

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

Meeting Minutes

DATE: November 4, 2010
TIME: 2:00 to 3:30 PM EDT
CALL-IN NUMBER: (303) 248-0285 | Access Code: 5863657
PLACE: DOE/FORS- Room 6B-104
CHAIR: Larry Stirling, Office of Environmental Policy and Assistance, HS-22

2:00 Welcome and Introduction – Larry Stirling

We are trying out a webinar format. Let us know how this works.

2:10 Updates

I. Global Climate Change

A. Executive Order 13514

1. Departmental Implementation Update – Josh Silverman

Since the last CAWG meeting, DOE has officially formed a Sustainability Performance Office (SPO). The SPO is located in EE-1 and is led by Jennifer MacDonald, formerly of the Office of the Chief Financial Officer (CFO). Ms. MacDonald has been involved in the development of DOE's Strategic Sustainability Performance Plan and will be supporting the Senior Sustainability Officer (SSO), Deputy Secretary Poneman.

It is anticipated that the SPO will work closely with other Headquarters offices including HSS and OECM in addition to the Under Secretaries. SPO will coordinate cross-cutting activities for meeting greenhouse gas (GHG) reduction goals and other sustainability goals.

The Pollution Prevention Tracking and Reporting System (PPTRS) is currently open. For those that have not yet visited the site, the guidance to enter data into the PPTRS is embedded within the database. Requested data specific to the CAWG is related to fugitive emissions. Please input data early to allow more time for any questions that may arise. The PPTRS reporting deadline is December 1, 2010.

Other sustainability reporting requirements related to the CAWG include the Site Sustainability Plan (SSP). Most sites have submitted draft SSPs for internal review and comment by the appropriate Program Secretarial Offices (PSOs).

Q: What type of information is needed regarding fugitive emissions?

A: There is a worksheet available via the PPTRS. The worksheet breaks down the request into high Global Warming Potential (GWP) substances. We are looking for information regarding inventory of these substances. Please contact Corey Buffo, (202) 586-9661, corey.buffo@hq.doe.gov, with specific questions. See Section B.

2. **Guidance for Federal Greenhouse Gas Accounting and Reporting** – Kira Darlow

The final version of the *Federal Greenhouse Gas Accounting and Reporting Guidance* was published October 6th. It is available at:

<http://www.whitehouse.gov/administration/eop/ceq/sustainability/fed-ghg>. There were no changes to the requirements in the final version although there were some clarifications on

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calculations. Final versions of Federal GHG Accounting and Reporting Guidance (Guidance) and Technical Support Document (TSD) were released

Changes to Guidance include editorial changes and addition of sections with background information and clarifications; no changes made to requirements

Changes to TSD include editorial changes; additional information on industrial wastewater adjustments in wastewater treatment plant emissions calculations and on using LandGEM for landfill emissions calculations; added an alternate methodology for calculating Scope 3 air travel emissions – the short, medium, long haul method described for this year's PPTRS reporting; changed the Scope 3 advanced ground travel method and added a new distance-based advanced method

B. Fugitive Emissions: Workgroup and PPTRS Reporting – Corey Buffo

There have been a few minor updates to the PPTRS in response to feedback. December 1, 2010 is the reporting deadline. If you have one sheet complete, please send it along early.

Spreadsheets are available on the P2 portal. There have been some changes to a few of the spreadsheets, but none to the fugitive gas emissions sheets.

Please don't forget to submit awards nominations using the revised categories

In response to a question, it should be noted that the Federal Guidance is not aligned with the EPA Mandatory GHG Reporting Rule (40 CFR, Part 98) for reporting landfill emissions. Each program reports landfill GHG emissions using different methods.

Deadline for PPTRS reporting (not award nominations!) is December 1. Please feel free to send completed worksheets early. Award nominations are due December 31.

C. Federal Mandatory Reporting Rule e-GGRT & Registration Update – Andrew D. Shroads

The Electronic Greenhouse Gas Reporting Tool (e-GGRT) (pronounced 'e-grit') is a tool developed by EPA for facilities to submit GHG emissions data to comply with the federal mandatory reporting rule (40 CFR, Part 98). State reporting or reporting under E.O. 13514 are not using e-GGRT at this time, so reporting for those systems will be completed separately. E-GGRT is a web-based system that can be accessed via Internet Explorer (IE) 7 or higher or via Mozilla Firefox 3 or higher. The Central Data Exchange (CDX) includes e-GGRT, so user information from the Toxic Release Inventory is already included. Registration for e-GGRT includes two rounds of mailing hard copies to EPA – EPA has to receive both documents by January 30, 2011.

