

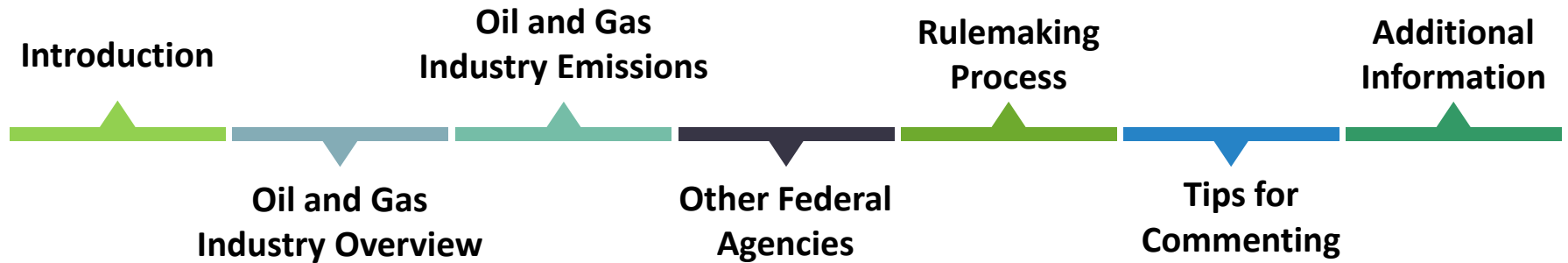
## EPA's Clean Air Act Authority

# Reducing Emissions of Methane and Other Air Pollutants from the Oil and Natural Gas Sector



May 2021

# Roadmap for Today's Training



## Introduction

## Oil and Gas Industry Emissions

## Rulemaking Process

## Additional Information

### Oil and Gas Industry Overview

### Other Federal Agencies

### Tips for Commenting

# EPA's Authority

- ▶ Agencies get their authority to issue rules from laws enacted by Congress
- ▶ EPA has authority under the **Clean Air Act** to regulate air quality
- ▶ EPA may decide to begin a rulemaking for many reasons, including new technologies or data, concerns arising from problems affecting society, or Presidential directives



President Bush signing the Clean Air Act Amendments of 1990.



EPA Administrator Michael S. Regan has called tackling climate crisis the single best opportunity to strengthen our economy, to put people back to work, and to build a healthier, more equitable environment for all Americans.

## ▶ Clean Air Act Section 111

- EPA regulates **greenhouse gases, volatile organic compounds, and other air pollutants** under this section of the Clean Air Act
- **National standards** for **new, modified, and reconstructed** oil and gas sources
- Although the Agency has not done so before, we plan to propose **guidelines** for reducing methane emissions from **existing** oil and gas operations

## ▶ Clean Air Act Section 112

- EPA regulates **air toxics** from the oil and gas sector. Air toxics are known to cause cancer and other serious health impacts.

## ▶ EPA also regulates the oil and gas industry under other laws to protect water quality and ensure proper treatment of hazardous waste

# EO on Public Health and the Environment

- ▶ On January 20, 2021, President Biden issued Executive Order 13990, **Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis**
- ▶ Among other direction to EPA, the order instructs EPA to consider taking two actions by September 2021 focused on reducing methane emissions from the oil and gas sector:
  - Propose strengthening previously issued standards for **new sources**
  - Propose emission guidelines for **existing operations** in the oil and gas sector
- ▶ These actions both fall under section 111 of the Clean Air Act

