



Hot Topics in Air: Regulatory Updates, GHG Reduction Goals and Cumulative Impact Analyses

September 26, 2024

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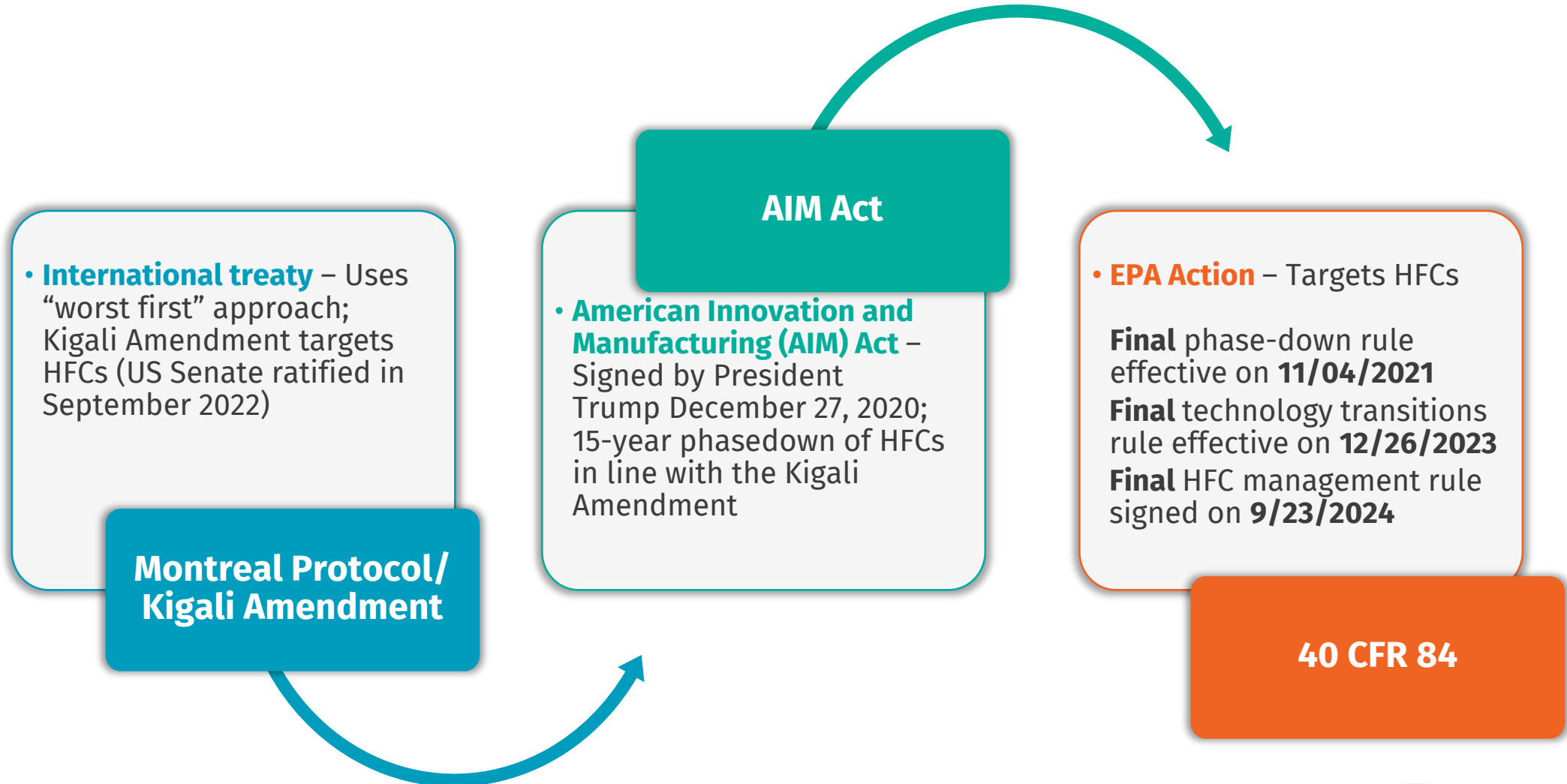
Agenda

1. Air Regulatory Update: Lynne Santos
2. Title V Update: Bob Rio
3. Massachusetts Climate Policy Landscape: Melissa Mittleman
4. Cumulative Impact Analysis: Glenn Keith
5. Panel Discussion

