DOE CLEAN AIR WORK GROUP
UPDATE
JUNE, 2010

I. GENERAL CONFORMITY

Revisions to the General Conformity Regulations – Final Rule

The EPA is revising its regulations relating to the Clean Air Act (CAA) requirement that Federal actions conform to the appropriate State, tribal or Federal implementation plan (SIP, TIP, or FIP) for attaining clean air ("General Conformity"). EPA and other Federal agencies have gained experience with the implementation of the existing regulations, which were promulgated in 1993, (with minor revisions in 2006), and have identified several issues with their implementation. Additionally, EPA issued regulations implementing the revised ozone (O3) national ambient air quality standards (NAAQS) in 2004 and the new fine particulate matter (PM2.5) standard in 2007. Air quality agencies are developing revised plans to attain these new standards; the revisions to the General Conformity Regulations will assist State, Tribe, and local agencies in developing the proposed revisions to each agency's implementation plan. This rule revision will also facilitate Federal agency compliance with conforming Federal activities to the implementation plan, thereby preventing violations of the NAAQS. This rule revision provides for a timely and effective process to ensure Federal activities are incorporated into the applicable implementation plan. If that is not possible, this rule revision provides an efficient and effective process for Federal agencies to ensure Federal actions do not cause or contribute to a violation of the NAAQS or interfere with the implementation plan for maintaining or attaining the NAAQS.

DATE: This action is effective on July 6, 2010.

II. HAZARDOUS AIR POLLUTANTS

CAA §112 – Stationary Reciprocating Internal Combustion Engine (RICE) National Emissions Standard for Hazardous Air Pollutants (NESHAP) - 40 CFR 63, Subpart ZZZZ.

The final amendments to this rule issued on March 3, 2010 (75 FR 9647) affects both hazardous air pollutant (HAP) major and area sources. This rule includes HAP limitations for existing stationary compression ignition (CI) RICE that are located at: (1) area sources of HAP emissions, or (2) major sources of HAP emissions. EPA is also revising the provisions related to startup, shutdown, and malfunction for RICE that were regulated under previous iterations of the RICE NESHAP. The final rule is effective on May 3, 2010.

CAA §112 – Requirements for Control Technology Determinations for Major Sources in Accordance With CAA Sections 112(g) and 112(j) - 40 CFR 63, Subpart B
March 3, 2010 (published in Federal Register - 75 FR 9647)

This proposed rule would revise subpart B, (e.g. the Permit Hammer Rule), to revise the process for determining case-by-case Maximum Achievable Control Technology (MACT) determinations when a NESHAP has been vacated by a Court or is not issued by EPA by the required date. The proposed rule also removes obsolete provisions and

reformats the rule to make it easier to understand. Refer to the EPA Fact Sheet for more information. The original comment deadline was April 29, 2010, but EPA extended the deadline to May 27, 2010 (75 FR 22548). DOE HS-22 does not expect to submit comments on this proposal.

CAA §112 – Boilers & Process Heaters NESHAP (Major Sources): Proposed Rule 40 CFR 63 Subpart DDDDD and CAA §112 – Boilers NESHAP (Area Sources): Proposed Rule 40 CFR 63 Subpart JJJJJJ
June 4, 2010 (published in Federal Register - 75 FR 32005 and 75 FR 31895)

The EPA comment deadline for both proposals will be August 3, 2010 (75 FR 32682). Comments should be submitted to HS-22 for consolidation and submission by July 5, 2010. Tables 1 and 2 (attached) summarize the proposed emission limits and work practices required by these two rules.

Table 1 summarizes proposed Subpart DDDDD, applying to industrial, commercial, and institutional boilers and process heaters located at major HAP sources. This rule applies to coal, biomass, liquid and gas-fired boilers and heaters. The emission limits are much more stringent than the previous rule, which was vacated by the court. The major source rule exempts hot water heaters (120 gallons or less).

Table 2 summarizes proposed Subpart JJJJJJ, applying to industrial, commercial, and institutional boilers located at area HAP sources. The area source rule does not apply to process heaters and does not affect existing gas-fired units; only coal, biomass, and oil-fired boilers are affected. The area source rule does not exempt hot water heaters presumably because they expect most to be existing gas-fired units, which are exempt. New gas-fired units will be applicable to the requirements of this rule.

