



# Federal Partnerships Division (FE-263)

Adam Eisele  
Division Director  
U.S. Department of Energy  
Office of Fossil Energy and Carbon Management

## **MEETING OBJECTIVES**

- **Overview of Past, Current, and Future Plans**
- **Alignment with Administration Priorities**
- **Discussion**



# FEDERAL PARTNERSHIPS DIVISION

**Adam Eisele**  
Division Director



**Jada Garofalo**  
General Physical Scientist



**Emily Turkel**  
ORISE Fellow



**Christina Waldron**  
General Engineer



# CONTEXT

## DOE is one of several federal agencies involved in carbon management

|                                                  |                                                      |                                                          |
|--------------------------------------------------|------------------------------------------------------|----------------------------------------------------------|
| <b>DOE</b><br>Carbon mgt.<br>RDD&D               | <b>Treasury</b><br>Tax credits<br>including 45Q      | <b>EPA</b><br>Onshore geologic<br>storage regulation     |
| <b>USDA</b><br>Forest Service land<br>management | <b>DOI</b><br>Geologic storage<br>research and regs. | <b>DOT (PHMSA)</b><br>CO <sub>2</sub> pipeline<br>safety |
| and many more                                    |                                                      |                                                          |

Note: EPA is Environmental Protection Agency; DOI is Department of the Interior; DOT is Department of Transportation; PHMSA is Pipeline and Hazardous Materials Safety Administration; USDA is United States Department of Agriculture

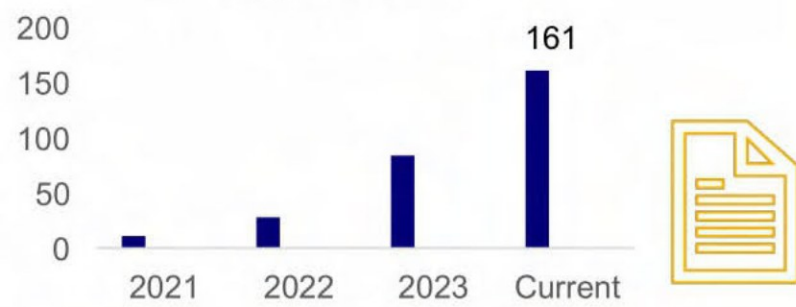
## Federal Partnerships Division engages federal and tribal governments

- Government partnerships have historically enhanced DOE’s ability to successfully develop and deploy technologies
- DOE has been leading federal CCUS coordination and serving as a technical resource for agencies for over 15 years
- Collaboration on technical challenges informs DOE R&D efforts, facilitates successful execution of R&D programs, and leverages DOE expertise to inform other agency actions
- **Federal Partnerships Division serves to streamline interagency collaboration**



# CLASS VI PERMIT STATUS

EPA Class VI Permit Applications



EPA Target Approval Timeframe

**24 months**



Number Permits Approved by EPA

**8**



Number of CarbonSAFE projects with permit applications in 2024

**29**



States with Class VI Primacy

**ND, WY, LA, WV\***

\* Pending Federal Register publication

Submitted Applications for Class VI Primacy

**AK, AL, CO, OK, MS, TX, UT**

# FEDERAL TECHNICAL ASSISTANCE PROGRAM (FTAP) FOR CLASS VI PERMITS

## Federal Partnerships Division Manages FTAP with EPA

- EPA needed technical assistance processing timely Class VI permits
- DOE and EPA have an Interagency Agreement (IAA) through 2029 to provide technical assistance on Class VI permit reviews and technical capacity-building
- Roles:
  - FECM serves program management role
    - Identifying expertise/assigning reviews
    - Works with EPA on review & capacity building requests & processes
  - EPA provides technical direction and funds to National labs directly
    - \$4.8 million EPA BIL funds sent to labs in 2024; Total capacity of IAA: \$30 million

### Participating National Labs

|                                                  |                                                   |                                                  |
|--------------------------------------------------|---------------------------------------------------|--------------------------------------------------|
| <b>NETL</b><br>National Energy<br>Technology Lab | <b>LANL</b><br>Los Alamos<br>National Lab         | <b>PNNL</b><br>Pacific Northwest<br>National Lab |
| <b>LBNL</b><br>Lawrence Berkeley<br>National Lab | <b>LLNL</b><br>Lawrence Livermore<br>National Lab | <b>ANL</b><br>Argonne National<br>Lab            |
|                                                  | <b>SNL</b><br>Sandia National<br>Lab              |                                                  |

