



**NORTH CAROLINA  
AIR AWARENESS PROGRAM  
AIR QUALITY EDUCATION  
6-8 Curriculum & Activity Guide**



# TABLE OF CONTENTS

<b>Division of Air Quality Mission Statement and Acknowledgements</b> .....	3
<b>Overview</b> .....	4
<b>Introduction</b> .....	5
<b>Background</b> .....	6, 7, 8
<b>Classroom Activity #1: Smoldering Nasty Stuff</b> .....	9
<b>Examining our household trash and learning the dangers of burning different materials.</b>	
o Students will learn that burning trash produces dangerous air pollution that harms human health and that burning trash is illegal.	
o Students will evaluate amounts and types of materials typically discarded and consider alternatives to disposal. Have a chance to look at, and report on, their household trash to see what could be recycled instead and why burning trash could be harmful to their family's health.	
<b>Classroom Activity #2: Burning Issues</b> .....	19
<b>Creating research-based posters for presentation</b>	
o In this lesson, students examine the effects of air pollution and open burning, as well as ways in which North Carolina regulates and controls open burning violations.	
o Students will use research to create informative or persuasive posters about open burning and air pollution. Posters can be posted in hallways or groups can present to other classes.	
<b>Classroom Activity #3: Heated Conversations</b> .....	27
<b>Skits to improve communication skills and explain the dangers of open burning / air pollution.</b>	
o Have some fun and let your students perform skits to learn about open burning.	
o Burning household trash, and other synthetic or manmade materials contributes to air, soil, and water pollution. It is against North Carolina law to burn them.	
o What are the consequences to the environment and human health caused by burning trash and synthetic materials?	
<b>Resources</b> .....	41
<b>Division of Air Quality Fact Sheet</b> .....	42, 43

## A project of the North Carolina Air Awareness Program

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## ***NC Division of Air Quality Mission***

The Division of Air Quality (DAQ) works with the state's citizens to protect and improve outdoor, or ambient, air quality in North Carolina for the health, benefit and economic well-being of all. To carry out this mission, the DAQ has programs to operate a statewide air quality monitoring network to measure the level of pollutants in the outdoor air, develop and implement plans to meet future air quality initiatives, assure compliance with air quality rules, and educate, inform and assist the public with regard to air quality issues.

## ***Open Burning Outreach Team***

Several years ago, the North Carolina Department of Environment and Natural Resources (DENR) Division of Air Quality, initiated an outreach team to communicate to the public the dangers of open burning, or burning trash in an open fire or burn barrel. The Open Burning Outreach Team (OBOT) in addition to working with multiple agencies, fire departments, and local groups, tries to spread a simple message; burning man made trash is dangerous, produces unhealthy air pollution, and is illegal.

## ***Acknowledgements***

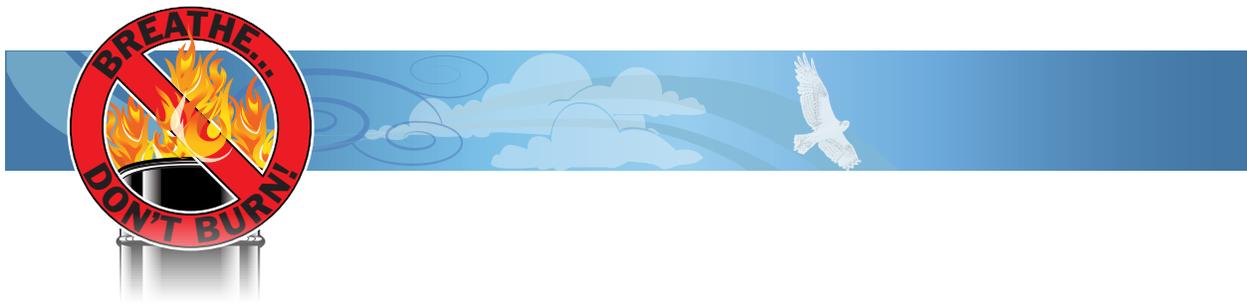
This project was the result of a collaborative effort between the Open Burning Outreach Team (OBOT) and the NC Air Awareness Program team. Many thanks go to all staff members who helped with this project.

