CAER: Research and Development Project on SCCs and WebFIRE

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Project Description

- Scoping study for identifying problems and solutions with SCCs and WebFIRE that will meet SLT, NEI, NATA, and CEDRI/ERT requirements under the CAER project. This is to inform the development of the common emissions form.

Project Deliverables

- Survey of States, Locals, and Tribes to identify existing challenges encountered in using SCCs and WebFIRE
- A summary of the responses to the survey with suggestions for a common emissions form with regard to SCCs / WebFIRE to better support CAER

CAER SCC/WebFIRE Team Members

- Mark Wert, Mass DEP (Team Lead)
- Julia Gamas, EPA
- Ketan Patel, EPA
- Mike Ciolek, EPA
- Dennis McGeen, Michigan DEQ
- Tom Shanley, Michigan DEQ
- Dave McClard, South Carolina DHEC

Definitions

- SCCs – Source Classification Code
  - Each SCC represents a unique source category-specific process or function that emits air pollutants
  - The SCCs are used as a primary identifying data element in EPA's WebFIRE, the National Emissions Inventory (NEI), and other EPA databases.
- WebFIRE
  - EPA's online emissions factor (EF) repository, retrieval, and development tool.
  - Contains recommended EFs for criteria and toxic pollutants for industrial and non-industrial processes identified by SCC.
  - For each recommended emissions factor and individual data value, WebFIRE contains descriptive information such as industry and source category type, control device information, the pollutants emitted, and supporting documentation.

Refining the Project Scope

- Project Scope -
  - Development, implementation, and evaluation of the survey
  - Focus on the interaction between activities (SCCs) and EFs (WebFIRE primarily)
  - Project needs to be of proper scope to be completed within a few months.
  - Avoid focusing on revamping the SCC or WebFIRE system themselves and more on where SCCs and WebFIRE interact while keeping in mind the goal of having SCCs and WebFIRE support the development of a Common Emissions Form.

Project Development Team (PDT) Process – Brainstorming

- Biweekly conference calls
- Presentations from team participants
  - State QA efforts specific to SCC / Webfire
  - WebFIRE changes pending
  - Controls and the use of Controlled Emission Factors
- Draft survey questions

Project Timeline

- January 2017 – Kickoff
- Feb – March 2017 – Brainstorming (Biweekly conference calls)
- March - April 2017 – Draft Survey Created
- Early July SCC/WebFIRE Survey Finalized
  - April – July – Staged survey request to SLTs.
- Mid July - SCC / WebFIRE Survey Published
  - Hosted by ECOS
- August – September 2017 – Survey Response Evaluation / Follow up with non-responders / questions
- September 2017 - Summary / Suggestions documented

Do you face any of these issues in using SCCs in your system? (preliminary responses)

Missing “map to” value for a retired SCC	60%
Timing of SCC changes / retirements	48%
SCCs have inconsistent description for like level codes, especially for top levels	44%
Multiple SCCs (with different pollutant lists and factors) have been retired by EPA and map to the same new SCC	32%
SCCs in WebFIRE do not match those in EIS	32%
SCC with valid emission factors is retired by EPA, but the map_to SCC has no factors in WebFIRE	28%
Missing “short name” for new SCCs	20%
SCC descriptions too long	16%
Other problems	36%

Do you face any of these problems in using the emission factor data in WebFIRE in your system? (preliminary responses)

Missing emission factors for some criteria pollutants associated with an SCC	66%
Multiple factors assigned to the same SCC requiring you to select the best one for use in your system	50%
Inconsistent emissions factors for nearly identical activities (factor “shopping”)	34%
WebFIRE emission factor table using outdated SCCs	28%
Emission factors assigned to general SCCs	25%
WebFIRE emission factor table factors outdated as compared to AP-42	19%
Controlled factors being higher than uncontrolled factors	6%
Other problems	31%

Preliminary Results

- SLT participation (as of 8/7/17)
  - 24 states
  - 8 locals
  - 2 tribes
- Common themes in results

QUESTIONS?

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