Emission factor course questions

- 1. When a facility submits electronically, does the state agency get an email automatically how would they know? Answer: State agencies can register to receive an email notification when a facility within their jurisdiction submits a report electronically. Simply go to: cedri@epa.gov and send an email message and we'll enter you into the system (CEDRI) as a state reviewer. You will need to provide your name, who you work for and the address, and an email address. You'll then receive an email providing directions on how to register in CDX/CEDRI to sign up for email notifications. If you want to sign up for email notifications once the reports are available in WebFIRE (public side), register at this address:
 - http://cfpub.epa.gov/webfire/index.cfm?action=fire.userregister
- 2. There is generally more than one source of information for a particular source of emissions. How does WebFIRE integrate more than one source. E.g., 7 boilers. Are you taking average vs median? Answer: WebFIRE uses a statistical approach that is based on taking the mean of the available datasets. However, these statistical procedures will only use data that produces the highest quality emissions factor possible, so it is possible that not all available data will be used.
- 3. Emission factors used by EPA for NEI development are not ending up in WebFIRE. For example, the natural gas particulate emission factors have been used by EPA since the 2002 NEI. When will these be put into WebFIRE?
 - Answer: We are not certain that these will ever be incorporated into WebFIRE. In order for data to be considered for use in developing an emissions factor in WebFIRE, we require that all supporting documentation be submitted. This will need to be provided in the correct electronic format in order for us to consider using that data to update WebFIRE emissions factors.
- 4. What is the time frame for new factors being available to facilities? Answer: The time frame for new factors becoming available is a function of when the data that supports the new factors is submitted and the extent of the public comments that are received on the proposed factor. All emissions factors will be subjected to a public comment and review process. Obviously the magnitude and complexity of submitted comments will affect the length of time it will take to finalize such factors.
- 5. What type of stack tests are required to be reported electronically? Answer: In general, only stack tests that are supported by the ERT are required to be submitted electronically. A list of supported methods can be found on the ERT website: http://www.epa.gov/ttnchie1/ert/. Each regulation that requires stack tests to be submitted provides information on the specific tests that are required to be submitted electronically. A list of those regulations can also be found at the website listed above.
- 6. What is the approach for providing data for non-regulated sources? Answer: Unregulated sources can use the ERT (if the methods are supported by the ERT) and submit the data via CEDRI to WebFIRE or via mail to the EPA using the WebFIRE template

(http://www.epa.gov/ttn/chief/ert/index.html#spreadsheets) on a CD to:

US EPA Group Leader

Measurement Policy Group, OAQPS

Mail Code D243-05

RTP, NC 27711 . The data must use an EPA approved method.

- 7. How many ERT submittals will you be receiving? Answer: Currently we have received over 500 ERT submissions. Once electronic reporting requirements are integrated into all of our Part 60 and Part 63 rules, we estimate that approximately 4,000 ERT submissions will be made annually. However, this estimate is highly uncertain as many of our rules provide sources a number of options for demonstrating compliance. In addition, our regulations are being revised as part of the Risk and Technology review required by the Clean Air Act and these revisions can result in changes to testing requirements.
 - Comment: Will be helpful for states as a workload perspective to know how many are coming in for their review.
- 8. Who reviews ERT submittals, does it have to be a state? Answer: No, it is any regulatory/permitting entity.
- 9. What happens if it isn't reviewed? If multiple people review is it averaged?

 Answer: This review is optional and the same thing happens as if the data were reviewed. Specifically, all performance test reports (whether reviewed by the state or not) received from the ERT via the CEDRI portal in CDX is placed in the WebFIRE database 60 days after it was submitted to CEDRI. The difference between the two is that the quality score assigned to the data can be adjusted for data that has been reviewed, but will not be adjusted for data that has not been reviewed. The quality score assigned to each individual test can affect the overall representativeness of the factor that is calculated form that data. We would expect people who would likely complete the review would be those with emissions testing experience. With multiple reviews, we anticipate we would average all reviews together and apply that to the quality score for the test.
- 10. Do you have to have reviewer status to look at report in CEDRI? Answer: Yes, you have to have state review access to review a report in CEDRI. See the response to Question #1 for instructions on how to register to gain access to CEDRI.
- 11. In the MDL example in the emission factor guidance document (http://www.epa.gov/ttnchie1/efpac/procedures/procedures81213.pdf, Table B-2 and Table B-3) MDL example Lots of different tests. Are these tests all for the same source? All the same test? Or are they separate tests? Answer: They are separate tests but represent the same source. Because they are separate tests, even if they have the same test method, they can have different MDLs determined specifically for the specific testing procedures associated with a specific test. The MDL is the point at which one can say measurement begins, although that value is quite imprecise, and is expected to vary depending on factors such as the analytical equipment in use, it's sterile state in regard to previous sample remnants, the quality of the blank material, as well as the operational proclivities of any given operator. For all of these reasons, the MDL can be expected to vary from one test to another test.
- 12. Example had different MDLs for each test, why different MDLs for the same method? Answer: The MDL is the point at which one can say measurement begins, although that value is quite imprecise, and is expected to vary depending on factors such as the analytical equipment in use, its sterile state in regard to previous sample remnants, the quality of the blank material, as well as the operational proclivities of any given operator. For all of these reasons, the MDL can be expected to vary from one test to another test.
- 13. Does the Factor Quality Index (FQI) replace ABCD ratings? And the lower the FQI the better?

