

Airwaves

February 2015

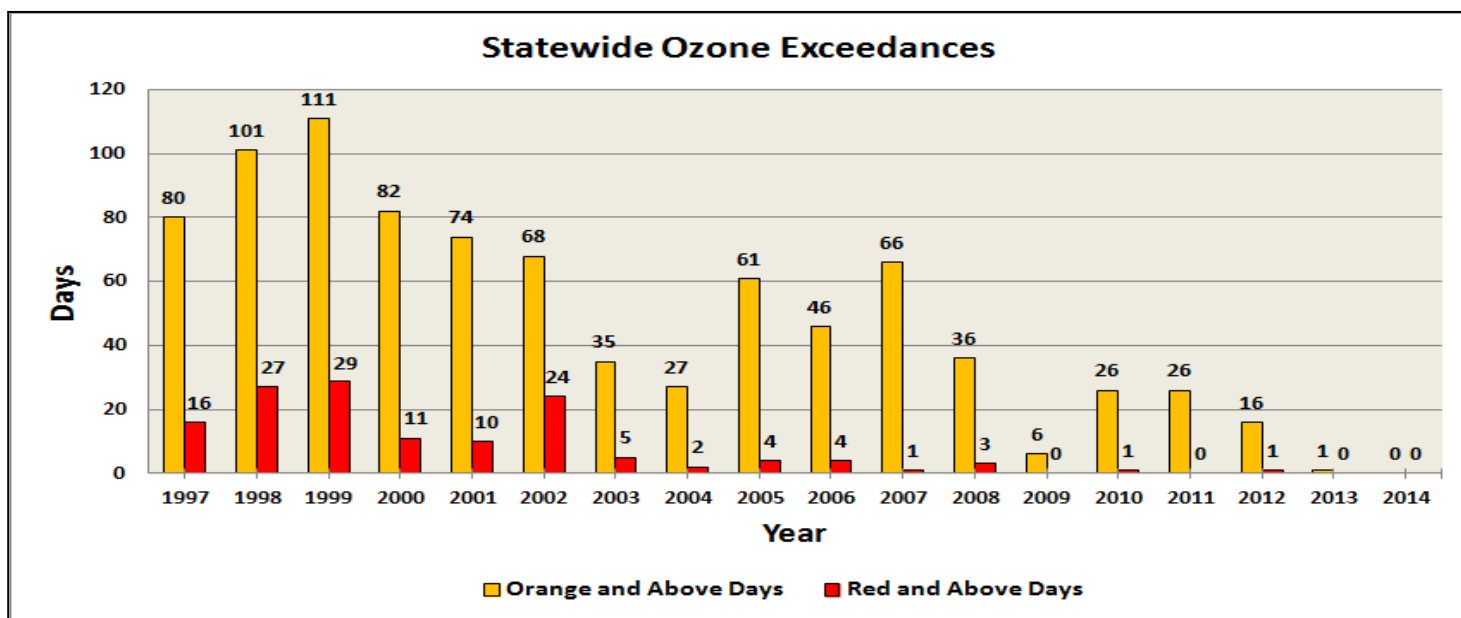
2015 Air Quality Update

By Jason Rayfield, Permitting & Enforcement Program Manager

During the 2014 Air Quality Forum, hosted by Mecklenburg County Air Quality, Scott Davis, Permitting Branch Chief from the Environmental Protection Agency (EPA), and Sushma Masemore, Planning Section Chief from the North Carolina Division of Air Quality, provided updates on our region's air quality status. There's no doubt that air quality within the Charlotte area continues to improve! Statewide, success has been made in achieving these federal standards over the past decade:

- 1997 Fine particle (PM2.5) standard;
- 2006 Lead standard;
- 2010 Nitrogen dioxide standard;
- 2010 Sulfur dioxide (SO₂) standard; and,
- 2012 Fine particle (PM2.5) standard.

Complying with the ground-level ozone standard remains a priority for the region and the latest monitoring data shows continuing declines in this pollutant. In fact, there were no exceedances of the current, 75 parts per billion (ppb) standard statewide in 2014. Work is now underway to redesignate our region back to attainment/maintenance for this standard.



