DEPARTMENT OF ENERGY
CLEAN AIR WORK GROUP (CAWG)

Agenda

DATE:	June 2, 2011
TIME:	1:00 to 2:30 PM EDT
CALL-IN NUMBER:	U.S. Toll: 303.248.0285 Access Code: 5863657
WEBSITE:	https://cc.readytalk.com/r/uq7nt6fqudzm
PLACE:	DOE/FORS- Room 6B-104
CHAIR:	Larry Stirling, Office of Sustainability Support, HS-21
PARTICIPANTS:	Members of the CAWG

I. Climate Change / Greenhouse Gases (GHGs)

A. Combustion Source Requirements of the GHG Mandatory Reporting Rule

There will be an opportunity in June to test the Electronic Greenhouse Gas Reporting Tool (e-GGRT) before the final version of the tool goes live. To register for early testing, visit http://www.epa.gov/climatechange/emissions/training.html.

GHG emissions are to be reported for each combustion unit. Similar units may be aggregated if ≤250 mmBtu/hour. Common fuel combustion units include natural gas, fuel oil, biomass, municipal solid waste (MSW); other fuels are listed in Table C-1. Equipment that is exempt from the GHG reporting rule includes portable equipment, emergency equipment and generators, irrigation pumps at agricultural operations, flares (unless in another subpart), and electricity generating units (Subpart D). There are four approaches or tiers to determining the amount of GHG emissions for CO_2, CH_4, and N_2O.

- Tier 1 uses an emission factor that is multiplied by annual fuel use and a default heating value for the fuel.
- Tier 2 uses an emission factor that is multiplied by annual fuel use and a measured heat factor. There is a separate calculation for steam in Tier 2 that multiplies GHG emission factor by annual steam use by the ratio of the maximum heat input capacity to design rated steam output capacity by 0.001. The measured heat factor must be obtained from a representative sample according to a specified sampling frequency and following industry standards.
- Tier 3 requires additional calculation. For CO_2, the annual fuel use is multiplied by the carbon content of the fuel and by various constants according to whether the fuel is solid or liquid. For gaseous fuels, fuel use is multiplied by the carbon content of the fuel and by the ratio of molecular weight to molecular volume and by various constants. Fuel samples must be representative and obtained with the minimum frequency as specified in Tier 2 with the exception of gaseous fuels, which must be sampled daily if equipped with a continuous analyzer or else weekly.
- Tier 4 requires a continuous emissions monitoring system (CEMS).

EPA has specific requirements for MSW and biomass fuels and provides emission factors in Tier 1 or 2. For GHG combustion reporting, aggregation of units that use the same fuel is permissible. However, aggregation is limited to use for units ≤250 mmbtu/hour in size

and those that are not tier 4 unless the units are natural gas. Additionally, if units consume less than 5% of the total fuel, then all GHG emissions can be attributed to the large source. For missing data, the arithmetic average of the "before" and "after" values is acceptable. If there is no after value, use the best available estimate for the missing parameter based on all available data.

A calculation worksheet for stationary combustion sources, EPA's Applicability Tool, is available at epa.gov/climatechange/emissions/GHG-calculator/stationary-fuel.html. The tool will compute the emissions for you according to how much is used. Please note that while the tool is available, E-GGRT is the only tool for submitting GHG information.

The following information is required for the GHG report:

1. Unit ID number, (if reporting individually)
2. Code representing the type of unit, (e.g. B001)
3. Maximum (not aggregate) rated heat input capacity of the unit or of the group, (e.g. MMBTU/hr or horsepower-hour)
4. Each type of fuel combusted during the report year (may be multiple if reporting individually)
5. Tier used to calculate CO_2 emissions for each fuel combusted and start and end date for using the tier
6. Annual unit emissions of CO_2, CH_4, N_2O and CO_2e

In general, if data are missing, provide the best available estimate and justification/explanation of that estimate. Records may be kept electronically or on paper copies, whichever allows greater access for an EPA audit. A tool to determine applicability of the stationary combustion rule is found on the EPA website: http://www.epa.gov/climatechange/emissions/GHG-calculator/stationary-fuel.html.

e-GGRT will have two options for entering data: enter only raw data only (similar to the applicability tool) or enter raw data and the calculated total GHG emissions. The tool will be very flexible in terms of allowable aggregation configurations.

Q: Do CERCLA regulated sources fall under this reporting requirement? The regulations are silent on this, and conversations from EPA suggest they are included.

A: The Greenhouse Gas Reporting Rule does not have to follow any other guidance because it is not tied to any other rule. This is very different from other rules at EPA in that exists independently from other CAA rules. As the rule is focused on reporting and not reducing or controlling emissions, CERCLA regulated sources may be required to report.