Air Regulatory Updates

EPA Action on Refrigerants

EPA Action on Refrigerants



Final Technology Transitions Rule

- ▶ Final rule published in Federal Register 10/24/2023
- ▶ Establishes restrictions on the use of regulated substances by **GWP** in sectors or subsectors with dates of 1/1/2025, 1/1/2026, 1/1/2027, and 1/1/2028:
 - Includes aerosol products, foam products, and refrigeration, air conditioning, and heat pump systems/products (RACHP)
- ▶ Does not restrict the continued use of any existing products or systems, but defines distinction between maintenance and installation of new system
- ▶ Requires labeling of all new products and components using HFCs
- ▶ Includes reporting, import, and export provisions

<https://www.epa.gov/climate-hfcs-reduction/regulatory-actions-technology-transitions>

Comparison to Massachusetts Regs (310 CMR 7.76)

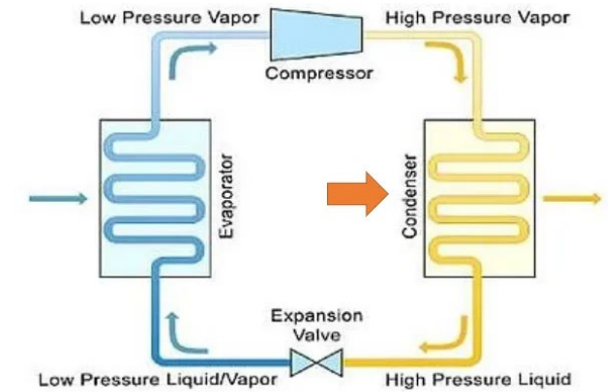
Establishes restrictions on the use of regulated substances by **compound** in sectors or subsectors with latest implementation date of **1/1/2024**

- Includes aerosol propellants, air conditioning, refrigeration, and foams
- Does not restrict the continued use of any existing products or systems, except for some retrofits

Requires labeling of all new products and components using HFCs

Final HFC Management Rule

- ▶ 40 CFR 84, Subpart C, signed on 9/23/2024
- ▶ Applies to systems with HFC or substitute refrigerant with GWP > 53
- ▶ 15 lb full charge capacity limit for leak repair requirements except for residential and light commercial HVAC
- ▶ Most requirements similar to 40 CFR 82, Subpart F (ODS) leak repair except:
 - Lower full charge threshold for required repair
 - Automatic Leak Detection Systems (ALDS) required for commercial and industrial systems with full charge $\geq 1,500$ lb
 - More information required to be included on chronic leaker report
- ▶ Cylinder tracking via QR codes and heel recovery



Compliance Dates for HFC Management Rule



- ▶ 1/1/2026 – leak repair provisions for appliances with ≥ 15 lb full charge
- ▶ 1/1/2027 – installation of ALDS on commercial and industrial process systems with $\geq 1,500$ lb full charge installed on or after 1/1/2017
- ▶ Update appliance inventory in 2025 to assess exposure, especially for 15-50 lb appliances (circuit-by-circuit basis) and any ≥ 50 lb HFC or substitute-containing appliances not previously included

Once In Always In Update

Reclassification of Major Sources as Area Sources

- ▶ For major sources of HAPs that want to reclassify so that no longer subject to a NESHAP
- ▶ 10/1/2020 – EPA issued rule reversing the “Once In, Always In” policy
- ▶ 9/10/2024 – Updated rule for reclassification to area source
 - Excludes sources subject to certain major source NESHAP even if they reclassify as area
 - Reclassified sources must provide notification to EPA including those that already reclassified
 - Not retroactive, so sources that reclassified to area prior to this rule are no longer subject to their major source NESHAP

EPA's Air Emission Reporting Rule (AERR)

EPA's Air Emission Reporting Rule (AERR)

- ▶ What is **AERR**?
 - The AERR is an EPA regulation (40 CFR 51, Subpart A) that requires states, local agencies, and some tribes to report annual air emissions data of criteria pollutants.
 - Currently, AERR requires reporting of criteria pollutants and precursors (CAPs), but hazardous air pollutant (HAP) emissions reporting is voluntary.
 - Data used to create National Emissions Inventory (NEI) used for air quality modeling, rulemaking, risk assessments, emission factor development, etc.
- ▶ Proposed rule with [AERR](#) updates published August 9, 2023
- ▶ Comment period closed on 11/17/2023



Proposed AERR Key Changes

Criteria Air Pollutants (CAPs)

- Converting some triennial reporting requirements to annual

Hazardous Air Pollutants (HAP)

- Adding new HAP reporting requirements
- If states do not incorporate the new HAP reporting into SIPs, sites must report directly to EPA (via CAERS)

Requires mobile source emissions reporting, including portable emergency engines, forklifts, mine vehicles, etc.

