

15A NCAC 02D .1904 AIR CURTAIN INCINERATORS

(a) Applicability. This Rule applies to the following air curtain incinerators:

- (1) new and existing air curtain incinerators subject to 40 CFR 60.2245 through 60.2260 or 60.2970 through 60.2974 that combust the following materials:
 - (A) 100 percent wood waste;
 - (B) 100 percent clean lumber;
 - (C) 100 percent yard waste; or
 - (D) 100 percent mixture of only wood waste, clean lumber, and yard waste.
- (2) new and existing temporary air curtain incinerators used at industrial, commercial, institutional, or municipal sites.

(b) Definitions. For the purpose of this Rule, the following definitions apply:

- (1) "Clean lumber" means wood or wood products that have been cut or shaped and include wet, air-dried, and kiln-dried wood products. Clean lumber does not include wood or wood products that have been painted, pigment-stained, or pressure treated, or manufactured wood products that contain adhesives or resins.
- (2) "Malfunction" means an unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures caused entirely or in part by poor maintenance, careless operations, or another upset condition within the control of the emission source are not considered a malfunction.
- (3) "New air curtain incinerator" means an air curtain incinerator that began operating on the effective date of this Rule or later.
- (4) "Operator" means the person in operational control over the open burning.
- (5) "Permanent air curtain incinerator" means an air curtain incinerator whose owner or operator operates the air curtain incinerator at one facility or site during the term of the permit.
- (6) "Temporary air curtain incinerator" means an air curtain incinerator whose owner or operator moves the air curtain incinerator to another site and operates it for land clearing or right-of-way maintenance at that site on one or more occasions during the term of its permit.
- (7) "Temporary-use air curtain incinerator used in disaster recovery" means an air curtain incinerator that meets the following requirements:
 - (A) combusts less than 35 tons per day of debris consisting of the materials listed in Parts (a)(1)(A) through (C) of this Rule;
 - (B) combusts debris within the boundaries of an area officially declared a disaster or emergency by federal, state, or local government; and
 - (C) combusts debris for less than 16 weeks unless the owner or operator submits a request for additional time no less than 1 week prior to the end of the 16-week period and provides the reasons that the additional time is needed. The Director shall provide written approval for the additional time if he or she finds that the additional time is warranted based on the information provided in the request.
Examples of disasters or emergencies include tornadoes, hurricanes, floods, ice storms, high winds, or acts of bioterrorism.
- (8) "Wood waste" means untreated wood and untreated wood products, including tree stumps (whole or chipped), trees, tree limbs (whole or chipped), bark, sawdust, chips, scraps, slabs, millings, and shavings. Wood waste does not include:
 - (A) grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs from residential, commercial, institutional, or industrial sources as part of maintaining yards or other private or public lands;
 - (B) construction, renovation, or demolition wastes;
 - (C) clean lumber; and
 - (D) treated wood and treated wood products, including wood products that have been painted, pigment-stained, or pressure treated, or manufactured wood products that contain adhesives or resins.
- (9) "Yard waste" means grass, grass clippings, bushes, shrubs, and clippings from bushes and shrubs. Yard waste comes from residential, commercial/retail, institutional, or industrial sources as part of maintaining yards or other private or public lands. Yard waste does not include:
 - (A) construction, renovation, or demolition wastes;
 - (B) clean lumber; and

(C) wood waste.

(c) Air curtain incinerators shall comply with the following conditions and requirements:

- (1) the operation of air curtain incinerators in particulate and ozone nonattainment areas shall cease in a county that the Department or the Forsyth County Office of Environmental Assistance and Protection has forecasted to be an Air Quality Action Day Code "Orange" or above during the 24-hour time period covered by that Air Quality Action Day;
- (2) the wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service during the time of the burning shall be away from areas, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, that may be affected by smoke, ash, or other air pollutants from the burning;
- (3) no fires shall be started or material added to existing fires when the North Carolina Forest Service, Fire Marshall, or other governmental agency has banned burning for that area;
- (4) burning shall be conducted only between the hours of 8:00 a.m. and 6:00 p.m. No combustible materials shall be added to the air curtain incinerator prior to or after this time period;
- (5) The air curtain incinerator shall not be operated more than the maximum source operating hours-per-day and days-per-week. The maximum source operating hours-per-day and days-per-week shall be set to protect the ambient air quality standard and prevention of significant deterioration (PSD) increment for particulate. The maximum source operating hours-per-day and days-per-week shall be determined using the modeling procedures in 15A NCAC 02D .1106(b), (c), and (f). This Subparagraph shall not apply to temporary air curtain incinerators;
- (6) air curtain incinerators shall meet manufacturer's specifications for operation and upkeep to ensure complete burning of material charged into the pit. Manufacturer's specifications shall be kept on site and be available for inspection by Division staff;
- (7) the owner or operator of an air curtain incinerator shall allow the ashes to cool and water the ash prior to its removal to prevent the ash from becoming airborne;
- (8) only distillate oil, kerosene, diesel fuel, natural gas, or liquefied petroleum gas may be used to start the fire; and
- (9) the location of the burning shall be at least 300 feet from any dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted. The regional office supervisor may grant exceptions to the setback requirements if a signed, written statement waiving objections to the air curtain burning is obtained from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 300 feet of the burning site. In case of a lease or rental agreement, the lessee or renter, and the property owner shall sign the statement waiving objections to the burning. The statement shall be submitted to and approved by the regional office supervisor before initiation of the burn. Factors that the regional supervisor shall consider in deciding to grant the exception include: all the persons who need to sign the statement waiving the objection have signed it; the location of the burn; and the type, amount, and nature of the combustible substances.