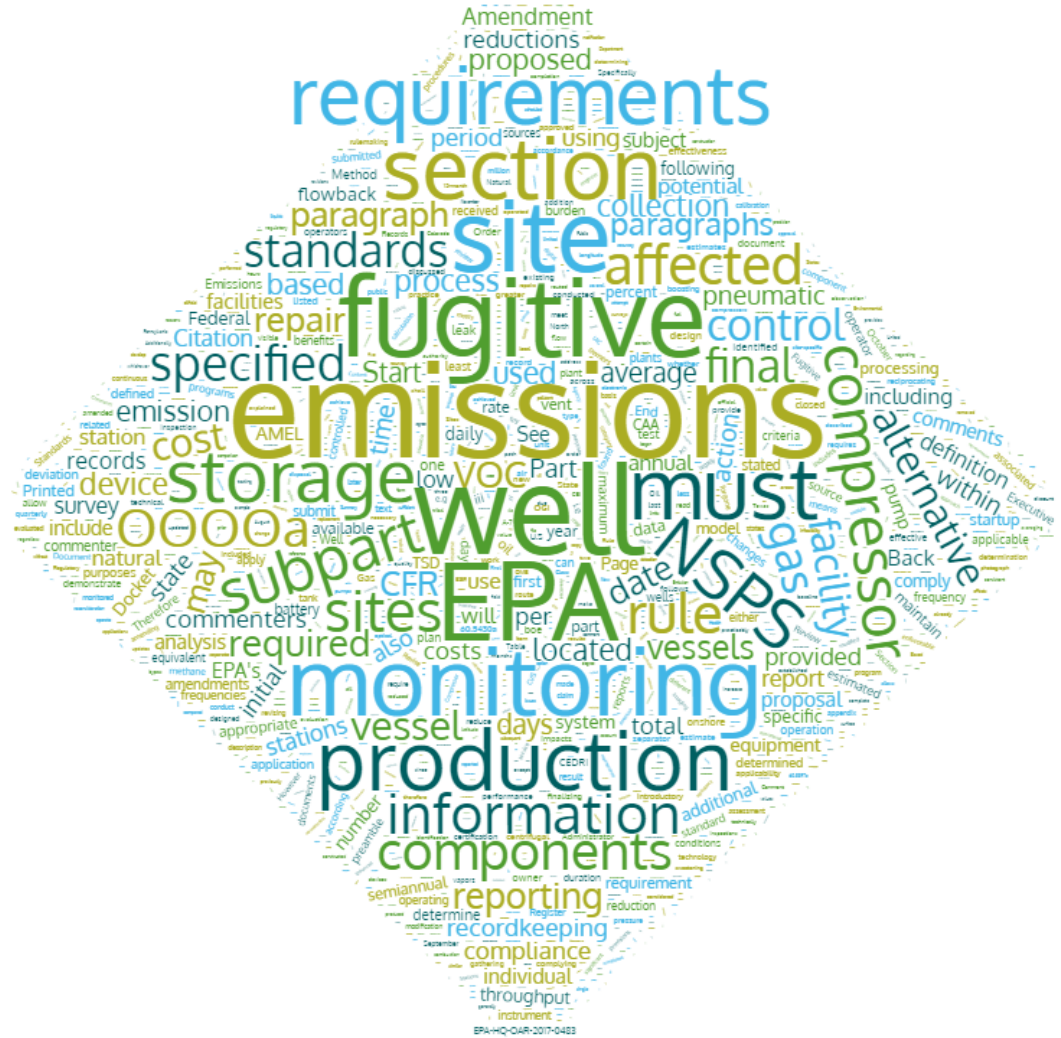


## **Purpose of EO 13990:**

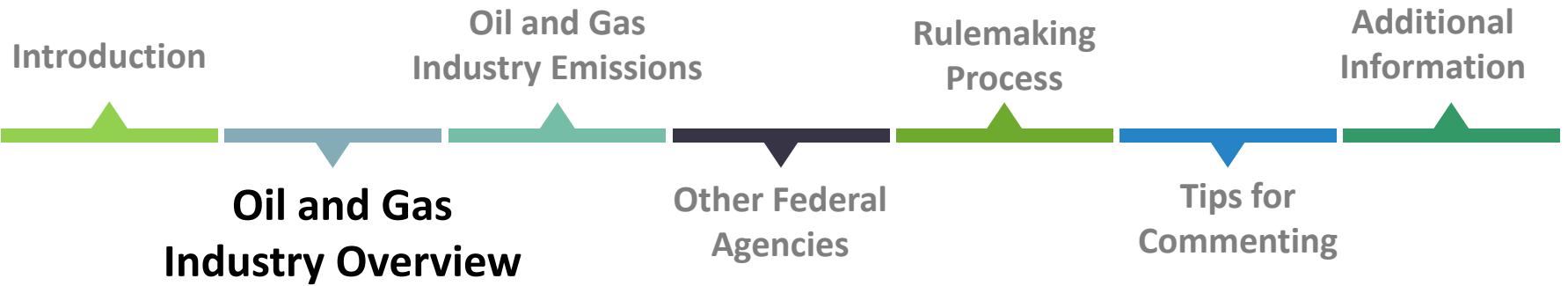
*“...to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the well-paying union jobs necessary to deliver on these goals.”*

# More Public Engagement = Better Rules

- ▶ EPA's mission is to protect human health and the environment
- ▶ We need input from a broad range of stakeholders

