

Base Year Emissions Inventories – Base Year, Time Period, Pollutants, and Proposed Schedule

(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 published the final rule on December 6, 2018 (effective date February 4, 2019) 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 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. These two options were also recently confirmed by EPA R3 on a call with VDEQ and a written statement is awaited.

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.

Time Period of Emissions & Corresponding Pollutants

The final 2015 ozone NAAQS implementation rule requires the base year emission inventory to be submitted for an average ozone season work weekday. It specifically mentions VOC and NO_x inventories to be provided. Based on the recent contact DOEE had with EPA R3, it seems these are the only requirements. A written response is awaited from EPA to confirm these requirements. CO emission will also be required for the base year in case the Washington region needs to submit a redesignation request and a maintenance plan for the 2015 ozone NAAQS in the future.

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.

Ozone Season Day: VOC, NO_x, CO

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

The table below provides the preliminary schedule for developing the base year emissions inventories for 2017.

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.