At the Forum, there was also a discussion about the significant challenges ahead for our region and state. Later in 2015, EPA is expected to finalize a new, more stringent ozone standard that could fall within the range of 60-70 ppb. Current data shows that a significant portion of the state (including Mecklenburg) could be designated as nonattainment. Additionally, the Clean Power Plan, aimed at reducing greenhouse gas (GHG) pollutant emissions from new and existing power plants, establishes targets for each state to reduce GHGs. Final rules affecting power plants are expected later this year (more details at www.epa.gov/cleanpowerplan).

Our region has experienced many successes in regards to air quality over the past decade thanks to pollution reduction efforts by industry and new, cleaner engine standards within the mobile source sector. Mecklenburg County Air Quality remains committed to keeping you informed about our region's status and providing you with the information needed to comply with your air quality permit.

2014 Annual Forum Summary

By Andrew Deal, Air Quality Specialist

On November 13, 2014, Mecklenburg County Air Quality (MCAQ), along with UNC Charlotte's Energy and Environmental Assistance Office (EEAO), hosted the 2014 Annual Air Quality Forum. The event invited local permitted businesses to hear the latest air quality program updates for our region. Presenters included Tom McKittrick of Forsite, Inc.; R. Scott Davis, Air Planning Branch Chief, USEPA Region 4; Sushma Masemore, Planning Section Chief, NC DAQ; as well as MCAQ staff. The event was attended by eighty-two people representing thirty-seven facilities in Mecklenburg County.

A highlight at the Forum was a presentation showcasing ReVenture Park by Tom McKittrick, President of Forsite Inc. ReVenture Park is Charlotte's first Eco-Industrial Park. Originally a textile dye manufacturing facility in northwest Mecklenburg County, this 667-acre Superfund site has been transformed into an award-winning Brownfield redevelopment site featuring multiple clean energy projects.

Scott Davis' presentation was also enlightening, as he covered EPA's Clean Power Plan, changes to air quality standards, and ongoing legal challenges in his comments. In her presentation, Sushma Masemore addressed recent trends in emissions, development of new air quality rules, and the State Implementation Plan. Other topics included updates from MCAQ's Mobile Sources, Permitting, and Monitoring Groups. More information, as well as the presentations themselves, can be found on our website at <http://airquality.charmeck.org>.

MCAQ would like to thank the staff at UNCC, and the EEAO in particular, who once again did a wonderful job helping to coordinate the event. MCAQ would also like to thank the following exhibitors: Charlotte Area North Carolina Air Awareness, the EEAO, and Mecklenburg County Solid Waste for their participation.

MCAQ's next compliance assistance event will be the annual spring workshop. The focus this year will be on understanding air emissions reporting requirements. Be looking out for an invitation soon!