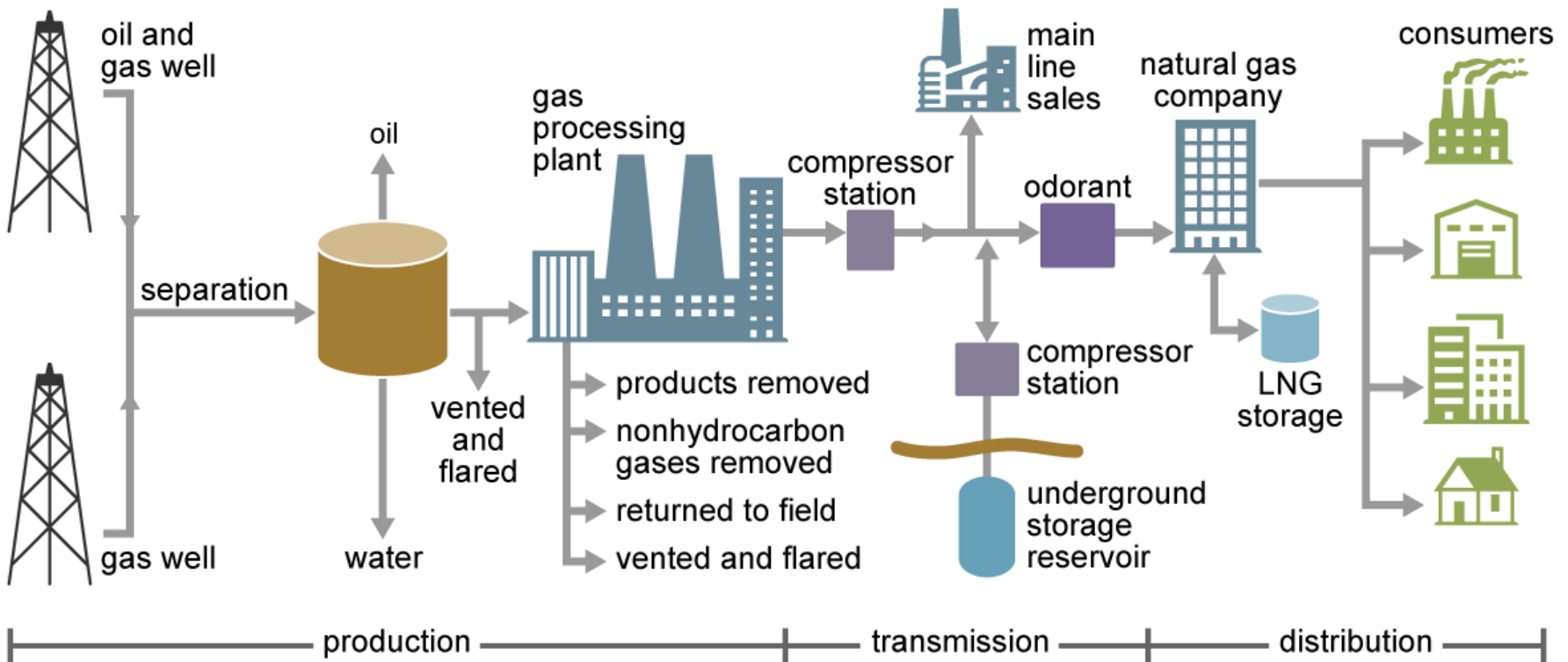


Word cloud for EPA's 2020 final rule titled "Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Reconsideration"

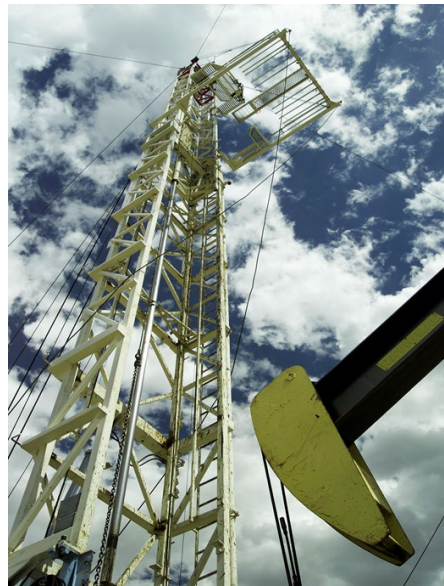




# What does the natural gas industry look like?



# Photos of Oil and Natural Gas Industry



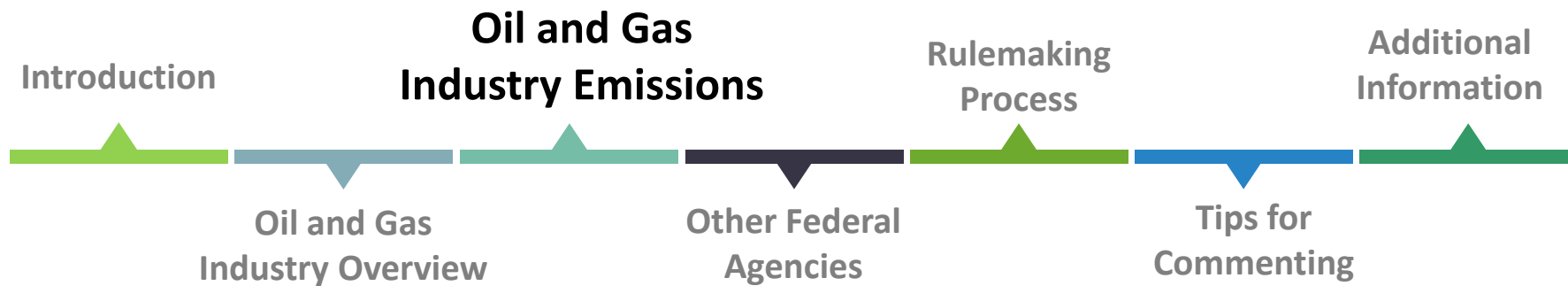
# Where is the oil and gas industry?

