

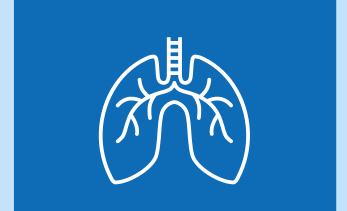




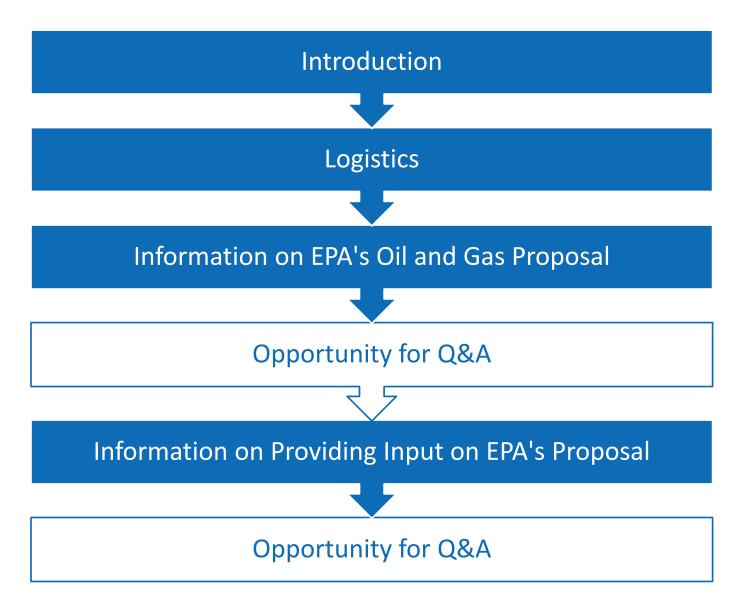


Webinar for Environmental Justice Communities and Members of Tribal Nations

NOVEMBER 17, 2022

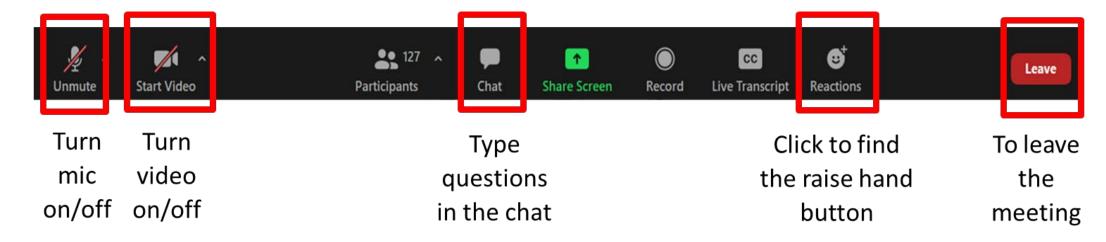


Welcome!



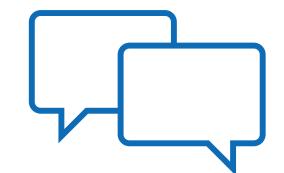
Webinar Instructions and Tips

- To minimize distractions, please remain muted and turn your camera off during the presentation
- If you have a question about the information EPA presents during today's webinar:
 - Raise your hand or type your question in the chat
 - EPA staff will call on you when we are at a stopping point, or at the end of the presentation during the Q&A portion of the webinar
 - When you are called on, unmute yourself and if you'd like, turn on your video
- If you have a logistical or technical question about today's meeting:
 - Type your question in the chat





In a supplemental proposal signed November 8, 2022, EPA is proposing to update, strengthen, and expand its November 2021 proposal for new and existing sources in the oil and natural gas industry



EPA is seeking comment on all aspects of the supplemental proposal

Supplemental Proposal

Overview of Rulemaking



November 2021

Proposes to:

- Update and strengthen methane and VOC standards on the books for new sources
- Add standards for currently unregulated new sources
- Establish first nationwide Emission Guidelines for states to regulate existing sources

EPA received over 470,000 comments and held three days of public hearings

November 2022

Proposes to:

- Make proposed standards more comprehensive
- Encourage innovative technologies
- Modify and refine proposed standards based on public input
- Provide key information for stakeholders

Supplemental

- Updated Regulatory **Impact Analysis**
- Implementation details
- Regulatory text



2023

Crude Oil and Natural Gas Operations: Where EPA's Proposed Methane Rules Would Apply

Production & Processing

EPA's methane proposal covers equipment & processes at:

