

**DEPARTMENT OF ENERGY  
CLEAN AIR WORK GROUP (CAWG)**

**Conference Call Notes**

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**DATE:** September 2, 2010  
**TIME:** 2:00 to 3:30 PM EDT  
**CHAIR:** Larry Stirling, Office of Environmental Policy and Assistance, HS-22  
**PARTICIPANTS:** Members of the CAWG

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**Welcome and Introduction – Larry Stirling**

**Updates**

**I. Global Climate Change**

**A. Executive Order 13514 Departmental Implementation Update – Josh Silverman**

- The SSP has been finalized. It is attached to the minutes from this meeting.
- The JM authorizing the development of a merged order combining DOE orders 430, *Real Property Asset Management*, and 450, *Environmental Protection Program* was approved by the Directives Review Board September 9, 2010. Work on the combined order can now officially begin.

**B. Federal Mandatory Reporting Rule – Carbon Sequestration Rules – Larry Stirling**

- Two proposed rules regarding the underground geologic sequestration:
  - One is proposed under the Safe Drinking Water Act, the other under the Clean Air Act. They have differing reporting requirements and the rules are coordinated in an attempt to avoid duplication and inconsistency.
- Impact on DOE is not clear, not expected to be large, but DOE has provided extensive funding for research into geologic sequestration and the owners/operators may need to apply for research and development exemptions.

**C. PPTRS Reporting: Fugitives – Corey Buffo / Kira Darlow/Daniel Waller**

- Fugitive emissions are a big opportunity for reducing GHG emissions (~14% of total GHG in Scope 1 and 2)
- Calculations and data needs are slightly different in PPTRS than in data call last December because the Federal GHG reporting guidance is now available
- 3 categories of fugitive emissions:
  - Industrial Refrigerants
  - Landfills / Solid Waste disposal facilities (onsite municipal solid waste only)
  - Wastewater Treatment (onsite only – treats municipal waste and maybe industrial)
- Off-site landfills / wastewater treatment emissions will be calculated via numbers already submitted
- A new spreadsheet adapted from the FEMP worksheet has been developed to report emissions under EO 14323
- Industrial Refrigerants / Fugitive Emissions
  - The first two worksheets (fugitive emissions of fluorinated gases and refrigerants) use a mass-balance approach. There is an option for reporting only acquisition of refrigerants, rather than all information for a mass-balance approach.
  - The refrigerant worksheet allows you to separate out a blend of refrigerants.
  - Caution: there is a chance for double counting if the refrigerant worksheet is used.
- On-Site Processes

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- The On-Site Processes worksheet details industrial processes that may be applicable to DOE sites. All GHG emissions associated with the process (as calculated using the methodologies listed in the PPTRS and Federal GHG Reporting guidance documents) should be included on this worksheet regardless of where in the process they are emitted (stack and fugitive emissions). Emissions associated with the combustion fossil fuels used in the process are not to be included in this worksheet, they will be accounted for elsewhere.
- On-Site Wastewater Treatment
  - The On-site WWTP worksheet asks if there are wastewater treatment facilities on-site. If an on-site treatment system is utilized, the user must identify the type of facility, and how many people are served by the facility. Estimates of GHG emissions from this data will be automatically calculated in the worksheet.
  - GHG emissions from on-site wastewater treatment are primarily produced from the treatment of municipal waste using anaerobic digestion. Industrial wastes that are not processed using anaerobic digestion will not produce GHG emissions. Any wastewater facilities that *only* treat industrial wastewater should not be reported in this worksheet.
- On-Site Landfill
  - The EPA LandGEM Model must be used to calculate the quantity of biogenic CO<sub>2</sub> and methane generated. The LandGEM output is then entered into the worksheet to estimate GHG emissions. The LandGEM model is only applicable to municipal solid waste (MSW) landfills; do not enter industrial landfills, (e.g. C&D, or RCRA / CERCLA wastes), into this worksheet. If there is an MSW component to the industrial landfill, then emissions may be estimated from that component using LandGEM.
- PPTRS will have links to download and upload worksheets. Contact Corey ([corey.buffo@hq.doe.gov](mailto:corey.buffo@hq.doe.gov)) regarding:
  - Questions/comments to improve the worksheets.
  - Volunteering to try out the worksheets in advance of the official reporting period
  - Participating in a conference call to go over details about reporting Scope 3 emissions (employee travel, commuting, etc.) on Sept 13.
  - Fugitive Emissions Working Group – new group forming, Josh Silverman is chair, first meeting Sept 9.