- ▶ In the U.S. there are over 15,000 oil and gas owners and operators
- ▶ Most of these are small businesses
- ▶ About one million producing onshore oil and gas wells (shown on map)
- ▶ About 7,000 gathering and boosting stations
- ▶ Over 650 gas processing plants
- ▶ About 2,000 transmission compression stations
- ▶ About 300,000 miles of transmission pipeline
- ▶ About 400 underground natural gas storage stations
- ▶ Over 100 liquefied natural gas storage or import/export stations



<https://www.eia.gov/state/maps.php?v=Petroleum>

Map from U.S. Energy Information Administration (data from Enverus)



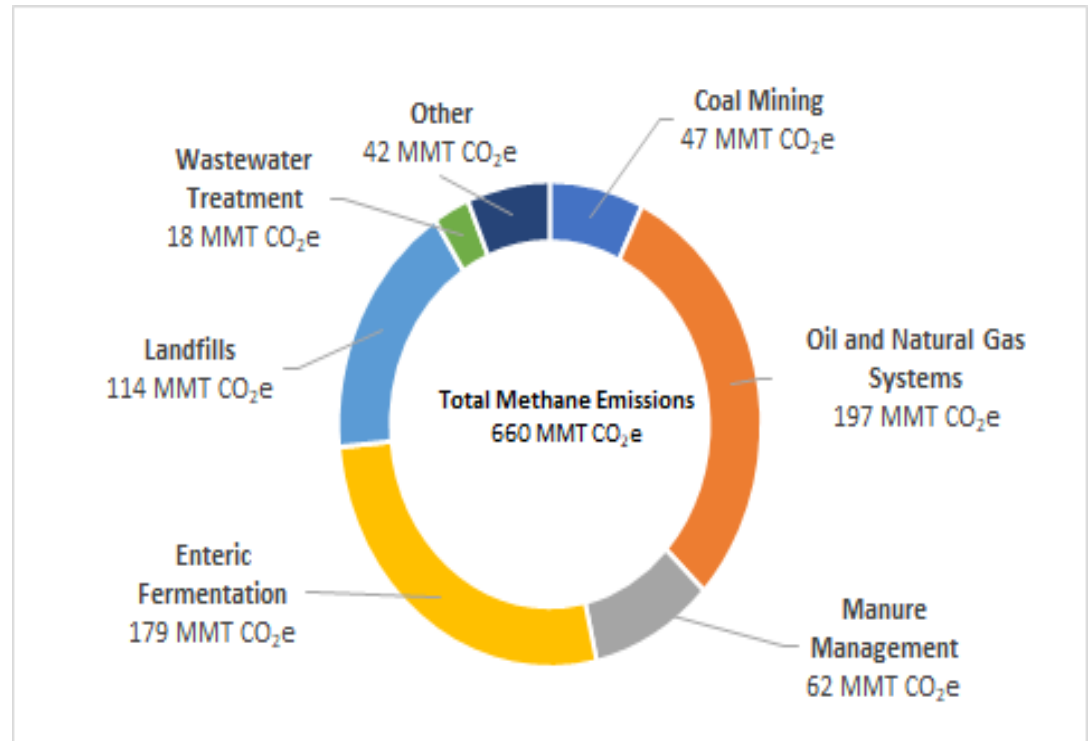
# Oil and Gas Emissions

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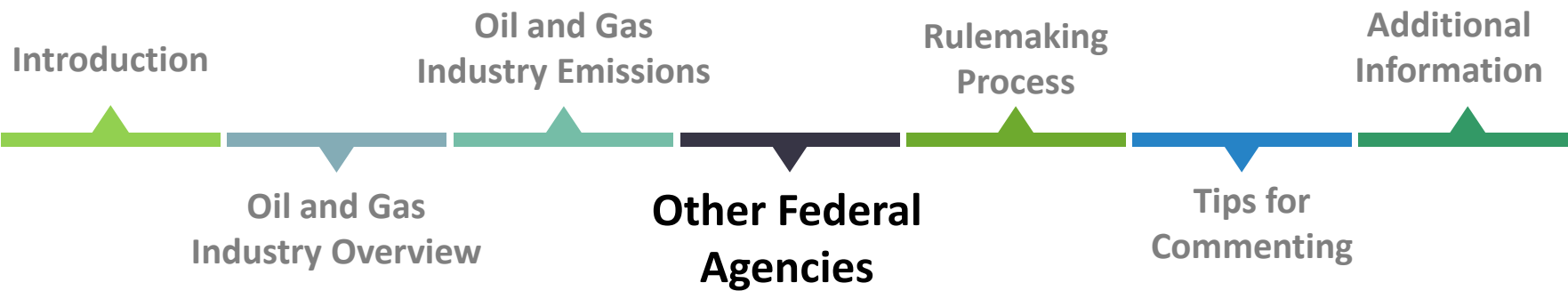
- ▶ Multipollutant industry
  - Greenhouse gases, including methane
  - Volatile organic compounds and sulfur dioxide
  - Air toxics, including benzene, toluene, ethylbenzene and xylene
- ▶ Emissions of pollutants occur in all segments of the industry, and include:
  - Fugitive emissions: unintentional leaks from equipment
  - Venting: direct release of natural gas into the atmosphere

# U.S. Methane Emissions

- ▶ The oil and gas sector is the largest industrial source of methane emissions in the U.S.
- ▶ Methane, the key constituent of natural gas, is a potent greenhouse gas that accelerates climate change
- ▶ Climate change poses threats to the health and well-being of everyone



Source: Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019



