



August 26, 2014

David Shaw, Director
Division of Air Resources
New York State Department of Environmental Conservation (NYSDEC)
625 Broadway
Albany, NY 12233-3250

***Re: Proposed Reasonably Available Control Technology Demonstration for
New York State for the 2008 8-Hour Ozone National Ambient Air Quality Standard***

Dear Mr. Shaw:

Thank you for the opportunity to comment on your proposed State Implementation Plan (SIP) revision concerning the Reasonably Available Control Technology (RACT) requirement for the 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS). As the head of the Bureau of Air Management at the Connecticut Department of Energy and Environmental Protection, I have recently directed the preparation of a RACT plan in Connecticut, which we submitted to the U.S. Environmental Protection Agency (EPA) Region 1 in July 2014. Based on that experience, I appreciate the effort that your Division applied in creating your RACT proposal, and I offer a few comments based on our experience and Connecticut's situation.

As you know well based on our joint efforts to address long standing ozone nonattainment issues in the multistate nonattainment area that includes southwestern Connecticut, northern New Jersey and New York City/Long Island (the NY-NJ-CT nonattainment area), Connecticut faces continuing challenges to attain the 1997 and 2008 ozone NAAQS despite our best efforts to reduce in-state emissions of ozone precursors. EPA's recent proposal to rescind the clean data determination for the 1997 ozone NAAQS in the NY-NJ-CT area (79 FR 27830; May 15, 2014) is the latest in a series of challenges our states face in addressing ground-level ozone. We view RACT under the 2008 ozone NAAQS as a useful tool to address interstate transport from upwind states as upwind states would presumably be held to the same RACT requirements in limiting ozone precursor emissions. Because of New York's proximity to Connecticut, reductions in emissions transported from New York, particularly during the hottest days of summer, are crucial to Connecticut's – and New York's -- attainment of the 2008 and future ozone NAAQS.

Because of our long standing ozone challenges, we examined NYSDEC's emission limits for nitrogen oxides (NO_x) for various source categories with particular interest. NYSDEC has not made commitments in the proposed RACT SIP to any revisions to the existing NO_x limitations for stationary sources. Connecticut has made a commitment in its RACT SIP under the 2008 ozone NAAQS to reduce the NO_x emissions limitations for a number of fuel-burning sources including boilers, turbines and engines. We are actively pursuing such reductions and have made extensive reviews of the NO_x emissions limitations in other states, including NYSDEC's existing boiler and turbine NO_x limits. We note that NYSDEC reduced the NO_x emissions

limits for all sizes and fuel types of boilers in a 2010 regulatory revision, and Connecticut anticipates some reduction in air emissions transported to Connecticut in the remainder of this ozone season and in subsequent years given the July 1, 2014 compliance date for the limits adopted in 2010. Such a reduction is vitally important as the boilers and turbines in the New York City and Long Island area reporting to EPA under the ozone season Clean Air Interstate Rule (CAIR) program collectively emitted more than 1,100 tons of NO_x in the first two months of the ozone season in 2014 compared to less than 200 tons for all the CAIR sources in all of Connecticut during the same time.

NO_x emissions from turbines are a second and greater concern to Connecticut. New York's emissions limits for oil-fired simple cycle turbines are set at 100 ppmvd, which is considerably higher than comparable emissions limits in other states in the region. Connecticut currently has in place a 75 ppmvd limit for the same type of units, which we are planning to make more stringent as part of our 2008 ozone NAAQS RACT updates. Based on 2013 data in EPA's Air Markets Program Data tool, many more turbines operate in the New York City and Long Island area than in all of Connecticut, and many of the New York turbines have ozone season emissions rates that are rather high. As a result of the number of units and high emission rates, the turbines in New York emit considerably more NO_x than all of the turbines in Connecticut. In New York, 177 combustion turbines, all but one of which are located in the NY-NJ-CT nonattainment area, emitted 1551 tons of NO_x in the 2013 ozone season compared to 46 combustion turbines in Connecticut that emitted about 34 tons of ozone season NO_x. Prevailing winds carry the NO_x emitted in New York directly to Connecticut, contributing to our ozone exceedances in both the NY-NJ-CT and the Greater Connecticut ozone nonattainment areas. The chart attached to this letter illustrates the differences in the magnitude of emission from and emissions rates of the combustion turbines in Connecticut and New York. A reduction in New York State's regulatory emission limit for combustion turbines as part of New York's 2008 ozone NAAQS RACT efforts is essential to ozone attainment planning efforts for both Connecticut and New York.

NO_x emissions from municipal waste combustors are a third area of concern as there are five municipal waste combustors, each with considerable NO_x emissions, in the New York City/Long Island area. These municipal waste combustors operate continuously through the ozone season, and the emissions are transported directly to points in Connecticut during ozone exceedance episodes in our areas. It is crucial that emissions from units operating during the high ozone days in our region are controlled at least to the RACT level. Rather than specifying the NO_x emissions standards for the municipal waste combustors in a regulation, NYSDEC limits NO_x emissions on a case-by-case basis by requiring a standard of best available control technology or lowest achievable emissions rate (LAER) when issuing a new source review permit for a municipal waste combustor. While such an approach certainly results in a NO_x emissions limitation that is at least RACT at the time of the BACT or LAER determination, over time such a permitted limit may become less than RACT. In examining the NSR permits for the municipal waste combustors under discussion, my staff found that most of the units are mass burn waterwall units with selective non-catalytic reduction (SNCR) used to reduce NO_x emissions. The NO_x emissions limits fall generally in a range between 170 and 185 ppmvd. This situation is similar to that in Connecticut, in which all of our large municipal waste combustor units have installed SNCR, and mass burn waterwall units have a regulatory emissions limitation of 200 ppmvd. Recognizing that New Jersey has in place and Massachusetts has proposed an emission limit of 150 ppmvd for mass burn waterwall units, Connecticut has committed to reduce the

municipal waste combustor NOx emissions limits as part of our RACT update. Several technologies are available and in use now to achieve such lower emissions limitations, including optimization of the installed SNCR or a Low NOx technology that is an augmentation to SNCR. We encourage NYSDEC to make a commitment in its final RACT SIP to promulgate more stringent regulatory NOx limits for municipal waste combustors.

We also note that the New Jersey Department of Environmental Protection is concerned about lightering in New York due to the impact on our shared ozone nonattainment area. We encourage NYSDEC to give serious attention to New Jersey's comments concerning lightering, and we encourage you to examine the State of Delaware's lightering requirements for possible application of that approach in New York.

Thank you for your attention to Connecticut's concerns. We look forward with interest to NYSDEC's final RACT SIP for the 2008 ozone NAAQS. We also note that Connecticut has begun a stakeholder process for revising the regulatory requirements for its fuel-burning sources. You can follow the process on that effort on our website at the following location: http://www.ct.gov/deep/cwp/view.asp?a=2684&q=546804&deepNav_GID=1619 We welcome your scrutiny of that effort to help us develop an effective new regulatory scheme that will work to the benefit of both of our states to achieve our shared clean air goals.

Sincerely yours,



Anne R. Gobin, Chief
Bureau of Air Management

cc: Scott Griffin (via electronic mail to airsips@gw.dec.state.ny.us)

**Comparison of 2013 Ozone Season NOx Emissions and Rates
 from Combustion Turbines Operating in Connecticut and New York**
 (based on EPA AMPD data)

