

Base Year Emissions Inventories – Proposed Schedule & Responsibilities (2015 Ozone NAAQS)

Background

EPA designated on August 3, 2018 the Washington region as a marginal nonattainment area for the 2015 ozone NAAQS (70 ppb). Subsequently, EPA Acting Administrator signed the final rule on November 7, 2018 (yet to be published in federal register) for the implementation of the above NAAQS. As part of the requirements for the marginal nonattainment area, the region needs to submit to EPA by August 3, 2020 a comprehensive base year emissions inventory for point, area, nonroad, and on-road sources.

Options for Base Year

Based on the above pre-FR version of the final implementation rule, EPA requires that the base year shall be selected consistent with the baseline year for the RFP plan as required by §51.1310(b) (page 141). Also, the emissions inventory submittal requirements for the 2015 ozone NAAQS implementation rule related to criteria and timing are the same as the ones specified in the 2008 ozone NAAQS implementation rule. The 2008 rule clearly mentions that the EPA expects that the base year inventory for the nonattainment area will serve as the RFP plan baseline (page 12290). According to §51.1310(b) of the 2015 rule, the RFP baseline emissions inventory year shall be the most recent calendar year for which a complete triennial inventory is required to be submitted to EPA. Alternatively, states may also use another year for RFP, which corresponds with the year of the effective date of the nonattainment designation (page 137). Therefore, EPA seems to be providing two options for the selection of the base year for the emissions inventory. The first option is the year 2017 as this is the year for which the triennial National Emissions Inventory (NEI) is required to be submitted in 2018 (year of the nonattainment designation for the Washington region). The second option is the year 2018, the year of nonattainment designation.

The District of Columbia, Maryland and Virginia have been working on developing emissions inventory for 2017 for the last few months for submitting it to EPA as part of the NEI effort. Therefore, significant information is available for emission inventories for this particular year. In contrast, not much information is available for 2018 as of now. Given the deadline for the submittal of the base year emission inventory for the 2015 ozone NAAQS (August 3, 2020) and the availability of the information, the choice of 2017 seems more favorable compared to 2018.

The District of Columbia, Maryland and Virginia have also been working on developing emissions inventories for 2016 as part of the EPA's Air Emissions Modeling Platform. An Alpha version of emissions inventories is complete for this effort as of now. However, based on the final 2015 ozone NAAQS implementation rule, it is not clear if this can qualify as a base year.

Time Period of Emissions & Corresponding Pollutants

The final 2015 ozone NAAQS implementation rule requires emission inventory to be submitted for an average ozone season work weekday. It specifically mentions VOC and NO_x inventories to be provided. However, in the past (e.g., base year for the 2008 ozone NAAQS), EPA required the Washington region to submit both annual and the ozone season day inventories. Following is the list of pollutants that were submitted for the base year emission inventories for the 2008 ozone NAAQS. This list would need to be conformed with EPA for the 2015 ozone NAAQS.

Annual: VOC, NO_x, CO, PM_{2.5}-Pri, SO₂, NH₃

Ozone Season Day: VOC, NO_x, CO

Following two tables provide schedules and responsible entities for developing emissions inventories for 2017 and 2016 (provided here in case this can also qualify as the base year).

Table A - Preliminary Timeline - Base Year 2017 Emissions Inventory (2015 Ozone Standard)

	2019									2020						
	Jan	Feb	Mar	Apr	May-Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	
Point Source		States convert annual 2017 NEI emissions to ozone season day (OSD)														
Area/MAR Source						States convert annual 2011 NEI emissions to ozone season day (OSD)			TAC recommends MWAQC for PC&H (Feb 12); MWAQC approves for PC&H (Feb 27)	States post notices for PC&H	PC&H Period ends	TAC approves response to comments (May 7); MWAQC approves the final document (May 22)		MWAQC approves the final document if process is delayed (July 24)		
MOVES Model Nonroad Source	States provide inputs	MWAQC staff develops MOVES model nonroad inventories														
MOVES Model On-road Source	States & MWAQC staff develop & provide MOVES inputs to TPB	TPB staff develops MOVES model on-road inventories, MWAQC staff														
Documentation	MWAQC staff develops documentation															

MAR = Marine, Air, Rail

MOVES2014b or latest version available at the time of emission development to be used for developing nonroad model and on-road source emissions.

Table B - Preliminary Timeline - Base Year 2016 Emissions Inventory (2015 Ozone Standard)

	2019							2020						
	Jan	Feb	Mar	Apr	May-Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	
Point Source	States convert annual 2016 alpha emissions (Air Emission Modeling Platform) emissions to ozone season day (OSD) emissions													
Area/MAR Source	States convert annual 2016 alpha emissions (Air Emission Modeling Platform) to ozone season day (OSD) emissions using seasonal adj factors							TAC recommends MWAQC for PC&H (Feb 12); MWAQC approves for PC&H (Feb 27)	States post notices for PC&H	PC&H Period ends	TAC approves response to comments (May 7); MWAQC approves the final document (May 22)			
MOVES Model Nonroad Source	States develop fuel inputs, MWAQC staff develops met inputs for MOVES	MWAQC staff develops MOVES model nonroad inventories												
MOVES Model On-road Source	States develop fuel and I/M program inputs, MWAQC staff develops met inputs for MOVES & provide them to TPB staff	TPB staff develops MOVES model on-road inventories, MWAQC staff reviews												
Documentation	MWAQC staff develops documentation													

MAR = Marine, Air, Rail

MOVES2014b or latest version available at the time of emission development to be used for developing nonroad model and on-road source emissions.