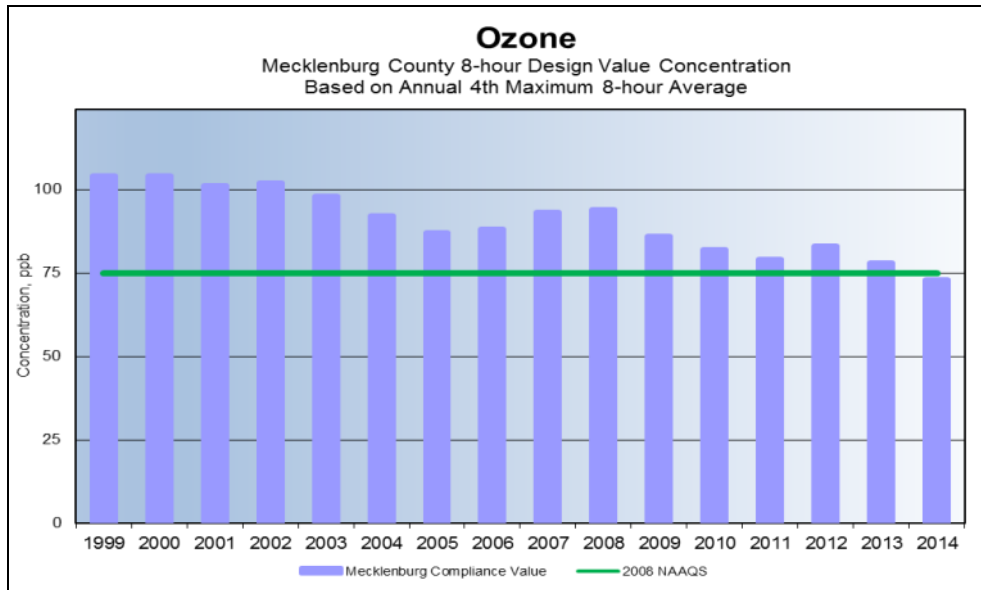


Mecklenburg County Air Quality Monitoring Update

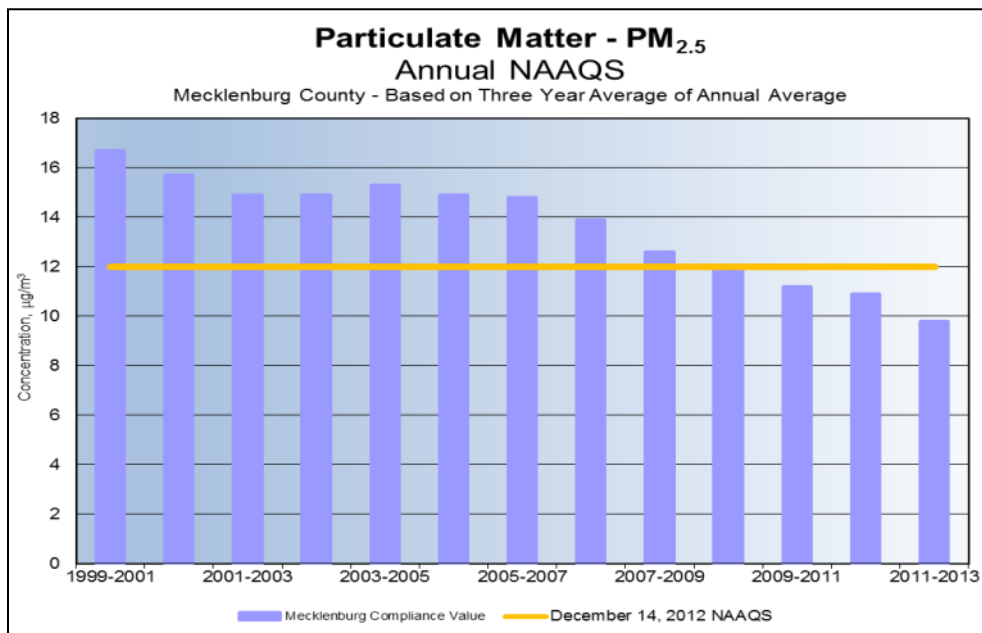
By Jeff Francis, Air Monitoring Program Manager

The Mecklenburg County Air Quality (MCAQ) monitoring program operates a monitoring network designed to measure compliance with the National Ambient Air Quality Standards (NAAQS). The NAAQS air pollutants are collectively known as the criteria air pollutants. The criteria air pollutants are nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), carbon monoxide (CO), particulate matter (two fractions: PM_{2.5} & PM₁₀), and ozone. In Mecklenburg County, ozone is the pollutant of most concern.

2014 was an historic year for ozone monitoring in the Mecklenburg County monitoring network. For the first time since the 2008 revision of the ozone NAAQS, the ozone compliance value measured in the MCAQ network was below the level of the standard. The 2008 NAAQS for ozone is 75 ppb. For the three year period 2012-2014, data collected in the MCAQ network indicated a compliance value of 73 ppb. The compliance values for monitoring sites operating in the MCAQ network are depicted in the graph below:



A revised particulate matter NAAQS was announced by USEPA on December 14, 2012. The NAAQS for the PM_{2.5} annual primary standard was revised from 15.0 ug/m³ to 12.0 ug/m³. Data collected for the period 2011-2013 indicate that the MCAQ network measured an annual compliance value of 9.8 ug/m³ for the period. Below is a chart depicting the annual NAAQS compliance values for Mecklenburg County plotted with the revised NAAQS threshold:



GRADE for Landfills: Turning Trash into Treasure

By Megan Green, Mobile Sources Program Manager

In October 2014, Mecklenburg County Air Quality (MCAQ) was selected by the Environmental Protection Agency to receive \$500,000 in Diesel Emission Reduction Action funding. This funding was awarded to support MCAQ's proposed "GRADE for Landfills" project. This project will reduce ozone-forming emissions by supporting the replacement or repower of diesel equipment operating at solid waste facilities, as outlined in the table below.