- 1. Onshore well sites
- 2. Storage tank batteries
- Gathering & boosting compressor stations
- 4. Natural gas processing plants

Natural Gas Transmission & Storage

EPA's methane proposal covers equipment & processes at:

- 5. Compressor stations
- 6. Storage tank batteries



Distribution

(not covered by EPA rules)

- 7. Distribution mains/services
- 8. City gate
- 9. Regulators and meters for customers

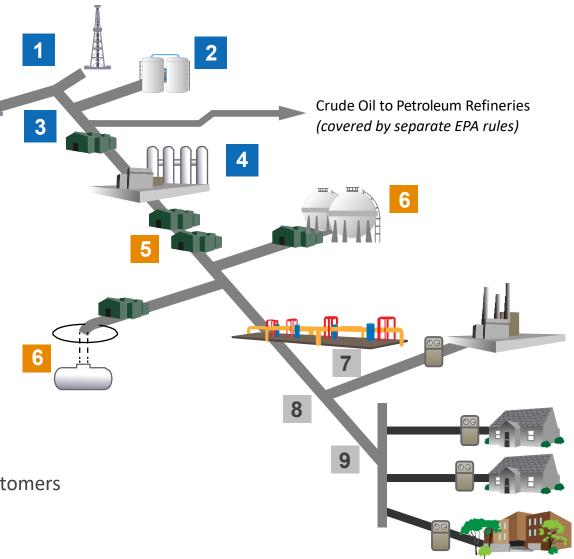
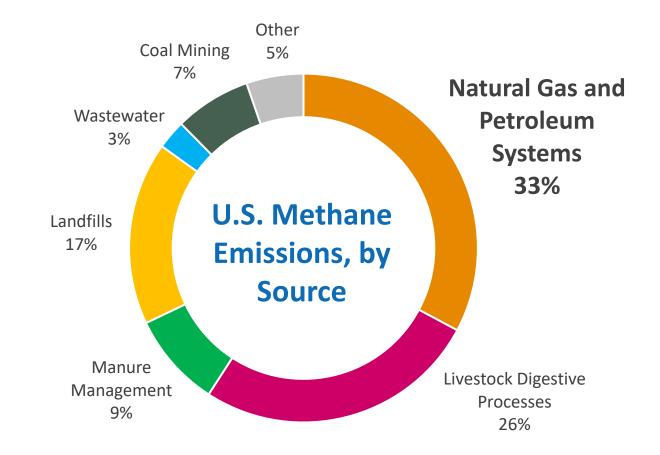


Figure: Adapted from American Gas Association and EPA Natural Gas STAR Program

- The oil and gas sector is the largest industrial source of methane emissions in the United States
- Methane is responsible for approximately one-third of current warming from human activities
- The oil and gas sector also emits
 other harmful pollutants, like smogforming volatile organic compounds,
 and toxic chemicals like benzene



Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2020

Methane Emissions from the Oil and Gas Sector

Impacts on Communities with Environmental Justice Concerns

- In Nov. 2021, EPA conducted "baseline" analyses to determine if certain environmental justice concerns existed as a result of impacts from oil and natural gas operations
- These analyses included impacts of the oil and gas industry as a whole, not just the equipment and activities covered by EPA's rules

Hispanic populations, Native Americans, and children 17 and younger may experience disproportional exposures to ozone pollution from VOC emissions from oil and natural gas operations

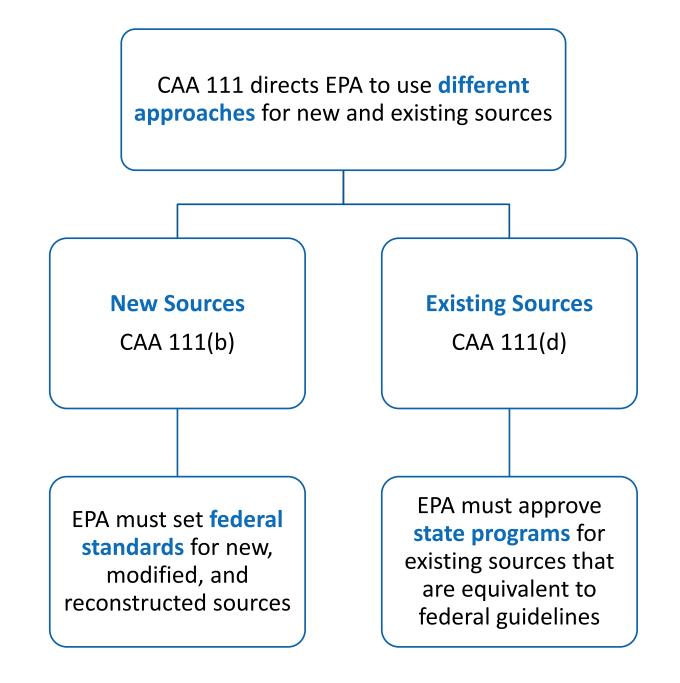
The analyses also showed that more Hispanic people, and slightly more children ages 17 and younger, may live in communities with potentially elevated cancer risk from oil- and gas-related air toxics emissions compared to the national population

