THE NAVAJO NATION RUSSELL BEGAYE - PRESIDENT
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Navajo Nation Environmental Protection Agency – Air & Toxics Department
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January 12, 2017

Elizabeth Adams
Acting Director, Air Division
U.S. EPA REGION 9
75 Hawthorne Street
Mail Code: ORA-1
San Francisco, CA 94105

RE: Dispersion Modeling Analysis Results for Navajo Generating Station for Sulfur Dioxide on the Navajo Nation – Implementation of Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide Primary National Ambient Air Quality Standard

Dear Ms. Adams:

Pursuant to the United States Environmental Protection Agency's (U.S. EPA) Data Requirements Rule[1] ("DRR"), the Navajo Nation Environmental Protection Agency ("NNEPA"), Air & Toxics Department ("ATD"), Air Quality Control Program ("AQCP") is submitting a summary of the Navajo Generating Station ("NGS") SO_2 DRR modeling protocol and analysis results to demonstrate compliance with the 2010 1-Hour Sulfur Dioxide ("SO_2") Primary National Ambient Air Quality Standard ("NAAQS").

NNEPA submitted a draft modeling protocol to U.S. EPA Region 9 on June 6, 2016 in which NNEPA had determined that the best approach to characterize air quality surrounding Navajo Generating Station was to reference existing near-field dispersion modeling of NGS, conducted as part of the 2015 Navajo Generating Station – Kayenta Mine Complex Environmental Impact Statement ("2015 NGS EIS") study[2]. NNEPA is including this summary of dispersion modeling analysis as part of the approach in defining designation areas.

The recommended dispersion model for modeling SO_2 designations is the American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) modeling system. This AERMOD dispersion modeling analysis was conducted using actual SO_2

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[1] "Data Requirements Rule for the 2010 1-Hour Sulfur Dioxide (SO_2) Primary National Ambient Air Quality Standards (NAAQS); Final Rule," 80 *Federal Register* 51052, August 21, 2015.
[2] "Near-Field Air Dispersion and Deposition Modeling Report for Navajo Generating Station Environmental Impact Statement, Draft", *Ramboll Environ*, November 2015, Novato, CA.

emissions from NGS for the 2008-2012 period. Emissions and meteorological data used in this analysis differs from the U.S. EPA's guidance (February 2016 *Draft SO_2 NAAQS Designations Modeling Technical Assistance Document*, herein referred to as "Modeling TAD") of modeling the most recent 3 years of available actual emissions and meteorological data. However, both power plant sources on the Navajo Nation have started closing down coal-burning units and reducing the power being generated. Existing consent decrees also create federally enforceable limits which require a considerable reduction in SO_2 emissions from these sources using advanced control technologies. Therefore, this modeling analysis generated based on full capacity power generation and without advanced controls provides far more conservative results than those that will be generated by new runs of the AERMOD model using more current emissions data.

The NNEPA provides the enclosed summary of modeling protocol and analysis results and a digital copy of the input and output files to U.S. EPA Region 9 in support of compliance with the 1-Hour SO_2 Primary NAAQS and attainment designation of the NGS source area.

If you have any questions, please contact Mr. Michael King, Senior Environmental Specialist, at (505) 368-1046 or mzking@navajo-nsn.gov. You may also contact Ms. Eugenia Quintana, Environmental Department Manager, at (928) 871-7800.

Sincerely,

Dr. Donald Benn
Executive Director
Navajo Nation Environmental Protection Agency

Enclosures

xc: Gwen Yoshimura, U.S. EPA Air Planning Office
Anita Lee, U.S. EPA Air Division