The initial user registration must be completed at one sitting. For sites that will report under e-GGRT, registration is required via a one-time electronic signature agreement (ESA). EPA approves the ESA and sends an email with a code to allow a designated representative (DR) to accept a role in e-GGRT. The designated representative must then print, sign, and mail a "certificate of representation" back to EPA. The DR can appoint alternate designated representative (ADR) and an unlimited number of agents (including contractors or support staff). Information will be sent out after the call regarding who can be a DR. EPA must receive the

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certification of representation by January 30, 2011. Please note that the ESA and certificate of representation will encounter mail delays.

e-GGRT information and FAQs:

<http://www.epa.gov/climatechange/emissions/data-reporting-system.html>

http://www.epa.gov/climatechange/emissions/downloads10/E-GGRT_webinar.pdf

Q: The registration update does not appear to be very user friendly. Are there plans to correct this?

A: The challenge for EPA is that companies will be submitting Confidential Business Information (CBI) into e-GGRT. There are certain requirements that EPA must follow regarding when and how CBI information is transmitted. Once e-GGRT is set up and a site has completed the registration, the process should be smoother. EPA is under a time crunch to get e-GGRT up and running. The system may be improved upon down the road, but the primary concern is for the system to become operational to enable registration and data submission.

Q: When is the program going to become available?

A: EPA is saying that it will be available soon. The program is in place, but they are currently doing final testing before it is released. Perhaps e-GGRT will be operational by the end of the month.

Q: Is EPA offering webinars for this?

A: Yes. The next webinar is scheduled for November 17th from 1pm-2:30pm. EPA has also posted the slides online to get a sense of what the system will look like. More information on e-GGRT is available at <http://www.epa.gov/climatechange/emissions/data-reporting-system.html>.

D. GHG Tailoring Rule for Title V Information Brief – Andrew Shroads

GHG are to be considered pollutants under Title V. An information brief on what this means for Title V permit holders is going through the final approval process and should be released later this month. For Title V permit holders, you will only need to modify your Title V permit with information regarding GHGs. If a specific compound (e.g., hazardous air pollutant) triggers your Title V permit, your permit update will need to include whether you're also a major GHG contributor. For those sites that have been considered an insignificant source and have not previously needed a Title V permit, you will need to check to see if your associated GHGs for those insignificant sources are over 100,000 tons per year. If so, then the source is considered significant, and you will need a Title V permit.

The info brief answers questions regarding the requirements for existing Title V sources and sources that will be Title V for GHG, including synthetic minor sources.

Info brief in final review process and should be available later in November.

Summary:

- If already a major Title V source, will have to include in Title V renewal application information about whether or not your facility is major for GHGs (>100,000 tons/year CO₂e AND 100 tpy total mass of GHG)
- If already have a synthetic minor permit addressing Title V, will have to check that you do not emit >100,000 tons/year CO₂e AND 100 tpy total mass of GHG and incorporate GHG limits into synthetic minor permit or submit a Title V permit

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- If not a Title V or synthetic minor source, will have to check that you do not emit >100,000 tons/year CO₂e AND 100 tpy total mass of GHG
- Will have to inventory all air emissions sources, even sources not currently in a Title V permit, to determine GHG emissions
- Some current insignificant sources may eventually have to be reclassified when a New Source Performance Standard (NSPS) is issued for GHG

II. Air Quality Regulations

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

1. Residual Risk Update – Andrew D. Shroads
 - a. Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks
 - b. Group I Polymers and Resins

NESHAP requires EPA to revisit residual risk. These two areas (Chromium Electroplating and Anodizing Tanks and Group I Polymers and Resins) may undergo residual risk review. The regulations for these areas are being updated to primarily on record-keeping and reporting requirements. If you have period of start-up, shut-down, or malfunction, there may be some compliance concern with these updates.

B. EPA 5-year Plan – Andrew Shroads

Climate change is anticipated to be integrated into all aspects of air quality. In conjunction with efforts to aid Congress in climate legislation, EPA will continue to assess and develop regulatory tools as warranted under the Clean Air Act. In addition to permitting large GHG emitters, EPA anticipates focusing on voluntary GHG reduction productions, participating in international methane reduction, and addressing the replacement of ozone-depleting substances with GHGs. Efforts will also focus on improved understanding of the climate effects of “black carbon”. Climate change research will focus on connections to air, water, and land use. These include investigating the impacts of climate change on air quality, emissions from low-carbon fuels, and life cycle analyses of energy technologies. Other research efforts include revising integrated science assessments and improving inventory and risk information for toxic air pollutants. Research efforts will not include methods for reducing GHG emissions. By 2015, EPA also plans to reduce ozone, NO_x, SO₂, and PM_{2.5} concentrations under the National Ambient Air Quality Standards (NAAQS). There was nothing new specifically identified in the 5-year plan regarding radiation protection.