• The term elevated risk means that 1 in 10,000 people may develop cancer after being exposed to air toxics 24 hours a day for 70 years

In addition, EPA's analyses also showed that Hispanic households spend a larger portion of their income on energy than non-Hispanic households

Clean Air Act Section 111

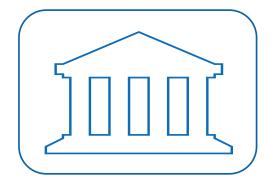
This part of the Clean Air Act (CAA) gives EPA the authority to set methane and VOC pollution standards for the oil and gas industry



Reducing Emissions at New, Modified, and Reconstructed Sources

EPA's standards fornew sources reflects the degree of emission limitation achievable through the application of the best system of emission reduction

Standards are reviewed at least every 8 years and revised, if appropriate



Congress
Clean Air Act Section
111(b)



Sets new source performance standards



StatesIssue state permits



Emissions Reductions

Reducing Emissions at Existing Sources

 Congress recognized that existing sources do not have as much flexibility as new sources to build emission controls into their design



Congress
Clean Air Act
Section 111(d)



EPA
Sets emission
guidelines



States
Develop state plans
to submit to EPA



Reviews and approves state plans



Emissions Reductions

If a state does not submit an approvable plan, EPA will issue a Federal Plan



Making Proposed Standards More Comprehensive

FUGITIVE EMISSIONS, ABANDONED AND UNPLUGGED WELLS, SUPER EMITTERS, FLARES, PNEUMATIC PUMPS, DRY SEAL CENTRIFUGAL COMPRESSORS, OTHER UPDATES

Fugitive Emissions from Well Sites

Ensures that all well sites are monitored for leaks, with requirements based on the type and amount of equipment on site

EPA is revising its Nov. 2021 proposal to find and fix leaks at new and existing well sites, including wellhead-only sites, to add proposed options that allow owners to use a wider selection of methane detection technologies to check for leaks

Ties leak monitoring requirements to the types and amount of equipment at a site rather than to estimated emissions

Ensures that all well sites are regularly checked for leaks

Includes leak repair deadlines for each type of site

Abandoned and Unplugged Wells

Prevents leaks from abandoned and unplugged wells by requiring documentation that well sites are properly closed and plugged before monitoring is allowed to end

EPA's proposal would require owners to continue monitoring a well site for leaks until all wells are properly closed and plugged

EPA's proposal would require owners to submit a well closure plan

- Plan for plugging all wells
- Documentation of financial assurance to complete the well closure
- Schedule for completing closure activities

Once a well site is closed, owners/operators would have to conduct a **final survey** using OGI to ensure emissions are not continuing

 If emissions are detected, owners/operators would be required to make repairs and resurvey the site

Super-Emitter Response Program

Leverages qualified expert monitoring to identify superemitter events for prompt mitigation "Super emitters" are large leaks from a small number of sources that are responsible for significant emissions of methane, smog-forming VOCs, and air toxics

 Often are caused by malfunctions or abnormal operating conditions, including unlit flares and open thief hatches on storage tanks

In addition to other proposed requirements that would reduce the number of super-emitters, EPA is proposing a **Super Emitter Response Program**

Approved third parties using approved remote detection technologies would notify oil and natural gas owners and operators when a superemitter is detected; owners and operators would then be required to determine the cause and address it

- 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, also would be available online

Flares

Requires flares to be properly operated to reduce emissions

If not properly designed and operated, flares that are used to meet emission reduction requirements can result in super emitters

EPA is proposing additional compliance requirements to ensure that flares meet all standards for good flare performance

- Requirements to continuously monitor the flare to ensure that a pilot flame burns at all times
- Requirements to monitor enclosed combustors

In addition, EPA is proposing to **limit the use of flares** as part of proposed requirements to
eliminate venting of associated gas from oil wells