## ***NC Air Awareness Program***

The NC Air Awareness Program of the DAQ began air quality public outreach, including forecasting of ground-level ozone levels, in 1997. The DAQ is responsible for protecting and improving outdoor air quality in North Carolina. The DAQ currently faces the environmental challenge of reducing harmful tailpipe emissions that greatly contribute to poor air quality in much of our state. The primary goal of this program is to educate the public, reduce air pollution and improve air quality for the benefit of all North Carolina citizens.



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## OVERVIEW

### *Breathe, Don't Burn! OBOT Classroom Activities*

#### **Greetings!**

We need your help to keep our air clean and healthy for everyone in the great state of North Carolina. Several years ago the Division of Air Quality (DAQ) initiated an outreach team to communicate to the public the dangers of open burning, or burning trash in an open fire or burn barrel. The Open Burning Outreach Team (OBOT), in addition to working with multiple agencies, fire departments, and local groups, tries to spread a simple message; burning man made trash is dangerous, produces unhealthy air pollution, and is illegal. These materials include everything from household wastes to old tires, plastics, and construction debris. OBOT is comprised of employees from the DAQ's seven regional air quality offices across the state who work to reduce air pollution and keep North Carolinians healthy. Illegal open burning is a serious issue in North Carolina.

These classroom activities which fit into the middle school essential standards and common core, are fun ways to bring new and exciting projects into your classroom that also send an important message. We need outstanding teachers to try these activities and then let us know what they think. Free materials, handouts, and other fun items for your students and parents can be made available to those willing to give these lessons a try.

Go to [www.ncair.org](http://www.ncair.org) or <http://ncdenr.org/web/daq/openburning/education> to learn more!

Thank you,

Jeffrey L. Bouchelle

Senior Environmental Specialist



# INTRODUCTION

## Breathe, Don't Burn! OBOT Classroom Activities

Welcome! We need your help to keep our air clean and healthy for everyone in our state. Several years ago the Division of Air Quality (DAQ) initiated an outreach team to communicate to the public the dangers of open burning, or burning trash in an open fire or burn barrel. The Open Burning Outreach Team (OBOT), in addition to working with multiple agencies, fire departments, and local groups, tries to spread a simple message; burning man made trash is dangerous, produces unhealthy air pollution, and is illegal. These materials include everything from household wastes to old tires, plastics, and construction debris. OBOT is comprised of employees from the DAQ's seven regional air quality offices across the state who work to reduce air pollution and keep North Carolinians healthy. Illegal open burning is a serious issue in North Carolina.

These classroom activities which fit into the middle school essential standards and common core are fun ways to bring new and exciting projects into your classroom that also send an important message. We need energetic, engaged, teachers to try these activities out, and then let us know what they think. Free materials, handouts, and other fun items for your students and parents can be made available to those willing to give these lessons a try. Go to <http://ncdenr.org/web/aq/openburning/education> to learn more! The three activities include;

### **Classroom Activity #1: Smoldering Nasty Stuff**

#### **Examining our household trash and learning the dangers of burning different materials.**

- Students will learn that burning trash produces dangerous air pollution that harms human health and that burning trash is illegal.
- Students will evaluate amounts and types of materials typically discarded and consider alternatives to disposal. They will have a chance to look at, and report on, their household trash to see what could be recycled instead, and why burning trash could be harmful to their family's health.

### **Classroom Activity #2: Burning Issues**

#### **Creating research-based posters for presentation**

- In this lesson, students examine the effects of air pollution and open burning, as well as ways in which North Carolina regulates and controls open burning violations.
- Students will use research to create informative or persuasive posters about open burning and air pollution. Posters can be posted in hallways or groups can present to other classes.

### **Classroom Activity #3: Heated Conversations**

#### **Skits too improve communication skills and explain the dangers of open burning / air pollution.**

- Have some fun and let your students perform skits to learn about open burning.
- Burning household trash, and other synthetic or manmade materials contributes to air, soil, and water pollution. It is against North Carolina law to burn them.
- What are the consequences to the environment and human health caused by burning trash and synthetic materials?