

SECTION .1900 – OPEN BURNING

15A NCAC 02D .1901 OPEN BURNING: PURPOSE: SCOPE

(a) Open Burning Prohibited. A person shall not cause, allow, or permit open burning of combustible material except as allowed by Rule .1903 and Rule .1904 of this Section.

(b) Purpose. The purpose of this Section is to control air pollution resulting from the open burning of combustible materials and to protect the air quality in the immediate area of the open burning.

(c) Scope. This Section applies to all operations involving open burning. This Section does not authorize any open burning that is a crime under G.S. 14-136, G.S. 14-137, G.S. 14-138.1 and G.S. 14-140.1, or affect the authority of the North Carolina Forest Service to issue or deny permits for open burning in or adjacent to woodlands as provided in G.S. 106-940 through G.S. 106-950. This Section does not affect the authority of any local government to regulate open burning through its fire codes or other ordinances. The issuance of any open burning permit by the North Carolina Forest Service or any local government does not relieve any person from the necessity of complying with this Section or any other air quality rule.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 1996;
Amended Eff. January 1, 2015; July 1, 2007; June 1, 2004.

15A NCAC 02D .1902 DEFINITIONS

For the purpose of this Section, the following definitions apply:

- (1) "Air Curtain Burner" means a stationary or portable combustion device that directs a plane of high velocity forced draft air through a manifold head into a pit or container with vertical walls in such a manner as to maintain a curtain of air over the surface of the pit and a recirculating motion of air under the curtain.
- (2) "Air Quality Action Day Code 'Orange' or above" means an air quality index greater than 100 as defined in 40 CFR Part 58, Appendix G.
- (3) "Air quality forecast area" means for:
 - (a) Asheville air quality forecast area: Buncombe, Haywood, Henderson, Jackson, Madison, Swain, Transylvania, and Yancey Counties;
 - (b) Charlotte air quality forecast area: Cabarrus, Gaston, Iredell South of Interstate 40, Lincoln, Mecklenburg, Rowan, and Union Counties;
 - (c) Hickory air quality forecast area: Alexander, Burke, Caldwell, and Catawba Counties;
 - (d) Fayetteville air quality forecast area: Cumberland and Harnett Counties;
 - (e) Rocky Mount air quality forecast area: Edgecombe and Nash Counties;
 - (f) Triad air quality forecast area: Alamance, Caswell, Davidson, Davie, Forsyth, Guilford, Randolph, Rockingham, and Stokes Counties; and
 - (g) Triangle air quality forecast area: Chatham, Durham, Franklin, Granville, Johnston, Person, Orange, Vance, and Wake Counties.
- (4) "Dangerous materials" means explosives or containers used in the holding or transporting of explosives.
- (5) "Initiated" means to start or ignite a fire or reignite or rekindle a fire.
- (6) "HHCU" means the Health Hazards Control Unit of the Division of Public Health.
- (7) "Land clearing" means the uprooting or clearing of vegetation in connection with construction for buildings; right-of-way maintenance; agricultural, residential, commercial, institutional, or industrial development; mining activities; or the initial clearing of vegetation to enhance property value; but does not include routine maintenance or property clean-up activities.
- (8) "Log" means any limb or trunk whose diameter exceeds six inches.
- (9) "Nonattainment area" means an area designated in 40 CFR 81.334 as nonattainment.
- (10) "Nuisance" means causing physical irritation exacerbating a documented medical condition, visibility impairment, or evidence of soot or ash on property or structure other than the property on which the burning is done.
- (11) "Occupied structure" means a building in which people may live or work, or one intended for housing farm or other domestic animals.
- (12) "Off-site" means any area not on the premises of the land-clearing activities.
- (13) "Open burning" means the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the atmosphere without passing through a stack, chimney, or a permitted air pollution control device.
- (14) "Operator" as used in .1904(b)(6) and .1904(b)(2)(D) of this Section, means the person in operational control over the open burning.
- (15) "Permanent site" means for an air curtain burner, a place where an air curtain burner is operated for more than nine months.
- (16) "Person" as used in 02D .1901(c), means:
 - (a) the person in operational control over the open burning; or
 - (b) the landowner or person in possession or control of the land when he has directly or indirectly allowed the open burning or has benefited from it.
- (17) "Pile" means a quantity of combustible material assembled together in a mass.
- (18) "Public pick-up" means the removal of refuse, yard trimmings, limbs, or other plant material from a residence by a governmental agency, private company contracted by a governmental agency, or municipal service.
- (19) "Public road" means any road that is part of the State highway system; or any road, street, or right-of-way dedicated or maintained for public use.
- (20) "RACM" means regulated asbestos containing material as defined in 40 CFR 61.142.
- (21) "Refuse" means any garbage, rubbish, or trade waste.