Pneumatic Pumps

Sets a zero-emissions standard for pneumatic pumps at affected facilities in all segments of the industry

EPA is proposing a zero-emissions standard for all pneumatic pumps

 Pumps used at an affected facility would not be driven by natural gas

EPA is proposing a **feasibility exemption** from the zero-emissions standard for sites that do not have access to electricity

- Owners and operators at sites with exemptions would have to use the emissions from the gas-driven pumps by routing them to a process on site
- If routing emission to a process is not feasible, the emissions control requirement depends on the number of pumps on site

Dry Seal Centrifugal Compressors

Sets requirements for previously unregulated source

Owners or operators of dry seal compressors would be required to maintain the volumetric flow rate at or below 3 standard cubic feet per minute to prevent emissions

EPA also is proposing updates to proposed requirements for new and existing wet seal centrifugal compressors

Achieving Additional Methane and VOC Reductions

EPA is proposing presumptive standards for **liquids** unloading

- Proposing to update the definition of liquids unloading affected facility, meaning not all liquids unloading would be considered modifications
- In light of this proposed change, EPA also is proposing presumptive standard for liquids unloading for existing sources

Updating the proposed protocol for using optical gas imaging (Appendix K)

- Protocol could be used for detecting leaks in more industrial sectors, if the rule specifies it
- For EPA's oil and natural gas rules, it would be used for OGI surveys to detect leaks at onshore natural gas plants; all other OGI surveys would follow procedures in the proposed NSPS regulatory text



Encouraging Innovative Technologies

SURVEY MATRIX, CONTINUOUS MONITORING SYSTEMS, ALTERNATIVE TEST METHOD APPROVALS

Alternative Periodic Screening Approach

Ties the frequency of required monitoring surveys to the detection ability of the technology used

EPA is proposing to allow the use of a broader range of advanced technologies in lieu of optical gas imaging or EPA Method 21

The supplemental proposal has several different screening frequencies corresponding to a range of minimum detection levels

- Wide variety of stakeholders recommended this approach
- Provides greater flexibility than the single screening frequency and detection level proposed in Nov. 2021

Provides clear framework for vendors interested in the development of **future technologies** for methane detection

Continuous Monitoring Systems

Allows owners and operators the option of using continuous monitoring technologies to check for methane leaks as an alternative to periodic screening An owner or operator using continuous monitoring technologies would conduct a **root cause analysis** and **corrective action** whenever methane emissions exceed an action level at the boundary of a facility

• Similar approach to EPA's fenceline monitoring requirements for air toxics at petroleum refineries

EPA is proposing two action levels, designed ensure that both smaller leaks and super emitters are promptly repaired

Alternative Test Methods Approvals

Streamlines approval process for use of advanced methane measurement technologies

Clear and streamlined pathway for technology developers and other entities to seek approval for the use of advanced measurement technologies

Once EPA approves a technology and technique, owners and operators would be able to use it without the need for additional approval



Providing Information on Plans for Existing Sources

MEANINGFUL ENGAGEMENT, REMAINING USEFUL LIFE AND OTHER FACTORS, TIMELINES, STATE PROGRAM EQUIVALENCY

Meaningful Public Engagement

Includes meaningful public engagement as a criteria in evaluating state plans

Adds detail to a proposed requirement that states conduct meaningful public engagement during development of their existing source plans

Seeking comment on including meaningful engagement in completeness criteria for state plans

Seeking comment on **proposed definitions** of meaningful engagement and "pertinent stakeholders" who states should include in that engagement

Seeking examples or models of state meaningful engagement, including best practices and challenges

Remaining Useful Life and Other Factors

Includes requirements for the types of information and evidence states must provide

The Clean Air Act directs EPA to allow states to consider "remaining useful life and other factors" in applying a standard to a particular existing source

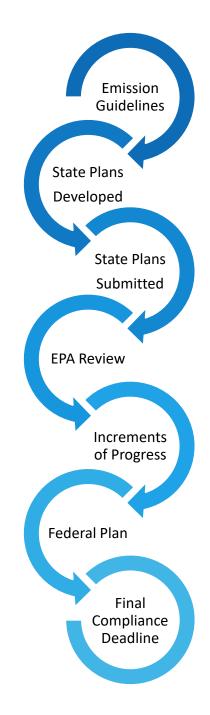
EPA is proposing requirements for the types of information and evidence states must provide to apply a less-stringent standard based on these factors

States must consider communities most affected by and vulnerable to the impact of the emissions from those facilities

