. Super emitters may be responsible for a large portion of total emissions from the oil and natural gas sector.

## EPA's Supplemental Proposal Creates A More Comprehensive Approach to Reducing Methane and VOC Pollution

- The updated requirements EPA is proposing would apply to the Agency's New Source Performance Standards (NSPS) for new, modified and reconstructed sources. They also would serve as presumptive standards to assist states in developing plans under the proposed Emissions Guidelines for existing sources.
- The supplemental proposal would:
  - Ensure that all well sites are routinely monitored for leaks, with requirements based on the type and amount of equipment on site;
  - Encourage the deployment of innovative and advanced monitoring technologies by establishing performance requirements that can be met by a broader array of technologies;
  - Prevent leaks from abandoned and unplugged wells by requiring documentation that well sites are properly closed and plugged before monitoring is allowed to end;
  - Leverage qualified expert monitoring to identify "super-emitters" for prompt mitigation;

- Strengthen requirements for flares to ensure they are properly operated to reduce emissions;
- Set a zero-emissions standard for pneumatic pumps at affected facilities in all segments of the industry, with exceptions limited to sites without access to electricity;
- Establish emission standards for dry seal compressors, which are currently unregulated; and
- Require owners/operators of oil wells with associated gas to implement alternatives to flaring the gas, unless they submit a certified demonstration that all alternatives are not feasible for technical or safety reasons.

#### Key requirements in the supplemental proposal include:

#### Requiring Leaks Monitoring at Every Well Site, Until Wells Are Properly Closed

- After considering information and comments received from the public, EPA is revising its
  November 2021 proposal to find and fix leaks at new and existing well sites. The
  supplemental proposal creates a cost-effective approach to ensure that every well site,
  regardless of size, is regularly checked for leaks. This new approach will achieve more
  comprehensive reductions in leaks from well sites and will allow for more streamlined
  compliance by owners and operators.
- The revised program would tie leak monitoring requirements to the types and amount of
  equipment at a site rather than to estimated emissions. This approach removes exemptions
  from routine monitoring for well sites with lower emissions, which EPA had proposed in
  2021.

#### Preventing Abandoned and Unplugged Wells

- To ensure that well sites are not left unplugged and potentially leaking, EPA is proposing that monitoring must continue at these sites until all wells have been plugged and equipment has been removed.
- In order to discontinue monitoring at a well site, the owner or operator would have to submit at well closure plan that includes the necessary steps to close the wells, including plugging all wells, documentation of financial assurance to complete the well closure, and a schedule for completing closure activities. Once a well site is closed, the owner or operator would have to conduct a final survey using OGI and repair and resurvey the site if leaks are found to ensure that emissions are not continuing.

#### Strengthening Requirements for Flares

 Flares are sometimes used to meet emissions reduction requirements at well sites, centralized production facilities, compressor stations or natural gas processing plants.
 However, if flares are not properly designed and operated, they can become sources of super-emitting events.

- EPA is proposing compliance requirements to ensure that flares meet all requirements for good flare performance, including requirements to continuously monitor the flare to ensure that a pilot flame burns all the time. The Agency is also proposing monitoring requirements for enclosed combustors.
- In addition, EPA is proposing to expand on its November 2021 proposal to prohibit venting of associated gas from oil wells and limit flaring of that gas. The supplemental proposal would require owners or operators to route associated gas to a sales line, use the gas for fuel or another beneficial purpose, or reinject it into a well for enhanced oil recovery. Flaring would be allowed only if the owner or operator submits a certified demonstration that a sales line is not available and other beneficial uses are not feasible for technical or safety reasons.

#### Creating a Super Emitter Response Program

- Studies show that emissions from a small number of sources are responsible for as much as
  half of the methane emissions from oil and natural gas operations, along with significant
  amounts of smog-forming VOCs and toxic air pollutants that are of concern in many
  communities. These "super emitters" often are caused by malfunctions or abnormal
  operating conditions, including unlit flares and open thief hatches on storage tanks.
- While many of EPA's proposed requirements would reduce the number of super-emitters,
   EPA also is proposing a Super-Emitter Response Program to identify these events quickly for prompt mitigation.
- The Super-Emitter Response Program would leverage expertise and data from regulatory agencies or EPA-approved qualified third parties with access to EPA-approved remote methane detection technology.
- Under the proposed program, regulatory authorities or qualified third parties that EPA has approved would notify oil and natural gas owners and operators when a super emitter is detected at a regulated facility. EPA is proposing to define a super-emitting event as emissions of 100 kilograms (220.5 pounds) of methane per hour or larger.
- Owners and operators would be required to conduct an analysis to determine the cause of the event identified in the notification. They would have to conduct that analysis within five days of receiving the notification. If the event was caused by a malfunction or abnormal operation, they would have to correct that within 10 days.
  - If fully mitigating a super emitter would take longer than 10 days, owners/operators would have to develop a corrective action plan, including a schedule for addressing the event, and submit it to EPA or the state.
- To ensure that the Super-Emitter Response Program provides transparency for the public and for affected communities, notices sent to oil and natural gas owners and operators would be available on a public website for easy access. The owners' and operators'

response, along with any corrective actions taken, if needed, would also be available on that website.

- To qualify to notify owners and operators of super-emitters, third parties would have to:
  - Be approved by EPA as having appropriate expertise and experience;
  - Use remote detection technology that EPA has approved; and
  - Include specific, required factual information in the notification to an owner or operator to document the existence of the super-emitting event.
- EPA is also proposing a mechanism for owners and operators to ask the Agency to revoke a notifier's certification, if they can demonstrate that repeated notifications contained verifiable errors.

## The Supplemental Proposal Includes Additional Requirements for Meaningful Engagement During State Plan Development

- In its November proposal, EPA proposed to require that states conduct meaningful public engagement as they develop their plans to reduce methane from existing sources. EPA is providing additional details on what constitutes meaningful engagement as part of the supplemental proposal. Meaningful engagement would help ensure that:
  - State plans achieve the appropriate level of emissions reductions;
  - Communities that are most affected by, and vulnerable to, the health and environmental impacts of existing sources have the opportunity to participate and have their views considered in the development of the plan; and
  - Those same communities benefit from emissions reductions achieved under the plan.
- EPA is proposing to require states to conduct meaningful engagement with "pertinent stakeholders" during development of their plans. These stakeholders would include communities most affected by and/or vulnerable to the impacts of a state plan or plan revision.
- States would have to share information and seek input on development of the plan and on any assessments that accompany it. If a facility qualifies for a standard that is less stringent than the presumptive standards EPA has proposed, states would have to engage with affected and vulnerable communities that would be affected by that standard.
- EPA would evaluate states' meaningful engagement demonstrations as part of determining whether their plans are complete.

### EPA Will Offer Training on the Supplemental Proposal

• EPA will offer a training on the supplemental proposal for communities and members of Tribal Nations on Thursday, November 17, 2022. The training will provide information on the supplemental proposal to help people prepare for providing public comments. Register to attend the training.

#### For More Information

• Read the proposal, additional fact sheets, and instructions on submitting comments.