Answer: The FQI is a numerical indicator representing the derived emissions factors ability to estimate the entire national population. The Individual Test Rating (ITR) is the quality indicator assigned to individual test reports and the ITR replaces the previously used letter grade quality ratings (A through D). (see appendix D of http://www.epa.gov/ttnchie1/efpac/procedures/procedures81213.pdf) The emissions factor quality indicator (highly, moderately, or poorly representative) replaces the previously used letter grade ratings assigned to emissions factors. In general, as the overall quality of an emissions factor increases, the FQI will decrease.

- 14. Can the FQI be high for a test that has a good rating? Single high test? Answer: No. An FQI is based on the number of test reports and a composite test rating of the candidate data set. Therefore, you couldn't develop an FQI from just 1 test report. It would have to be three or more. Typically, poorly representative is assigned to emissions factors having the highest FQI rating.
- 15. Will WebFIRE do the choosing of which tests will be used for the EF for you? Answer: Yes (procedure is provided in Appendix D of http://www.epa.gov/ttnchie1/efpac/procedures/procedures81213.pdf)
- 16. Will WebFIRE factors be changing as new data come in? Answer: It is possible that existing emissions factors will change based upon new data being submitted to WebFIRE. WebFIRE will analyze the impact of new data on the existing emissions factor and we will make a decision to post a revised or new factor based on whether the data warrants the development or revision of a new factor.
- 17. How long is public review for EFs? Answer: We typically allow 60 days for comments, but consider requests for extending the comment period.
- 18. Do you just keep WebFIRE approved factors? Answer: WebFIRE contains the most current factor as well as revoked factors. WebFIRE retains all underlying test data that was reviewed to determine if an EPA emissions factor should be developed/revised, even if some of the data was not used to derive the new emissions factor. WebFIRE does not retain user derived factors.
- 19. Will WebFIRE keep back history of EPA factors? Answer: Yes. Those are revoked factors and WebFIRE will retain the underlying data that was used to develop a factor that was revoked (if it's available).
- 20. How many significant figures? Answer: 2 significant digits
- 21. What are the pollutant groups? Answer: Some examples of pollutant groups include: Greenhouse Gasses (GHG), heavy metals, inorganic compounds, dioxins, organic compounds, Oxides of Nitrogen and Sulfur, PM, VOC's. Will you have all individual HAPs? Answer: The pollutants for which we develop emissions factors will be determined by the data that is submitted.
- 22. For SO2 EF depends on types fuel that are not in the SCC? How will this affect NOX and PM. Those source characteristics would impact the EF so if you don't have things like type of fuel how can you develop an EF? Can require the fields and they'd have to be included in the test?

 Answer: WebFIRE will only develop emissions factors based on the data that is submitted. If an SCC is not available for data being submitted, the submitter can request that an SCC be assigned. If data (example: fuel type) is necessary for developing an emissions factor is not submitted or is incomplete, WebFIRE will be unable to derive a new or revised emissions factor. We envision WebFIRE will be able to return simple equations like 38S. If the equation is more

- complicated, then WebFIRE will not be able to return those values. They would remain in the respective AP-42 Chapters.
- 23. How deal with existing EFs in WebFIRE where you don't have individual test rating?

 Answer: For data incorporated into WebFIRE prior to the development of ERT, the current subjective letter-grade ratings will be converted to numerical ITR values as follows: A = 80; B = 60, C = 45, D = 30.
- 24. Will EPA be doing a pilot? How will it be launched?

 Answer: We will be requesting volunteers to help with the beta testing.
- 25. How will public see the raw test data? Answer: The raw test data will be included as attachments in the ERT access database file. All of this raw data will be available when the test report is downloaded from WebFIRE.
- 26. What will happen to the draft chapters of AP-42 (landfills, rubber tire manufacturing)? Answer: They'll stay as they are until that point in time when the supporting documentation necessary to finalize those chapters is provided.
- 27. Will they go away? Answer: No
- 28. Will there be a field that says the date updated into the WebFIRE csv? Answer: That is a good suggestion we plan to incorporate that idea into WebFIRE.
- 29. When will factors be updated? Answer: It is difficult to predict how often factors may be updated as it is a function of when data is submitted and the impact that the new data has on the existing factor. In addition, we will need to review, evaluate, and respond to public comments prior to finalizing a factor.
- 30. Would you be letting the community know that a new factor would be done?

 Answer: We will send listserv notices when we propose to revise a factor as well as when we finalize a factor. You can subscribe to receive listserv notices at the following web site:

 http://www.epa.gov/ttn/chief/listserv.html#chief
- 31. What happens when a state comes in to review a test report after the EF is completed?

