

**MEMORANDUM OF UNDERSTANDING  
BETWEEN  
THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL  
RESOURCES  
DIVISION OF AIR QUALITY  
AND  
THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE  
ON  
THE OPEN BURNING OF AGRICULTURAL LANDS FOR AGRICULTURAL  
MANAGEMENT PRACTICES UNDER TITLE 15A NORTH CAROLINA  
ADMINISTRATIVE CODE 2D .1903**

**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 Environment and Natural Resources (NCDENR) - 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 regulations 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.

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 b.5, will be defined and guidance developed to help classify cases of open burning involving 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. In section 2D .1903 b.5, it states that permissible open burning without a permit includes, "fires purposely set to agricultural lands for disease and pest control and fires set for other agricultural or apicultural practices acceptable to the NCDA&CS." Public education will be based upon agreed upon guidelines for burning by NCDA&CS and DAQ. The DAQ has created an Open Burning Outreach Team (OBOT) to develop methods to reduce unnecessary and illegal open burning in North Carolina. The DAQ desires to define what is "acceptable" when open burning for agricultural management practices, in order to better enforce the current open burning regulation.

**B. NCDENR – DAQ and NCDA Responsibilities**

**1. General**

The NCDA&CS and DAQ will define "acceptable" agricultural fires for agricultural management practices. The DAQ will proceed with enforcement against individuals or businesses responsible for open burning fires that do not comply with the provisions outlined in this MOU. NCDA&CS and DAQ will work cooperatively together 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 "accepted" agricultural management practices involving open burning of agricultural lands for the following.

- Disease Control Burn
- Pest Control Burn
- Crop Residue Burn

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 control a disease outbreak?
- Is the burn an acceptable agricultural or apicultural practice to control a pest infestation?
- Is this crop residue burn an acceptable agricultural or apicultural practice?

## 3. Enforcement

All agricultural land open burnings that the DAQ investigates that do not clearly fall into the categories mentioned in II.B.2 of this MOU will be considered in violation of 2D. 1903 b.5. Enforcement on these violations will begin one year after the MOU is signed by both agencies to allow time for outreach on these new procedures to take place. 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. Outreach

The NCDA&CS and DAQ will jointly develop outreach materials that both agencies can distribute. The NCDA&CS and DAQ will work to cross train key personnel. NCDA&S will provide training on acceptable agricultural or apicultural practices that would include open burning. DAQ will give presentations on the concerns related to open burning from an air quality perspective.



7.29.2009

N. David Smith

Date

NCDA&CS Chief Deputy Commissioner



7/29/2009

Keith Overcash

Date

DAQ Director

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

*Last Revised July 2009*

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 is not considered an acceptable agricultural or apicultural practice and would be a violation of open burning regulations.

The North Carolina Department of Agriculture and Consumer Services based its acceptance of these burning practices as necessary for insect and disease 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 (**106-549.7**) to have an NCDA&CS-approved method of mortality disposal, which can include an incinerator to handle normal levels of animal loss. Statute (**106-402**) also provides the State Veterinarian the authority to determine the manner in which livestock producers may dispose of dead domesticated animals. Compliance with all DAQ, DWQ, 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 would include but not be 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 misc. ornamental plants, and annual prunings from these trees and shrubs, is considered an acceptable agricultural practice by the North Carolina Department of Agriculture and Consumer Services. This applies to all commercial Christmas tree farms, nurseries and greenhouses that grow these plants. Burning will kill many primary insect and disease 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 insect and disease 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 1,000 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 1,000 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 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." 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/pdffiles/sfn17.pdf>) outlines the benefits of leaving and managing crop residue.

Special Note: Under conditions 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. The North Carolina Department of Agriculture and Consumer Services (NCDA&CS) will request recommended guidelines from the members of the Ag Task Force Advisory Committee (ATFAC) to quantify the conditions that would allow the removal of the crop residue as an acceptable agricultural practice. These guidelines are to provide a clear and calculated method of determination of when to allow burning. Upon approval by NCDENR - Division of Air Quality (DAQ) and the NCDA&CS these recommendations will be included in the NCDA&CS Guidance Document for Agricultural Burning.

## **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 North Carolina Department of Agriculture and Consumer Services. This applies to all orchards, vineyards, and other perennial fruit crops. Burning will kill many primary insect and disease pests that live in this wood and pose a hazard for nearby orchards or vineyards. Burning is necessary to prevent the spread of these insect and disease 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 1,000 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 1,000 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 North Carolina Department of Agriculture and Consumer Services considers the burning of tobacco waste (tailings) as an acceptable agricultural practice. The burning of tobacco trash is as 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 1,000 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 1,000 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.

## **Permissible Land Clearing**

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 1000 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.