- (22) "Regional Office Supervisor" means the supervisor of personnel of the Division of Air Quality in a regional office of the Department of Environment and Natural Resources.
- (23) "Salvageable items" means any product or material that was first discarded or damaged and then all, or part, was saved for future use, and include insulated wire, electric motors, and electric transformers.
- (24) "Smoke management plan" means the plan developed following the North Carolina Forest Service's smoke management program and approved by the North Carolina Forest Service. The purpose of the smoke management plan is to manage smoke from prescribed burns of public and private forests to minimize the impact of smoke on air quality and visibility.
- (25) "Synthetic material" means man-made material, including tires, asphalt materials such as shingles or asphaltic roofing materials, construction materials, packaging for construction materials, wire, electrical insulation, and treated or coated wood.

History Note: Authority G.S. 143-212; 143-213; 143-215.3(a)(1);
Eff. July 1, 1996;
Amended Eff. January 1, 2015; July 1, 2007; December 1, 2005; June 1, 2004; July 1, 1998.

15A NCAC 02D .1903 OPEN BURNING WITHOUT AN AIR QUALITY PERMIT

(a) All open burning is prohibited except open burning allowed under Paragraph (b) of this Rule or Rule .1904 of this Section. Except as allowed under Paragraphs (b)(3) through (b)(9) of this Rule, open burning shall not be initiated in an air quality forecast area that the Department, or the Forsyth County Environmental Affairs Department for the Triad air quality forecast area, has forecasted to be in an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

(b) The following types of open burning are permissible without an air quality permit:

- (1) open burning of leaves, logs, stumps, tree branches or yard trimmings, if the following conditions are met:
 - (A) The material burned originates on the premises of private residences and is burned on those premises;
 - (B) There are no public pickup services available;
 - (C) Non-vegetative materials, such as household garbage, lumber, or any other synthetic materials are not burned;
 - (D) The burning is initiated no earlier than 8:00 a.m. and no additional combustible material is added to the fire between 6:00 p.m. on one day and 8:00 a.m. on the following day; and
 - (E) The burning does not create a nuisance; and
 - (F) Material is not burned when the North Carolina Forest Service has banned burning for that area.

The burning of logs or stumps of any size shall not be considered to create a nuisance for purposes of the application of the open burning air quality permitting exception described in this Subparagraph.

- (2) open burning for land clearing or right-of-way maintenance if the following conditions are met:
 - (A) The wind direction at the time that the burning is initiated and the wind direction as forecasted by the National Weather Service at the time that the burning is initiated are away from any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;
 - (B) The location of the burning is at least 500 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:
 - (i) a signed, written statement waiving objections to the open burning associated with the land clearing operation is obtained and submitted to, and the exception granted by, the regional office supervisor before the burning begins from a resident or an owner of each dwelling, commercial or institutional establishment, or other occupied structure within 500 feet of the open burning site. In the case of a lease or rental agreement, the lessee or renter shall be the person from whom permission shall be gained prior to any burning; or
 - (ii) an air curtain burner that complies with Rule .1904 of this Section, is utilized at the open burning site.

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. The regional supervisor shall not grant a waiver if a college, school, licensed day care, hospital, licensed rest home, or other similar institution is less than 500 feet from the proposed burn site when such institution is occupied.

- (C) Only land-cleared plant growth is burned. Heavy oils, asphaltic materials such as shingles and other roofing materials, items containing natural or synthetic rubber, or any materials other than plant growth shall not be burned; however, kerosene, distillate oil, or diesel fuel may be used to start the fire;
- (D) Initial burning begins only between the hours of 8:00 a.m. and 6:00 p.m., and no combustible material is added to the fire between 6:00 p.m. on one day and 8:00 a.m. on the following day;
- (E) No fires are initiated or vegetation added to existing fires when the North Carolina Forest Service has banned burning for that area; and