Emission Guidelines Implementation Timelines

EPA is proposing to require states to **submit plans** to EPA for review within **18 months** after the final Emissions Guidelines are published in the Federal Register

States would be required to impose a compliance deadline on existing sources that is no later than 36 months after the state plan is due to EPA



State Program Equivalency

Includes criteria for determining whether state programs can be considered equivalent to the presumptive standards

Five basic criteria would be used in a source-by-source evaluation of a state program

- Designated facility
- Designated pollutant
- Standard type or format of standard (numeric, work practice)
- Emission reductions (with consideration of applicability thresholds and exemptions)
- Compliance assurance requirements (monitoring, recordkeeping and reporting)

EPA will compare the state program to EPA's **presumptive** standards

- Is state program designated facility definition, pollutant, and format the same?
- Does the state plan include a demonstration that the state requirements achieve the same or greater emissions reduction as the presumptive standards?
- Does the state plan make a demonstration that compliance measures under a state program are at least as effective as those in the presumptive standard?



Projecting Benefits and Costs

AIR POLLUTION REDUCTIONS, USEFUL PRODUCT CONSERVATION, COSTS OF COMPLIANCE

Benefits

- EPA's supplemental proposal would secure major climate and health benefits for all Americans
- EPA has improved its modeling approach to conduct a new analysis of the costs and benefits of the supplemental proposal.
- 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.

Reduce Climate-Warming Methane

- Avoid methane emissions by an estimated 36 million tons 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
- In 2030 alone, the proposal would reduce methane emissions from covered sources by an estimated **87 percent** compared to 2005
 - Does not include additional reductions likely to result from the proposed Super-Emitter Response Program.
- Yield nearly \$3.1 billion to \$3.2 billion in climate benefits per year, with total net benefits valued at \$34 to \$36 billion from 2023 through 2035 (2019\$)

Reduce VOCs and Air Toxics

 Avoid smog-forming VOC emissions by 9.7 million short tons from 2023 to 2035, along with 390,000 tons of toxic air pollutants like benzene and toluene, among others

Recover Natural Gas

• Increase recovery of natural gas, valued at \$3.3 to \$4.6 billion from 2020 through 2035, that otherwise would go to waste (2019\$). That's enough natural gas to heat 3.5 million homes for the winter.



Next Steps

RULEMAKING PROCESS, HOW TO COMMENT, MORE INFORMATION



How to Comment

- Your comments may address any aspect of the proposal
- Comments EPA receives in writing get the same weight as comments received at the public hearing



Comment in Writing

- Comments must be received by February 13, 2023
- Label your comments with the docket number Docket ID No. EPA-HQ-OAR-2021-0317
- EPA prefers that you submit comments online through the Federal eRulemaking Portal
- -Visit https://www.regulations.gov/ and type EPA-HQ-OAR-2021-0317 in the search box
- For other ways to submit written comments, please see EPA's fact sheet How to Comment on the Supplemental Proposal



Comment at the Public Hearing

- EPA will hold a virtual public hearing on January 10, 2023, and January 11, 2023
- You will need to register to speak in advance
- -The hearing dates and information on registering will be posted at on EPA's website at https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry when the proposal is published
- Each speaker will have 4 minutes to speak
- If you need language translation or other reasonable accommodation, please register within 7 days of the proposal being published, so that the Agency may provide this service



Any Questions?

To read the proposed rule and find additional summary resources, visit: epa.gov/controlling-air-pollution-oil-and-natural-gas-industry