Q: I wasn't aware that temperature was included in these air quality assessments. How is climate change to be incorporated?

A: Climate change will likely be incorporated after the latest adjustment to the NAAQS. Generally, EPA uses models to determine whether areas are in attainment or not. The models assume that temperatures are similar over time. However, the warming of the atmosphere will likely shift more and more counties into non-attainment status. It is unclear whether EPA will need to go through a regulatory approval process for the selection and use of the models when adapting models to account for climate change.

Q: What about particulate reduction? EPA was considering excluding some particulates due to severe weather patterns.

A: For natural events that generate air-borne particulate matter (e.g., wind storms, forest fires), states can discount data collection that occurs during such events. The length of time for such an event may be called into question with upcoming revisions, but it would be difficult to remove this exclusion outright.

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C. Stationary RICE – Andrew Shroads

EPA's October 19th amendments are affecting spark ignition (SI) engines over 100 horsepower (hp) at a major source of HAP emissions and SI engines over 500 hp for area source HAP emissions. Formaldehyde restrictions for certain non-emergency SI RICE $100 \leq$ horsepower (HP) \leq 500 at major sources and >500 HP at area sources. Carbon Monoxide (CO) restrictions for certain non-emergency SI RICE $100 \leq$ HP \leq 500 at major sources and >300 HP at area sources.

III. DOE Sites

A. Indoor Air Program - Argonne National Laboratory – Jim Podraza

In partnership with Grainger and 3M, Argonne has begun a pilot program to move toward using 3M Filtrete high-efficiency air filters in select air-handling units. Conventional filtering at Argonne relied on three filters. These three filter systems have been replaced with a single filter. There was some resistance to this change initially, but the systems have been in place for 8 months and operating well. The new filters were first installed at a building seeking LEED-EB certification in alignment with the Department of Energy's High Performance Sustainable Building policy. They are also being used at the APS, which can benefit from a significant reduction in waste volume and labor time in hauling and replacing equipment with 18 separate air handling units. Compared with most of the filters used at Argonne, the 3M filters offered the following advantages:

- Longer overall product life cycle, which translates to reduced labor costs,
- Average return on investment (ROI) is less than 4 months,
- Better than a 75% reduction in disposal volume, and
- An almost 40% reduction in purchase cost compared to similar filters.

3M tests the filters after installation and checks flow upstream and downstream. The new filters can also operate at a higher level of resistance requiring fewer replacements according to resistance- 1.4 inches of resistance versus 1 inch of resistance with the previous system. The 3M filter relies on a depth loading principle as opposed to the face loading principle of conventional filters. The new filters include frames to reduce filter air bypass due to gaps.

The filters have a lower pressure drop than filters used on-site, which can reduce energy consumption by fans that have to overcome air-flow resistance. 3M provided a calculator to determine the electrical savings, which are realized by the laboratory overall and not the Facilities Management & Services Division.

There is an added safety benefit to the use of these filters. Because the filter footprint is small, Granger will store the filters at a local site until needed (avoiding safety trip hazard issues on-site associated with storage).

In addition to the filters, pre-screen filters were added to outside air intakes that are low to the ground at several buildings. The low level air intakes were collecting grass clippings, insects, and other debris due to their proximity to the ground. The pre-screen filters have significantly reduced waste volumes at these intakes reducing labor costs for maintenance.

Q: You mentioned one of the goals was improved Indoor Air Quality (IAQ). Have you observed any improvements from users?

A: We don't expect to see this until the filters are rolled out to more buildings. Nine buildings have the new filters installed, and they have been in place for less than a year. The lifetime of the

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filter is expected to be between 1 and 1.5 years, so we may learn more about IAQ benefits as the systems have been in place longer.

B. Air Web Site – Andrew Shroads/Larry Stirling

The web site will include notes from the CAWG meetings, a variety of links to internal and external sources, and air pollution training. We hope to have this website up by the end of the year. Send any information that you would like to share on the website to Larry.

[Editor's Note: The website went online after this meeting. The URL is:

<http://homer.ornl.gov/nuclearsafety/env/air/>]

3:10 Old Business

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

There is nothing new to report at this time.

3:20 New Business

There was positive feedback on the webinar as a method of avoiding the roll call at the beginning of the call.

For those interested in sharing what is going on at your site, please contact Larry.

Next Meeting

January 6, 2:00 PM to 3:30 PM Eastern Time