# Environmental Protection Agency

- ▶ EPA has authority under the Clean Air Act to regulate air quality
- ▶ EPA regulates emissions of greenhouse gases, volatile organic compounds, air toxics, and other air pollutants from the oil and natural gas sector
- ▶ EPA also regulates the oil and gas industry under other laws to protect water quality and ensure proper treatment of hazardous waste





## Department of the Interior (DOI)

Regulates the extraction of oil and gas from **federal lands**

### ► Bureau of Land Management (BLM)

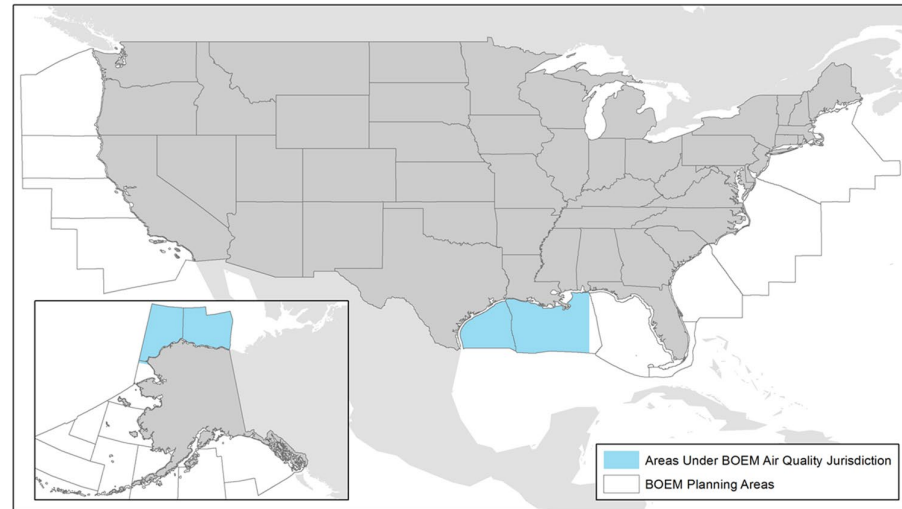
- BLM manages the Federal government's **onshore** subsurface mineral estate – about 700 million acres (30% of the United States)
  - BLM also oversees oil and gas operations on many Tribal leases
- BLM maintains an **oil and gas leasing program**
- BLM **does not directly regulate emissions for the purposes of air quality.**
  - BLM does regulate venting and flaring of natural gas for the purposes of preventing waste
  - An operator may be required to control/mitigate emissions as a condition of approval on a drilling permit

## Department of the Interior (DOI)

Regulates the extraction of oil and gas from **federal lands**

### ► Bureau of Ocean Energy Management (BOEM)

- Manages the development of America's **offshore** energy and mineral resources
- BOEM has air quality jurisdiction in the **Gulf of Mexico** and the **North Slope Borough of Alaska**. (blue areas on map)
- BOEM has air jurisdiction in federal waters on the Outer Continental Shelf 3-9 miles **offshore** (depending on state) and beyond



