



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

December 16, 2021

Alison Eyth
109 T.W. Alexander Drive
Mail Code: C339-02
Research Triangle Park, NC 27709
USEPA - OAQPS

RE: Ohio EPA Comments on the U.S. EPA 2016v2 emissions modeling platform

Dear Ms. Eyth:

Ohio EPA is providing the following comments regarding our review of the US EPA 2016 version 2 emissions modeling platform (2016v2 EMP).

Ohio identified the following areas of concern in the 2016v2 EMP on which our comments focus:

- Non-electricity generation stationary (non-EGU) point source emissions controls
- Future year emissions projections for various point and non-point inventory sectors
- Stationary point EGU growth rate differences between the ERTAC vs IPM models
- Ohio onroad mobile emissions projections

NonEGU Point Source Emissions Controls

In conjunction with LADCO, Ohio EPA worked to identify the highest-emitting sources and applicable control technology information for non-EGU stationary point sources in Ohio. We generated a spreadsheet (see attachment "nonegu_control_factors_survey_Ohio.xlsx") with the highest-emitting nonEGU sources in 2016. The spreadsheet includes columns with Ohio EPA input on emissions control information for each of the sources. Wherever applicable, Ohio EPA has identified base year emissions controls and potential emissions controls for non-EGU point sources in the spreadsheet.

Given that US EPA has indicated that non-EGU point sources will be included in the remedy for the states' obligations under the 2015 Ozone NAAQS Transport Rule, Ohio EPA recommends that this information be considered by U.S. EPA in any decisions on this topic. Information provided by Ohio EPA in columns R through V provide an up-to-date and accurate view of the status of controls for NOx at the Ohio facilities in this spreadsheet.

Future Year Emissions Projections for Various Sources

Ohio EPA wishes to comment on a number of SCCs for which the 2016v2 EMP projection rates are not consistent either with real-world emissions trends or regional emissions projection information more applicable for Ohio.

Concerning the ptnonipm SCCs 30501604, 30501404, 30501403, 30500706, 20400110 and 10300601, the growth factors used are, in many cases, national growth factors, or generic factors applied to many states from the Annual Energy Outlook, which are not realistic or applicable specifically to Ohio. The growth factors for np_oilgas and pt_oilgas SCCs 2310021100, 2310011600, 2310010100, 2310000220, and 20200254 which are based on projections derived from the AEO Oil and Gas Supply regions are overly broad and not in line with real-world trends and projections for Ohio. These projections are based on economic potential, whereas it is more realistic to consider actual recent activity. Additionally, the growth factors for airport sector SCC 2275020000, nonpt sector SCC 2103004002, and nonroad sector SCC 2282005022 are unrealistic compared to real-world trends and more applicable projections for Ohio, and are similarly based on economic potential without consideration of actual recent activity.

The attached spreadsheet "LADCO_EPA2016v2_Projections_Comments.xlsx" includes a column with these SCCs along with their descriptions and alternative projection information and LADCO comments on the sources of the alternative information. In each case, the growth factor provided in column J, "Updated growth factor" is a more realistic factor which could be used for Ohio.

EGU Point Source Emissions Projections

Ohio EPA, in conjunction with LADCO, has identified a number of areas where the 2016v2 EMP does not take into account planned shutdowns at facilities in Ohio, or where IPM projections are unrealistic and should not be used.

1. **Planned shutdowns:** Several facilities in Ohio have upcoming shutdowns that should be accounted for in future year projections:
 - a. Avon Lake Power Plant (ORIS ID 2836) has a planned shutdown by 4/1/2022 which has been filed with PJM.
 - b. W H Zimmer Generating Station (ORIS ID 6019) has a planned shutdown by 6/1/2022 which has been filed with PJM. This facility is also under an enforceable commitment to shut-down all coal-fired boilers by 1/1/2028.
 - c. Miami Fort Power Station (ORIS ID 2832) has an enforceable commitment to shut-down all coal-fired boilers by 1/1/2028.
 - d. W H Sammis (ORIS ID 2866) has issued a notification of plans to shut down under the reporting and recordkeeping requirements of 40 CFR 423.19 and will permanently shutdown by 12/31/2028.
2. **Cardinal Power Plant (ORIS ID 7872):** The 2023 IPM projection for Cardinal Power Plant is unreasonably elevated when compared to 2023 ERTAC projections and recent year actual emissions:

Source	Year	NOx (tons)
IPM	2023	8,919
ERTAC	2023	6,322
Actual (CAMD)	2020	4,176
Actual (CAMD)	2019	3,887
Actual (CAMD)	2018	3,843
Actual (CAMD)	2017	3,893
Actual (CAMD)	2016	3,763

