

# GHGs and the Federal Clean Air Act: A Brief History

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# Catalysts for Directly Regulating GHGs Under the Federal CAA (1/2)

- ▶ **April 10, 1998** – EPA General Counsel Jonathan Z. Cannon legal opinion concluding that carbon dioxide (CO<sub>2</sub>) “emissions are within the scope of EPA’s authority to regulate.”
- ▶ **April 2, 2007** – Massachusetts v. Environmental Protection Agency (EPA)
  - In a 5-4 decision in the Supreme Court held that “greenhouse gases fit well within the Act’s capacious definition of ‘air pollutant’” and that EPA therefore has statutory authority to regulate GHG emissions from new motor vehicles.
  - The court further ruled that “policy judgments have nothing to do with whether greenhouse gas emissions contribute to climate change and do not amount to a reasoned justification for declining to form a scientific judgment.”
  - In EPA’s view, this required the agency to make a positive or negative endangerment finding under Section 202(a) of the CAA.
    - ◆ Section 202(a)(1) of the Clean Air Act requires EPA to establish standards “applicable to the emission of any air pollutant from...new motor vehicles or new motor vehicle engines, which in their judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare”.

# Catalysts for Directly Regulating GHGs Under the Federal CAA (2/2)

- ▶ **December 7, 2009** – EPA Makes Endangerment Finding. Two distinct findings:
  - **Endangerment Finding**, in which the Administrator found that the mix of atmospheric concentrations of six key, well-mixed greenhouse gases threatens both the public health and the public welfare of current and future generations. These greenhouse gases in the atmosphere constitute the "air pollution" that threatens both public health and welfare.
  - **Cause or Contribute Finding**, in which the Administrator found that the combined greenhouse gas emissions from new motor vehicles and motor vehicle engines contribute to the atmospheric concentrations of these key greenhouse gases and hence to the threat of climate change.
- ▶ There are six greenhouse gases were determined to be regulated.
  - ◆ carbon dioxide (CO<sub>2</sub>),
  - ◆ methane (CH<sub>4</sub>),
  - ◆ nitrous oxide (N<sub>2</sub>O),
  - ◆ hydrofluorocarbons (HFCs),
  - ◆ perfluorocarbons (PFCs), and
  - ◆ sulfur hexafluoride (SF<sub>6</sub>)

# Prongs of GHG Stationary Source Regulations Under the CAA

- ▶ **Prong 1:** New Source Review (NSR/PSD)
- ▶ **Prong 2:** Clean Power Plan (CPP)/Affordable Clean Energy Rule (ACE)
- ▶ **Prong 3:** New Source Performance Standards (NSPS)
  - Electrical Generating Units (EGUs)
  - Oil and Gas Sector
- ▶ **Prong 4:** Hydrofluorocarbons (HFCs) Regulation

# Prong 1: New Source Review [CAA §165]

▶ Where have we been:

- **May 23, 2010** – EPA Finalizes Tailoring Rule
  - ◆ GHGs treated much like any other NSR regulated pollution under the Prevention of Significant Deterioration of Air Quality (PSD) permitting program
  - ◆ Established Subject To Regulation Thresholds (STR) and Major Source Thresholds (MST) for GHGs
  - ◆ Projects triggering PSD for GHGs required to meet Best Available Control Technology (BACT)
- **June 23, 2014** – Challenge to Tailoring Rule ends with SCOTUS Decision in Utility Air Regulatory Group v. EPA:
  - ◆ U.S. Supreme Court found 5-4 that EPA cannot regulate a power plant solely due to its GHG emissions, striking down the Tailoring Rule.
  - ◆ Separately, found 7-2 ruling found that EPA has the authority under the Clean Air Act to regulate GHG emissions from new power plants, provided the source is regulated for other air pollutants.

▶ Where we stand today:

- GHG PSD Review for PSD “anyway” sources
- Outstanding action for EPA to finalize support for GHG MST/STR levels
  - ◆ Trump EPA took no action on this
- Continued regulatory confusion on how GHG PSD applies to biomass source

# Prong 2: Clean Power Plan/Affordable Clean Energy Rule [CAA §111(d)]

## ▶ Where have we been:

- Clean Power Plan
  - ◆ **August 3, 2015** – Clean Power Plan
    - Each state was assigned an individual goal for reducing carbon emissions, which could be accomplished how they saw fit, but with the possibility of the EPA stepping in if the state refused to submit a plan.
  - ◆ **February 9, 2016** – SCOTUS ordered the EPA to halt enforcement (stay granted) of the Clean Power Plan
  - ◆ **June 19, 2019** – EPA moved to formally repeal the Clean Power Plan
- Affordable Clean Energy Rule
  - ◆ **June 19, 2019** – Affordable Clean Energy Rule finalized by EPA
  - ◆ **January 19, 2021** – Federal DC Appeals Court ruled the Affordable Clean Energy rule violated the Clean Air Act

