

**DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL  
DIVISION OF AIR AND WASTE MANAGEMENT**

Statutory Authority: 7 Delaware Code, Chapter 60 (7 Del.C. Ch. 60)

**GENERAL NOTICE**

**State Implementation Plan (SIP): Regional Haze 5-Year Periodic Report  
SAN# 2013-09**

**1. TITLE OF STATE IMPLEMENTATION PLAN (SIP) REVISION:**

Regional Haze 5-Year Periodic Report (proposed)

**2. BRIEF SYNOPSIS OF THE SUBJECT, SUBSTANCE AND ISSUES:**

Regional haze is defined as visibility impairment that is produced by a multitude of sources and activities which emit fine particles and their precursors, and which are located across a broad geographic area. These emissions are transported over large regions, including national parks, forests and wilderness areas ("Class I" federal areas). The Clean Air Act Mandates protection of visibility, especially in Class I areas. States were required to submit a SIP to the U.S. Environmental Protection Agency (EPA) that defined a specific plan for complying with the federal Regional Haze Rule (RHR). On September 25, 2008 (and later approved by EPA in August, 2011) Delaware submitted a SIP to EPA to address visibility impairment in the only nearby Class I area for which Delaware significantly impacted, i.e., the Brigantine Wilderness Area located in Brigantine, NJ. Five years after submittal of the initial regional haze SIP, states are required to evaluate the progress towards the reasonable progress goals for each Class I area for which the state significantly impacts. This proposed revision to the SIP serves as Delaware's 5-year periodic review per Section 308(g) of the RHR.

Pursuant to Clean Air Act section 169A(d), the DAQ is also notifying the public that the responsible Federal Land Managers (FLM) have been consulted. DAQ is making the FLM conclusions/recommendations, and the DAQ responses available to the public, as part of the supporting documentation and public hearing process. Upon completion of the public notice period, and after addressing any written comments, the DAQ will submit the final documentation to the EPA as a revision to Delaware's SIP.

In summary, DAQ proposes to submit a negative declaration to EPA specifying that the Delaware 2008 Regional Haze SIP is sufficient for meeting the requirements outlined in the RHR. The DAQ also proposes to conclude that no additional controls are necessary, based on this first Delaware five year progress report.

**3. POSSIBLE TERMS OF THE AGENCY ACTION:**

None

**4. STATUTORY BASIS OR LEGAL AUTHORITY TO ACT:**

7 Delaware Code, Chapter 60, Environmental Control

**5. OTHER REGULATIONS THAT MAY BE AFFECTED BY THE PROPOSAL:**

None

**6. NOTICE OF PUBLIC COMMENT:**

Interested parties may submit comments by September 6, 2013 in writing to Jack Sipple, Division of Air Quality, Blue Hen Corporate Center, 655 S. Bay Road, Suite 5N, Dover, DE 19901, and/or statements and testimony may be presented either orally or in writing at the public hearing to be held on Thursday, August 22, 2013 beginning at 6:00 pm, in DNREC's Auditorium, R & R Building, 89 Kings Hwy, Dover, DE 19901. The SIP may also be viewed on DNREC's website at:

<http://www.dnrec.delaware.gov/Air/Pages/Visibility-SIP-5-yr-Progress-Report.aspx>

**7. PREPARED BY:**

Jack Sipple (302) 739-9402 July 11, 2013 Email address: [john.sipple@state.de.us](mailto:john.sipple@state.de.us)

**Delaware State Implementation Plan Revision:**

**Regional Haze 5-Year Periodic Report**

**Progress Towards the Reasonable Progress Goals for Visibility In Class I Federal Areas And Determination of Adequacy of Existing Implementation Plan**

**PROPOSED**

July 15, 2013

## EXECUTIVE SUMMARY

Regional haze is defined as visibility impairment that is produced by a multitude of sources and activities which emit fine particles and their precursors, and which are located across a broad geographic area. These emissions are transported over large regions and can obscure vistas integral to the value of our national parks, forests and wilderness areas ("Class I" federal areas). The Clean Air Act mandates requirements to protect visibility, especially in Class I Federal areas. In 1999, the U.S. Environmental Protection Agency (EPA) finalized the Regional Haze Rule (RHR) to address visibility impairment at Class I areas.

The RHR calls for state, tribal, regional planning organizations (RPO) and federal agencies to work together to improve visibility in 156 Class I areas. Specifically, states are required to develop a series of state implementation plans (SIP) to reduce visibility impairment with the express intent that by 2064, the visibility in all Class I areas will be returned to natural conditions. The first such SIP must establish interim goals and emissions reduction strategies for 2018, based on trends from various sources including point, area, and mobile (both onroad and nonroad) source emissions, biogenic, and wildfire and agricultural emissions.

Visibility assessments prepared by the RPO: Mid-Atlantic/Northeast Visibility Union (MANE-VU) determined that for the initial Regional Haze SIPs, ammonium sulfate was the largest contributor to visibility impairment at Class I areas and reduction of sulfur dioxide (SO<sub>2</sub>) emissions is the most effective means of reducing ammonium sulfate. As such, the majority of the focus with regard to existing and planned emission controls pertains to the largest sources of SO<sub>2</sub> emissions. These sources consist of electric generating units (EGUs) and large industrial boilers. Hence, MANE-VU's long term strategy to reduce SO<sub>2</sub> to improve visibility prior to 2018 includes:

- Timely implementation of Best Available Retrofit Technology,
- Reducing the sulfur content of fuel oil,
- Reducing sulfur dioxide emissions from electric power plants,
- Seeking to reduce emissions outside MANE-VU that impair visibility in our region, and
- Continuing to evaluate other measures such as energy efficiency, alternative clean fuels, and measures to reduce emissions from wood and coal combustion.

On September 25, 2008 Delaware submitted it's "Delaware Visibility State Implementation Plan" (regional haze SIP) to EPA to comply with the 2018 MANE-VU strategy. Many of the EGUs and large industrial boilers within Delaware have committed to and have installed controls through a number of mechanisms, including Delaware's multi-pollutant regulation, federally enforceable permits, and state and federal consent agreements. Reductions associated with many of these mechanisms were used to estimate the 2018 visibility improvements at the Brigantine Wilderness Class I area in New Jersey. However, since Delaware submitted its initial regional haze SIP in 2008, additional regulations and actions have been imposed which will reduce visibility impairing pollutants. Moreover, as recently as the summer of 2012, several large EGUs have announced plans to either shutdown sources or curtail emissions by converting to natural gas, leading to even more significant reductions in SO<sub>2</sub> emissions. As this report will show, these additional mandates will help ensure that the reasonable progress goals are attained well before 2018.

Section 308(g) of the RHR also requires each state to report on progress in improving visibility five (5) years after submitting the initial SIP. Known as "5-Year Progress Reports" (Report), they must be in the form of SIP revisions that comply with the procedural requirements of the United States Clean Air Act, as amended. This Report fulfills the requirements of 40 CFR 51.308(g) requiring periodic reports evaluating progress in implementing the measures included in Delaware's 2008 SIP. This document also fulfills the requirements of 40 CFR Part 51.308(h), 308(i), and 40 CFR 51 Parts 102 and 103.

It is for these reasons that the Delaware Department of Natural Resources and Environmental Control (DNREC) submits a negative declaration to EPA, specifying that the Delaware 2008 Visibility State Implementation Plan is sufficient for meeting the requirements outlined in the RHR. Furthermore, no additional controls are necessary, based on this first Report.

**17 DE Reg. 248 (08/01/13)**