

Ask the Inspector Workshop

Clean Air Act Presentation

February 25, 2021

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Clean Air Act (CAA) 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)

CAA Applicability to Most Federal Facilities

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

CAA 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.

CAA 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



CAA Applicability

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



CAA 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.