## ▶ Where we stand today:

- **February 12, 2021** – EPA Memo (Clean Slate)
  - ◆ “The court’s decision vacated the ACE rule, including its requirements that states submit State Plans by July 8, 2022. Because the court vacated ACE and did not expressly reinstate the CPP, **EPA understands the decision as leaving neither of those rules, and thus no CAA section 111(d) regulation, in place with respect to greenhouse gas (GHG) emissions from electric generating units (EGUs).**”

# Prong 3: NSPS Sector Rules – EGUs [CAA §111(b)]

## ► Where have we been:

- **October 23, 2015** – EPA released the final standards of performance for greenhouse gas (GHG) emissions for new, modified, and reconstructed: electric utility generating units (EGUs). New NSPS Subpart TTTT. Sources Covered:
  - ◆ Newly constructed, modified, and reconstructed fossil fuel-fired utility boilers and IGCC units.
  - ◆ Newly constructed and reconstructed stationary combustion turbines.
  - ◆ Covered EGUs must be capable of combusting more than 250 MMBtu/hr heat input of fossil fuel, and supply a generator capable of providing greater than 25 MW net to a utility distribution system.
- **January 13, 2021** – EPA Finalizes Pollutant-Specific Significant Contribution Finding for Greenhouse Gas Emissions from New, Modified, and Reconstructed Electric Utility Generating Units (SCF Rule)
  - ◆ EPA established clear framework for determining when standards are appropriate for emissions of GHGs from specific source categories under § 111(b)(1)(A).
  - ◆ Follows finding from the 2020 Oil and Gas Rule, which determined that, EPA must first find that emissions of that pollutant from that source category contribute significantly to dangerous air pollution. This is called a pollutant-specific “significant contribution finding.”
  - ◆ EPA’s framework sets an emissions threshold of 3 percent of total gross U.S. GHG emissions as the primary criterion in making a pollutant-specific significance determination for purposes of §111(b).
  - ◆ EPA determined EGUs are substantially above the 3-percent threshold [and no other sectors are above 3-percent].

## ► Where we stand today:

- EGUs have NSPS standards for GHGs – Subpart TTTT in full effect.
- §111(b) a clearly viable regulatory path for GHG regulations on stationary sources.
- Unclear if final SCF Rule will stand.
- On March 17, 2021, EPA asks D.C. Circuit to vacate and remand rule.

# Prong 3: NSPS Sector Rules – Oil and Gas Rules

## [CAA §111(b)]

### ► Where have we been:

- **April 17, 2012** – EPA finalizes NSPS for VOC emissions from new wells and other oil and gas equipment. This rule reduces methane emissions indirectly and does not apply to existing oil wells.
- **May 12, 2016** – EPA finalizes NSPS for VOC and methane emissions from the oil and gas sector. Notably, this rule triggers the obligation to regulate methane from existing wells and equipment.
- **October 20, 2016** – EPA publishes final “*Control Techniques Guidelines for the Oil and Natural Gas Industry*.” The document provides states with moderate ozone nonattainment areas information to help them determine reasonably available control technology (RACT) for VOC emissions at existing sources.
- **August 13, 2020** – EPA released its final rescission and revision of the 2012 and 2016 VOC and methane standards for oil and gas facilities.
  - ◆ The two actions, referred to as the Reconsideration Rule and Review Rule, fully rescind VOC and methane standards for transmission and storage and methane standards for all segments and revises standards for VOC emissions in the production and processing segments.
  - ◆ The rule breaks with decades of EPA interpretation of the CAA to take a stance that could limit the ability of EPA to regulate GHG emissions from any source. (see January 2021 SCF rule)
- **September 14, 2020** – EPA publishes the Review Rule immediately removing regulatory requirements for the transmission and storage segments of the oil and gas industry.

### ► Where we stand today:

- **January 20, 2021** – President Biden signs EO 13990 specifically instructing EPA to consider suspending, revising or rescinding the Trump era rule for new sources by May 2021.
- **February 1, 2021** and **February 5, 2021** – EPA files motions to hold the case challenging the Trump era methane rules in abeyance.

# Prong 4: HFCs [Montreal Protocol and American Innovation and Manufacturing Act]

▶ Where have we been:

- **HFCs – hydrofluorocarbons** (e.g., R-134a, R-407C, R-410A)
  - ◆ 3rd generation; non-ODS, but several have high global warming potential (GWP)
  - ◆ Production targeted for future phase down
- **October 15, 2016** – Adoption of Kigali Amendment to Montreal Protocol
  - ◆ Trump Administration did not ratify even though had industry backing
- **March 11, 2020** – EPA 40 CFR Part 82 Subpart F Leak Repair Provisions issues final rule rolling back leak repair revisions for non-exempt substitutes (e.g., HFCs)
- **December 27, 2020** – Trump Signs the “American Innovation and Manufacturing” (AIM) Act
  - ◆ Outlines HFC production/consumption reductions and requires EPA to issue a final rule within 270 days (mirrors Kigali Amendment)

▶ Where we stand today:

- **January 27, 2021** – Biden EO set 60-day deadline to seek Senate’s advice and consent to ratify Kigali Amendment

# Questions

