



# **Ask the Inspector Workshop Clean Air Act Presentation**

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# Clean Air Act Presentation

- Introduction
- Applicability of the CAA to Federal Facilities
- Inspection Methodology
- Common Deficiencies
- Causes of Deficiencies
- Recommendations to Prevent Deficiencies and Improve Compliance.

# Purpose of CAA Presentation

- An inspector's approach to CAA inspections with insights on common problems and solutions.
- This presentation should generate ideas and procedures for you to improve CAA compliance at your facility.
- Not meant to be a treatise on the CAA.

# Clean Air Act

- Most difficult environmental program
- Numerous federal regulations and standards
- Additional state regulations and conditions
- Numerous processes and emissions sources that are regulated
- A lot of recordkeeping, self-monitoring, and reporting.

# Clean Air Act

- All of these federal and state requirements lead to long comprehensive permits: **READ AND COMPLY WITH ALL CONDITIONS IN THE PERMITS.**
- However, not all regulatory requirements will be in the permits, particularly if new regulations have been promulgated since the permits were issued: **CHECK FOR APPLICABILITY OF ALL FEDERAL REGULATIONS EVEN IF NOT IN YOUR PERMITS.** Look for physical changes or changes in the method of operation that increased actual emissions, projected actual emissions (NSR), and/or increased the maximum emission rate in kg/hour (NSPS)

# Clean Air Act Applicability to Most Federal Facilities

- Federally regulated emissions sources present at most federal facilities:
  - Boilers
  - Emergency generators
  - Air conditioning and refrigeration (ACR) units.

# Clean Air Act Applicability to Specific Federal Facilities

- Federally regulated emissions sources present at some federal facilities:
  - RICE engines other than emergency generators
  - Painting/coating
  - Plating
  - Solvent degreasing
  - Medical waste incineration
  - Hazardous waste incineration.

# Clean Air Act Applicability to Specific Federal Facilities

- Federally regulated emissions sources present at some federal facilities:
  - Aerospace manufacturing and repair
  - Shipbuilding and repair
  - Gasoline dispensing
  - ETO sterilizers
  - Explosives manufacturing.





# Clean Air Act Applicability

- Emissions sources regulated by state and local agencies:
  - Visible emissions sources
  - Open burning
  - Boilers
  - Painting/Coating
  - Solvent degreasers
  - Gasoline dispensing
  - Emergency generators.



# Clean Air Act 112r Risk Management Program Applicability

- A majority of federal facilities do not have the listed chemicals above the thresholds in the regulations.
- Important for most federal facilities to check initially and regularly for potential applicability.
- Common chemicals that could be subject to RMP requirements at federal facilities include:
  - Ammonia
  - Chlorine gas
  - Ethylene oxide
  - Hydrazine
  - Nitric and hydrochloric acids
  - Sulfur dioxide

# Pre-Inspection Document Requests from EPA and State

- Current Title V Permit(s)
- Construction and operating permits issued since Title V Permit was issued
- Reports for last 3 FCEs and any important PCEs
- Permit correspondence regarding changes in production capacity, emissions, efficiency. Boiler fuel use and/or Heat Input design.
- Any enforcement actions and related correspondence
- Also I review the EPA ECHO database. Tip: You should review this database regularly for your facility.

# Pre-Inspection Document Requests from Facility

- Most recent Title V Permit Application
- Current list of air emissions sources
- Any notifications submitted for applicable NESHAPs
- Most recent 3 Annual Compliance Certification (ACC) and Annual Emissions Reports
- Any semi-annual reports for the past three years
- Inventory of ACR units with greater than or equal to 50 pounds of refrigerants
- Any deviations not noted in ACCs.
- Facility Process Description with PFDs

# Typical Inspection Steps and Procedures

- In-brief and overview discussions of the facility
- PFD and Process Review
- Review the permit(s) with CAA staff
- Tour facility and visit specific emissions sources
- On-site records review
- Exit briefing on compliance concerns
- Followup contacts to get further information and outstanding documents.



# Some Specific Items Examined During a CAA Inspection

- Verify the regulatory agency been notified of all current air emissions sources at the facility?
- Tour facility looking for any visible emissions.
- Identify and evaluate problematic operations and emissions sources.
- Review past deviations identified by the facility and inspectors and current compliance status of these deviations.
- Identify systemic issues causing noncompliance.
- Review total emissions of pollutants and identify trends.





# Common Air Program Deficiencies

- CAA recordkeeping deficiencies
- Title VI ODS recordkeeping and notification deficiencies
- Applicability deficiencies
- Unpermitted air emissions
- CAA reporting deficiencies
- CAA Permit application deficiencies
- CAA Permit exceedances.

# CAA Title VI Stratospheric Ozone Protection

- Compliance requires working closely with ACR unit maintenance staff and contractors.
- Important to educate applicable personnel on requirements and procedures.
- Conduct adequate regular oversight to verify compliance.
- Often overlooked because most state inspectors do not evaluate for compliance!
- Typically appropriate records are not kept and leak calculations are not performed.

# New CAA Title VI Regulatory Requirements

- Final Rule promulgated on 11/18/16 with final compliance dates on 1/1/18 and 1/1/19.
- Numerous new requirements including extending refrigerant management requirements to common substitutes.
- On 9/18/18, EPA proposed rescinding the extension of the requirements to common substitutes, but only proposed.
- EPA has very good information on these regulatory requirements on its website.

# Causes of Deficiencies

- Lack of awareness of all permit and regulatory requirements.
- Lack of procedures or the procedures are not followed for permitting new emissions sources.
- Human error/neglect/shortcutting.
- Lack of accountability by facility personnel.

# Causes of Deficiencies

- Changeover of personnel without an overlapping transition period.
- Relying on state inspectors' evaluations as full compliance determinations.
- Failure to conduct proper operation and maintenance.
- Lack of regular oversight and personal contacts by environmental staff of facility personnel.

# Recommendations

- ✓ Ensure accuracy of permit application.
- ✓ Evaluate all emissions sources for regulatory applicability and compliance.
- ✓ Make sure regulatory agency is notified of all new and future emissions sources.
- ✓ Review the entire permit and ensure there are procedures and personnel to maintain compliance with all conditions.

# Recommendations

- ✓ Be the on-site CAA “inspector” for your facility.
- ✓ Conduct oversight of all required recordkeeping and reporting.
- ✓ Conduct annual comprehensive audits to verify compliance.
- ✓ Ensure all deviations are identified and reported.



# Questions? Comments?

CAA regulatory and enforcement policy questions should be directed to your state regulatory agency or to EPA Region 3.

Future topics to cover or suggestions for improvements.