 Answer: WebFIRE will consider it new data, and the data will be analyzed with all other relevant data in WebFIRE to determine the impact of the new data on the current emissions factor. If the new data changes the candidate data set in a way that warrants a revision of the emissions factor, it will be posted for public comment.
- 32. Suppose you submit a SIP that relied on EFs for its inventories. If we change factors, people could challenge SIPs. How would EPA handle challenges? Answer: The development of emissions factors is based upon available data and does not consider such implementation issues. We recommend seeking guidance from your EPA Regional Office.
- 33. Clarify 60 day public comment period vs 60 day processing period.

 Answer: Once a decision is made to propose a new or revised emissions factor, a listserv messages will be sent to all registered users announcing a 60 day period during which comments on the proposed factor can be submitted to EPA. Performance test reports submitted to the Agency from the source via the CDX through the CEDRI portal will not be listed in WebFIRE until 60 days after the data was submitted to CEDRI. This is the period in which the permitting authority has an opportunity to review the test report prior to it being released to the public.
- 34. If you have 100 runs within a specific test, is that counted once against other tests?

 Answer: Yes.

- 35. Are CEMS data able to be reported? Answer: While we are not able to accept raw CEMS data, we can accept RATAs that have been performed to calibrate the CEMS. Currently, ERT supports Performance Specifications 2, 3, and 4.
- 36. ERT not always 3 1-hour runs. What if it is a 24 hour average run? Answer: Emissions factors are typically developed on a mass of pollutant per activity level (e.g., pounds per ton of product produced). Both hourly data and daily data can be used to derive an emissions factor as long as the activity data is from a time period that is consistent with the emissions data. Care needs to be taken in applying such factors as there will be uncertainty in applying a factor based on a 24 hour test to a short term (e.g., hourly) activity rate.
- 37. Can other websites pull data from WebFIRE directly? Answer: We're working with other programs where they can either pull data from WebFIRE or the data can be parsed out to other programs (EIS, TRI, ECHO etc...).
- 38. Which Sectors will EPA be developing EFs for?

 Answer: This will be determined based on the data that is submitted to WebFIRE. Certainly source categories that are affected by rules that require electronic reporting are likely candidates for updating factors, but data can also be submitted for source categories that are not covered by rules requiring electronic reporting. Also, it is difficult to estimate what emissions factors will be updated because all factors will be proposed and subjected to public review and comment prior to finalizing them. Finally, factors will not necessarily be updated just because new data has been submitted to WebFIRE. For example if new data affirms the existing factor, we would not propose to update that factor. A list of rules that currently require E reporting are at the following link: http://www.epa.gov/ttn/chief/ert/ert_rules.html This list will be updated once new parts/subparts are promulgated.
- 39. Please provide a list of SCCs for the 25 sectors already regulated by Emissions reporting tool?

 Answer: A list of rules that currently require E reporting is posted at:

 http://www.epa.gov/ttn/chief/ert/ert_rules.html. It is important to note that not all SCCs within these categories are covered by these rules and that some rules will cover multiple SCCs. Also, we are in the process of revising the SCCs, so any list of SCCs subject to e-reporting now is likely to change in the future.
- 40. What SCCS associated with the sectors that are going to be E-reported?

 Answer: Essentially all of the point source SCCs covered by our rules which are required to be tested will eventually be required to e-report.
- 41. For non-regulated sources there may be cases in which methods have been validated but not EPA approved. Answer: While we expect data submitted electronically to be from EPA reference methods, there is no reason we could not derive a factor based on data collected with a validated method.
- 42. What about a modified test method? Could we use them? Would they be flagged? States may have approved? Answer: We could develop emissions factors based from data collected using a modified test method. This will be determined on a case by case basis. Typically, in developing an emissions factor we would not combine data collected from different test methods unless we can determine that there is no statistical difference between the data collected from a modified test method and a reference method. In the event we develop an emissions factor based on data from a modified test method, we would note that in WebFIRE.

- 43. Will MATS test data be put into WebFIRE? Answer: Currently, MATS sources are required to submit test data to ECMPS. All data submitted to ECMPS data will be shared with WebFIRE and be available for use in the development of emissions factors.
- 44. Not being able to combine SCCS in WebFIRE? This happens in AP 42 right now? How will you do this for HAPs? Answer: While we don't anticipate the need to combine data cross SCCs, WebFIRE will have the ability to compare data sets to determine if they are statistically the same dataset. In the event we find that data sets from different SCCs are statistically from the same dataset, we would be able to combine the data across SCCs. Of course, we would need to assign a new SCC to represent the combined processes.
- 45. Are we able to see the ITR scores? Answer: Yes.
- 46. Is the quality assessment the same process as approving the stack test? Answer: No. The approval of the stack test encompasses many more considerations than the quality assessment review. The quality assessment review is completed by answering a limited set of questions regarding the documentation that was submitted with the test report. Also, the quality assessment is optional.
- 47. Any new ICRs have to use the ERT to collect data? Answer: While it is unknown when ICRs will be issued and for what industries, it is likely that the ERT will be required to be used. Keep in mind that it would only be required for those methods compatible with the ERT.