UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region8

Ref: 8ARD-QP

Mr. James L. Semerad, Director
Division of Air Quality
North Dakota Department of Health
918 East Divide Avenue
Bismarck, North Dakota 58501

Dear Mr. Semerad:

Thank you for the opportunity to provide comments on the North Dakota SO_2 Data Requirements Rule (DRR) ongoing emissions report. We have provided recommendations, outlined in the enclosure, to assist the state in meeting the reporting requirements of the DRR. If you have any questions, please contact me at 303-312-6416, or your staff may contact Adam Clark, of my staff, at 303-312-7104.

Sincerely,

8/13/2019

X Carl Daly

Signed by: CARL DALY

Carl Daly
Acting Director
Air and Radiation Division

Enclosure

ENCLOSURE

EPA Region 8 Comments on North Dakota SO2 DRR Ongoing Data Report

1. Analysis Area: The report includes an analysis of the changes in annual SO_2 emissions for each source modeled for the 2010 SO_2 National Ambient Air Quality Standards (NAAQS) designations but does not include information about the sources modeled together for each area. The DRR requires that annual reports document the annual SO_2 emissions of every applicable source in each area where modeling of actual SO_2 emissions was the basis of an attainment designation. Therefore, the EPA recommends that the report include a separate analysis for each individual designation area, taking into account all the modeled sources (primary and background) modeled at actual emissions that contributed to the air quality of the area. For the state's convenience, the sources modeled that formed the basis for all the modeled attainment/unclassifiable designations are listed below.

    a. McLean County/Eastern Mercer County Area – Coal Creek Station, Leland Olds Station (modeled at allowable emissions), and Stanton Station
    b. Central Mercer County Area – Coyote Station
    c. Northern Mercer County Area - Coyote Station, Antelope Valley Station, and Great Plains Synfuels Plant
    d. Oliver County – Coal Creek Station, Coyote Station, Leland Olds Station (modeled at allowable emissions), Milton R. Young Station, R.M. Heskett Station, and Stanton Station
    e. Burleigh County and Morton County ("Bismarck Area") – R.M. Heskett Station, Mandan Refinery

2. Designation Analysis Years: The report states that the sources were modeled based on actual emissions from 2012-2014. However, this is only true for the McLean County/Eastern Mercer County Area and the Central Mercer County Area, which were designated as part of a final action published July 12, 2016 (81 FR 45039). For all other areas, which were designated in a final action published January 9, 2018 (83 FR 1098), the emission years modeled were 2013-2015. For areas modeled using 2013-2015 actual emissions, the EPA recommends that the report assess changes from the modeled years to the annual emissions of all subsequent years (i.e., 2016-2018) that have not yet been analyzed. For the areas where modeling was based on 2012-2014 emissions, the intervening years following those modeled (2015-2017) were already analyzed in the state's SO_2 DRR report submitted to EPA Region 8 on July 31, 2018, and it is not necessary to address them again. However, the EPA recommends that the state, in addition to its comparison of the modeled years to the most recent emissions year (2018), also compare 2018 emissions with the previous year (2017) for areas modeled using 2012-2014 emissions, per the DRR.[1] The EPA also recommends correcting the references to the emission time periods to align with the years used in the modeling for each designation area.

[1] Per 40 CFR 51.1205(b), "The Air Agency shall submit an annual report… that documents the annual SO_2 emissions of each

3. Explanation of Emissions Increases: Consistent with the DRR, as the report notes on page two, the state should provide an assessment of the reason(s) for any emissions increase. Regarding the Coyote Station, the report notes that "the increase in emissions is attributed to an increase in sulfur in the coal combusted and an increase in production." The EPA recommends that the state add further explanation (including data where appropriate) to support this statement.

4. Modeled Design Values: Table One of the report indicates it provides 2012-2014 modeled design values for each source. However, the values presented in the report do not align with all of the EPA's modeled design values that were the basis of the 2010 SO_2 NAAQS designations. This misalignment is likely due to the assessment of sources individually rather than as designated areas. The EPA recommends that the report change the modeled design values where needed to reflect the levels modeled as the basis for these designations.[2] For the state's convenience, these values are provided below. The EPA also recommends that, based on edits to the modeled 99th percentile values, the state review the percentage changes in emissions listed in Table One and make changes as needed.

    a. McLean County/Eastern Mercer County Area – 167.3 $\mu g/m^3$, 85.2% of the 2010 SO_2 NAAQS
    b. Central Mercer County Area – 115.88 $\mu g/m^3$, 59% of the 2010 SO_2 NAAQS
    c. Northern Mercer County Area – 136.6 $\mu g/m^3$, 69.5% of the 2010 SO_2 NAAQS
    d. Oliver County – 77.8 $\mu g/m^3$, 39.6% of the 2010 SO_2 NAAQS
    e. Burleigh County and Morton County – 156.3 $\mu g/m^3$, 79.6% of the 2010 SO_2 NAAQS

applicable source in each such area and provides an assessment of the cause of any emissions increase from the previous year."

[2] The Technical Support Documents (TSDs) for these designations are available on regulations.gov by entering document ID EPA-HQ-OAR-2017-0003-0046 (https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0003-0046), and document ID EPA-HQ-OAR-2014-0464-0394 (https://www.regulations.gov/document?D=EPA-HQ-OAR-2014-0464-0394).