Q: Would using biomass to generate steam require a Tier 1 calculation or a Tier 2 calculation?

A: If using a solid biomass to generate steam, Tier 2 is required. Likewise, if the heat value is known (e.g., landfill gas often has a known heat value), Tier 2 is required.

Otherwise, Tier 1 is allowed.

Q: Is aggregation limited to combustion equipment using any specific fuel-types?
A: No. You can't aggregate equipment across fuels, but all equipment using any one fuel can be aggregated.

Q: Can we get an abbreviated report on the reporting rule?
A: Will follow up with EPA to see.

Q: Are you required to follow tier 2 or can you use tier 1 for biomass for steam generation?
A: For solid fuel, use tier 2. For other biomass fuels in Table C-1, you can use tier 1 so long as you do not know what the heat value is. If you're getting the fuel commercially delivered and the heat values are known, then you will need to use the tier 2 approach. You cannot aggregate fuels together, but you can aggregate all sources that burn that fuel.

Q: Any concerns for R&D?
A: As long as the R&D activities are in the proof of concept, scale, or pure R&D stage, there are exclusions. EPA does not have a method established to track new or esoteric fuels.

II. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

A. Delay and Reconsideration of the Industrial, Commercial, and Institutional Boiler and Process Heater NESHAP

EPA issued notice of reconsideration on March 21, 2011. March 18, 2011 delayed the effective date until judicial review or reconsideration is complete. EPA has not stated if change in effective dates will change compliance dates. EPA may issue a public notice for comment on the rule aspects under reconsideration. The area source Boiler NESHAP became effective on May 20, 2011 and is not affected by the delay.

The area source boiler NESHAP became effective on May 20, 2011 and is not affected by delay. Existing area sources with no emission limitations in the NESHAP must comply by March 21, 2012. Existing area sources with emission limitations or energy assessment requirements in the NESHAP must comply by March 21, 2014.

B. Avoiding Major Source Boiler Rule via Synthetic Minor Restrictions on Hazardous Air Pollutant (HAP) Emissions

If actual HAP is less than major MACT thresholds, you can apply for a synthetic minor permit that would make you an area source, but not a major source. Sites may want to consider under what requirements they are a major or area source under MACT. A Title V permit does not necessarily mean that a site is a major source. Under certain conditions it may be possible to lower those emissions to cap emissions of other compounds such that sites do not have to comply with the stricter guidelines for major source.

EPA has a "once in, always in" MACT policy. Facilities should review the requirements of both the major and area source boiler MACT standards. If there is a large difference between the maximum theoretical HAP emissions of your boiler and the actual HAP emissions, it may be possible to apply for a synthetic minor permit which would subject you to the Boiler MACT for area sources and avoid major MACT status. Such a permit must be issued by March 21, 2014.

III. New Source Performance Standards (NSPS)

A. Delay and Reconsideration of the Commercial and Industrial Solid Waste Incineration (CISWI) Units NSPS

The CISWI NSPS is also subject to the same reconsideration and delayed effective dates as the Boiler NESHAP. EPA has not stated if the change in effective dates will affect the compliance dates. EPA may issue a public notice for comment on the rule aspects under reconsideration

B. NSPS for Electric Generating Utilities (EGU) - Greenhouse Gas Requirement Update

Publication of the proposed rule is expected in August 2011, with planned publication of the final rule in summer 2012. The proposed rule is expected to include GHG limits for new and existing electric generating units. This is the primary impact of this rule on the DOE complex – this rule will move GHGs from listed pollutants to regulated pollutants. All Title V facilities will have to list GHG emissions for all sources; currently GHGs only have to be listed if a site is applicable to the Title V permit program due to potential GHG emissions. GHGs still will not appear in the Title V permit because there are no current emissions limits for GHG emissions. It appears that EPA will develop implementation guidance after the rule goes into effect and that the states will lean on this guidance to determine which GHG-emitting units are to be included. For example, EPA will have to provide guidance concerning the necessity of including all break room refrigerators that contain HFCs and therefore are potential GHG emitters.

The proposed EGU rule is expected to include GHG limitations for new and existing sources. When NSPS is issued with GHG limitations, Title V facilities must update their permit applications to list GHG emissions from **individual** sources and report and re-classify exempt or insignificant units. The final rule is expected in the summer of 2012.

Question from the field:

Q: How much time will be allowed for inclusion of GHGs on the Title V permit?

A: Based on current trends, new Title V permit applications will be required to include GHGs immediately and all applications currently in the queue will need revision. For sites that already have Title V permits, inclusion of GHGs will probably be required on the next permit renewal or modification application.