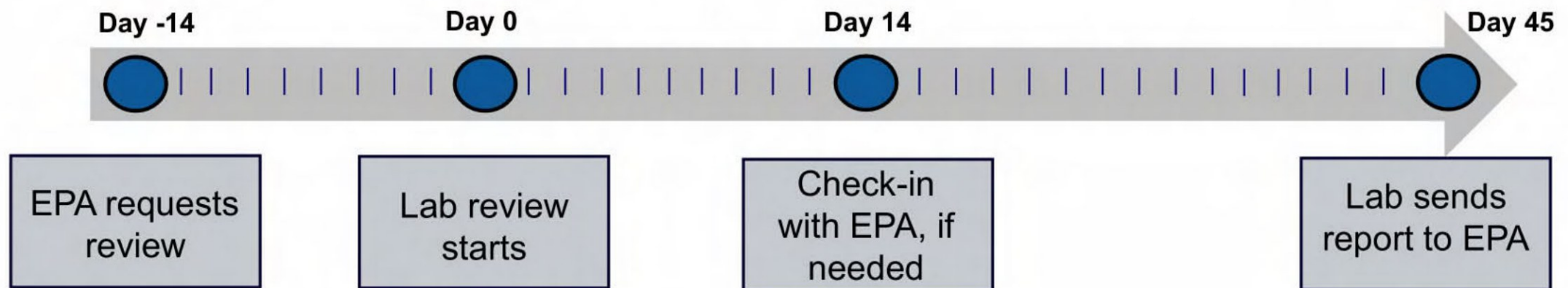


# FTAP: CLASS VI PERMIT APPLICATION REVIEW

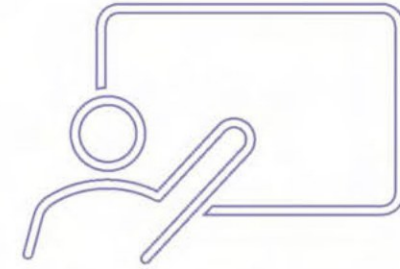
## Review Requests

National Labs review certain technical components of Class VI permit applications

- 45 reviews to date on geologic characterization and/or subsurface modeling
- Labs largely complete reviews within 6-week timeframe
- Re-reviews may occur with new information from applicant
- Labs use a checklist to produce a standardized report



# FTAP (CONTINUED)



## Capacity-Building Requests

- FECM leverages expertise at DOE National Labs to provide capacity-building technical assistance/training for EPA and state permit reviewers
- To date, 20 capacity-building requests from EPA
  - Examples of requested topic papers include:
    - Corrosion
    - Self-healing wells
  - Other examples include:
    - 'Ask a Scientist' workshops
    - 101 trainings
    - Well construction material checklist

## Current Status

- Paused active management this week
- Any concerns with continuing business-as-usual project management role coordinating permit - reviews and capacity building activities with EPA and labs?
- Recognizing EPA provides technical direction and funds to DOE labs



# FACA CCUS PERMITTING TASK FORCES

- **FECM administers two Task Forces mandated by the USE IT Act in accordance with the Federal Advisory Committee Act (FACA)**
  - Federal Lands Task Force
  - Non-Federal Lands Task Force
- **Purpose:**
  - 1) Identify challenges that permitting authorities and project developers face in permitting projects in an efficient, orderly, and responsible manner
  - 2) Improve the performance of the permitting process and regional coordination for the purpose of promoting the efficient, orderly, and responsible development of CCUS projects and CO<sub>2</sub> pipelines
- **Memorandum of Understanding with the White House Council on Environmental Quality:**
  - DOE: Administers task forces
  - CEQ: Selects task force members
- **Members:**
  - In 2023, CEQ solicited membership through 2 FR Notices; announced task force members to be appointed; in 2024 DOE established and launched Task Forces and Subcommittees
  - Includes individuals from:
    - DOE (Mark de Figueiredo), PHMSA, USGS, EPA, BOEM, BSEE, BLM
    - Industry, environmental, pipeline safety, state and local govt