There are some unique requirements in these rules: energy assessments (audits) are required for all existing units at major HAP sources and for existing coal, biomass and oil-fired units ≥ 10 milliong British Thermal Units (MMBTU) pre hour at area sources. An energy assessment is defined as an in-depth assessment of a facility to identify immediate and long-term opportunities to save energy, focusing on the steam and process heating systems and involves a thorough examination of potential savings from energy efficiency improvements, waste minimization and pollution prevention, and productivity improvement. As proposed this assessment must include:

1. A visual inspection of the boiler system.
2. Establish operating characteristics of the facility, energy system specifications, operating and maintenance procedures, and unusual operating constraints
3. Identify major energy consuming systems
4. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
5. A list of major energy conservation measures,
6. The energy savings potential of the energy conservation measures identified,

7. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments
8. [Major HAP sources only] A facility energy management program developed according to the Energy Starr guidelines for energy management.

Periodic tune-ups are required for existing units that are not subject to specific emission limits. At major HAP sources all new and reconstructed units that burn natural gas or refinery gas and all existing units ≥10 MMBTU/hr that burn natural gas or refinery gas must perform annual tune-ups. All existing units <10 mmBTU/hr and existing coal, biomass and oil-fired units <10 mmBTU/hr at major sources and must perform tune-ups biennially.

An affected area source does not need to obtain a Title V permit unless they need one for another reason, except for any source that was a major source and installed a control device on a boiler after November 15, 1990, and, as a result, became an area source under 40 CFR, Part 63. These sources are required to obtain a Title V permit regardless of actual or potential emissions.

The major source rule allows facilities to average emissions from boilers in the same category as long as a boiler in another source category does not vent to the same stack. The rule imposes a discount factor of 90% to ensure that facilities that perform this averaging do not emit more than facilities estimate emissions from each boiler.

The compliance deadline for these rules will be three years after the final rules are published, for existing sources, and upon startup for new sources. Refer to the area source rule EPA Fact Sheet and the major source rule EPA Fact Sheet for more information.

CAA §129 – Commercial & Industrial Solid Waste Incinerators (CISWI) NSPS/EG
40 CFR 60 Subparts CCCC and DDDD
June 4, 2010 (published in the Federal Register - 75 FR 31938)

The EPA comment deadline for this proposal will also be 45 days after it is published in the Federal Register. Comments should be submitted to HS-22 for consolidation and submission no later than 30 days after publication. The signed prepublication versions of these amendments are posted at http://www.epa.gov/ttn/oarpg/t3pfpr.html.

This proposed rule would revise would remove the exemptions for agricultural waste incineration units; cyclonic barrel burners; burn-off ovens; waste burning kilns; chemical recovery units; and laboratory analysis units. These units would be regulated under the revised CISWI standards if they burn non-hazardous solid waste at a commercial or industrial facility. Refer to the EPA Fact Sheet for more information. The original comment deadline has been extended to August 3, 2010 (75 FR 32682).

Table 3 compares the current limits which are the same for both new and existing CISWI units to the proposed amended limits. The amended NSPS requirement would affect units constructed or reconstructed after the final rule is published in the Federal Register. All other units will become subject to the amended existing source requirements as States update their implementation plans to include the requirements within this rule. The compliance deadline for existing source will vary between the States but will likely be in 2015. DOE HS-22 does not expect to submit comments on this proposal, as no DOE facilities are expected to be applicable to this proposal.

III. National Ambient Air Quality Standards (NAAQS)

SO_2 Primary NAAQS

In December 2009, EPA proposed to revise the primary NAAQS for SO_2 (74 FR 64810) by establishing a new 1-hour SO_2 standard within the range of 50-100 parts per billion (ppb) with the intent of lowering public short-term exposure to SO_2. The EPA also proposed to revoke both the existing 24-hour and annual primary SO_2 standards. EPA is under court order to finalize the rule by June 2, 2010.