Ohio Onroad Emissions

Ohio EPA wishes to comment on the Onroad Activity Data used for MOVES3 in the 2016v2 EMP for Source Type 62: Combination Long-haul Trucks and Source Type 32: Light Commercial Trucks. The starting point for Ohio activity data in the 2016v2 EMP is the U.S. EPA default dataset starting with the 2017 NEI activity data. In that dataset, U.S. EPA default age distributions were used in place of Ohio-submitted data for these source types. Largely, Ohio EPA agrees with that decision and agrees with the reasons for U.S. EPA default age distributions being used for those categories. However, there are significant differences in these age distributions and Ohio EPA is concerned with the impacts these may have on the 2016v2 EMP and future actions relying on the 2016v2 EMP. For example, Figure 1 shows the age distributions for Combination Long-haul Trucks, and the nearly opposite patterns in these trends. Ohio EPA wishes to draw attention to these differences and recommends careful consideration in assessing which is most appropriate.

2017 rep county = 39035. Ohio: Cuyahoga

Source Type 62: Combination Long-haul Truck

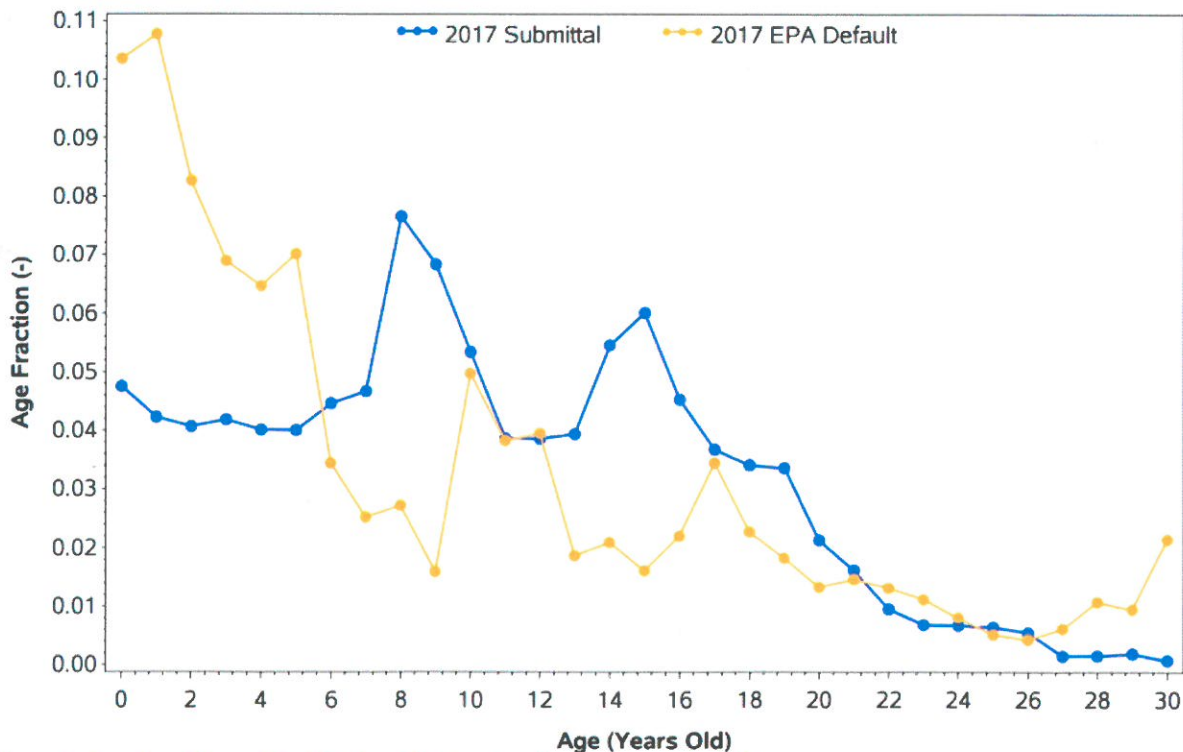


Figure 1: Cuyahoga County EPA default v Ohio Age Distribution, Source Type 62

Figure 1 is fairly representative of most Ohio counties in terms of the pattern it shows for Combination Long-haul Truck age distributions. Ohio EPA also has similar concerns for Light Commercial Trucks.

Ohio EPA thanks you for this opportunity to comment.

Sincerely,



Robert Hodanbosi
Chief, Division of Air Pollution Control, Ohio EPA

Enclosure: nonegu_control_factors_survey_Ohio.xlsx,
LADCO_EPA2016v2_Projections_Comments.xlsx

cc:

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Jessica Kuenzli, Manager, Ohio EPA DAPC
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