

# Using and Understanding Boiler (5D) and RICE (4Z) Rules

A two-day course for state and local agency personnel to cover two of the 40 CFR 63 rules. This course will cover the regulations as well as permitting and compliance issues associated with implementing and enforcing the regulations. Approximately 1.5 days are associated with the Boiler MACT rules (40 CFR 63, Subpart 5D) and the remaining time is associated with the reciprocating internal combustion engines (RICE) rules (40 CFR 63, Subpart 4Z). We will also discuss, where appropriate, the similarities and differences of the Boiler GACT rules (40 CFR 63, Subpart 6J) to the Boiler MACT (5D) rules.

## DAY 1 (June 20, 2017)

### BOILERS and the 5D Rule

0830 Introductions: Basic Course Ground Rules. How the course is structured. Who is attending? Why are we here? What we will cover? What outcomes we hope to gain from this course.

0900 PRE-TEST

0930 A Brief History of the Rule of the Industrial Boiler MACT Rule

- Initial Promulgation and Court Challenges (Vacating the rule)
- Current Rule Overview
- A Brief Summary of Impacts of Recent Court Rulings and Remand Back to EPA

1000 Structure of the 5D rule (EPA's Unified Rule Approach)

- Applicability
- Compliance Dates
- Methods of Demonstrating Compliance
- Performance Testing
- Monitoring
- Recordkeeping
- Reporting
- The Most Important Rule for a State Agency in 5D (40 CFR 63.7570, Who Implements and Enforces this Subpart) and Most Important Table in the Rule (Table 10)

1030 BREAK

1045 RULE CONTENT AND PERMITTING CONSIDERATIONS

- What types of operations (boilers) are excluded from this rule?
- What types of boilers and fuels are covered in this rule?
- Examples

1200 LUNCH (on your own)

1300 RULE CONTENT AND PERMITTING CONSIDERATIONS (CONT'D)

- Linkage/Issues with other Rules (e.g., NSPS Subpart Db and Dc, PSD, State SIP requirements) and Definition Conflicts for Permitting/Compliance
- What Emission Limits Apply and How to Meet Them
  - Performance Testing (and Parametric Monitoring)
  - Fuel Sampling and Fuel Sampling Plans
  - CEMs
  - Permitting Issues and Pitfalls (These are all Title V Permits, after all)

1430 BREAK

1445 RULE CONTENT AND PERMITTING CONSIDERATIONS (CONT'D)

1615 Q&A

1630 ADJOURN

## Day 2 (June 21, 2017)

### BOILERS and the 5D Rule (continued)

0830 INSPECTIONS AND SOURCE SAMPLING

What to Look for During Inspections of 5D Boilers

- Records
- Deviations and Deviation Reports
- Physical Condition of the Control Equipment and Boiler Operation
- Examples

0915 Source Testing and Source Test Observation

- Test Methods and Issues
- CEMs RATAs and Performance Testing for Compliance Demonstrations
- Data Reporting through the Electronic Reporting Tool (ERT)
- Examples

1000 BREAK

1015 CASE BOILER EXAMPLES AND FINAL QUESTIONS

# RICE and the 4Z (4I and 4J) Rule

## 1100 RULE CONTENT and APPLICABILITY

- Quick overview NESHAP, NSPS 4I and NSPS 4J, GACT and MACT requirements in 4Z
- Stationary vs. Mobile (how far do you have to move to be considered mobile)
- Overlap and loophole
- Import restrictions of NSPS engines
- Change location/purchase of used engines.
- Sources subject to 4Z but no requirement
- Commercial, residential, institutional (EPA website)
- Change in emergency definition (NC agreement with Duke Energy for certain contracts)

## 1200 Lunch (on your own)

## 1300 NESHAP 4Z, NSPS 4I and NSPS 4J (cont'd) COMPLIANCE REQUIREMENTS AND PERMITS

### NESHAP

- Area source emergency
- Area source non-emergency
- Stack testing full load vs. normal operation, dual range testing,
- temperature range modification, ASTM test method vs. EPA method
- Readiness testing
- Emissions Testing for 4Z

### NSPS

- EPA certification vs vendor certification
- “performance guarantee” by vendor
- Emissions Testing for NSPS
- View EPA websites (Nav tool, Tools to Help comply, etc.)

## 1400 CPMS Requirements

- Pressure drop (relative to load)
- Calculating 4 hr average
- Site Specific monitoring plan

## 1430 BREAK

## 1445 Case Studies

- Views of DOC
- Views of crank case filters
- Dual use engines (emergency and non-emergency use)
- Landfill engines
- Dual fuel and synthetic gas

## 1530 Q&A, REVIEW

## 1600 POST TEST

## 1630 ADJOURN