

**MEMORANDUM OF UNDERSTANDING**  
***BETWEEN***  
**THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**DIVISION OF AIR QUALITY**  
***AND***  
**THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE AND**  
**CONSUMER SERVICES**  
***ON***  
**OPEN BURNING WITHOUT AN AIR QUALITY PERMIT PURSUANT TO**  
**TITLE 15A NORTH CAROLINA ADMINISTRATIVE CODE 2D 1900**

**I. Purpose and Scope**

The purpose of this Memorandum of Understanding (MOU) is to set forth the principles of the working relationship between the North Carolina Department of Environmental Quality (NCDEQ) – Division of Air Quality (DAQ) and the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) that will educate the public of the open burning rules in North Carolina.

The intent of this agreement is to reduce air pollution resulting from the open burning of combustible materials, but not to affect the authority of the NCDA&CS to use open burning as an acceptable agricultural or apicultural practice for disease and pest control or an acceptable land management practice.

This instrument will serve as a guide for cooperation and coordination between the DAQ and the NCDA&CS. The term “acceptable,” as referenced in 2D .1903 will be defined and guidance will be developed by DAQ and NCDA&CS to help classify cases of open burning involving agricultural and non-agricultural lands.

**II. Background and Responsibilities**

**A. Background**

The second chapter of the North Carolina Administrative Codes, Environmental Management, includes provisions in 2D .1900 on permissible open burning without an air quality permit. The permissible open burning includes burns that are sanctioned by the practices of the NCDA&CS and the North Carolina Forest Service. The agencies have a long history of communication and information sharing to reach common goals. This MOU is meant to enhance and reaffirm our understanding and advance our goals.

## **B. DAQ and NCDA&CS Responsibilities: Agricultural Lands**

### **1. General**

With input from DAQ, the NCDA&CS will define “acceptable” agricultural fires for agricultural management practices. The NCDA&CS and the DAQ will work cooperatively in the cross-training of personnel on the use of open burning as an acceptable agricultural or apicultural practice for disease and pest control.

### **2. Definition of Acceptable Fires to Agricultural Lands for Agricultural Management Practices**

The DAQ will use the “Guidance Document for Agricultural Burning” provided by the NCDA&CS to distinguish the different types of acceptable agricultural management practices involving open burning of agricultural lands for the following:

- Disease Prevention and Control
- Pest Prevention and Control
- Crop Residue
- Polyethylene agricultural plastic pursuant to North Carolina General Statute (NCGS) 106-950
- Burning of unmarketable tobacco crop

The following criteria shall be considered by the DAQ when investigating the open burning of agricultural lands to evaluate whether the burn was conducted in an acceptable manner.

- Is the burn an acceptable agricultural or apicultural practice to prevent or control a disease outbreak?
- Is the burn an acceptable agricultural or apicultural practice to prevent or control a pest infestation?
- Is this crop residue burn an acceptable agricultural or apicultural practice?
- Is the material burned a polyethylene agricultural plastic as defined pursuant to NCGS 106-950?

### **3. Enforcement**

All agricultural land open burning that the DAQ investigates that does not clearly fall into the categories mentioned in II.B.2 of this MOU, or are covered under another section of 2D .1903, will be considered in violation of 2D .1903. Any other violations of the open burning rules that do not fit within the categories of agricultural burning addressed by this MOU and the Guidance Document for Agricultural Burning will be handled according to DAQ’s currently established policy and procedures.

### **4. Training and Outreach**

The NCDA&CS and the DAQ will jointly develop outreach materials that both agencies can distribute. The NCDA&CS and the DAQ will work to cross-train key personnel. The

NCDA&CS will provide training on acceptable agricultural or apicultural practices that would include open burning. The DAQ will give presentations on the concerns related to open burning from an air quality perspective.

**C. DAQ and NCDA&CS Responsibilities: Non-agricultural Lands**

**1. General**

The North Carolina Forest Service (NCFS), part of the NCDA&CS, and the DAQ will work together, when necessary, to determine if the burning of vegetative material for land management purposes is an acceptable management practice and to determine if the adherence to the smoke management plan under the North Carolina Smoke Management Program (NC SMP) is applicable.