# CCUS PERMITTING TASK FORCE APPOINTED MEMBERS, FEDERAL LANDS

| Appointed to Represent: | Name                   | Employer/Organization                                                                                       |
|-------------------------|------------------------|-------------------------------------------------------------------------------------------------------------|
| Industry                | Jack Andreasen         | Breakthrough Energy                                                                                         |
| Industry                | Al Collins             | Representative of CCUS Project Developers and Operators (retired, Oxy)                                      |
| Industry                | Raven Goswick          | Aka Energy Group LLC                                                                                        |
| Industry                | Sallie Greenberg****   | Sallie Greenberg Consulting                                                                                 |
| Industry                | Kenneth Jackson        | Carbon-Zero US, LLC                                                                                         |
| Industry                | Jenny Joyce            | ExxonMobil Low Carbon Solutions                                                                             |
| Industry                | Sasha Mackler          | ExxonMobil Low Carbon Solutions                                                                             |
| Industry                | Jim Powell             | Southern States Energy Board                                                                                |
| Industry                | Jan Sherman            | Carbonvert Inc.                                                                                             |
| Industry                | Sherry Tucker          | CapturePoint Solutions                                                                                      |
| NGO                     | Xan Fishman            | Bipartisan Policy Center                                                                                    |
| Environmental NGO       | Shannon Heyck-Williams | National Wildlife Federation                                                                                |
| Environmental NGO       | Matt Rota              | Healthy Gulf                                                                                                |
| Environmental NGO       | Nichole Saunders**     | Environmental Defense Fund                                                                                  |
| Environmental NGO       | Mark Spalding          | The Ocean Foundation                                                                                        |
| State                   | Lily Barkau            | Wyoming Department of Environmental Quality                                                                 |
| State                   | Ken Brass              | State of Louisiana                                                                                          |
| State                   | Jason Lanclos          | Louisiana Department of Energy and Natural Resources                                                        |
| State                   | Julie Murphy           | Colorado Department of Natural Resources                                                                    |
| Fed Agency              | Indra Dahal            | United States Department of Interior - Bureau of Land Management (BLM)                                      |
| Fed Agency              | Mark de Figueiredo     | United States Department of Energy (DOE)                                                                    |
| Fed Agency              | James Kendall          | United States Department of the Interior - Bureau of Ocean Energy Management (BOEM)                         |
| Fed Agency              | Stacey Noem            | United States Department of the Interior - Bureau of Safety and Environmental Enforcement (BSEE)            |
| Fed Agency              | [vacant]               | United States Department of Transportation - Pipeline and Hazardous Materials Safety Administration (PHMSA) |
| Fed Agency              | [vacant]               | United States Environmental Protection Agency (EPA)                                                         |
| Expertise               | Bill Caram             | Pipeline Safety Trust                                                                                       |
| Expertise               | Matthew Fry***         | University of Wyoming                                                                                       |
| Expertise               | Matt Holmes            | California Environmental Justice Coalition                                                                  |
| Expertise               | Timothy Meckel         | University of Texas at Austin                                                                               |
| Expertise               | Jeremy Moddrell        | United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry                  |
| Expertise               | Tara Righetti*         | University of Wyoming                                                                                       |

\*Federal Lands TF Chair; \*\*Federal Lands TF Vice Chair; \*\*\*Federal Lands Subcommittee Chair; \*\*\*\*Non-Federal Lands Subcommittee Co-Chair.