**D. Tailoring Rule for Title V and Prevention of Significant Deterioration**

**Publication of Final Rule – Andrew Shroads**

- Notes were provided summarizing the final rule (GHG Title V Summary.docx)
- EPA has proposed two rules designed to ensure that permits will continue to be issued after January 2, 2011 in states whose air regulations do not automatically include GHGs.
  - The first rule is a call for these states to submit a revised state rule defining GHGs in permitting process
  - In the event that the new state rule is not in place by the effective date of the Tailoring Rule, the second rule is a Federal Implementation Plan (FIP) that allows EPA to assume the permitting process from the state on only the GHG portion of the permit.
  - EPA has stated its intent to have the states process all permits; if any state refuses to add GHGs to their list of pollutants for permitting purposes, EPA may revoke their Title V or Prevention of Significant Deterioration permitting authority in part or in total. EPA could also request that the Department of Transportation withhold Federal highway funding to a non-complying state.

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- EPA held a public hearing for these rules on Sept. 14. Kira attended and the notes from this hearing are attached.
- Permitting requirements are based on “potential-to-emit –defined as emissions from a facility operating at full capacity without the use of any air pollution control equipment. Different states and EPA regions have slightly different versions of full capacity and inherent process limitations.

**II. Air Quality Regulations** – slides (Biomass Summary.pdf) provided for this section

**A. New Source Performance Standards (NSPS)**

Commercial & Industrial Solid Waste Incinerators for Biomass – Andrew Shroads

- The NSPS will apply to any new or reconstructed CISWI.
- The NSPS includes emissions limits on hazardous metals, dioxin/furans, criteria pollutants, and opacity.
- Continuous emissions monitors, emissions testing, and a siting analysis are required
- Historically, it has been difficult for CISWI to reduce dioxin/furan limits to EPA thresholds, even with the addition of control technology

**B. Clean Air Act Section 129 – Solid Waste Combustion**

Combustion of Non-hazardous Secondary Materials – Andrew Shroads

- EPA has issued regulations defining non-hazardous secondary materials used as a fuel or combustible ingredient
- The regulation provides standards for defining the fuel or ingredient

**C. National Emissions Standards for Hazardous Air Pollutants (NESHAP)**

**1. Area / Major Source Boiler NESHAP for Biomass** – Andrew Shroads

- The major and area boiler NESHAPs include emissions limits for hazardous metals, carbon monoxide, and particulate matter. The major source NESHAP also includes an emissions limit for dioxin/furan.
- Note that boilers serving research and development (R&D) facilities are not exempt; only boilers used for R&D are exempt.
- Continuous emissions monitors and emissions testing are required for some boilers.

**2. Update of Comments on Boiler NESHAP** – Larry Stirling

- Comments were already sent to EPA and were forwarded to the CAWG on Sept. 2 (comments on boiler NESHAP.docx)
- Please notify Larry if you have any additional comments
- Bob Roulston mentioned that Pantex submitted independent comments requesting that EPA clarify the records required to be kept for co-fired boilers. Andrew figures that EPA would prefer to defer such a determination to the local enforcement agency; however, if they receive several similar comments regarding this issue, EPA will have to clarify the record-keeping requirements to satisfy the public notice requirements for the proposed rule.

**Old Business**

**I. Air Pollution Training Update** – Larry Stirling/Andrew Shroads

- Some money is no available to start working on this again; Andrew is developing some straw man modules using a hypothetical site. These will be shared with the CAWG for feedback. Andrew requested examples of air pollution sources found at DOE sites for inclusion in the hypothetical site example (e.g. a 1950's era building undergoing renovation / demolition, boilers). Any suggestions for naming the hypothetical site?

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**New Business**

- Discussion about information requests regarding the new one hour SO<sub>2</sub> National Ambient Air Quality Standard
  - Greg Barrett at Argonne received correspondence from IL EPA requesting a large amount of information regarding ANL's air pollutants, equipment and stack location, and building information in order to conduct air dispersion modeling in possible non-attainment areas. He wondered if anybody else had received such requests. No one else has as of the CAWG meeting.
  - Andrew: EPA uses the dispersion modeling to determine what level of control is required to reduce air emissions in a non-attainment (or possible non-attainment) area. The model is used in conjunction with the air monitoring network to establish what emissions levels for emitters should be to ensure attainment.

**Next Meeting**

November 4, 2:00 PM to 3:30 PM Eastern Daylight Savings Time