



2010 Annual Summary Report

Overview and Mission of the Agency

In the 1940s, the City of Asheville established a “Smoke Abatement Program” to address the blanket of black smoke that engulfed the city during particularly stagnant weather conditions. The local air quality agency is an extension of that program. Originally, the agency served four counties, and from 1970 to 2000, the Agency served two counties (Buncombe and Haywood). In 2000, the Western North Carolina Regional Air Quality Agency (WNCRAQA) was re-formed through an interlocal agreement between Buncombe County and the City of Asheville. The purpose of this agreement was to establish, administer, and enforce a local air quality program for Buncombe County and the City of Asheville in accordance with the provisions of North Carolina General Statutes Section 143-215.112.

The mission of the Agency is to monitor and regulate the air quality of the City of Asheville and Buncombe County to safeguard public health and the environment, while preserving the quality of life and economic vitality of the area. The Agency is responsible for implementing and enforcing the provisions of the federal Clean Air Act and all additional state and local air quality regulations in Buncombe County. We operate an air pollution monitoring network that is used to determine whether our area is in compliance with the national ambient air quality standards (NAAQS). Our program ensures that industrial facilities, gas stations, dry cleaners, grading contractors, and asbestos removal activities comply with all applicable air quality regulations that protect the public health and welfare. We enforce the open burning regulations and investigate air quality complaints. We offer compliance assistance, education and outreach services, and we are available to do presentations on air quality at the request of schools, civic groups, and other community organizations. We also maintain an indoor air quality hotline for citizen inquiries and we have partnered with other agencies to distribute free radon test kits.

The WNCRAQA is governed by a five-member board with three members appointed by the Buncombe County Commissioners, and two members appointed by the Asheville City Council. The Agency is also served by an advisory committee made up of community members from a wide range of backgrounds.

Current Air Quality Monitoring Data – Ozone and Fine Particles

Our most recent design value used to determine compliance with the national health-based standard for ozone (average of the 4th highest 8-hour ozone concentration measured over 3 consecutive years) at our Bent Creek monitor here in Buncombe County is 68 parts per billion (ppb). While we are in compliance with the current standard of 75 ppb, EPA has recently proposed to lower the national standard to somewhere between 60 and 70 ppb to better protect public health. A final decision on the proposal is expected in 2011.

4th Highest Maximum 8-Hour Ozone Concentration (ppb) and Number of 8-Hour Ozone Exceedances¹

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
90	76	90	70	73	79	71	73	71	64	71
7	1	7	0	0	1	0	0	1	0	1

¹Exceedance numbers are based on the ozone standard that was in effect for each year listed above. From 2000 through 2007, the standard was 80 ppb, since 2008 the standard has been 75 ppb.

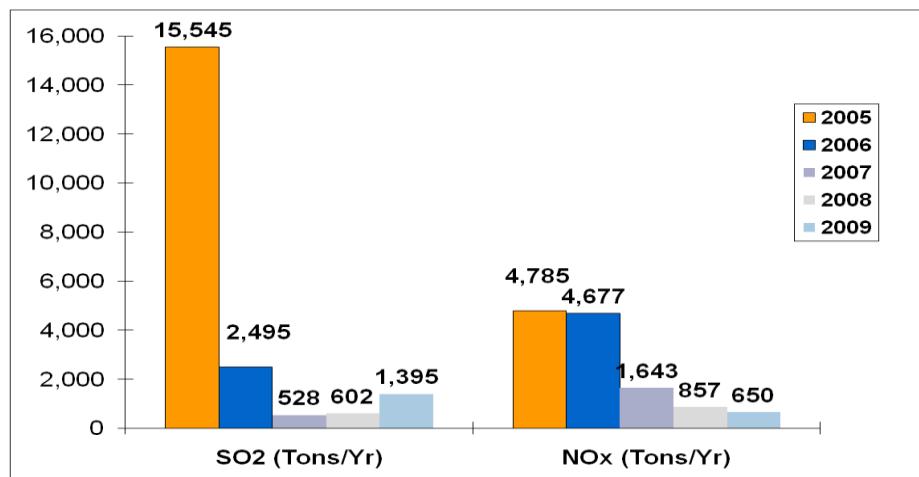
The agency also operates a monitoring site for fine particulate matter (PM_{2.5}). There are two NAAQS for PM_{2.5}; the 98th percentile 24-hour average standard is 35 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), and the annual arithmetic mean standard is 15 $\mu\text{g}/\text{m}^3$. Our area is currently in compliance with these standards. The full 2010 dataset is not yet available for review, and as such, the most recent 3-year design value available for comparison with the standards is for the period of 2007-2009. The 98th percentile 24-hour average is 23 $\mu\text{g}/\text{m}^3$, and the annual arithmetic mean is 9.9 $\mu\text{g}/\text{m}^3$. Below are trend data for the annual standard.