# CCUS PERMITTING TASK FORCE

## APPOINTED MEMBERS, NON-FEDERAL LANDS

| Appointed to Represent:    | Name                      | Employer/Organization                                                                                       |
|----------------------------|---------------------------|-------------------------------------------------------------------------------------------------------------|
| Industry                   | Andrew Duguid***          | Advanced Resources International                                                                            |
| Industry                   | Richard Esposito          | Southern Company                                                                                            |
| Industry                   | Julio Friedmann*          | Carbon Direct                                                                                               |
| Industry                   | Matthew Hagen             | Air Products                                                                                                |
| Industry                   | Keith Tracy               | Elysian Carbon Management                                                                                   |
| Industry                   | Poh Boon Ung              | BP Gas & Low Carbon Energy                                                                                  |
| NGO                        | Rudra V. Kapila**         | Third Way                                                                                                   |
| CCUS NGO                   | Jarad Daniels             | Global CCS Institute                                                                                        |
| CCUS NGO                   | Robert VanVoorhees        | Carbon Sequestration Council                                                                                |
| Environmental NGO          | Laura Brannen             | The Nature Conservancy                                                                                      |
| Environmental NGO          | Catherine Coleman Flowers | Center for Rural Enterprise and Environmental Justice                                                       |
| Environmental NGO          | Virginia Palacios         | Commission Shift                                                                                            |
| Environmental NGO          | Alexander Spike           | Air Alliance Houston                                                                                        |
| Environmental NGO          | John Thompson***          | Clean Air Task Force                                                                                        |
| Labor / Electrical Workers | Matthew Warren            | International Brotherhood of Electrical Workers                                                             |
| Local                      | Rusty Bell                | Gillette College Foundation                                                                                 |
| Local                      | Lorelei Oviatt            | Kern County, California, Planning and Natural Resources                                                     |
| State                      | James Canfield            | Louisiana Department of Energy and Natural Resources                                                        |
| State                      | Kristin Carter            | Pennsylvania Department of Conservation and Natural Resources                                               |
| State                      | Rich Garman               | North Dakota Department of Commerce                                                                         |
| State                      | Scott Heiner              | State of Wyoming                                                                                            |
| State                      | Tyson Todd                | State of Utah School and Institutional Trust Lands Administration                                           |
| State                      | Michael Turner            | Colorado Energy Office                                                                                      |
| Federal Agency             | Mark de Figueiredo        | United States Department of Energy (DOE)                                                                    |
| Federal Agency             | Sarah Ryker               | United States Geological Survey (USGS)                                                                      |
| Federal Agency             | [vacant]                  | United States Department of Transportation - Pipeline and Hazardous Materials Safety Administration (PHMSA) |
| Federal Agency             | [vacant]                  | United States Environmental Protection Agency (EPA)                                                         |
| Expertise                  | Kevin Connors             | Energy and Environmental Research Center, University of North Dakota                                        |
| Expertise                  | Kyle Henderson            | United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry                  |
| Expertise                  | Jesse Richardson Jr       | West Virginia University College of Law                                                                     |
| Expertise                  | Sarah Saltzer****         | Stanford University                                                                                         |

\*Non-Federal Lands TF Chair; \*\*Non-Federal Lands TF Vice Chair; \*\*\*Priority Pipelines Subcommittee Chair; \*\*\*\*Non-Federal Lands Subcommittee Co-Chair.

## TASK FORCES: PROGRESS TO DATE

- Public Meetings to date: USE IT Act requires meeting 2x/year
  - May 2024
  - Dec 2024
- Closed recurring working meetings – currently in progress
  - Federal Lands Subcommittee
  - Non-Federal Lands Subcommittee
  - Priority Pipelines Subcommittee
  - Small groups focused on:
    - Capture technologies R&D
    - CO<sub>2</sub> utilization
    - Financing mechanisms
- Task Forces aim to finalize recommendations by end of 2025
  - Members share diverging views on certain recommendations



## PERMITTING TASK FORCES: CURRENT STATUS

- Task Forces working on identifying best practices and recommendations for streamlining permitting per USE IT Act duties
- DEI/EJ
  - While not the main focus of the Task Forces, the framing documents (charters, MOU, charges) contain a sentence on EJ not in the USE IT Act.
  - Email sent to Task Force members directing suspension of any DEI related work; DEI and EJ are not the subject of any planned meetings
  - All DOE-led Task Force meetings cancelled week of 1/27
  - Next Steps: Starting process of formally revising charter, MOU, and charge to remove EJ language
    - Process will take several months
    - Opportunity to consider other changes
    - Could occur concurrently with task force activities

# TASK FORCE TENTATIVE 2025 CALENDAR

| Activity                               | Objective                                                           | Attendees                                   | Target Dates                     |
|----------------------------------------|---------------------------------------------------------------------|---------------------------------------------|----------------------------------|
| CCUS Task Force Leadership Biweekly    | Task Force coordination                                             | DOE DFO, Task Force and Subcommittee Chairs | Biweekly, next meeting on Feb 10 |
| Federal Lands Subcommittee             | Development of recommendations on USE IT Act duties                 | DOE DFO & Subcommittee members              | Biweekly, next meeting on Feb 4  |
| Non-Federal Lands Subcommittee         | Development of recommendations on USE IT Act duties                 | DOE DFO & Subcommittee members              | Biweekly, next meeting on Feb 11 |
| Priority Pipelines Subcommittee        | Development of recommendations on USE IT Act duties                 | DOE DFO & Subcommittee members              | Biweekly, next meeting on Feb 5  |
| CEQ appoints new EPA and PHMSA members | Required by USE IT Act; previous members were political appointees  | N/A                                         | March                            |
| Joint Task Force Spring Meeting        | Subcommittees present recommendations; Task Forces discuss and vote | DOE DFO, Task Force members & public        | May 15 & 16 (tentative)          |
| Joint Task Force Fall Meeting          | Chairs/authors present Joint Report; Task Forces discuss and vote   | DOE DFO, Task Force members & public        | November (tentative)             |

