## (Revised, April 30, 1998, 1/3/02, 3/26/02, 4/16/15) *NOx EMISSIONS AVERAGING GUIDANCE*

This guidance is not intended to, nor does it, constitute rulemaking by the Agency, and it may not be relied upon to create a right or benefit, substantive or procedural, enforceable at law or in equity, by any person. The Department may take an action that is at variance with this document if appropriate in a specific case.

The  $NO_x$  emissions averaging program is an alternative approach to compliance with Section 22a-174-22e of the Regulations of Connecticut State Agencies ("Regulations") for Control of Nitrogen Oxide Emissions under development in 2015. Emissions averaging, is a compliance method that requires 2 or more emissions units with different emission rates located at the same facility, or different facilities if the facilities are under common control. The guidelines for emissions averaging are as follows:

- Averaging "credits" and "debits" are calculated for each emission unit by type of fuel in your averaging set. Credits must offset debits on a 24-hour or calendar month basis.
- 24-hour averaging means the units on average must meet the limits set during that time period, measured from midnight at the beginning of any day to midnight of the end of that day, including all periods of operation included in determining compliance with the emission limits.
- Monthly averaging means the units on average must meet the limits set during that time period, measured from midnight at the beginning of any month to midnight of the end of that same month, including all periods of operation included in determining compliance with the emission limits.
- Surplus 24-hr averaging credits cannot be carried over into any other day and surplus monthly averaging credits cannot be carried over into any other month.
- An "averaging set" is a list of the individual emitting units for use in averaging. All equipment to be included in the averaging set must be listed in the Trading Agreement and Order.
- Emissions credits generated by the over-compliant units may only be used for the purpose of NO<sub>x</sub> averaging and <u>cannot</u> be used for calculating offsets for new sources or for any other purpose, program or regulation.

- Since emissions averaging requires scheduling of fuel use and hours of operation from multiple units to balance emissions, averaging is limited to a single facility or multiple facilities or premises with common owners/operators.
- Emissions credits are not generated using averaging and therefore <u>cannot</u> be sold to facilities or premises with different owners/operators.
- For each unit and fuel in its averaging set, an owner/operator must comply with the applicable allowable emissions rates for the appropriate fuels and emission sources shown in Section 22a-174-22e(d) of the Regulations.
- For 24-hour averaging the allowable emission rates in Section 22a-174-22e(d) of the Regulations are discounted by 10% to assure a benefit to the environment. For monthly averaging, the allowable emission rates in Section 22a-174-22e(d) of the Regulations are discounted by 20% to assure a benefit to the environment and to account for the potential excess emissions associated with the monthly averaging (an additional 10% discount on averaging credits is applied if the source uses stack test rates (instead of CEMS) to determine FLERs).
- The applicable Trading Agreement and Order will specify the formula for calculating the number of credits needed by the user (including averaging of credits and debits).
- Owners/operators specify a Full Load Emission Rate (FLER) for each unit in the averaging set. The FLER will be used for: 1.) demonstration of compliance for future stack testing; and 2.) calculation of averaging credits and debits. The FLER must not exceed a limit set in a permit. A FLER in a Trading Agreement and Order does not preclude the Commissioner from taking enforcement actions for other violations of law or regulation including other applicable emission limitations.
- Approved discrete emission reduction credits (DERCs) may be used in conjunction with averaging in Phase 1 (ends May 31, 2022) only, however the averaging limit must be adjusted downward by 5 % to provide a design margin. The use of DERCs must be specified (and the limit adjusted) prior to use.
- Averaging Trading Agreements and Orders contain historical emissions caps calculated using the <u>lower of actual or allowable</u> (see Table 22-1 of existing Section 22a-174-22 of the Regulations) emissions rates for the

monthly, annual, and ozone and non-ozone seasons during the previous two (2) years (or another more representative period as approved by the commissioner) for <u>each</u> piece of equipment in the averaging set. This will cap maximum emissions in tons for the premises during the appropriate seasons or year. Emissions may not exceed the cap without express written permission in advance by the Commissioner and must be offset by approved DERCs at a ratio of 2 to 1. DERCs are only allowed to be used to offset historical caps during Phase 1 (ends May 31, 2022).

- The owner/operator must make and keep records, in a method approved by the Commissioner, to show compliance on a 24-hour or monthly basis. The record keeping for each unit in the averaging set shall include, but not be limited to, the following:
  - Owner or operator, location, averaging period, dates.
  - Averaging set including: Emission unit(s) identification (boiler no., etc.) and fuel type.
  - Heat input (MMBtu) or other measure of activity level.
  - Full Load Emission Rate (FLER).
  - Allowable emissions rate (see Section 22a-174-22e(d) or Section 22a-174-22e(e) (multi-fuel emission unit section) of the Regulations).
  - Actual NO<sub>x</sub> emissions (in lbs. or tons).
  - Difference between FLER and allowable emissions rate in Section 22a-174-22e(d)) (+ credits and debits).
  - Discounted allowable emissions rate in Section 22a-174-22e(d) by 10% on credits (0% debits) for sources using <u>24-hour</u> averaging (an additional 10% discount on credits is applied if the source uses stack test rates (instead of CEMs) to determine the FLER).
  - Discounted allowable emissions rate in Section 22a-174-22e(d) by 20% on credits and 10% on debits for sources using monthly averaging (an additional 10% discount on credits is applied if the source uses stack test rates (instead of CEMs) to determine the FLER and an additional 5% discount on debits is applied if the source uses DERCs during Phase 1 to offset excess emissions).
  - Calculation and reconciliation of net credits during each averaging period.
  - Statement of "in" or "out" of compliance for each averaging period (24-hour or monthly).
  - Emissions averaging can only be used until June 1, 2030 at which time owners will be required to comply with Phase 2 emission limits unless otherwise specified in a permit or order.