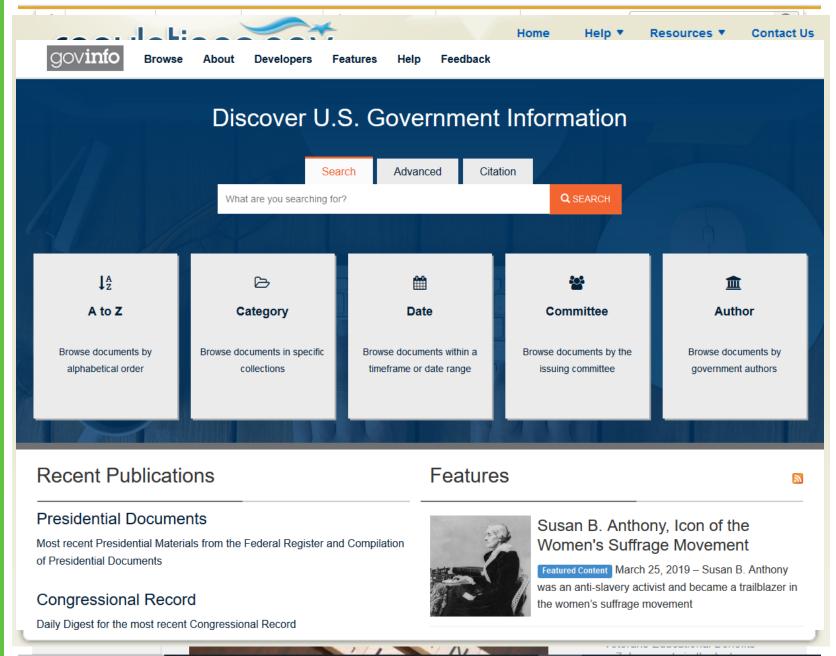


Preparing and Effective Written Comments

FINDING AND REVIEWING INFO ABOUT THE PROPOSAL, DRAFTING YOUR COMMENT, FINALIZING YOUR COMMENT

Where to Find Information about Regulations

- Reginfo.gov
- FederalRegister.gov
- Regulations.gov
- GovInfo.gov



From EPA

 Get Involved with EPA Regulations

From the Office of the Federal Register

Tips for Submitting
 Effective Comments



TIPS FOR SUBMITTING EFFECTIVE COMMENTS*

Overview

A comment can express simple support or dissent for a regulatory action. However, a constructive, information-rich comment that clearly communicates and supports its claims is more likely to have an impact on regulatory decision making.

These tips are meant to help the public submit comments that have an impact and help agency policy makers improve federal regulations.

Summary

- ✓ Read and understand the regulatory document you are commenting on
- ✓ Feel free to reach out to the agency with questions
- ✓ Be concise but support your claims
- Base your justification on sound reasoning, scientific evidence, and/or how you will be impacted
- ✓ Address trade-offs and opposing views in your comment
- ✓ There is no minimum or maximum length for an effective comment
- ✓ The comment process is not a vote one well supported comment is often more influential than a thousand form letters

Detailed Recommendations

- Comment periods close at 11:59 eastern time on the date comments are due begin work well before the deadline.
- Attempt to fully understand each issue; if you have questions or do not understand a part of the regulatory document, you may ask for help from the agency contact listed in the document.

Note: Although the agency contact can answer your questions about the document's meaning, official comments must be submitted through the comment form.

- Clearly identify the issues within the regulatory action on which you are commenting. If you are commenting on a particular word, phrase or sentence, provide the page number, column, and paragraph citation from the federal register document.
 - a. If you choose to comment on the comments of others, identify such comments using their comment ID's before you respond to them.

Resources for Writing Comments

EPA Dockets

- Dockets contain information that EPA uses in a rulemaking or other agency action and that explain or support its decisions
- Contain public input provided through the formal comment process and in public hearings
- Available to the public for review
- Learn more about EPA dockets at https://www.epa.gov/dockets

Getting Ready to Comment

Collect and review relevant materials

Get help understanding the issues

Identify your key issues and concerns

Review the Proposed Document

Read the preamble's summary and table of contents

Determine which sections are most critical to you

Mark up document as you read it

- Agreements
- Disagreements
- Questions
- Concerns

Begin Your Assessment

Ask questions to help shape your comments

- Do you disagree with the underlying assumptions?
- Is important information missing?
- Do you agree with methodologies used in assessments, such as monitoring methodologies or risk assessments?
- Do conclusions and recommendations appear to be logical and supported?

Be sure to **document the reasons** for your comments

Continuing Your Assessment

Check for consistency with other information

- Check facts with other sources
- Check cited references
- Get feedback from allies/other experts

Content: Identify Shortcomings

Pinpoint factual mistakes

- Information is wrong or misleading
- Information is outdated or incomplete
- Relevant information is missing

Highlight items you support and do not support

Illustrate/explain legal weaknesses

 Are there any opportunities that EPA missed that are supported by current laws or regulations?

Provide examples

Content: Recommend Alternatives

Offer alternative solutions

Suggest specific language

Respond to questions that EPA is asking

Make sure your comments **relate** to the proposed action

Organization and Format

- Make it easy to follow
- Clearly identify each section addressed
- Use headings, indentation, and bullets
- Avoid dense blocks of text (long paragraphs)
- If comments are lengthy consider a table of contents

Table of Contents First very important point....