# FAST-41 OVERVIEW

- Title 41 of Fixing America's Surface Transportation Act (FAST) of 2015
  - Intended to modernize federal environmental permitting
  - Intended to improve transparency, predictability, and accountability and to promote agency coordination and synchronization
- BIL amendment made FAST-41 permanent and established Permitting Council
- Participation in FAST-41 is voluntary for project developers and a project must meet eligibility criteria to obtain program benefits.
- CCS is one of 19 FAST-41 sectors
- FAST-41 projects have a public dashboard showing timetables for all required reviews that are updated quarterly



# FECM'S ROLE IN FAST-41

- Generally, FECM will serve as lead agency for DOE-funded CCS projects (due to NEPA requirements associated with receiving DOE-funding)
- 1<sup>st</sup> FAST-41 CCS Project: Pelican Carbon Sequestration Hub in Stockton, CA

Home

## Pelican Carbon Sequestration Hub

PERMITTING DASHBOARD PROJECT POSTING DATE: NOVEMBER 13, 2024

All dates below are specific to the schedule of the Environmental Review and Permitting processes for this project.



ENVIRONMENTAL REVIEW AND PERMITTING STATUS  
PLANNED



ESTIMATED COMPLETION DATE OF ENVIRONMENTAL REVIEW AND PERMITTING  
PENDING



ENVIRONMENTAL REVIEW AND PERMITTING PROCESSES COMPLETED



SECTOR  
Carbon Capture and Sequestration



CATEGORY  
Project Category FAST-41 Covered Projects



LEAD AGENCY  
Department of Energy

[View FAST-41 Postings by Agencies](#)

**Description:**

Pelican Renewables, LLC and its affiliates propose to develop a carbon sequestration hub on Rindge Tract, a large island in the Sacramento-San Joaquin River Delta, located approximately 7 miles from the Port of Stockton. The Project's primary goal is to capture, utilize, and/or sequester CO<sub>2</sub> emissions. The Project will use Pelican's existing ethanol production plant at the Port of Stockton for the anchor source of carbon dioxide to kick-start Hub operations. The existing rail terminal at the plant will be used to receive carbon dioxide from external sources by rail, where it can be barged to Rindge Tract for storage. Additionally, a Pelican affiliate, ZuCO<sub>2</sub> Transport, LLC, will develop a barge-based CO<sub>2</sub> transport system that will move CO<sub>2</sub> from the Port of Stockton and from external sources to the Rindge Tract sequestration site.



**Project Primary Address**  
**Primary Location**

Project Address  
3028 Navy Drive  
Stockton, CA 95206  
United States  
County  
San Joaquin

**Lead Agency Information:**

**POC Name:** Emily Turkel  
**POC Email:**  
[emily.turkel@hq.doe.gov](mailto:emily.turkel@hq.doe.gov)  
**Agency/Department:** Department of Energy

**Sponsor Contact Information:**

**POC Name:** John Zuckerman  
**POC Title:** Managing Member  
**POC Email:** [jz@zuCO2.com](mailto:jz@zuCO2.com)

[www.permits.performance.gov/permitting-project/fast-41-covered-projects/pelican-carbon-sequestration-hub](https://www.permits.performance.gov/permitting-project/fast-41-covered-projects/pelican-carbon-sequestration-hub)



## INTERAGENCY COORDINATION

- Coordinate bimonthly CCUS meetings with staff across participating federal agencies
- Support FECM's Tribal Fossil Energy and Carbon Management Working Group
  - Federal Partnership Division includes the FE-20 Tribal Liaison for engagement and consultations
- Host trainings for federal agencies
- Coordinate "Topic Team" meetings covering:
  - Land management
  - CO<sub>2</sub> transport
  - Engagement
- Long-standing interagency relationships can be leveraged for future initiatives



