

Notes from January 13, 2010 DOE Fugitive Emissions Working Group Meeting

DOE FEWG Updates: Josh Silverman (FEWG Chair):

- 1) The Fugitive Emissions Working Group Annual Report will discuss the FY 2010 PPTRS results, review the SSPs to determine realistic expectations for future emissions reductions, and share case studies and best practices from DOE sites. Staff hopes to share the draft report with FEWG members by the March meeting.

- 2) Following up last meeting's discussion about emissions earmarks in the DOE FY 2011 budget, the SPO office advises us the FY 2011 budget mark up will not fund detection and capture of fugitive emissions.

- 3) The Chair thanked PPPL for hosting a recent HQ staff visit to discuss fugitive emissions. Later this month HQ staff will visit SNL-NM. Sites interested in sharing information or hosting a visit to review fugitive emissions strategies should contact HS-22. HQ works with sites visited to write up best practices, coordinate resources, and share information with other facilities. HS-22 is actively soliciting volunteers to present at future FEWG calls and develop case studies: contact Josh Silverman or Jeff Eagan.

Initial Analysis of PPTRS Data Call Results:

The Chair presented an early analysis of the 2010 PPTRS Data Call. The results were presented in draft form subject to change, as both the 2010 data and the 2008 baseline values are still undergoing review. The data currently show a 41% decrease in total fugitive emissions from 2008 to 2010, which equate to a 6% decrease in the total DOE GHG Scope 1 and 2 Inventory. This is primarily due to the 47% reduction in SF₆ emissions.

The Chair thanked all sites for their fugitive emissions reduction efforts. Some parts of the fugitive emissions inventory did increase, due to improved accounting efforts that include additional gases not accounted in the 2008 baseline, including CO₂, methane, etc. Recalculated 2008 data may reverse this apparent increase. HS-22 wants to discuss with sites those activities that actually reduced the fugitive emissions, in order to separate emissions reductions attributable to accounting differences.

Questions from the field:

When re-calculating the 2008 baseline, should we recalculate all of the gases in the 2010 data call or only those gases that we reported in the first 2008 data call?

Answer: Provide data for all relevant gases listed in the 2010 PPTRS spreadsheets. Please note if you still plan to submit updated 2008 data, the values need submitted ASAP!

Feedback and Discussion on PPTRS Fugitive Data Call: Kira Darlow (SC&A Inc)

While reviewing the industrial fugitive worksheets submitted through PPTRS, HS-22 noted areas for improvement which are listed below. Feedback concerning spreadsheets should be directed to Corey Buffo and Kira Darlow.

- Document control became an issue as the spreadsheet template was updated in the fall, both in providing the most recent version of the spreadsheet to the field and in communicating data revisions during the quality control check.
 - Should the spreadsheets be gotten rid of in favor of hard-coding the data entry into PPTRS or is it preferable to maintain the ability to download and upload the files?
 - Is it important that either option provide the lbs to MTCO_{2e} calculation?
- Some spreadsheets may have been distributed for completion without the associated instructions or FAQ document. In the future, the instructions and FAQs should be embedded directly into the spreadsheets to be more accessible to the people filling out the spreadsheets.
- There was ambiguity or confusion in a few sections where the worksheets were not adequately explained:
 - Definition of “disbursements” – the Federal GHG Reporting Guidance uses the term “disbursements” to mean quantities of gas sent off-site for recycling or disposal. This differs from the common use of the term, which means a quantity distributed from the central repository and used on-site. During worksheet review, staff identified some instances when the on-site distribution definition had been used. This should be clarified for reporting in the future.
 - Double counting in the worksheets was also a concern. The overlap between the “industrial gases” tab and the “refrigerants” tab and some double counting of single component refrigerants was identified and corrected.
 - We expect that next year’s guidance will more clearly distinguish between fugitive and process emissions.

Site Presentation: Gene Iley (Western Area Power Administration)

SF₆ Program Presentation (See previous PowerPoint attachment sent to FEWG members.)

- Total SF₆ nameplate capacity at Western is increasing as older oil-filled breakers are replaced with new SF₆-filled breakers. SF₆ emissions have been declining for a decade.
- The SF₆-filled breakers vary widely in their leakiness, as evidenced by the slide examples.

- SF₆ emissions are calculated and reported for previous calendar year by individual electrician crews. Emissions are calculated by weighing the SF₆ bottles before and after each maintenance activity and summing the total amount used over the year. SF₆ used to fill new equipment is subtracted from the maintenance quantity and assumed to not have been emitted. Crews get SF₆ from the central warehouse or order new bottles independently. Each crew develops their own leak management practices.
- Western does not own a leak-detection camera. Technologies change too quickly and the equipment and training requirements are too costly to be a viable investment. Instead, Western hires contractors when they go out to check the equipment.
- WAPA actively shares best management practices with its crews, such the SF₆ maintenance trailer (described in the presentation).
 - The crews talk to each other often and the foremen in each region get together annually. Central Office does not force any specific practices on the crews, but Iley and others travel to give presentations to crews and promote certain practices. This trailer will be part of the next round of presentations – hopefully the crews will like the idea and decide to implement it in their regions.

Next FEWG meeting is Thursday, February 10, 2011 from 11am until Noon ET. Agenda will include an analysis of the SSPs received and a presentation by the Princeton Plasma Physics Lab.

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