

## STATE OF DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

OFFICE OF THE SECRETARY

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## Secretary's Order No 2014-A-0014

APPROVAL OF REVISION TO THE DELAWARE STATE IMPLEMENTATION RE: PLAN FOR MEETING REASONABLY AVAILABLE CONTROL TECHNOLOGY REQUIREMENTS UNDER THE FEDERAL CLEAN AIR ACT

> Date of Issuance: July 18, 2014 Effective Date: July 18, 2014

This Order of the Secretary of the Department of Natural Resources and Environmental Control (Department) approves a proposed revision to the Delaware State Implementation Plan (SIP), which is issued as a state-wide air management plan under 29 Del. C. Section 6010.

## **Background**

The United States Environmental Protection Agency (EPA) delegated authority to the Department to administer certain parts of the federal Clean Air Act (CAA) authority, including the establishment and management of a SIP. Delaware's SIP sets forth the methods for Delaware to attain and maintain air quality that conforms to EPA's primary and secondary National Ambient Air Quality Standards (NAAQS). The SIP sets forth the regulations, source specific requirements, and non-regulatory items, such as plans and emission inventories that will allow Delaware to meet the CAA standards. The current revision is to meet the requirements of the 2008 Ozone NAAQS, which established a ground-level ozone standard of 0.075 parts per million (ppm) in order to protect the environment and public health from the

risk of excessive ozone levels. EPA in May 2012 designated New Castle County and Sussex County as nonattainment of the 2008 ground-level ozone NAAQS, which under Section 182(b)(2) of the CAA requires Delaware to submit to EPA by July 2014 a SIP revision that demonstrates that Delaware has implemented the necessary Reasonably Available Control Technology (RACT) requirements to stationary emission sources of precursors to ground-level ozone, i.e., volatile organic compounds (VOC) and oxides of nitrogen (NOx).

The Department's Division of Air Quality (DAQ) prepared the proposed SIP revision, which has been available to the public since April 17, 2014 and published in the May 1, 2014 issue of the Delaware Register of Regulations, as well as legal notices in the April 27, 2014 Sunday News Journal and the Delaware State News. These public notices also provided notice of a June 2, 2014 public hearing at the Department's Dover offices. The public was afforded an additional ten days for written public comments. The Department's presiding hearing officer prepared the attached Report, which recommends approval of the SIP revision as prepared by DAQ. The Report is adopted to the extent it is consistent with this Order.

## **Findings and Reasons**

The Department finds that the record supports approval of the SIP revision, which will amend the SIP to reflect changes in the RACT requirements. The changes updates the implementation of regulations to control the emissions of VOCs and NOx, and establishes NOx limits for two sources of NOx emissions at the Delaware City Refinery Company LP's (DCRC) petroleum refinery, namely, the fluidized catalytic cracking unit (FCCU) and the fluid coking unit (FCU). The SIP revision also determines that the RACT control measures satisfies the CAA requirements for the 50 ton per year (and above) major VOC sources and for the 100 ton per year (and above) for the major NOx sources. While 25-50 TPY VOC

sources and 25-100 TPY NO<sub>X</sub> sources are not specifically addressed in this SIP document, they remain subject to the 1-hour RACT requirements under Delaware Regulations and under the "anti-backsliding" provisions of the EPA 8-hour ozone implementation rule. Finally, the SIP revision demonstrates that Delaware has promulgated the necessary regulations that will meet current RACT levels and the 2008 ozone NAAQS.

The only public comments received on the SIP revision were from DCRC, at the hearing, which objected to the SIP's determination of RACT-level limits for its FCU and FCCU equipment.

Four of DCRC's comments were directed at claiming that the limits presented for FCU and FCCU operation were not RACT. DAQ, in its Technical Response Memorandum (TRM), did not agree with DCRC's comments. DAQ's proposed SIP revised relied on then available information from extensive testing of the FCU and FCCU using installed pollution abatement equipment for the FCU and FCCU. The proposed SIP revision for the FCU and FCCU was consistent with EPA's definition of RACT because this equipment is installed and the operating conditions determined pursuant with the terms of a 2001 consent decree that continues to control aspects of the Department's regulation of the refinery's air emissions.. On May 21, 2014 EPA issued its determination on what the FCU and FCCU NOx limits would be, and DCRC is subject to these limits in the near future. Accordingly, DAQ at the hearing revised the SIP to reflect the EPA determination. t

The DAQ used limits based upon the existing controls installed on the FCU and FCCU, which were the subject of an extensive 18 month long optimization studies, which DAQ reviewed. These studies, along with DAQ's expert opinion, provide ample justification for the FCU and FCCU having RACT limits established in Section 3.3 of the proposed SIP

SIP revision. DAQ properly determined the two units' emission rates for purposes of the RACT's SIP revision. Without question, the two units' limits, as determined by EPA in its May 21, 2014 letters and accepted by DAQ's experts, meet the definition of RACT, and, hence, should be reflected in the SIP. At the hearing, DAQ adopted the EPA determined NOx limits for the FCU and FCCU consistent with its use as the RACT in the SIP. This change was appropriate and necessary to make considering that EPA will review the SIP revision approved by this Order. The record remained open for public comment and none was received on the change, which was modest from the originally proposed SIP revision. The public had ample opportunity to comment following the hearing of this change, and DCRC commented, as discussed above. In surn, the EPA change should be reflected in the SIP revision and the Department properly reflected the change in its SIP revision.

The Department finds that the SIP revision should be adopted and submitted to EPA for approval. Approval of the SIP revision in final is supported by the record and consistent with the Department's delegated duties under the federal Clean Air Act. In conclusion, the following findings and conclusions are entered:

- 1. The Department finds the proposed SIP revision is supported by the record and should be adopted as a final SIP revision;
- 2. The Department finds that the SIP revision should be submitted to EPA for EPA's review in order that the SIP may be approved by EPA; and
- The Department shall publish notice of this Order in the same manner as the notice of the proposed SIP revision.

David S. Small Secretary