The NCFS and the DAQ will work cooperatively in the cross-training of personnel on the use of open burning as an acceptable management practice and on concerns related to open burning from an air quality perspective.

Key contact officials for this agreement are the NCFS Forest Protection Division Director and the DAQ Deputy Director. These agency officials will coordinate, at a minimum, a yearly Cooperative Meeting to discuss and review this MOU, the NC SMP and the smoke management database.

**2. Responsibilities**

The NCFS will use best efforts to avoid prescribed burning when an Air Quality Action Day Code "Orange" or higher is forecast. The NCFS will maintain and coordinate the NC SMP regarding acceptable vegetative burning for land management. The NCFS will maintain a smoke management database that promotes compliance with the NC SMP, to the extent resources are available, and will make it available to DAQ.

The NCFS and the DAQ will: 1) develop/review public information materials (brochures, billboards, etc.) to be used to inform landowners/homeowners of the NC SMP and the State's open burning rules, and 2) review and discuss comments on the EPA, and other agency proposed rules or policies requesting comments on matters that can directly or indirectly affect the use of fire to maintain non-agricultural lands. Each agency agrees to share their comments prior to submittal. Jointly, the DAQ and the NCFS will prepare the documentation to submit to the EPA when an exceptional event has been identified as being related to a wildland fire.

Both agencies will provide personnel and equipment during times of fire emergencies, as resources allow. Agency Directors or their representatives will be responsible for approval of all requests.

Each agency will investigate and, if appropriate, take regulatory action on all possible illegal open fire referrals from the other agency. The DAQ will copy the NCFS on air quality violations resulting from a referral.

The DAQ will notify the NCFS of any circumstances, such as an air pollution episode, that would require special action regarding fires on non-agricultural land.

### 3. Enforcement

All non-agricultural land open burning that the DAQ investigates that is not an acceptable land management practice and/or that do not follow the smoke management plan when applicable may be considered in violation of 2D .1903. Any other violations of the open burning rules that do not fit within the category of non-agricultural land burning addressed by this MOU will be handled according to DAQ's currently established policy and procedures.

### 4. Training and Outreach

The NCFS will encourage landowners and/or their agent(s) to become certified burners and to adhere to the requirements of the law (G.S. 113 Article 4E. North Carolina Prescribed Burning Act), the NC SMP, and related air quality rules. They will train, coordinate, and emphasize the use of the NC SMP via the NCFS burn schools for certified burners. They will also advise landowners and/or their agent(s) and certified burners if weather conditions are not suitable for conducting prescribed burns when these persons contact the NCFS to provide burning information as required by the NC SMP. This task will be accomplished provided that the technology and hardware are in place to support the NC SMP.

The DAQ will provide NCFS with printed informational materials on acceptable open burning practices, and the NCFS will disseminate said materials to each burn permit agent and encourage them to provide the information to the public. The NCFS will provide the DAQ with printed informational materials on the NC SMP, and the DAQ will disseminate said materials to all regional offices.

A DAQ representative will participate on the North Carolina Prescribed Fire Council (NCPFC), the Fire Environment Committee (FEC), and, as resources allow, with the NCFS certified burner workshops.

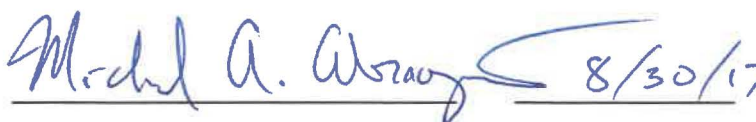
The DAQ will provide training on air monitoring equipment that the NCFS may acquire, as training resources allow, and include the NCFS on the list serve for exceptional events.