*Map courtesy of BOEM*

## Department of Transportation (DOT)

Manages the U.S. transportation system

### ▶ Pipeline and Hazardous Materials Safety Administration (PHMSA)

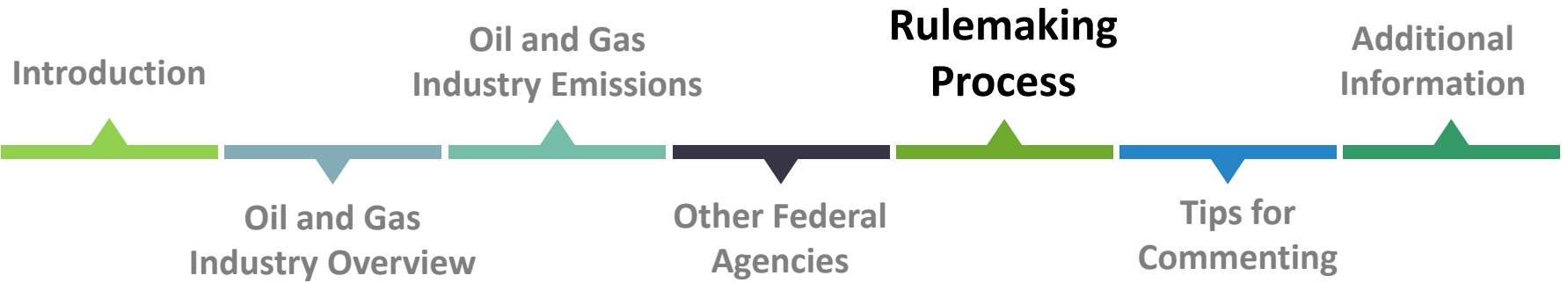
- The Office of Pipeline Safety ensures safety in the design, construction, operation, maintenance, and spill response planning of America's 2.8 million miles of **natural gas and hazardous liquid transportation pipelines.**
  - Data and risk analysis
  - Outreach
  - Research and development
  - Regulations and standards
  - Training
  - Inspections and enforcement
  - Accident investigations

## **Department of Energy (DOE)**

Develops policies, funds and conducts research on advanced fuels and monitoring and measurement technologies

### ▶ **Federal Energy Regulatory Commission (FERC)**

- FERC regulates natural gas **pipeline, storage, and liquefied natural gas facility construction.**
- Issues **environmental assessments** or draft and final **environmental impact statement** for comment on most projects.



# Upcoming Rulemaking for Oil and Gas Sector



# Pre-Proposal Engagement

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- ▶ We encourage the public to engage with EPA **before** a rulemaking is proposed.
- ▶ Additional opportunities for pre-proposal engagement to be aware of:
  - Public docket for pre-proposal comments
  - Listening sessions

# Pre-Proposal: Public Docket

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- ▶ EPA has opened a pre-proposal 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-2021-0295
  - We'll go through how to navigate regulations.gov in a few slides
- ▶ For more information on submitting information to EPA dockets, visit <https://www.epa.gov/dockets/commenting-epa-dockets>
- ▶ Note: This is not the docket for the proposed rulemaking
  - EPA will open a separate regulatory docket when it issues the proposal in September



# Pre-Proposal: Listening Sessions

- ▶ EPA will hold **virtual listening sessions** to take public input on the Agency's upcoming proposed regulations for the Oil and Natural Gas Industry
- ▶ The listening sessions will be held over **three days**
- ▶ Each day will focus on different stakeholder groups; however, you may register to speak on any day:
  - Tuesday, June 15, 2021: Focus on Industry and Non-Governmental Organizations
  - Wednesday, June 16, 2021: Focus on Communities, Environmental Justice Stakeholders and Tribes
  - Thursday, June 17, 2021: Focus on States, Local Governments and Small Businesses
- ▶ Registration will remain open until **June 9, 2021**
  - Register to speak at: <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>
  - A view-only link for the listening sessions will also be made available

# After Proposal: Comment Period

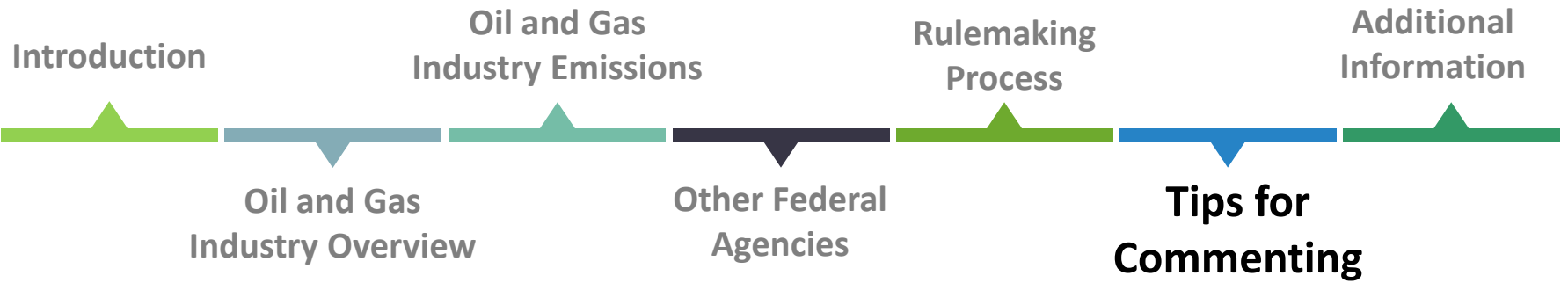
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- ▶ The **comment period** for the proposed rule will open when the September 2021 proposed rule is published in the Federal Register
  - This will be a separate docket from the public docket for pre-proposal comments, which is open now
- ▶ The **preamble** of the proposed rule and the **fact sheet** posted to EPA's website will provide specific directions on submitting comments
- ▶ There will be a separate docket for the proposed rulemaking. Comments on the proposal should go to that separate docket
  - 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
- ▶ Submit comments within the **comment period** outlined in the proposed rule and in the fact sheet