Additional Tips for Comment Submittal

Make your comments easy to follow

- Be organized
- Be clear, concise and convincing
- Support your key comments with evidence
- Provide solutions/alternatives that you think should be considered

Submit comments by deadline



Submitting Written Comments

COMMENT PERIOD, FINDING THE DOCKET, SUBMITTING COMMENTS TO THE DOCKET

Comment Period

The **comment period** for the proposed rule will open when the proposed rule is published in the Federal Register

Comment periods typically range from **30-60 days** but may be longer or shorter

The **preamble** of the proposed rule and the **fact sheet** posted to EPA's website will provide specific directions on submitting comments

EPA's preference is to receive comments through the Federal eRulemaking portal at **regulations.gov**

• We also accept written comments via email, fax, and mail

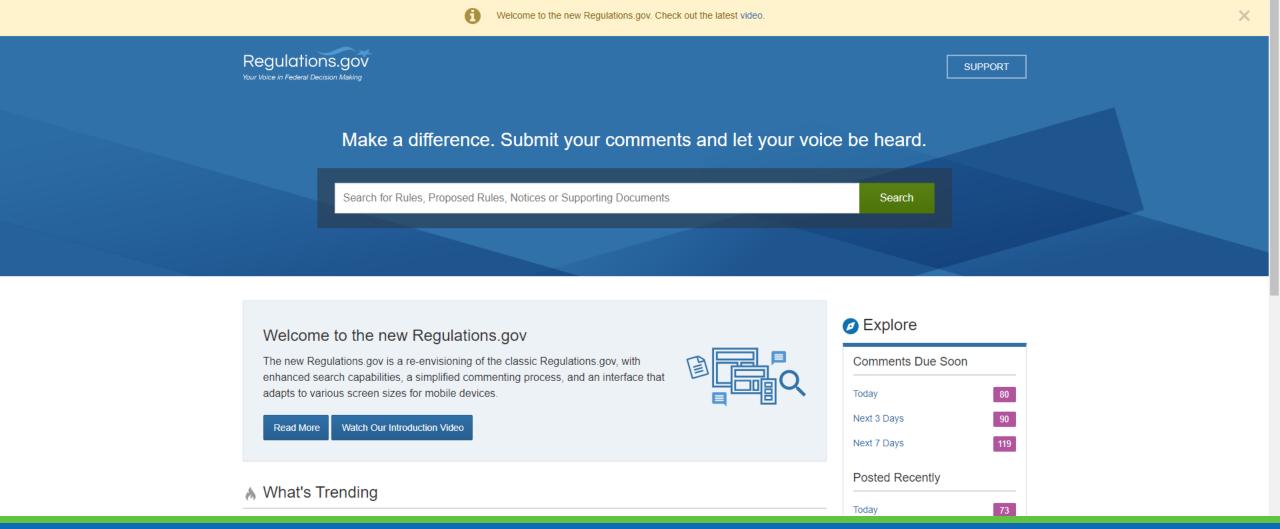
Submitting Comments to the Public Docket

EPA has opened a **docket** for members of the public to submit input to the Agency in writing

- Visit https://www.regulations.gov/
- Search for Docket ID No. EPA-HQ-OAR-2021-0317

For more information on submitting information to EPA dockets

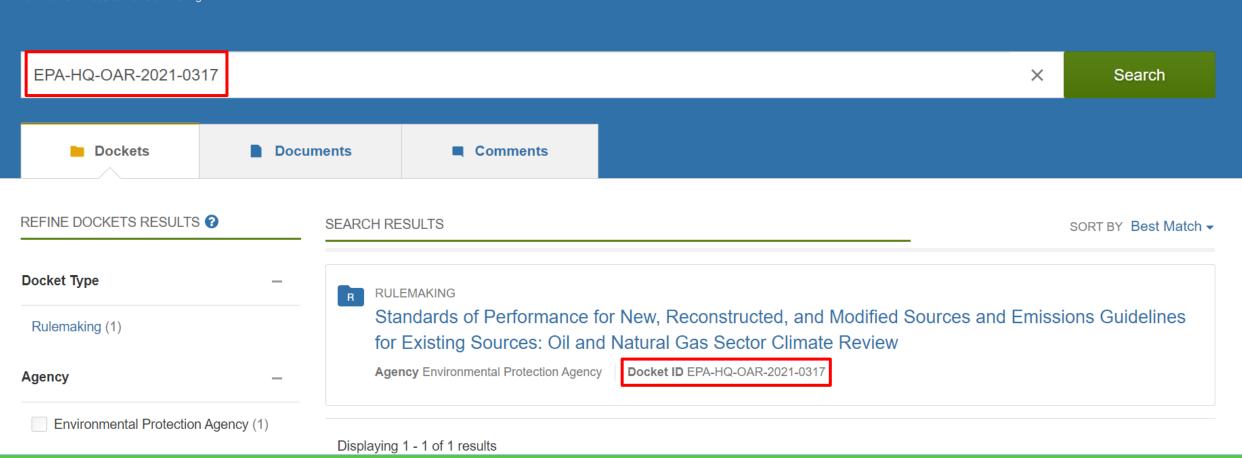
Visit https://www.epa.gov/dockets/commenting-epa-dockets