PM_{2.5} Data: Annual Arithmetic Mean ($\mu\text{g}/\text{m}^3$)

1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
16.1	15.4	12.8	14.5	12.7	12.3	13.1	12.8	12.1	10.7	8.46

Reductions in Air Emissions from Progress Energy's Skyland Plant

The most exciting and significant emissions reduction project affecting Buncombe County during the last few years has been the installation and operation of the flue gas desulphurization (FGD) units, or scrubbers, and selective catalytic reduction (SCR) systems at the Skyland plant, in accordance with the NC Clean Smokestacks Act of 2002. The NC Clean Smokestacks Act requires NC power plants to reduce total emissions of sulfur dioxide (SO₂) and nitrogen oxides (NOx) by approximately 70%. SO₂ and NOx contribute to fine particle pollution, acid deposition, and the regional haze that obscures our mountain vistas in the summer time. Nitrogen oxides also contribute to ozone formation. Below is a table showing the emissions reductions from the Asheville plant.



2010 Education and Outreach and Voluntary Program Initiatives

In addition to our core duties of implementing our monitoring, permitting, and enforcement programs, below is a list of education and outreach activities that were accomplished in 2010.

- WNCRAQA completed a stimulus grant-funded project with monies obtained from the NC Department of Environment and Natural Resources to retrofit 20 fire trucks in the City of Asheville and Buncombe County with air pollution control devices that will decrease emissions of particulate matter, carbon monoxide, and hydrocarbons by approximately 20, 41, and 66% per year respectively. Total emissions reductions are expected to be between 1 and 2 tons per year.
- The Agency continued working on a campaign to encourage the reduction of engine idling by parents waiting to pick up their children at local schools. Signs stating “Turn off your engine – breathe better – save money” were distributed to the City of Asheville Schools in 2010, Buncombe County Schools received and put up signs in 2009.
- WNCRAQA continued working on an initiative to educate citizens who heat with wood about the benefits of newer stoves that meet EPA emission limits. A public service announcement was produced and aired by Buncombe County TV in 2010 to let citizens in the area know that federal tax credits could be used to offset the cost of upgrading to cleaner and safer equipment. Federal tax credits were available for stoves meeting minimum efficiency requirements installed at a primary residence in 2010.
- Agency staff participated in a presentation for local government leaders at Land of Sky Regional Council regarding proposed changes to the EPA’s ozone standard. We continued to participate in training classes for real estate agents and hosted 7th grade science classes from Erwin Middle school for an educational presentation. The Agency had an air quality booth and distributed information at Asheville High School sustainability event, Buncombe County Soil and Water Conservation Field Days, a local health fair, The VA’s Earth Day Fair, and helped out with the Clean Air Campaign’s annual Bele Chere festival booth.
- Outreach with the regulated community was conducted by participation in a workshop sponsored by Asheville Green Works and Alcan – Best Environmental Practices for Industry Forum. Outreach was also conducted with area gas stations, auto body shops, several metal fabrication companies, and electroplating companies that are subject to new federal air pollution requirements.
- The Agency partnered with the NC Radon Program and the NC Cooperative Extension Service to distribute free radon test kits during radon awareness month in January.
- Agency staff continued to serve on the City of Asheville’s Sustainable Advisory Committee on Energy and the Environment, the Buncombe County Environmental Advisory Board, and the French Broad River MPO’s Technical Coordinating Committee. The agency is an active member of Land-of-Sky Regional Council’s Clean Air Campaign and Clean Vehicles Coalition.
- The Agency continued its popular air quality awards for permitted facilities to recognize those that implement voluntary measures to reduce emissions. In conjunction with this, the Agency continued its efforts as an EPA ENERGY STAR Low Carbon IT Campaign ally by promoting the use of power management tools on computers to save energy and money, and to reduce emissions of greenhouse gases and other air pollutants.