# After Proposal: Public Hearing(s)

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- ▶ There will be an opportunity to make oral presentations at a **public hearing**
- ▶ Details about a public hearing will either be included in the preamble of the proposed rule or in a later Federal Register notice. Information will also be posted to EPA's website.
  - Generally, presenters register in advance and have **3-5 minutes** to present
  - Oral presentations will be **transcribed** and available in the **public docket** for the proposed rule



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### Welcome to the new Regulations.gov

The new Regulations.gov is a re-envisioning of the classic Regulations.gov, with enhanced search capabilities, a simplified commenting process, and an interface that

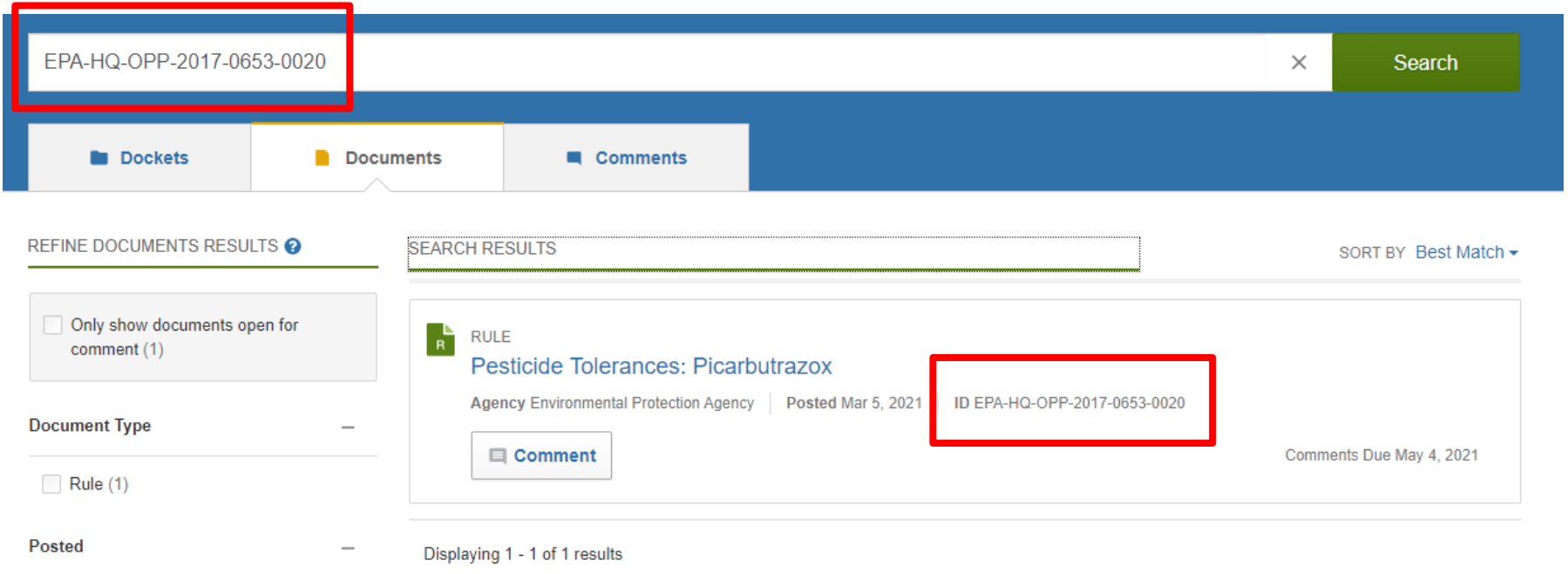


### Explore

Comments Due Soon

# Docket ID Number

▶ Type in the docket ID number



The screenshot shows the EPA docket search interface. At the top, a search bar contains the docket ID number "EPA-HQ-OPP-2017-0653-0020", which is highlighted with a red box. To the right of the search bar is a green "Search" button. Below the search bar are three tabs: "Dockets", "Documents", and "Comments". The "Documents" tab is selected. On the left side, there is a "REFINE DOCUMENTS RESULTS" section with a filter option: "Only show documents open for comment (1)". Below this are "Document Type" and "Posted" filters, both currently set to "Rule (1)". The main area displays "SEARCH RESULTS" with a "SORT BY Best Match" dropdown. A single result is shown for a "RULE" titled "Pesticide Tolerances: Picarbutrazox" from the "Agency Environmental Protection Agency", posted on "Mar 5, 2021". The docket ID "ID EPA-HQ-OPP-2017-0653-0020" is highlighted with a red box. A "Comment" button is visible below the title, and the text "Comments Due May 4, 2021" is on the right. At the bottom of the results, it says "Displaying 1 - 1 of 1 results".

# Submitting Comments

## Write a Comment

[Read Agency Guidelines](#) | [Commenter's Checklist](#)

Comment\*

Start typing comment here...

5000

## Attach Files

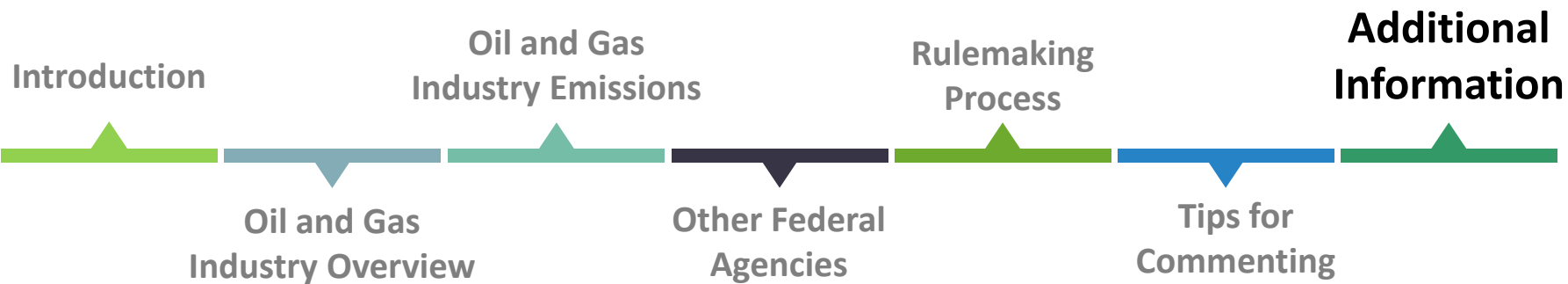
You can attach up to 20 files, but each file cannot exceed 10MB. Valid file types include: bmp, docx, gif, jpg, jpeg, pdf, png, ppbx, rtf, sgml, tif, tiff, txt, wpd, xlsx, xml.

Drop files here or [Browse...](#)

