

**From:** McConnell, Robert [<mailto:mccconnell.robert@epa.gov>]  
**Sent:** Tuesday, October 06, 2015 4:25 PM  
**To:** Gere, Merrily  
**Cc:** Conroy, David  
**Subject:** RE: Connecticut's RACT rule for fuel-burning equipment

Merrily – thanks for giving us the opportunity to review this. Here are four comments for you to consider as Connecticut moves forward with revisions to 22a-174-22e:

1. Our review of the control technology used by large NOx emission sources within Connecticut indicates that these emission units are generally well controlled and are achieving significant emission reductions within the state. We noted this within our June 27, 2013 final rule that approved Connecticut's RACT certification for the 1997 ozone standard. Table 2 of that notice contained a listing of the 10 largest NOx emitting units within Connecticut, and documented the NOx controls and annual average NOx emission rates for these units.

We note, however, that many of these large NOx emission units are achieving emission reductions in practice that significantly exceed what Connecticut's proposed NOx RACT rule requires. For example, the proposed Phase 1 NOx RACT limit for **Bridgeport Harbor's coal-fired unit**, the only remaining coal burning EGU in the state, is a 24 hour average of 0.38 lbs mmBTU, and seasonal limits of 0.15 lbs/mmBTU. Data for 2014 from EPA's Clean Air Markets Division (CAMD) indicates, however, that Bridgeport Harbor routinely operates at levels below these rates. For example, of the 137 days that Bridgeport Harbor operated in 2014, the daily average NOx rate was below 0.165 lbs/mmBTU on all but 9 days. Furthermore, the heat input and emissions data indicate that the unit was run minimally on these 9 days, indicating the likelihood of a startup or shutdown event. Given Bridgeport Harbor's demonstrated ability to operate consistently at levels substantially below the proposed Phase 1 limit, Connecticut should consider lowering the allowable RACT rate for coal units within 22a-174-22e.

A similar observation is made for **Middletown's unit 3**, a cyclone boiler fueled by residual oil with natural gas as a back-up fuel. This unit's emissions are controlled by water injection and SNCR. The proposed Phase 1 emission limit for such equipment is a 24 hour average of 0.43 lbs/mmBTU, and seasonal limits of 0.2 lbs/mmBTU (ozone season) and 0.15 lbs/mmBTU (non-ozone season). CAMD data indicates that this unit operated on 46 days during 2014, and on all but 7 of these days operated with a daily average NOx rate below 0.30 lbs/mmBTU. Additionally, a 24 hour average emission rate of 0.25 lb/mmBTU during the 5 month ozone season appears to be within reason for this unit. Connecticut should review the daily NOx emission rate data for this and other residual oil fueled EGU boilers to determine whether lowering the Phase 1 RACT limits for such equipment is feasible.

2. Connecticut's draft revisions to Section 22a-174-22e indicates that use of existing, banked NOx DERCs to comply with applicable emission limits will continue within Phase 1, which begins June 1, 2018, but will end at the start of Phase 2, beginning on June 1, 2022. We support Connecticut's intention to end use of DERCs as a compliance option, as it should result in additional NOx reductions within the state as sources seek other means to comply with the limits within 22a-174-22e.

3. As you know, on October 1, 2015 EPA announced a tightened ozone NAAQS, and it is likely that Connecticut will have portions of the state found to be in nonattainment when designations are made in 2017. In light of this, Connecticut should consider moving up the start date for Phase 2, which is currently slated to begin in 2022, to 2021 or earlier to maximize the impact that the emission reductions achieved by these tightened emission limits will have on ozone air quality levels in the state. Additionally, we note that the SIP requirements rule for the 2008 ozone NAAQS requires that controls adopted to meet RACT for that standard be effective by January 1, 2017.

4. Beyond the proposed changes to 22a-174-22e, we understand that Connecticut also intends to tighten some of the NOx emission limits for municipal waste combustors within 22a-174-38. Stakeholder meeting materials from earlier this year indicated that the NOx emission limits on mass burn waterwall units were to be reduced to a level of 150 ppmvd. Is that still Connecticut's intention?

That's it; let me know if you have any questions,

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