WNC Regional Air Quality Agency
2010 Environmental Management Commission
Report Parameters

REPORT ITEM	SUB-ITEM	CY 2010
Number of Staff in Each Program Area (In Person-Years)		
	<i>Permitting</i>	1.5
	<i>Inspections</i>	2.75
	<i>Enforcement</i>	1.25
	<i>Monitoring</i>	1.5
	<i>Clerical</i>	0.5
	<i>Administrative</i>	1.5
Number of Facilities, By Category		
	<i>Title V</i>	7
	<i>Synthetic Minor</i>	9
	<i>Small</i>	55
	<i>Stage I Vapor Recovery</i>	148
	<i>Dry Cleaners</i>	7
Number of Operating Permits Issued, By Category		
	<i>Title V</i>	2
	<i>Synthetic Minor</i>	2
	<i>Small</i>	23
Number of Construction or Modification Permits Issued, By Category		
	<i>Title V</i>	2
	<i>Synthetic Minor</i>	1
	<i>Small</i>	12
Average Time to Process Each Permit, By Category		
	<i>Initial Title V</i>	6 months
	<i>Synthetic Minor</i>	1 month
	<i>Small</i>	1 month
	<i>Construction</i>	1.5 month
Have emissions inventories been reported to EPA?		Yes

REPORT ITEM	SUB-ITEM	CY 2010
How many stack tests were observed?		2
How many stack test protocols and reports were received, reviewed, and approved?		2
List Number of Continuous Emissions Monitors, By Type		
	<i>CO</i>	1
	<i>CO₂</i>	2
	<i>NO_x</i>	2
	<i>O₂</i>	1
	<i>Opacity</i>	2
	<i>SO₂</i>	2
	<i>Mercury</i>	2
Number of Inspections Performed at Each Source Category		
	<i>Title V</i>	7
	<i>Synthetic Minor</i>	9
	<i>Small</i>	30
	<i>Stage I Vapor Recovery</i>	145
	<i>Dry Cleaners</i>	7
Number of Full Compliance Evaluations		
	<i>Title V</i>	7
	<i>Synthetic Minor</i>	9
	<i>Small</i>	30
	<i>Stage I</i>	145
	<i>Dry Cleaners</i>	7
Number of Staff Available to Perform Compliance Evaluations		
	<i>Industrial</i>	3
	<i>Asbestos</i>	2
	<i>Indoor Air Quality (IAQ)</i>	2
	<i>Open Burning, Dust, Odor</i>	7

REPORT ITEM	SUB-ITEM	CY 2010
Number of Violations Found During Inspections		9
Number of Complaints Received		
	<i>Industry</i>	12
	<i>Asbestos</i>	1
	<i>Dust, Odor, IAQ</i>	14
	<i>Open Burning</i>	54
	<i>Stage I Vapor Recovery</i>	0
Number of Complaints Investigated		
	<i>Industry</i>	12
	<i>Asbestos</i>	1
	<i>Dust, Odor, IAQ</i>	14
	<i>Open Burning</i>	54
	<i>Stage I Vapor Recovery</i>	0
Number of NOVs, By Type		
	<i>Industry – Emissions</i>	0
	<i>Industry - Procedural</i>	9
	<i>Asbestos</i>	0
	<i>Dry Cleaners</i>	0
	<i>112(r) Program</i>	0
	<i>Open Burning</i>	20
	<i>Stage I Vapor Recovery</i>	10
Number of Enforcement Cases Processed		39
Number of Special Orders of Consent Issued		0
Number of Penalties Assessed		25
Total Amount of Penalties Assessed		\$22,931.75
Total Amount of Penalties Collected ¹		\$17,944.75
Number of High Priority Violations Reported to EPA		0
Was compliance status of the facilities updated in AFS on a regular basis? How often?		Yes, Bi-Monthly

¹ The Agency turns over 85% of all collected penalties to the local school system.