# APPENDIX



# USE IT ACT: CCUS PERMITTING TASK FORCE DUTIES

- I) inventory existing or potential Federal and State approaches to facilitate reviews associated with the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines, including best practices that—
  - (aa) avoid duplicative reviews to the extent permitted by law;
  - (bb) engage stakeholders early in the permitting process; and
  - (cc) make the permitting process efficient, orderly, and responsible;
- II) develop common models for State-level carbon dioxide pipeline regulation and oversight guidelines that can be shared with States in the geographical area covered by the task force;
- III) provide technical assistance to States in the geographical area covered by the task force in implementing regulatory requirements and any models developed under subclause (II);
- IV) inventory current or emerging activities that transform captured carbon dioxide into a product of commercial value, or as an input to products of commercial value;
- V) identify any priority carbon dioxide pipelines needed to enable efficient, orderly, and responsible development of carbon capture, utilization, and sequestration projects at increased scale;
- VI) identify gaps in the current Federal and State regulatory framework and in existing data for the deployment of carbon capture, utilization, and sequestration projects and carbon dioxide pipelines;
- VII) identify Federal and State financing mechanisms available to project developers; and
- VIII) develop recommendations for relevant Federal agencies on how to develop and research technologies that—
  - (aa) can capture carbon dioxide; and
  - (bb) would be able to be deployed within the region covered by the task force, including any projects that have received technical or financial assistance for research under paragraph (6) of section 103(g) of the Clean Air Act (42 U.S.C. 7403(g)).



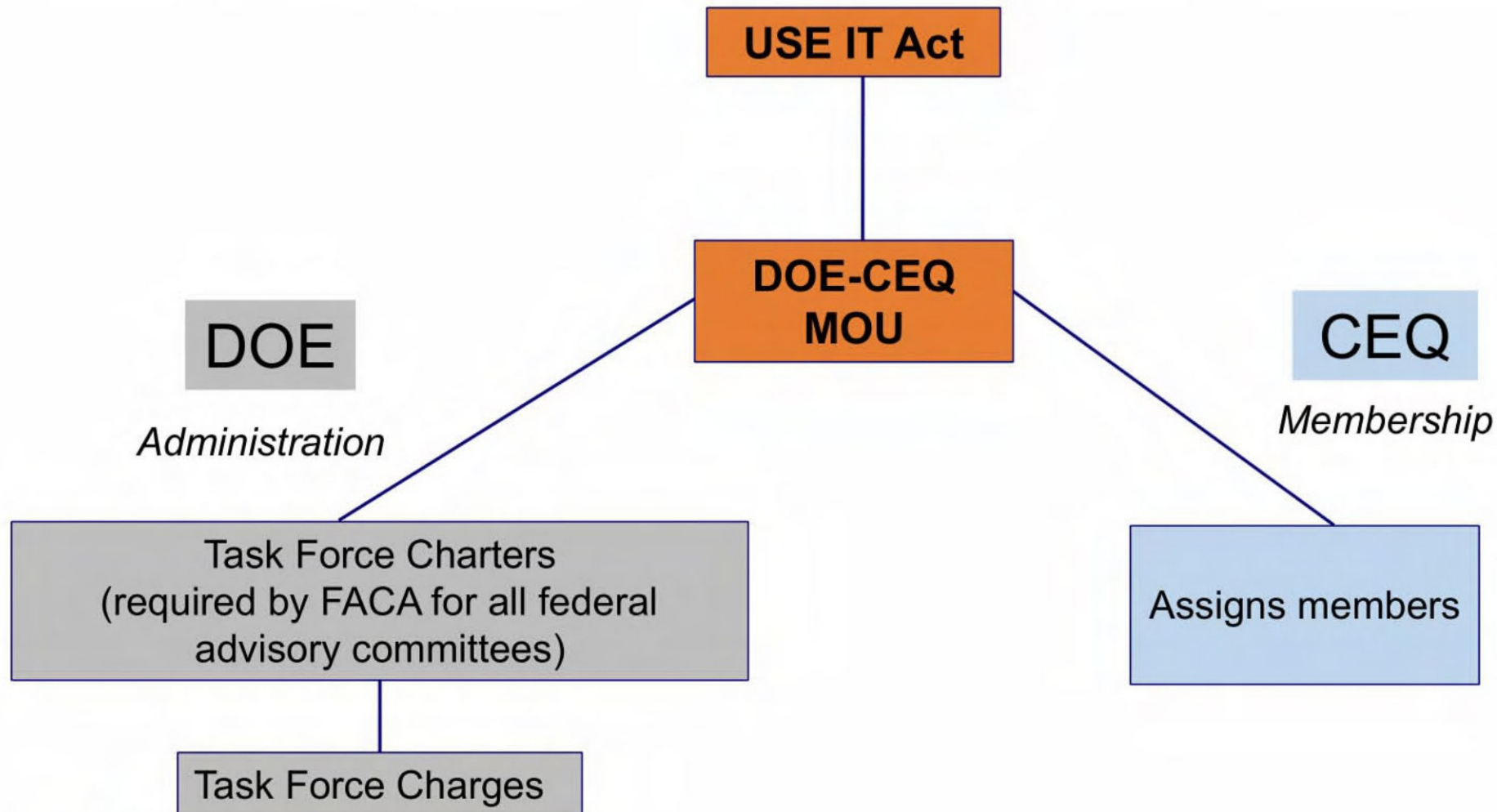
# DRAFT TASK FORCE REPORT STRUCTURE & TIMELINE

