

SUBCHAPTER 2D - AIR POLLUTION CONTROL REQUIREMENTS
SECTION 2D.1900 - OPEN BURNING

.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 which is a crime under G.S. 14-136 through G.S. 14-140-1, or affect the authority of the Division of Forest resources to issue or deny permits for open burning in or adjacent to woodlands as provided in G.S. 113-60.21 through G.S. 113-60.31. This Section does not affect the authority of any local government to regulate open burning through its fire codes or other ordinances. The issuance if any open burning permit by the Division of Forest Resources 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);
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.1902 DEFINITIONS

For the purpose of this Section, the following definitions may 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 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;
 - (e) Triad air quality forecast area: Alamance. Caswell, Davidson, Davie, Forsyth Guilford, Randolph, Rockingham, and Stokes Counties; and
 - (f) 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) “HHCB” means the Health Hazards Control Branch of the Division of Epidemiology.
- (6) “Initiated” means start or ignite a fire or reignite or rekindle a fire.
- (7) “Land clearing” means the uprooting or clearing of vegetation in connection with construction for buildings; right-of-way maintenance; agricultural, institutional, commercial, 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 identified 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 2D .1904(b)(6) and .1904(b)(2)(D) of this Section, means the person in operational control over the open burning.
- (15) “Person” as used in 2D .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 benefited from it.

- (16) “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.
- (17) “Pile” means a quantity of combustible material assembled together in a mass.
- (18) “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.
- (19) “RACM” means regulated asbestos containing material as defined in 40CFR 61.142.
- (20) “Refuse” means any garbage, rubbish, or trade waste.
- (21) “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.
- (22) “Salvageable items” means any product or material that was first discarded or damaged and then all, or part, was saved for future use, and included insulated wire, electric motors, and electric transformers.
- (23) “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.

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.1903 PERMISSIBLE OPEN BURNING WITHOUT AN AIR QUALITY PERMIT

(a) All open burning is prohibited except for 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, tree branches or yard trimmings, excluding logs and stumps, 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 pick-up 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;
 - (E) The burning does not create a nuisance; and
 - (F) Material is not burned when the Division of Forest Resources has banned burning for that area;
- (2) open burning for land clearing purposes 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 significantly affected by smoke, ash, or other air pollutants from the burning;
 - (B) The location of the burning is at least 1,000 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 shall 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 approved 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 1,000 feet of the open burning site, in the case of a lease or rental agreement, the lessee or renter will be considered the person from whom permission should be gained prior to any burning, or
 - (ii) an air curtain burner as described in 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 1000 feet from the proposed burn site when such institution is occupied.

- (C) Only land cleared plant growth shall be 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 are not burned. However, kerosene, distillate oil, or diesel fuel may be used to start the fire;
 - (D) Initial burning begins only between the hours of 8:00a.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 to be initiated or vegetation is added to existing fires when the Division of Forest Resources has banned burning for that area; and
 - (F) Materials shall not be carried off-site or transported over public roads for open burning unless the materials are carried off-site or transported over public roads to facilities permitted according to Rule .1904 of this Section for the operation of an air curtain burner at a permanent site;
- (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 recommended by the Division of Forest Resources and which follows the smoke management plan as outlined in the Division of Forest Resources' smoke management program;
 - (5) fires purposely set to agricultural lands for disease a pest control and fires set for other agricultural or agricultural practices for which burning is currently recommended by the Department of Agriculture;
 - (6) fires purposely set for wildlife management practices for which burning is recommended by the Wildlife Management 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 valid standard qualification program;
 - (9) fires purposely set for the instruction and training of fire-fighting personnel 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 Division of Forest Resources:
 - (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;
- (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 which 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.

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.1904 AIR CURTAIN BURNERS

(a) Air permits shall not be required for air curtain burners located at temporary land clearing or right-of-way maintenance sites for less than nine months. However, air permits shall be required for air curtain burners located at permanent sites or where materials are transported in from another site.

(b) Air curtain burners described in Paragraph (a) of this Rule shall comply with the following conditions and stipulations:

- (1) Prevailing winds at the time of the burning shall be away from any area, including public road within 250 feet of the burning as measured from the edge of the pavement or other roadway surface, which may be significantly affected by smoke, ash, or other 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 Division of Forest Resources has banned the 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. If the air curtain burner will:
 - (A) burn 35 tons of material per day or more in an area where the particulate baseline date for the PSD has been triggered, or
 - (B) burn 210 tons of material per day or more in an area where the particulate baseline date for PSD has not been triggered,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 Chapter. This Subparagraph shall not apply to temporary air curtain burners;
- (6) Operators of the air curtain burner shall be certified to read visible emissions and the facility shall be tested for visible emissions within 90 days after initial operation and within 90 days before permit expiration;
- (7) Air curtain burners shall meet manufacturers specifications for operation and upkeep to ensure complete burning of material charged into the pit. Manufacturers specifications shall be kept on site and be available for inspection by Division staff;
- (8) Except during start-up, visible emissions shall not exceed five percent opacity when averaged over a six-minute period except that one six-minute period with an average opacity of more than five percent but no more than 35 percent opacity 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 thirty minutes, and shall be no more than one start-up per day;
- (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 that ash begins to impede combustion, whichever occurs first. The owner or operator of an air

curtain burner shall 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 at temporary sites shall be at least 500 feet from any other dwelling, group of dwellings, or commercial or institutional establishment, or other occupied structure not located on the property on which the burning conducted.

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 materials burned in pounds per hour and tons per year. 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.

(d) Title V Considerations. Burners that have the potential to burn 15,000 tons of material or more per year may be subject to Section 15A NCAC 2Q .0500, Title V Procedures.

(e) Prevention of Significant Deterioration Consideration. Burners that burn 38,000 tons per year or more may be subject to 15A NCAC 2D .0530, Prevention of Significant Deterioration.

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