Eligible Facilities	Equipment Examples	Eligible counties
Publicly and privately owned facilities that accept solid waste including: Municipal solid waste Construction and demolition debris Land clearing and inert debris Yard waste	Compactors Dozers Excavators Rubber tire loaders Scrapers Tub grinders	Cabarrus Gaston Iredell Lincoln Mecklenburg Rowan Union (NC)

MCAQ developed the *GRADE for Landfills* project based on the success of past projects at solid waste facilities. Since 2007, MCAQ has provided sub-grant funding to repower or replace 11 pieces of landfill equipment. MCAQ's experience shows that landfill equipment is high-horsepower and high-use, leading to cost-effective NOx emission reductions. *GRADE for Landfills* will reduce an estimated 60 tons of nitrogen oxide emissions over the life of the projects. Since landfill equipment is used at a fixed location, all of these emissions reductions will stay in the Charlotte region. To learn more about *GRADE for Landfills*, view the "commercial" that accompanied MCAQ's winning application for funding at <http://bit.ly/GRADEforLandfillsVideo>.



Photos from a landfill compactor replacement project completed by York County Public Works in 2010.

Airwaves is published by Mecklenburg County Air Quality as a service to permitted air sources in Mecklenburg County. Upon request, information will be available in an alternative format for persons with disabilities. No warranty for the reliability or usefulness of the contents herein. For specific questions, contact your Air Quality representative.

Mecklenburg County Air Quality

Make Charlotte a Breathtaking City by Cutting Pollution When It Counts

2015

January

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Schedule of Events

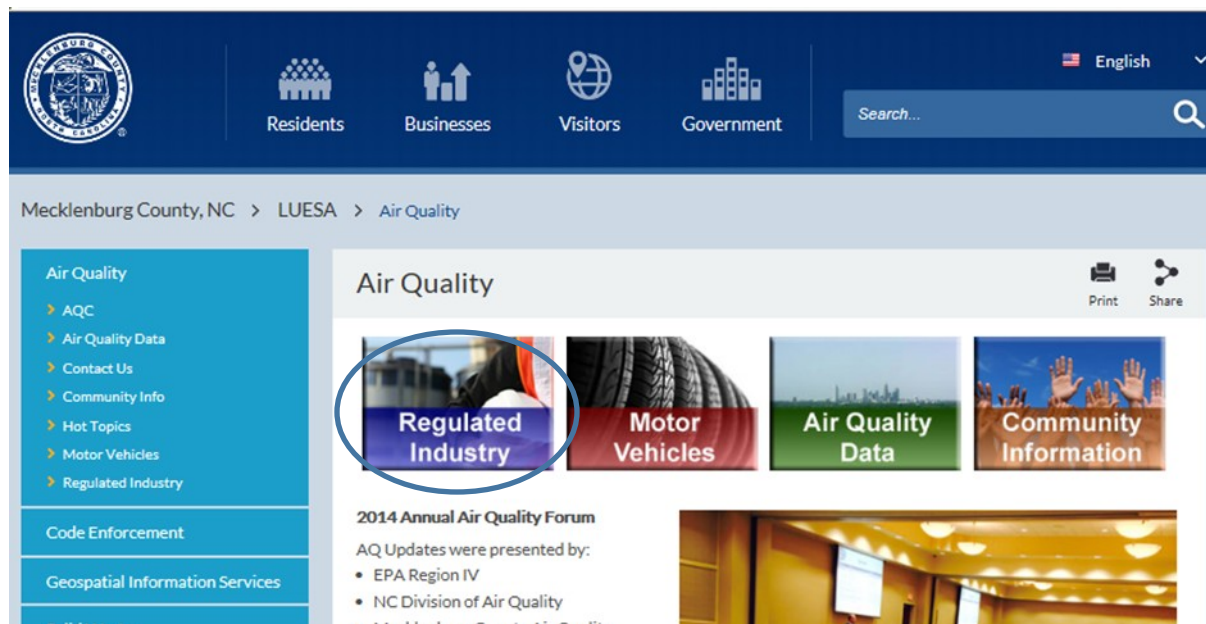
- **4th Monday of Every Month**
Air Quality Commission (AQC) Meeting (open public comment period for proposed permits)
- **30th Day of Every Month**
Submit Monthly, Quarterly, Semi-Annual, or Annual Report(s) to MCAQ (all permitted facilities shall submit an Annual Report by April 30th)
- **April 1st to October 31st Ozone Season**
- **Air Quality Meetings/Workshop**
- Spring 2015 Workshop (TBD)
- November 2015: Air Quality Annual Forum (TBD)
- **November 2015**
- Annual Invoice Fees mailed to Permitted Facilities