**N. David Smith**  
**NCDA&CS Chief Deputy Commissioner**

8.31.2017

**Date**



**Michael A. Abraczinskas**  
**DAQ Director**

**Date**

# **NCDA&CS Guidance Document for Agricultural Burning**

*Last Revised August 2017*

North Carolina Administrative Code (NCAC) 15A NCAC 02D .1903 (b) (5) allows open burning without an air quality permit for "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." This includes the burning of contaminated wooden boxes and containers provided that the burning does not enhance the spread of the disease or pest. Diseased plant materials being considered for destruction by burning must be destroyed on the farm where produced. The burning of household trash, pesticide containers or other manmade materials (with the exception of polyethylene agricultural plastic covered by under NCGS 106-950) is not considered an acceptable agricultural or apicultural practice and would be a violation of open burning regulations.

Pursuant to NCGS 106-940 through 106-950, a permit from the North Carolina Forest Service (NCFS) may be required, especially when the burning activity occurs within 500 feet of a woodland or involves land clearing operations in "high hazard" counties.

The North Carolina Department of Agriculture and Consumer Services (NCDA&CS) based its acceptance of these burning practices as necessary for disease and pest control on information from technical experts with N.C. State University and N.C. A&T State University. Emergency protocols from federal or state agencies may provide exceptions to these guidance documents.

## **Animal Mortality Incineration**

The NCDA&CS Veterinary Division routinely inspects methods and facilities employed by livestock and poultry producers to dispose of dead animals. All poultry producers are required by statute (NCGS 106-549.70) to have an NCDA&CS-approved method of mortality disposal, which can include an incinerator to handle normal levels of animal loss. NCGS 106-402.1 also provides the State Veterinarian the authority to determine the manner in which livestock producers may dispose of dead domesticated animals. Compliance with all Division of Air Quality, Division of Water Quality, and Solid Waste rules is required. Additionally, producers are expected to fully adhere to manufacturers' instructions and directions in operating any method of commercial animal disposal. Open burning of animal mortality is not an acceptable practice or permitted by the Veterinary Division of NCDA&CS.

The Veterinary Division of NCDA&CS states that there are many diseases of livestock and poultry that could be potentially transmitted to humans as well as other animals that are effectively mitigated or destroyed by the practice of animal incineration. These include but are not limited to Avian Influenza, Exotic Newcastle, Rabies, Brucellosis, Tuberculosis, Pseudorabies, Mycoplasma, Salmonella, E. coli, and others.



## **Christmas Tree, Nursery, and Ornamental Burning**

Open burning of Christmas trees, ornamental trees, shrubs, and other miscellaneous ornamental plants, and annual prunings from these trees and shrubs, is considered an acceptable agricultural practice by the NCDA&CS. This applies to all commercial Christmas tree farms, nurseries and greenhouses that grow these plants. Burning will kill many primary diseases and pests that live in this wood and pose a hazard for nearby Christmas trees, nursery and greenhouse crops. Burning is recommended in a timely manner to prevent the spread of these diseases and pests to healthy trees, shrubs, and other ornamental plants. Piling, mulching or transferring to landfill increases the risk of spreading disease. Any burning with prevailing winds towards a public road should be a minimum of 250 feet from the edge of the public road. No burning is allowed within 500 feet of another property owner's occupied structure without a signed written waiver at the time of the burn from the property owner(s) within the 500 feet boundary. Such a waiver must be approved by the Division of Air Quality Regional Supervisor in the respective area prior to the burn being initiated.

## **Field Crop Residue Burning**

North Carolina Administrative Code (NCAC) 15A NCAC 020 .1903 (b) (5) allows open burning without an air quality permit for "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." NCDA&CS encourages farmers to consider long-term strategy for conservation tillage, including equipment purchases and modifications of existing equipment to meet the demands of planting into crop residue. *Soil Fertility Note 17: Managing Crop Residue* (<http://www.ncagr.gov/agronomi/pdf/files/sfn17.pdf>) outlines the benefits of leaving and managing crop residue.

Special Note: Under certain conditions (such as situations where crop residue is likely to reduce seed germination or contribute to plant diseases), burning of crop residue may be considered an acceptable agricultural practice.

