# POST PHASE II R&D PROJECT STANDARDIZE CODE TABLES FOR THE COMBINED AIR EMISSIONS REPORTING SYSTEM (CAERS)

January 15, 2020

## **OVERVIEW**

## 1. Participants

Name	Affiliation	Phone Number	Email
Chun Yi Wu*	Minnesota Pollution Control Agency	651-757-2833	chun.yi.wu@state.mn.us
Julia Gamas*	U.S. EPA, OAQPS	919-541-7915	gamas.julia@epa.gov
Ben Way	Wyoming Department of Environmental Quality	307-777-7017	ben.way@wyo.gov
Jing Wang	Georgia Department of Natural Resources	404-363-7137	jing.wang@dnr.ga.gov

## 2. Project Description

The goal of this project is to identify the differences in data codes between State Local Tribal (SLT) Emissions Inventory systems and the NEI system. Two broad categories of differences in codes between SLT and federal programs can exist. One has to do with differences in nomenclature or naming conventions for similar data fields, such as a different name or number to represent the same data field, e.g. unit type. A second type of difference has to do with codes that are unique for the SLT and are thus, either missing from the NEI code lists or do not have a one to one match with the NEI codes. This project will identify both types of differences and issue recommendations for the followings:

- standardizing codes where possible,
- identify necessary crosswalks for codes that cannot be standardized,
- identify missing SLT specific codes so they can be included in the CEF.

Adoption of the recommendations for the CEF will help minimize the burden for collecting emissions data by facilities and SLTs. A previous R&D project that focused on comparing the TRI and NEI programs identified several instances of differences in the codes between both programs. This project is an extension of that work to a comparison with SLT program codes.

## 3. Project Steps

1. Identify data-elements that are essential to the CEF and potentially with more codes from SLT Els than NEI. The following five groups of codes, of great significance to NEI reporting, have potential differences with SLTs that should be identified early so that design of the CEF can factor them in:

- Unit Type Code
- Control Measure Code
- Calculation Parameter Unit of Measure
- Calculation Material Code
- Emissions Calculation Method Code.

Although varieties of pollutants have been collected in different programs, pollutant codes have been studied in previous R & D projects. The SLT Els/NEI/TRI Team developed cross walks of pollutants between NEI and TRI. The Data Model Team identified pollutants covered in SLT Els in addition to those in NEI. A direct link between the CEF and the EPA Substance Registry Services (SRS), EPA's authoritative resource for information about chemicals, biological organisms, and other substances tracked or regulated by EPA, is already planned and in design. Therefore, a research of pollutants codes will not be covered in this project.

Conduct a survey among SLTs to find whether they have additional codes than those of NEI, and/or SLT-specific naming conventions that are different from NEI's. This project uses NEI codes as starting points because NEI codes are more detailed than TRI codes.

- 2. Analyze the survey results and identify differences in coverage and naming conventions.
- 3. Issue recommendations on standardization of codes and additional code names to add to the CEF.

#### 4. Prior Work

Prior work includes three previous projects from PDT R&D Teams:

- Additional Pollutants Requested for Reporting to EIS in the Phase I of Emission Data Model project.
- NEI/TRI pollutant crosswalk in the Phase I of NEI/TRI/SLT Els project.
- NEI/TRI crosswalk for emission estimation codes and Control Measures in the Phase II of NEI/TRI/SLT Els project.

These projects can be found in the **CAER** website.

In addition, the EIS Reporting Code Tables are published in the EIS Gateway.

#### 5. Deliverables

- 1. A list of data elements for the code research project
- A report to summarize results of the survey on differences in data codes between SLT systems and the NEI system for the identified data elements.
- 3. Recommendations for standardizing the data codes are critical to the success of the CEF. The standardized codes would serve to 1) validate the concept of a CEF, 2) establish a foundational reporting structure upon which subsequent complexity can be built to meet various state needs, and 3) ensure that the CEF is usable for the largest possible number of states. The recommendations should be clear and easy to follow. Where standardization is not possible, the report will identify crosswalks that the CEF would have to include to allow for the SLT codes to be incorporated into the CEF

#### 6. Resource Needs

It may need contractor help to craft the survey questions for the states, tribes and local municipalities and to format the project reports in the way consistent with previous R & D team reports.

### 7. Expected Workload

This project will include frequent discussions in the PDT team calls and require PDT team members review documents.

## 8. Deliverables & Expected completion dates

Deliverable & Milestones	Expected Completion Date	
Finalize the list of data elements for research	Mid November 2019	
SLT code survey	December 16, 2019	
Survey report	February 17, 2020	
Recommendations for standardizing codes	April 30, 2020	