- (F) Materials are not carried off-site or transported over public roads for open burning unless the materials are carried or transported to:
- (i) Facilities permitted in accordance with 15A NCAC 02D .1904 (Air Curtain Burners) for the operation of an air curtain burner at a permanent site; or
 - (ii) A location, where the material is burned not more than four times per year, that meets all of the following criteria:
 - (I) At least 500 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.
 - (II) There are no more than two piles, each 20 feet in diameter, being burned at one time.
 - (III) The location is not a permitted solid waste management facility.
- (3) camp fires and fires used solely for outdoor cooking and other recreational purposes, or for ceremonial occasions, or for human warmth and comfort and which do not create a nuisance and do not use synthetic materials or refuse or salvageable materials for fuel;
 - (4) fires purposely set to public or private forest land for forest management practices for which burning is acceptable to the North Carolina Forest Service and which follow the smoke management plan as outlined in the North Carolina Forest Service's smoke management program;
 - (5) fires purposely set to agricultural lands for disease and pest control and fires set for other agricultural or apicultural practices for which burning is currently acceptable to the Department of Agriculture;
 - (6) fires purposely set for wildlife management practices for which burning is currently acceptable to the Wildlife Resource Commission;
 - (7) fires for the disposal of dangerous materials when it is the safest and most practical method of disposal;
 - (8) fires purposely set by manufacturers of fire-extinguishing materials or equipment, testing laboratories, or other persons, for the purpose of testing or developing these materials or equipment in accordance with a standard qualification program;
 - (9) fires purposely set for the instruction and training of fire-fighting personnel at permanent fire-fighting training facilities;
 - (10) fires purposely set for the instruction and training of fire-fighting personnel when conducted under the supervision of or with the cooperation of one or more of the following agencies:
 - (A) the North Carolina Forest Service;
 - (B) the North Carolina Insurance Department;
 - (C) North Carolina technical institutes; or
 - (D) North Carolina community colleges, including:
 - (i) the North Carolina Fire College; or
 - (ii) the North Carolina Rescue College;
 - (11) fires not described in Subparagraphs (9) or (10) of this Paragraph, purposely set for the instruction and training of fire-fighting personnel, provided that:
 - (A) The regional office supervisor of the appropriate regional office and the HHCB have been notified according to the procedures and deadlines contained in the appropriate regional notification form. This form may be obtained by writing the appropriate regional office at the address in Rule .1905 of this Section and requesting it, and
 - (B) The regional office supervisor has granted permission for the burning. Factors that the regional office supervisor shall consider in granting permission for the burning include type, amount, and nature of combustible substances. The regional office supervisor shall not grant permission for the burning of salvageable items, such as insulated wire and electric motors or if the primary purpose of the fire is to dispose of synthetic materials or refuse. The regional office supervisor of the appropriate regional office shall not consider previously demolished structures as having training value. However, the regional office supervisor of the appropriate regional office may allow an exercise involving the burning of motor vehicles burned over a period of time by a training unit or by several related training units. Any deviations from the dates and times of exercises, including additions, postponements, and deletions, submitted in the schedule in the

- approved plan shall be communicated verbally to the regional office supervisor of the appropriate regional office at least one hour before the burn is scheduled; and
- (12) fires for the disposal of material generated as a result of a natural disaster, such as tornado, hurricane, or flood, if the regional office supervisor grants permission for the burning. The person desiring to do the burning shall document and provide written notification to the regional office supervisor of the appropriate regional office that there is no other practical method of disposal of the waste. Factors that the regional office supervisor shall consider in granting permission for the burning include type, amount, location of the burning, and nature of combustible substances. The regional office supervisor shall not grant permission for the burning if the primary purpose of the fire is to dispose of synthetic materials or refuse or recovery of salvageable materials. Fires authorized under this Subparagraph shall comply with the conditions of Subparagraph (b)(2) of this Rule.

(c) The authority to conduct open burning under this Section does not exempt or excuse any person from the consequences, damages or injuries that may result from this conduct. It does not excuse or exempt any person from complying with all applicable laws, ordinances, rules or orders of any other governmental entity having jurisdiction even though the open burning is conducted in compliance with this Section.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); S.L. 2011-394, s.2; Eff. July 1, 1996; Amended Eff. June, 13 2016; March 19, 2015; July 3, 2012; July 1, 2007; December 1, 2005; June 1, 2004; July 1, 1998.