EPA has posted a map showing areas in non-attainment of the proposed range of standards based on the most recent data (2006-2008). The map is available at http://www.epa.gov/air/sulfurdioxide/pdfs/countieswmonitorsviolating.pdf. Although the actual designation of areas will be based on more recent data, the map gives an idea of what areas will be affected. The new standard will include anti-backsliding requirements: rules preventing air quality (SO_2) to degrade in areas which were or are in non-attainment of the existing annual and three-hour SO_2 standards. DOE HS-22 does not expect to submit comments on this proposal.

IV. Greenhouse Gases (GHGs)

GHG Mandatory Reporting Rule (MRR) Amendments

On March 16, 2010, EPA issued a direct final rule and corresponding proposed rule that would make several changes to the GHG MRR. In the rule, EPA is removing the lists of source and supply category subparts from various sections of the rule, replacing them with three new tables that list the source categories. On 5 May, the direct final rule was withdrawn due to receipt of an adverse comment. EPA will proceed with action on the proposed rule. DOE HS-22 does not expect to submit comments on this proposal.

On 12 April 2010, EPA published four additional proposals amending the GHG MRR. Brief summaries of the proposals are provided below.

1. Mandatory Reporting of Greenhouse Gases, 18455-18468
   http://edocket.access.gpo.gov/2010/2010-6765.htm
   EPA is proposing to require reporters subject to the rule to provide: The name, address, and ownership status of their U.S. parent company; their primary and all other applicable North American Industry Classification System (NAICS) code(s); and an indication of whether or not any of their reported emissions are from a cogeneration unit.

2. Mandatory Reporting of Greenhouse Gases: Additional Sources of Fluorinated GHGs, 18652-18723
http://edocket.access.gpo.gov/2010/2010-6768.htm

   EPA is revising and supplementing its initial proposed actions to require reporting of fluorinated GHG emissions from certain source categories, specifically, reporting of fluorinated GHG emissions from electronics manufacturing, production of fluorinated gases, and use of electrical transmission and distribution equipment. EPA is also proposing to require such reporting from manufacture or refurbishment of electrical equipment and import and export of pre-charged equipment and closed cell foams.

3. Mandatory Reporting of Greenhouse Gases: Injection and Geologic Sequestration of Carbon Dioxide, 18576-18606
http://edocket.access.gpo.gov/2010/2010-6766.htm

   EPA is proposing a rule to require monitoring and reporting of CO_2 injection and geologic sequestration.

4. Mandatory Reporting of Greenhouse Gases: Petroleum and Natural Gas Systems, 18608-18650
http://edocket.access.gpo.gov/2010/2010-6767.htm

   EPA is proposing a supplemental rule to require reporting of GHG emissions from petroleum and natural gas systems, specifically to require emissions reporting from the following industry segments: Onshore petroleum and natural gas production, offshore petroleum and natural gas production, natural gas processing, natural gas transmission compressor stations, underground natural gas storage, liquefied natural gas (LNG) storage, LNG import and export terminals, and distribution.

GHG Tailoring Rule
June 3, 2010 (published in the Federal Register – 75 FR 31513)

The final GHG tailoring rule establishes the applicability thresholds for sources emitting GHGs in the Title V (operating permit) and Prevention of Significant Deterioration (installation permit) programs. The effective date of the rule is August 2, 2010, and the rule is expected to be applicable to all sources on January 2, 2010. The applicability thresholds are as follows: new Title V and PSD sources – 100,000 tpy of carbon dioxide equivalent (CO_2e) emissions; net emissions increase for new or modified PSD sources - 75,000 tpy of CO_2e emissions.

On January 2, 2011, all existing sources of GHG that have pending Title V or PSD permit applications must revise these applications to include GHG emissions. Existing Title V

sources must revise their Title V permits to include GHG emissions and GHG emitting sources.

On July 1, 2011, any source that is not already Title V must submit a Title V permit application for all emissions, (including CO_2e). Existing sources with 100,000 tpy of CO_2e actual or potential emissions will be subject to PSD requirements for any net emissions increase of CO_2e emissions greater than or equal to 75,000 tpy.