Proposed AERR Key Changes

- ▶ Additional data being requested
 - Unit-specific release point locations (lat./long.), stack exhaust parameters, control equipment identification and effectiveness, regulatory applicability, etc.
 - Per Table 2A
- ▶ All stack test reports must be submitted (if not already submitted via *CEDRI*)
- ▶ Required information cannot be marked Confidential
 - Including throughput data (in stack tests & annual reporting)

New HAP Reporting Applicability Criteria

▶ Title V Major Sources

- Report all HAP emitted

▶ Sites with a Primary NAICS on Table 1C

- Report each HAP with actual emissions \geq [Table 1B](#) thresholds
- Also report *incidental* CAP (e.g., VOC, PM₁₀, PM_{2.5})

▶ Table [1B thresholds](#) vary by individual HAP (1.1E-07 tpy to 10 tpy!)

▶ The first report will be required May 31, 2026, and annually thereafter

▶ Massachusetts

- Reporting already required if major source of HAPs or if you have a HAP limit
- This may require reporting for ASFs and Minor Facilities
 - ◆ Will require understanding emissions to determine applicability

New HAP Reporting Applicability Criteria

Table 1C Primary NAICS:

| NAICS | Description |
|--|---|
| 21xxxx, 22xxxx, 3xxxxx except 311811 | Industrial and manufacturing industries. |
| 4247xx | Petroleum and Petroleum Products Merchant Wholesalers. |
| 481xxx | Scheduled Air Transportation. |
| 486xxx | Pipeline Transportation. |
| 4883xx | Support Activities for Water Transportation. |
| 493xxx | Warehousing and Storage. |
| 5417xx | Scientific Research and Development Services |
| 54199x | Other Professional, Scientific, and Technical Services. |
| 56191x | Packaging and Labeling Services. |
| 5622xx | Waste Treatment and Disposal. |