## **Orchards, Vineyards, and Other Perennial Fruit Crops**

Open burning of brush, including annual prunings, trees, bushes, and vines removed as part of orchard renovation, and diseased or pest-contaminated wooden harvest bins is considered an acceptable agricultural practice by the NCDA&CS. This applies to all orchards, vineyards, and other perennial fruit crops. Burning will kill many primary diseases and pests that live in this wood and pose a hazard for nearby orchards or vineyards. Burning is necessary to prevent the

spread of these diseases and pests to fruit trees, bushes, and vines. Piling, mulching or transferring to landfill increases the risk of spreading disease. Any burning with prevailing winds towards a public road should be a minimum of 250 feet from the edge of the public road. No burning is allowed within 500 feet of another property owner's occupied structure without a signed written waiver at the time of the burn from the property owner(s) within the 500 feet boundary. Such a waiver must be approved by the Division of Air Quality Regional Supervisor in the respective area prior to the burn being initiated.

### **Tobacco Burning**

The NCDA&CS considers the burning of tobacco waste (tailings) as an acceptable agricultural practice. The burning of tobacco trash is an acceptable means of disposal for the management of tobacco diseases, such as tobacco mosaic virus, as opposed to land application or deposition in a county landfill, where leaves could be blown or otherwise be deposited in fields used for tobacco production. Burning is the only feasible practice to thoroughly kill some tobacco disease organisms such as tobacco mosaic virus. Piling, mulching or transferring to landfill increases the risk of spreading disease. Any burning with prevailing winds towards a public road should be a minimum of 250 feet from the edge of the public road. No burning is allowed within 500 feet of another property owner's occupied structure without a signed written waiver at the time of the burn from the property owner(s) within the 500 feet boundary. Such a waiver must be approved by the Division of Air Quality Regional Supervisor in the respective area prior to the burn being initiated. The NCDA& CS considers the burning of tobacco determined to be unmarketable by leaf purchasers, crop insurance agents, or researchers an acceptable means of disposal. Burning is the most effective way to ensure that unmarketable tobacco does not reenter the purchasing system preserving the integrity of the industry

### **Permissible Land Clearing**

Pursuant to 15A NCAC 02D .1903(b)(2), open burning for land clearing or right-of-way maintenance is permissible provided that: (1) prevailing winds are away from built-up areas; (2) the location of the burn is at least 500 feet from any occupied structure; (3) the location of the burn is at least 250 feet from the edge of a roadway if the prevailing wind is toward the roadway; (4) only kerosene distillate, or diesel fuel is used to start the fire; (5) burning shall commence between 8:00 am and 6:00 pm and no additional material is added other than during those hours. Open burning should not be initiated when the Air Quality Action Day Code "Orange" or above is forecasted.

### **Burning of Polyethylene Agricultural Plastics**

Open burning of polyethylene agricultural plastic used in connection with agricultural operations (such as strawberry row covering) is permissible under GS 106-950, and no air quality permit (or fee) is required, if certain conditions are met. First, this activity is not allowed

in cases where the Commissioner of Agriculture has prohibited all open burning during periods of hazardous forest fire conditions, or during air pollution episodes declared pursuant to Article 21B of Chapter 143 of the NC General Statutes. In addition, the plastic material must be related to the growing, harvesting, or maintenance of crops. All of the following conditions apply:

- 1) the burning does not violate any State or Federal ambient air quality standards,
- 2) the burning is conducted between an hour after sunrise and an hour before sunset,
- 3) the fire is set back at least 250 feet from any paved public roadway and at least 500 feet from any dwelling, group of dwellings, commercial or institutional establishment, or other occupied structure not located on the property on which the burning is conducted,
- 4) the burning is conducted in a manner such that it does not constitute a public nuisance,
- 5) the burning is conducted by any of the following means:
  - a.) by professionally manufactured equipment solely for the purpose of plastic mulch burning or incineration and approved by the Commissioner, or
  - b.) by a fire that is enclosed in a noncombustible container, or
  - c.) by a fire that is restricted to a pile no greater than eight feet in diameter built upon ground cleared of all combustible material.