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- ▶ **Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (Executive Order 12898)**
  - Applies to rules, policies, and guidance that have identified and addressed disproportionately high and adverse human health or environmental effects on minority populations and low-income populations (to include indigenous peoples and tribes as relevant populations)
- ▶ EPA defines **environmental justice** as "the **fair treatment** and **meaningful involvement** of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies."

- ▶ **Fair Treatment** means that no group of people should bear a **disproportionate burden** of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental and commercial operations or programs and policies
  
- ▶ **Meaningful Involvement** means that:
  - Potentially affected community members have an appropriate opportunity to provide input about a proposed activity that will affect their environment and/or health
  - The public's contribution can influence the regulatory agency's decision
  - The concerns of all participants involved will be considered in the decision-making process
  - The rule writers and decision-makers seek out and facilitate the involvement of those potentially affected

# Understanding Potential Impacts

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- ▶ To better understand potential environmental justice impacts, EPA will conduct analyses that consider demographic distribution
- ▶ EPA will use these analyses to inform rulemaking efforts

# For Additional Information

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**Environmental Justice Contact:** Lena Epps-Price and Holly Wilson

Community and Tribal Programs Group  
Office of Air Quality Planning and Standards

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[wilson.holly@epa.gov](mailto:wilson.holly@epa.gov)

# Questions and Answers

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## ▶ Questions & Answers

## ▶ Resources

- [EPA Website: Basics of Regulatory Process](#)
- [EPA Website: Get Involved in EPA Regulations](#)
- [EPA Website: Commenting on EPA Dockets](#)
- [regulations.gov](#)



May 25-27, 2021



## **U.S. EPA's Webinar on Oil and Natural Gas**

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**Thank you for attending today's training webinar  
on oil and natural gas.**

**EPA will post the recording of today's webinar to  
our website soon at this address:**

**<https://go.usa.gov/xHJDX>**