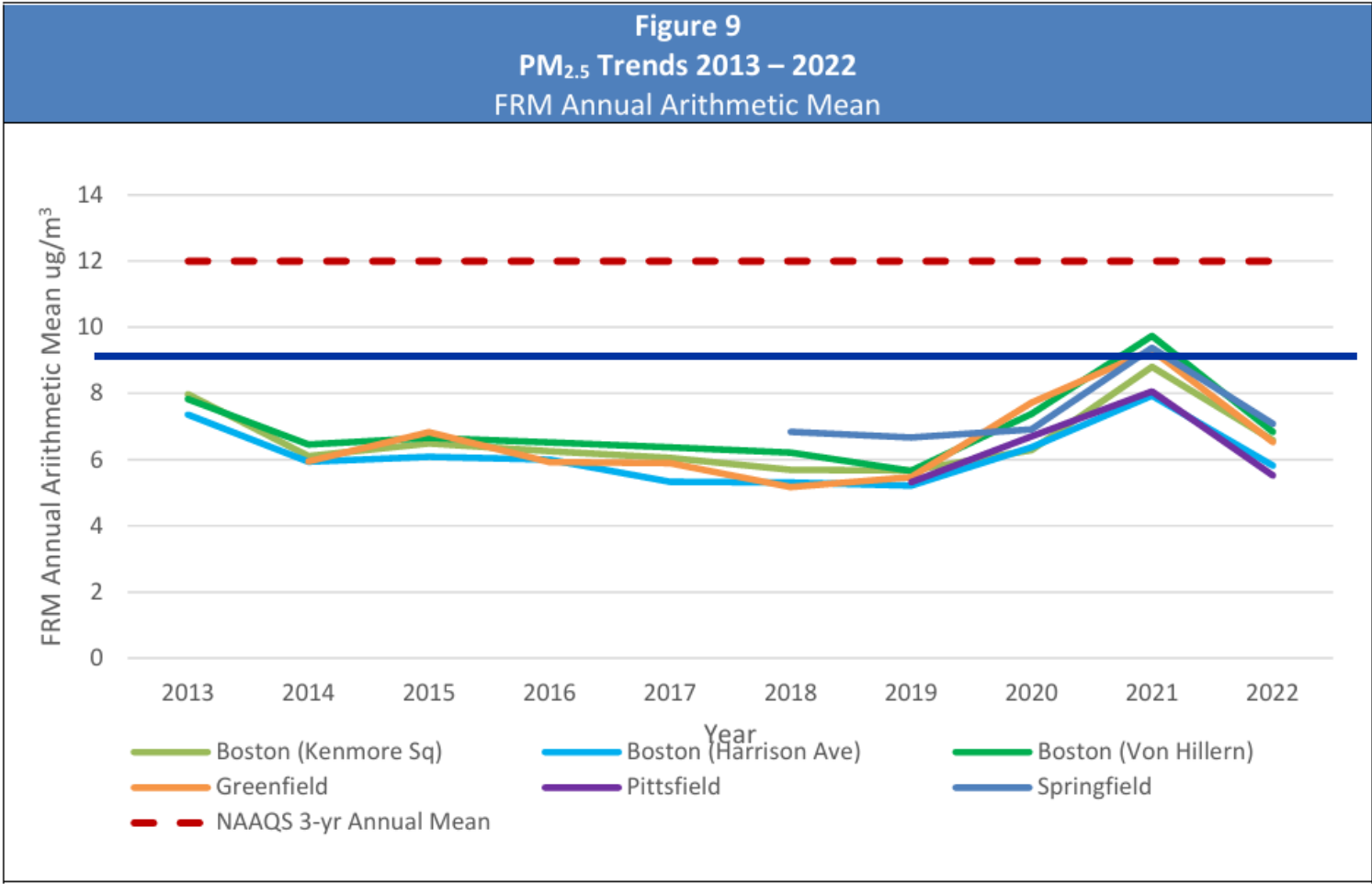
| NAICS | Description |
|--------|--|
| 5629xx | Waste Management and Remediation Services. |
| 61131x | Colleges, Universities, and Professional Schools. |
| 62211x | General Medical and Surgical Hospitals. |
| 62231x | Specialty (except Psychiatric and Substance Abuse) Hospitals. |
| 811121 | Automotive Body, Paint and Interior Repair and Maintenance (except small entities) |
| 8122xx | Death Care Services. |
| 812332 | Industrial Launderers. |
| 92214x | Correctional Institutions. |
| 927xxx | Space Research and Technology. |
| 928xxx | National Security and International Affairs. |

National Ambient Air Quality Standards (NAAQS) for Particulate Matter

Revised PM_{2.5} NAAQS – Effective Date

- ▶ Official release by EPA of pre-publication version of the revised NAAQS, as well as supporting documents, on **February 7, 2024**
- ▶ Final rule was published in the Federal Register on **March 6, 2024**
- ▶ Effective date of the revised (lowered) annual PM_{2.5} NAAQS is **May 6, 2024**
- ▶ **Primary annual PM_{2.5} NAAQS revised to be 9 µg/m³**
 - Significant drop from the previous annual standard of 12 µg/m³
 - No changes to primary /secondary 24-hr PM_{2.5} NAAQS, secondary annual PM_{2.5} NAAQS, or primary/secondary PM₁₀ NAAQS
- ▶ Free Trinity online webinar: [Complimentary Webinar: Navigating New Challenges in PM2.5 NAAQS Compliance | Trinity Consultants](#)

Massachusetts PM_{2.5} FRM Monitor



From Massachusetts 2022 Air Quality Report
 FRM = Federal Reference Method

Effects of Lowered PM_{2.5} NAAQS

- ▶ **Attainment Status Designations:** EPA gathers monitoring data; makes area designations – February 2026.
- ▶ **Control Strategy:** States with Nonattainment Areas revise their SIPs to require reductions from stationary sources.
- ▶ **Nonattainment NSR Permitting:** Major sources require offsets for new construction/ major modifications; lowest achievable emission rate (LAER).
- ▶ **PSD/Minor Source Permitting:** More difficult to show compliance with standard if air dispersion modeling is required.