Q: What does this require for Title V facilities?
A: For facilities that are already Title V, this will require an update at permit renewal or permit modification. For those coming into Title V after July 1st, the initial Title V application will include GHG emission information on making them major.

Q: Are states moving toward a similar approach?
A: Most states are waiting to tackle this until EPA releases federal guidelines.

Q: Will this generate a lot of paperwork for marginal benefit?
A: Any federal GHG rule will likely trigger changes to the definition of "pollutant" in the Title V program. Currently there are no rules limiting GHGs, so the paperwork is for reporting without any requirement for reducing GHG emissions. This may require reporting of a lot of equipment with insignificant emissions. EPA guidance may clarify this issue. As a result, states are waiting for EPA to issue rule and guidance.

IV. Permitting

A. $PM_{2.5}$ New Source Review Implementation
The final rule implementing $PM_{2.5}$ new source review was submitted to the *Federal Register*. The rule with an effective date of May 16, 2011 repeals the grandfather provision of controlling PM_{10} as a surrogate for $PM_{2.5}$. This is applicable to facilities installing new or modifying existing sources subject to PSD or NSR permit programs.

B. Including GHG Title V & Prevention of Significant Deterioration (PSD) Actions
Phase I took effect January 1, 2011 and required all existing Title V facilities with potential to emit GHGs over the threshold to include GHG emissions on their next permit renewal or modification application.

The second phase of the PSD/Title V GHG tailoring rule goes into effect on July 1, 2011. Under phase one, which went into effect in January, Title V sources with the facility-wide potential to emit 100,000 tons per year (tpy) of CO_{2e} **and** ≥100 tpy of all six GHGs by mass must include actual and potential GHG emissions in the renewal or modification of the permit. For phase two, non-Title V sources with the potential to emit ≥100,000 tpy of CO_{2e} and ≥100 tpy of all six GHGs by mass are subject to Title V permitting requirements.

There are additional applicability thresholds for minor and major PSD sources. For non-title V permit holders or existing Synthetic Minor Title V permit holders with GHG emissions ≥100,000 tpy of CO_{2e} and ≥100 tpy of all six GHGs by mass, you can submit a revised Synthetic Minor permit application so long as the permit is **issued** before July 1, 2012. Otherwise, Synthetic Minor Title V permit holders will need to submit a Title V permit application, which must be submitted before July 1, 2011. Any application submitted after January 2, 2011 should include GHG emissions. Don't forget to include GHG when you're renewing or modifying a permit.

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V. Other

A. Clean Air Interstate Rule (CAIR)
The Transport Rule (revised CAIR) is currently at OMB for review. The revised rule targets power plant emissions of SO_2 and NO_X (form $PM_{2.5}$ and O_3). It is likely that EPA will introduce limited interstate trading in rule and will likely focus on intrastate trading. This will coordinate with NAAQS on meeting attainment for $PM_{2.5}$ and O_3.

B. Confidential Business Information – Bob Roulston, Pantex
For GHG reporting, a facility can declare at the time of submission what is confidential and what is not. If there is something to be submitted under 40 CFR 98 that you have concerns with regarding confidentiality, this is something to discuss with General Council.

There is a provision in the mandatory reporting rule concerning CBI or Official Use Only Information (OUOI). Table 2 of 40 CFR Part 98 presents which CBI/OUOI is allowed or not allowed. If reported as CBI/OUOI at the time of submittal, this information is protected from FOIA requests. In Pantex's experience with state reporting, they have been required to submit two copies of each report: one including the CBI/OUOI and on that is redacted for public release.

C. NSPS DDDD (Bob Roulston)
Headquarters and the National Training Center discussed New Source Performance Standard subparts CCCC and DDDD, CISWI. For situations where small incinerators are used only for national security purposes, the incinerator could fall under EEEE or FFFF, other solid waste incineration (OSWI) units. Pantex obtained, submitted, and implemented the information to EPA Region 6 so that exclusion for national security purposes applies. If the state of Texas implements NSPS rules, Pantex will likely work with them through the process as well. The take away from this is if you think you have an incinerator unit under CISWI, review the OSWI section.

D. Emergency Demand Response Comments Update
Comments from the subgroup were submitted to General Council. GC forwarded comments to Melanie King at EPA. Larry Stirling is tracking the status of the comments, and will provide an update once EPA responds.

Next Meeting

August 4, 1:00 PM to 2:30 PM Eastern Daylight Saving Time

Web Conference Information:
Test your computer for compatibility prior to the conference:
http://test.readytalk.com
Click here to join the meeting:
https://cc.readytalk.com/r/uq7nt6fqudzm
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For technical support:

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