| Chapter Title                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Executive Summary                                                                                                                                                                                                                                                                                                                                   |
| Cross-cutting issues                                                                                                                                                                                                                                                                                                                                |
| Chapter 1: Permitting and reviews for CCUS projects and CO <sub>2</sub> pipelines on Federal lands – approaches and best practices to facilitate reviews for land access, project and pipeline development on federal lands. Includes identifying any gaps in data or regulatory framework ( <i>Duty I, VI</i> )                                    |
| Chapter 2: Permitting and reviews for CCUS projects and CO <sub>2</sub> pipelines on non-Federal lands – approaches to improve processes and regional coordination, and model guidelines for state-level CO <sub>2</sub> pipeline regulation and oversight. Includes identifying any gaps in data or regulatory framework ( <i>Duty I, II, VI</i> ) |
| Chapter 3: Priority CO <sub>2</sub> pipelines needed to enable responsible scale-up of CCUS ( <i>Duty V</i> )                                                                                                                                                                                                                                       |
| Chapter 4: Federal and State Financing Mechanisms for CCUS project and CO <sub>2</sub> pipeline developers ( <i>Duty VII</i> )                                                                                                                                                                                                                      |
| Chapter 5: CO <sub>2</sub> Conversion / Utilization – Current and emerging activities ( <i>Duty IV</i> )                                                                                                                                                                                                                                            |
| Chapter 6: CO <sub>2</sub> Capture Research & Development ( <i>Duty VIII</i> )                                                                                                                                                                                                                                                                      |

| Months                  | Primary Activity                                   |
|-------------------------|----------------------------------------------------|
| Aug 2024 - Oct/Nov 2025 | Subcommittee kick off and ongoing meetings         |
| Oct – Dec 2024          | Finalize workplan, assign chapter leads            |
| Nov 2024                | Chapter team kick off meetings (chapters 4,5,& 6)  |
| Dec 2024                | Subcommittee presentations                         |
| Jan 2025                | Chapter team kick off meetings (chapters 1, 2,& 3) |
| Dec – Apr 2025          | Chapter drafting                                   |
| Mid-Apr 2025            | Chapter rough drafts due                           |
| Jun & Jul 2025          | Chapter final drafts due                           |
| Aug 2025                | Technical editing                                  |
| Aug – Oct 2025          | Task Force review of final draft report            |
| Oct 2025                | Consolidate comments                               |
| Oct – Nov 2025          | Finalize draft and submit to CEQ                   |