15A NCAC 02D.1904 AIR CURTAIN BURNERS

(a) Air quality permits are required for air curtain burners subject to 40 CFR 60.2245 through 60.2265, 60.2810 through 60.2870, 60.2970 through 60.2975, or 60.3062 through 60.3069 or located at permanent sites or where materials are transported in from another site. Air quality permits are not required for air curtain burners located at temporary land clearing or right-of-way maintenance sites for less than nine months unless they are subject to 40 CFR 60.2245 through 60.2265, 60.2810 through 60.2870, 60.2970 through 60.2975, or 60.3062 through 60.3069. The operation of air curtain burners in particulate and ozone nonattainment areas shall cease in any area that has been forecasted by the Department, or the Forsyth County Environmental Affairs Department for the Triad air quality forecast area, to be in an Air Quality Action Day Code "Orange" or above during the time period covered by that forecast.

(b) Air curtain burners shall comply with the following conditions and stipulations:

- (1) 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 any area, including public roads within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be affected by smoke, ash, or other air pollutants from the burning;
- (2) Only collected land clearing and yard waste materials may be burned. Heavy oils, asphaltic materials, items containing natural or synthetic rubber, tires, grass clippings, collected leaves, paper products, plastics, general trash, garbage, or any materials containing painted or treated wood materials shall not be burned. Leaves still on trees or brush may be burned;
- (3) No fires shall be started or material added to existing fires when the North Carolina Forest Service 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.;
- (5) The air curtain burner 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 Rule .1106(b), (c), and (f) of this Subchapter. This Subparagraph shall not apply to temporary air curtain burners;
- (6) An air curtain burner with an air quality permit shall have onsite at all times during operation of the burner a visible emissions reader certified according to 40 CFR Part 60, Method 9 to read visible emissions, and the facility shall test for visible emissions within five days after initial operation and within 90 days before permit expiration;
- (7) Air curtain burners 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;
- (8) Except during start-up, visible emissions shall not exceed ten percent opacity when averaged over a six-minute period except that one six-minute period with an average opacity of more than ten percent but no more than 35 percent shall be allowed for any one-hour period. During start-up, the visible emissions shall not exceed 35 percent opacity when averaged over a six-minute period. Start-up shall not last for more than 45 minutes, and there shall be no more than one start-up per day. Instead of complying with the opacity standards in this Subparagraph, air curtain burners subject to:
 - (A) 40 CFR 60.2245 through 60.2265 shall comply with the opacity standards in 40 CFR 60.2250;
 - (B) 40 CFR 60.2810 through 60.2870 shall comply with the opacity standards in 40 CFR 60.2860;
 - (C) 40 CFR 60.2970 through 60.2975 shall comply with the opacity standards in 40 CFR 60.2971; or
 - (D) 40 CFR 60.3062 through 60.3069 shall comply with the opacity standards in 40 CFR 60.3066;
- (9) The owner or operator of an air curtain burner shall not allow ash to build up in the pit to a depth higher than one-third of the depth of the pit or to the point where the ash begins to impede combustion, whichever occurs first. The owner or operator of an air curtain burner shall allow the ashes to cool and water the ash prior to its removal to prevent the ash from becoming airborne;

- (10) The owner or operator of an air curtain burner shall not load material into the air curtain burner such that it will protrude above the air curtain;
- (11) Only distillate oil, kerosene, diesel fuel, natural gas, or liquefied petroleum gas may be used to start the fire; and
- (12) 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.

Compliance with this Rule does not relieve any owner or operator of an air curtain burner from the necessity of complying with other rules in this Section or any other air quality rules.

(c) Recordkeeping Requirements. The owner or operator of an air curtain burner at a permanent site shall keep a daily log of specific materials burned and amounts of material burned in pounds per hour and tons per year. The logs at a permanent air curtain burner site shall be maintained on site for a minimum of two years and shall be available at all times for inspection by the Division of Air Quality. The owner or operator of an air curtain burner at a temporary site shall keep a log of total number of tons burned per temporary site. Additionally, the owner or operator of air curtain burner subject to:

- (1) 40 CFR 60.2245 through 60.2265 shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.2245 through 60.2265;
- (2) 40 CFR 60.2810 through 60.2870 shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.2810 through 60.2870;
- (3) 40 CFR 60.2970 through 60.2975 shall comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.2970 through 60.2975; or
- (4) 40 CFR 60.3062 through 60.3069 shall comply with comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR 60.3062 through 60.3069.

(d) Title V Considerations. Burners that have the potential to burn 8,100 tons of material or more per year may be subject to Section 15A NCAC 02Q .0500, Title V Procedures.

(e) Prevention of Significant Deterioration Consideration. Burners that burn 16,200 tons per year or more may be subject to 15A NCAC 02D .0530, Prevention of Significant Deterioration.

