NON-EGU POINT WORKGROUP CHARGE

Draft Jan 24, 2017

General Tasks

1. Develop a scope of work for developing base and future year inventories
2. Develop a 2016 inventory
3. Develop projection approaches to 2023 and 2028, including activity forecasts and emissions controls
4. Project the 2016 inventory to 2023 and 2028
5. Develop and/or collect ancillary data needed to prepare the inventories for photochemical grid models
6. Document the process and data used to develop the base and future year inventories

Inventory Years

Base year = 2016

Projection Year(s) = 2023, 2028

Timing and Deliverables

The expected timeline for completing the inventory, with interim milestones, are as follows:

- January 2018 – 2016alpha
- Summer 2018 – 2016beta with projections to 2028
- Early 2019 – 2016v1.0 with projections to 2023 and 2028

Documentation

Data files will not be considered complete without documentation. Documentation will be based on the Inventory Collaborative Specification Sheet Format. The workgroup is charged with providing documentation for the 2016 and future year Point non-EGU and Aircraft inventory development process and data in the form of a specification sheet. Per the specification sheet template, documentation will include data sources, processing, inventory analysis, projection methods, and workgroup membership.

Workgroup Scope of Work

The Point non-EGU workgroup is charged with delivering working base and future Point non-EGU and Aircraft emission files for use in air quality modeling for each target date to include at least: (1) August 2018 and (2) January 2019. In addition, the initial documentation will be updated to reflect changes to the initial draft materials. If these are not provided by the target dates, the modeling team is directed to

proceed with the last complete working set, which, at a minimum, may be the initial EPA draft point non-EGU and aircraft files. The selected base and future Point non-EGU and Aircraft files will be quality assured by USEPA. The files will be named by the workgroup according to a naming convention devised by the 2016 leadership workgroup.

Workgroup Organization

The workgroup will be composed of state and EPA staff who have volunteered to review and as necessary improve the draft Point non-EGU and Aircraft emission input files and the draft methodologies to grow and control the inputs. The workgroup will be led by two co-leads, Tammy Manning (NC) and Caroline Farkas (EPA). This workgroup is charged with spinning off a subgroup to update the universal growth factors used across sources by SCC. A second subgroup that focuses specifically on Aircraft emissions will also be formed. As implied by the name, each workgroup member agrees to contribute substantially to the technical development, documentation and/or communication of the final work products. No contractor support is anticipated for workgroup activities. EPA staff at OAQPS are directed to provide data, information and advice to the workgroup as requested.

The workgroup and subgroups are charged with organizing themselves to meet at least monthly between January and December 2018 to coordinate their work. The workgroup will provide periodic analysis and progress briefings to the 2016 leadership workgroup. Each workgroup should plan to use their own resources to store and share files among themselves. The Point non-EGU workgroup is responsible to the 2016 leadership committee who may revise the charge as needed.

Initial materials

Initial materials include 1) draft 2016 alpha Point non-EGU and Aircraft files, 2) Draft growth and control files in Emission Modeling Framework (EMF) format; and 3) documentation. The draft 2016 alpha non-EGU files will be annual averages in FF10 format and will be for every county in the Continental United States (CONUS). The emissions will be based on the 2014NEIv2 with improvements as described in the draft documentation also provided by EPA. The emissions files will be shared by EPA for download from an ftp. In addition, files assigning spatial and temporal distribution by SCC may be provided.

Base Year Inventory Development

The workgroup may choose to analyze the initial emissions and documentation to identify outliers and anomalies. In addition, the workgroup may identify new sources of input data. Consideration may be given to temporal and spatial aspects of the data. Chemical speciation of the output may be reviewed and revised. The workgroup will be responsible for making changes to the emissions and providing adequate documentation and QA of the changes.

Ideally, consistent methods should be used to estimate emissions across the country to the extent that input data supports this. In the past, state input files have been considered of higher quality and incorporated instead of the EPA defaults, but this can lead to discontinuities in methods used in different parts of the country. With the introduction of highly resolved new datasets as described in the initial draft documentation, a higher standard may be set to accept state provided data. The workgroup should evaluate this question and develop and implement a plan to analyze, quality assure, document and incorporate state data. At a minimum, state data should result from recognized sources and the state should provide documentation of their approach and sources. The workgroup will devise and execute a plan to include such data and documentation into the reference input files.

Projection Factor and Future Year Inventory Development

A subgroup will be formed to update the universal growth factors of sources by SCC. These factors are based on indicators such as fuel usage (from the annual Energy Output from the Energy Information Agency EIA-AEO), population and business patterns, etc. Initial growth and control factors along with documentation will be provided in EMF packet format by EPA for download from an ftp for a limited timeframe. Except for the northeastern states, where defaults were exchanged for state specific growth factors, these factors will be national or regional in nature. The workgroup will examine these factors and decide on what factors should be updated and how they should be updated. The workgroup may choose to analyze the initial packets and documentation to identify outliers and anomalies. In addition, the workgroup may identify new sources of input data. Only highly reliable data sources should be considered. The workgroup will be responsible for making changes to the packets and providing adequate documentation and QA of the changes. At a minimum, the fuel usage factors from the EIA-AEO should be updated to reflect AEO 2018 when they become available in Spring, 2018.