# USE IT ACT TASK FORCES ENABLING FRAMEWORK



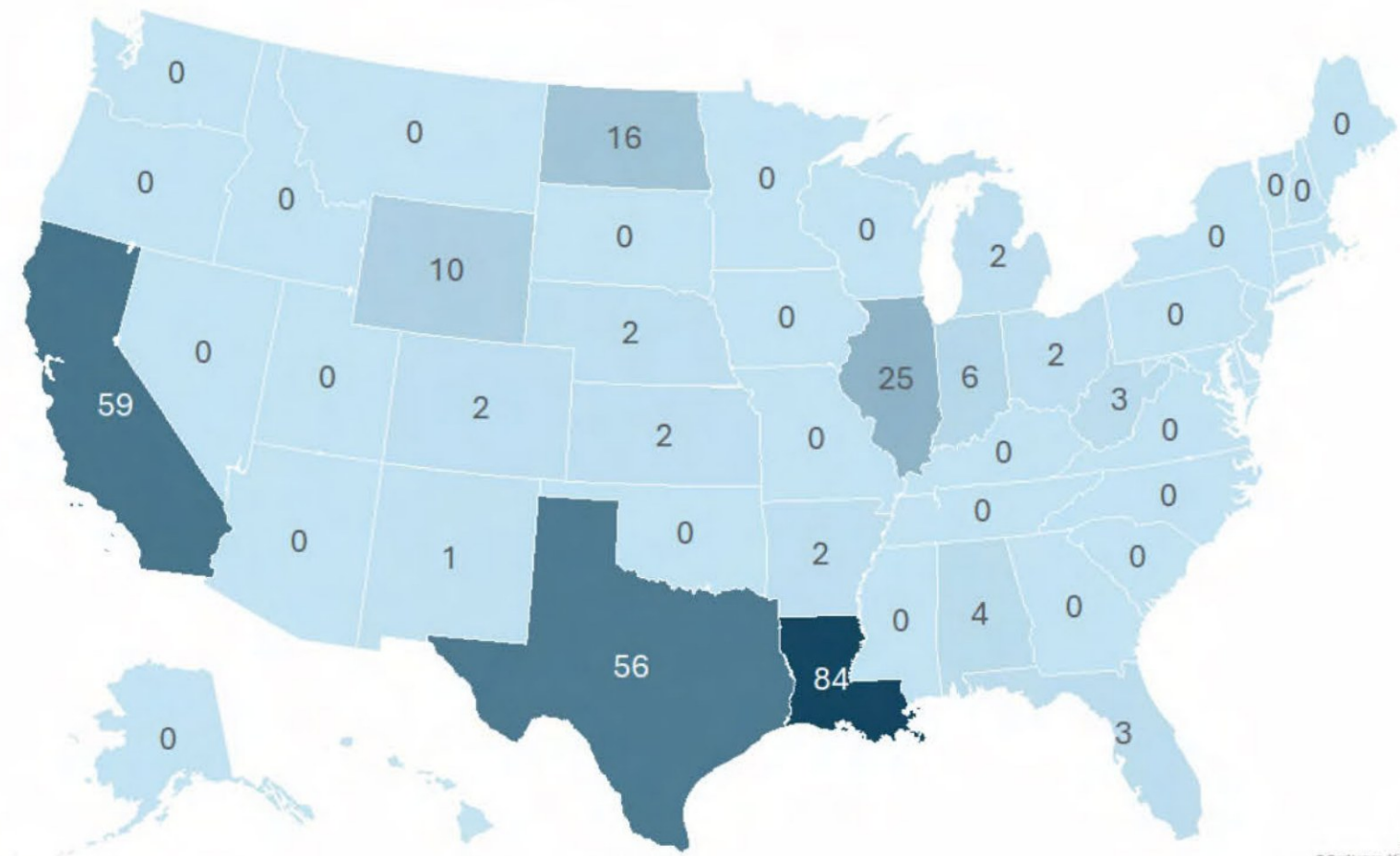
# REGULATORY STATUS

| Agency    | Action                                                                                                                                                                                                     | Status                                                                                       |
|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| BSEE/BOEM | Proposed rule to establish regulations governing long-term carbon sequestration on the Outer Continental Shelf related to granting a lease, easement, or right-of-way into sub-seabed geologic formations  | Internal BSEE/BOEM review                                                                    |
| PHMSA     | Signed proposed rule on January 10, 2025 that includes revisions to Pipeline Safety Regulations to include safety standards and reporting requirements for gas- and liquid-phase CO <sub>2</sub> pipelines | Was not published in Federal Register and is therefore subject to review by PHMSA leadership |
| BLM       | Instruction Memorandum that focuses on unitization of pore space and authorizing ROWs for CCUS                                                                                                             | Internal BLM review                                                                          |
| USFS      | Proposed rule issued providing an exemption for carbon capture and storage on National Forest Service lands                                                                                                | Comment period closed January 2, 2025                                                        |



# PENDING/APPROVED CLASS VI PERMIT APPLICATIONS

(as of January 6, 2025)



Powered by Bing  
© GeoNames, Microsoft, TomTom