(f) A person may use a burner using a different technology or method of operation than an air curtain burner as defined under Rule .1902 of this Section if he demonstrates to the Director that the burner is at least as effective as an air curtain burner in reducing emissions and if the Director approves the use of the burner. The Director shall approve the burner if he finds that it is at least as effective as an air curtain burner. This burner shall comply with all the requirements of this Rule.

(g) In addition to complying with the requirements of this Rule, an air curtain burner subject to:

- (1) 40 CFR Part 60, Subpart CCCC that commenced construction after November 30, 1999, or that commenced reconstruction or modification on or after June 1, 2001, shall also comply with 40 CFR 60.2245 through 60.2265, or
- (2) 40 CFR Part 60, Subpart EEEE that commenced construction after December 9, 2004, or that commenced reconstruction or modification on or after June 16, 2006, shall also comply with 40 CFR 60.2970 through 60.2975.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5), (10); 143-215.66; 143-215.108; 40 CFR 60.2865; S.L. 2011-394, s.2; Eff. July 1, 1996; Amended Eff. July 3, 2012; July 1, 2007; December 1, 2005; August 1, 2004.

15A NCAC 02D .1905 REGIONAL OFFICE LOCATIONS

Inquiries, requests and plans shall be handled by the appropriate Department of Environment and Natural Resources regional offices. They are:

- (1) Asheville Regional Office, 2090 Highway 70, Swannanoa, North Carolina 28778
- (2) Winston-Salem Regional Office, 585 Waughtown Street, Winston-Salem, North Carolina 27107;
- (3) Mooresville Regional Office, 610 East Center Avenue, Suite 301, Mooresville, North Carolina 28115;
- (4) Raleigh Regional Office, 3800 Barrett Drive, Raleigh, North Carolina 27611;
- (5) Fayetteville Regional Office, Systel Building, 225 Green Street, Suite 714, Fayetteville, North Carolina 28301;
- (6) Washington Regional Office, 943 Washington Square Mall, Washington, North Carolina 27889; and
- (7) Wilmington Regional Office, 127 Cardinal Drive Extension, Wilmington, North Carolina 28405.

History Note: Authority G.S. 143-215.3(a)(1);
Eff. July 1, 1996;
Amended Eff. December 1, 2005;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. January 5, 2016.

15A NCAC 02D .1906 DELEGATION TO COUNTY GOVERNMENTS

(a) The governing body of any county or municipality or group of counties or municipalities may establish a partial air pollution control program to implement and enforce this Section provided that:

- (1) It has the administrative organization, staff, financial and other resources necessary to carry out such a program;
- (2) It has adopted appropriate ordinances, resolutions, and regulations to establish and maintain such a program; and
- (3) It has otherwise complied with G.S. 143-215.112 "Local Air Pollution Control Programs."

(b) The governing body shall submit to the Director documentation demonstrating that the requirements of Paragraph (a) of this Rule have been met. Within 90 days after receiving the submittal from the governing body, the Director shall review the documentation to determine if the requirements of Paragraph (a) of this Rule have been met and shall present his findings to the Commission. If the Commission determines that the air pollution program is adequate, it shall certify the local air pollution program to implement and enforce this Section within its area of jurisdiction.

(c) County and municipal governments shall not have the authority to issue permits for air curtain burners at a permanent site as defined in 15A NCAC 02D .1904.

(d) The three certified local air pollution programs, the Western North Carolina Regional Air Quality Control Agency, the Forsyth County Environmental Affairs Department, and Mecklenburg County Air Quality, a Division of Land Use and Environmental Services Agency, shall continue to enforce open burning rules as part of their local air pollution programs.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.112;
Eff. July 1, 1996;
Amended Eff. December 1, 2005; June 1, 2004.*

15A NCAC 02D .1907 MULTIPLE VIOLATIONS ARISING FROM A SINGLE EPISODE

(a) Multiple violations arising from a single episode of open burning may result in multiple civil penalties. Factors the Director shall consider in determining the number of violations per episode of open burning include:

- (1) the type of material burned,
- (2) the amount of material burned,
- (3) the location of the burn, and
- (4) any other factor relevant to air pollution control or air quality.

(b) Each pile of land clearing or road maintenance debris that does not comply with the specifications of 15A NCAC 02D .1903(b)(2) shall constitute a separate violation.

*History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5);
Eff. July 1, 2007.*