(d) Exemptions. Temporary-use air curtain incinerators used in disaster recovery are excluded from the requirements of this Rule if the following conditions are met:

- (1) the air curtain incinerator meets the definition of a temporary-use air curtain incinerators used in disaster recovery as specified in Subparagraph (b)(7) of this Rule;
- (2) the air curtain incinerator meets requirements pursuant to 40 CFR 60.2969 or 60.3061 to which the air curtain incinerator is subject; and
- (3) the air curtain incinerator is operated in a manner consistent with the operations manual for the air curtain incinerator and the charge rate during operation remains less than or equal to the lesser of 35 tons per day or the maximum charge rate specified by the manufacturer of the air curtain incinerator.

(e) Permitting. Air curtain incinerators shall be subject to 15A NCAC 02Q .0500.

- (1) The owner or operator of a new or existing permanent air curtain incinerator shall obtain a General Title V Operating Permit pursuant to 15A NCAC 02Q .0509.
- (2) The owner or operator of a new or existing temporary air curtain incinerator shall obtain a General Title V Operating Permit pursuant to 15A NCAC 02Q .0510.
- (3) The owner or operator of an existing permanent or temporary air curtain incinerator shall complete and submit a permit application within 12 months after the effective date of this Rule.

- (4) The owner or operator of a new permanent or temporary air curtain incinerator shall complete and submit a permit application 60 days prior to the date the unit commences operation.
 - (5) The owner or operator of an existing permanent or temporary air curtain incinerator that is planning to close rather than obtaining a permit pursuant to 15A NCAC 02Q .0509 or 15A NCAC 02Q .0510 shall submit a closure notification to the Director within 12 months after the effective date of this Rule.
- (f) Opacity limits.
- (1) The owner or operator of an existing air curtain incinerators shall meet the following opacity limits:
 - (A) Maintain opacity to less than or equal to 35 percent opacity, as determined by the average of 3 1-hour blocks consisting of 10 6-minute average opacity values, during startup of the air curtain incinerator, where startup is defined as the first 30 minutes of operation.
 - (B) Maintain opacity to less than or equal to 10 percent opacity, as determined by the average of 3 1-hour blocks consisting of 10 6-minute average opacity values, at times of operation other than during startup or during malfunctions.
 - (2) The owner or operator of a new air curtain incinerator shall meet the opacity limits specified in Subparagraph (f)(1) of this Rule within 60 days after air curtain incinerator reaches the charge rate at which it will operate, but within 180 days after its initial startup.
- (g) Performance tests.
- (1) Initial and annual opacity tests shall be conducted using 40 CFR 60 Appendix A-4 Test Method 9 to determine compliance with the opacity limitations specified in Subparagraph (f)(1) of this Rule.
 - (2) The owner or operator of an existing air curtain incinerator shall conduct an initial performance test for opacity as specified in 40 CFR 60.8 within 90 days after the effective date of this rule.
 - (3) The owner or operator of a new air curtain incinerator shall conduct an initial performance test for opacity as specified in 40 CFR 60.8 within 60 days after achieving the maximum charge rate at which the affected air curtain incinerator will be operated, but not later than 180 days after initial startup of the air curtain incinerator.
 - (4) After the initial test for opacity, the owner or operator of a new or existing air curtain incinerator subject to this Rule shall conduct annual opacity tests on the air curtain incinerator no more than 12 calendar months following the date of the previous test.
 - (5) The owner or operator of an existing air curtain incinerator that has ceased operations and is restarting after more than 12 months since the previous test shall conduct an opacity test upon startup of the unit.
- (h) Recordkeeping and Reporting Requirements.
- (1) Prior to commencing construction of an air curtain incinerator, the owner or operator of a new air curtain incinerator shall submit the following information to the Director:
 - (A) a notification of intent to construct an air curtain incinerator;
 - (B) the planned initial startup date of the air curtain incinerator; and
 - (C) the materials planned to be combusted in the air curtain incinerator.
 - (2) The owner or operator of a new or existing air curtain incinerator shall do the following:
 - (A) keep records of results of initial and annual opacity tests onsite in either paper copy or electronic format for five years;
 - (B) make records available for submission to the Director or for an inspector's onsite review;
 - (C) report the results of the initial and annual opacity tests as the average of 3 1-hour blocks consisting of 10 6-minute average opacity values;
 - (D) submit initial opacity test results to the Division within 60 days following the initial test and submit annual opacity test results within 12 months following the previous report;
 - (E) submit initial and annual opacity test reports to the Division as specified in 15A NCAC 02D .0605(i); and
 - (F) keep a copy of the initial and annual reports onsite for a period of five years.
- (i) In addition to complying with the requirements of this Rule, an air curtain incinerator subject to:
- (1) 40 CFR Part 60, Subpart CCCC, shall also comply with 40 CFR 60.2245 through 60.2260; or
 - (2) 40 CFR Part 60, Subpart EEEE, shall also comply with 40 CFR 60.2970 through 60.2974.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.65; 143-215.66; 143-215.107(a)(5); 143-215.107(a)(10); 143-215.108; S.L. 2011-394, s.2; 40 CFR 60.2865;

Eff. July 1, 1996;
Amended Eff. July 3, 2012; July 1, 2007; December 1, 2005; August 1, 2004;
Readopted Eff. September 1, 2019;
Amended Eff. September 1, 2023.