

Attachment

The following information is being provided for your use in completing and submitting the four-factor analysis, including helpful links found on the second page of this attachment:

- a. Use EPA’s Guidance on Regional Haze SIP Implementation Plans for the Second Implementation Period. The analysis will focus on the following sections:

<u>EPA Guidance Section</u>	<u>Title</u>
II.B.4	Step 4: Characterization of factors for emission control measures
II.B.4(a)	Determining which emission control measures to consider
II.B.4(b)	Selection of emissions information for characterizing emission-related factors
II.B.4(c)	Characterizing the cost of compliance (statutory factor 1)
II.B.4(d)	Characterizing the time necessary for compliance (statutory factor 2)
II.B.4(e)	Characterizing energy and non-air environmental impacts (statutory factor 3)
II.B.4(f)	Characterizing remaining useful life of the source (statutory factor 4)

- b. Evaluate control measures for SO₂ and NO_x using the four factors in Section 169A(g)(1) of the Clean Air Act and 40 Code of Federal Regulations (CFR) § 51.308(f)(2)(i) of the Regional Haze Rule.
- c. Use calendar year 2017 emissions for non-electric generating units (non-EGUs) and 2019 emissions for electric generating unit (EGUs) as a baseline to evaluate cost and feasibility of additional control measures for the following units:

<u>Unit</u>	<u>Unit Description</u>
Source 031	Boiler Unit 1
Source 032	Boiler Unit 2

- d. Identify and consider all available control measures that are technically feasible for SO₂ and NO_x. A top-down approach shall be used to analyze multiple control options to select the most effective and reasonable control measure in light of the costs of compliance (in 2019 \$ / ton). A control measure shall only be rejected when one of the four factors makes it unreasonable to require the control. To be clear, all four factors need to be analyzed to be considered a complete analysis.
- e. Consider emission reductions due to ongoing air pollution programs, fuel conversions and source retirement and replacement schedules for control measure options pursuant to 40 CFR § 51.308(f)(2)(iv) of the Regional Haze Rule and section II.B.4 of the EPA guidance.

Please be mindful that these emission reductions must be due to federally enforceable measures (i.e. Included in a Title-V permit, federally enforceable consent agreement, etc.)

- f. All information needs to be clearly and thoroughly documented and justified, especially when varying from EPA’s Guidance or Control Cost Manual. References and appendices should be submitted with the final four-factor analysis.

Helpful Links

2017 MANE-VU “Ask”

<https://otcair.org/MANEVU/Upload/Publication/Formal%20Actions/MANE-VU%20Intra-Regional%20Ask%20Final%208-25-2017.pdf>

2020 National Park Service Q/d Analysis – PA Facilities

<http://files.dep.state.pa.us/Air/AirQuality/AQPortalFiles/Pollutants/Haze/NPS%20Q%20over%20d%20analysis%20-%20PA%20facilities%202020.pdf>

EPA Guidance on Regional Haze State Implementation Plans for the Second Planning Period

https://www.epa.gov/sites/production/files/2019-08/documents/8-20-2019_-_regional_haze_guidance_final_guidance.pdf

EPA Control Cost Manual

<https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-reports-and-guidance-air-pollution#cost%20manual>

EPA Cost Analysis Models/Tools for Air Pollution Regulations

<https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-analysis-modelstools-air-pollution#cost%20manual>

EPA RACT/BACT/LAER Clearinghouse (RBLC) Basic Information

<https://www.epa.gov/catc/ractbactlaer-clearinghouse-rblc-basic-information>

EPA Visibility and Regional Haze

<https://www.epa.gov/visibility>

EPA Amendments to the Regional Haze Rule – January 2017

<https://www.govinfo.gov/content/pkg/FR-2017-01-10/pdf/2017-00268.pdf>

EPA Regional Haze Rule – July 1999

<https://www.govinfo.gov/content/pkg/FR-1999-07-01/pdf/99-13941.pdf>

Introduction to Visibility

<https://www.epa.gov/sites/production/files/2016-07/documents/introvis.pdf>

Pennsylvania DEP – Regional Haze

<https://www.dep.pa.gov/Business/Air/BAQ/PollutantTopics/Pages/Haze.aspx>

EPA Regional Haze Story Map

<https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=e4dbe2263e1f49fb849af1c73a04e2f2>