

RULE SYNOPSIS

Draft rule language for Ohio Administrative Code (OAC) Chapter 3745-110, "Nitrogen Oxides - Reasonably Available Control Technology"
Five- year review

The Ohio EPA Division of Air Pollution Control (DAPC) has completed draft rule language for the incorporation of minor revisions in Ohio Administrative Code (OAC) Chapter 3745-110, "Nitrogen Oxides - Reasonably Available Control Technology", as required by Ohio Revised Code (ORC) Section 119.032 (Five-year review). DAPC has determined that all the rules in this chapter are still necessary and require amendments as noted below.

DAPC is proposing a new presumptive NO_x emission limitation be added for reheat furnaces. The remaining draft amendments are minor in nature, primarily for clarification, formatting and typographical corrections.

Summary of revisions for Chapter 3745-110, 5-year review:

1. OAC rule 3745-110-01 (Definitions)

- a. One comment received by GenOn Energy, Inc., during the early stakeholder outreach comment period for this rule suggested the definition of "start-up unit" in paragraph (B)(42) of this rule be expanded from its current definition to include the following text: ... *"A start-up unit may also operate as a "space heating unit" during the start-up of larger electric generating units or during periods in which the larger electric generating units served by the start-up unit are not operating."* DAPC agrees with this recommended amendment and will include the additional text within the definition.
- b. The addition of a definition for "engine testing operation" under paragraph (B)(14) of this rule.
- c. The addition of a definition for "reheat furnace" under paragraph (B)(35) of this rule.

2. OAC Rule 3745-110-02 (Applicability)

The comment section of this rule has been revised by deleting the wording "Incorporation by reference" and replacing it with the wording "Reference to materials"

3. **OAC rule 3745-110-03 (RACT limitations for emissions of NOx from stationary sources)**

- a. DAPC is recommending a new presumptive NOx emission limitation be specified for reheat furnaces with a recommended NOx emission limitation of 0.09 lb/MMBtu. The inclusion of reheat furnaces will be incorporated in paragraph (G) of this rule.

Currently Ohio EPA's NOx RACT rules contain presumptive NOx emission limitations for three (3) source categories; Boilers, Combustion Turbines, and Internal Combustion Engines. All other NOx emission sources (e.g., reheat furnaces and process heaters) subject to the rule are required to submit a NOx RACT Study in accordance with OAC rule 3745-110-03(I) to determine the technical and economic feasibility of employing NOx emission controls.

NOx emission reductions based on this figure would represent a 50% - 75% NOx emission reduction for a majority of these sources. Combustion controls (i.e., low NOx burners) would be a cost-effective NOx emission control measure in most cases. A facility would still have the option of submitting a NOx RACT study for those cases where a facility believes it is not technically or economically feasible to employ combustion controls to reduce NOx emissions.

- b. The addition of the following types of NOx emission control measures under paragraph (J)(1)(h) of this rule (RACT studies for stationary sources). These proposed additions represent NOx emission control technologies that are currently available in addition to those NOx emission control technologies currently listed in the rule.

1. Low NOx burners with external flue gas recirculation.
2. Mid-kiln firing.
3. Mid-kiln air injection.

- c. The addition of the following text under paragraph (J)(1)(n) of this rule.

" ... or the most recent edition of the "united states environmental protection agency air pollution control cost manual."

- d. The addition of the following text under paragraph (J)(3) of this rule.

"For any source that is subject to an emission limit(s) contained in paragraph (A) to (G) of this rule, if the director disapproves a definition of RACT and a schedule of compliance for the source pursuant to paragraph (I) of this rule, or if the RACT study determines the applicable NOx emission limit is technically feasible and economically reasonable (i.e., cost-effective)

to achieve, the source remains subject to the emission limit(s) contained in paragraphs (A) to (G) of this rule and the applicable compliance deadline specified in paragraph (B) of rule 3745-110-04 of the Administrative Code.”

- e. The addition of site (facility) specific NOx emission limits for affected sources under paragraphs (P), (Q), (R), and (S) of this rule. These site specific NOx emission limitations are being added pursuant to NOx RACT studies approved by Ohio EPA.
- f. The addition of “engine testing operation” as an exemption under paragraph (B)(14) of this rule.

4. **OAC rule 3745-110-05 (Compliance testing and monitoring)**

The last sentence in paragraph (B) of this rule will be deleted. Specifically, the sentence *“The continuous emission monitoring system shall be certified at least three months prior to a demonstration of compliance with the applicable emissions limit(s).”* This sentence is not needed since continuous emission monitoring systems are already certified on an annual basis.