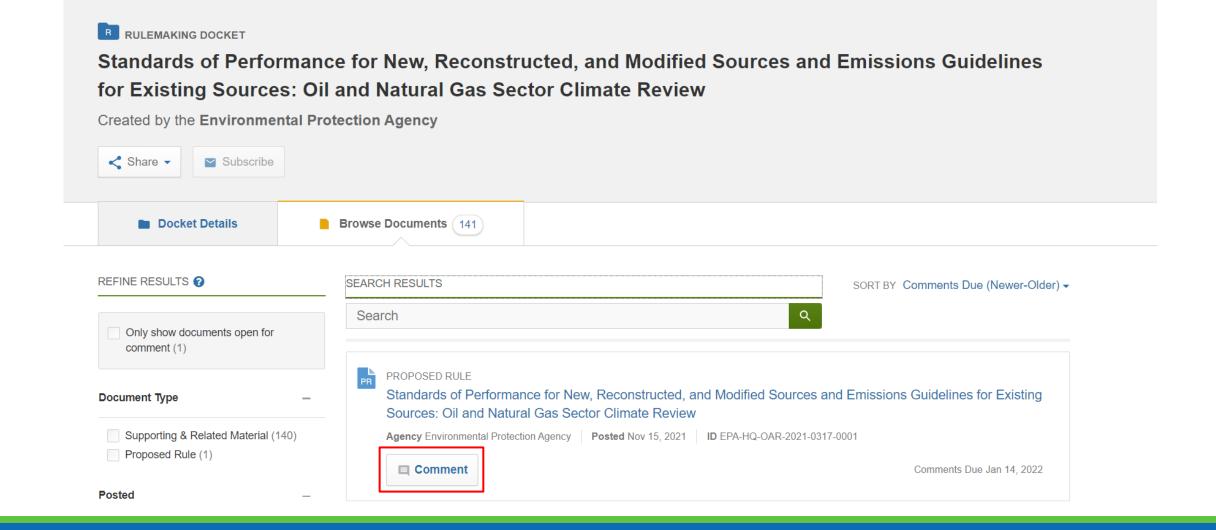
Regulations.gov







Searching Docket ID Number



Docket Documents

Write a Comment	
Read Agency Guidelines Commenter's Checklist	
Comment*	
Start typing comment here	
	5000
Attach Files	
You can attach up to 20 files, but each file cannot exceed 10MB. Valid file types include: bmp, docx, gif, jpg, jpeg, pdf, png, pptx, rtf, sgml, tif, tiff, txt, wpd, xlsx, xml.	
Drop files here or	Browse
Email Address	
Email Address	
Opt to receive email confirmation of submission and tracking number? (We will never post on Regulations.gov or share your email with anyone else.)	

Submitting Comments



Participating in Public Hearings

DEVELOPING COMMENTS, PREPARING, AND SPEAKING

What is a Public Hearing?

A public hearing is a **formal meeting** where EPA officials hear the public's view and concerns about an EPA action or proposal

EPA is required to consider comments, whether submitted to the docket or provided during a public hearing, when evaluating Agency action

Public hearings must be held upon request during the public comment period, but EPA can also choose to hold a public hearing without a request

Developing Your Comments

Determine what your key messages will be

- What areas of the proposal do you agree/ disagree with
- Respond to any questions that EPA outlined in the proposal

Be factual

Make specific recommendations

Be clear, concise and constructive

Practice, practice, practice

Preparing to Speak at a Public Hearing

- Read the preamble of the proposed rule and review other relevant documents
- EPA's proposed rules are accompanied by a fact sheet that summarizes key aspects of the proposal



Speaking at a Public Hearing

- Respect the time limits
- Speak clearly and confidently
- Follow up with written comments





Any Questions?

To read the proposed rule and find additional summary resources, visit: epa.gov/controlling-air-pollution-oil-and-natural-gas-industry