County Holidays

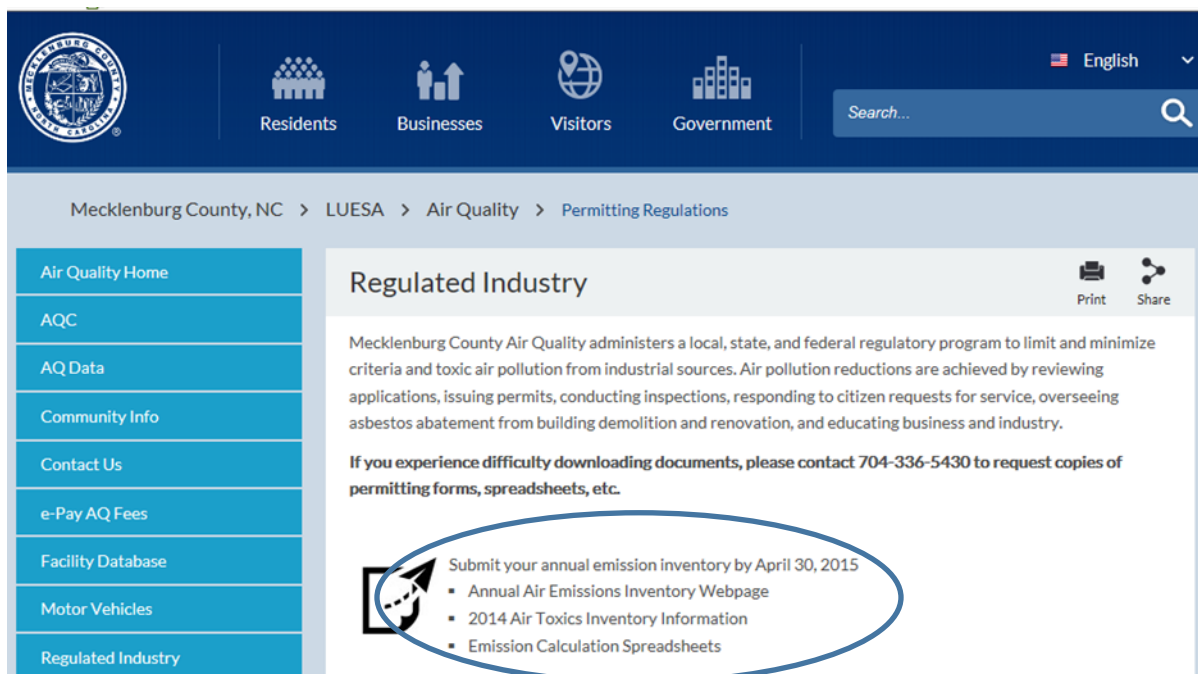
- Jan 1st: New Year's Day
- Jan 19th: Martin Luther King Day
- April 3rd: Good Friday
- May 25th: Memorial Day
- July 3rd: Independence Day
- Sep 7th: Labor Day
- Nov 26-27th: Thanksgiving + One Day
- Dec 24-25th: Christmas + One Day

Permitting and Enforcement Update

MCAQ is always working on process and technology improvements to help our permitted facilities be successful and stay compliant. Some examples of this can be seen in our current website. The County as a whole upgraded our website in December 2014, so the layout might look a little different, but you can still find all of the information you need by going to <http://airquality.charmeck.org> and clicking on "Regulated Industry."



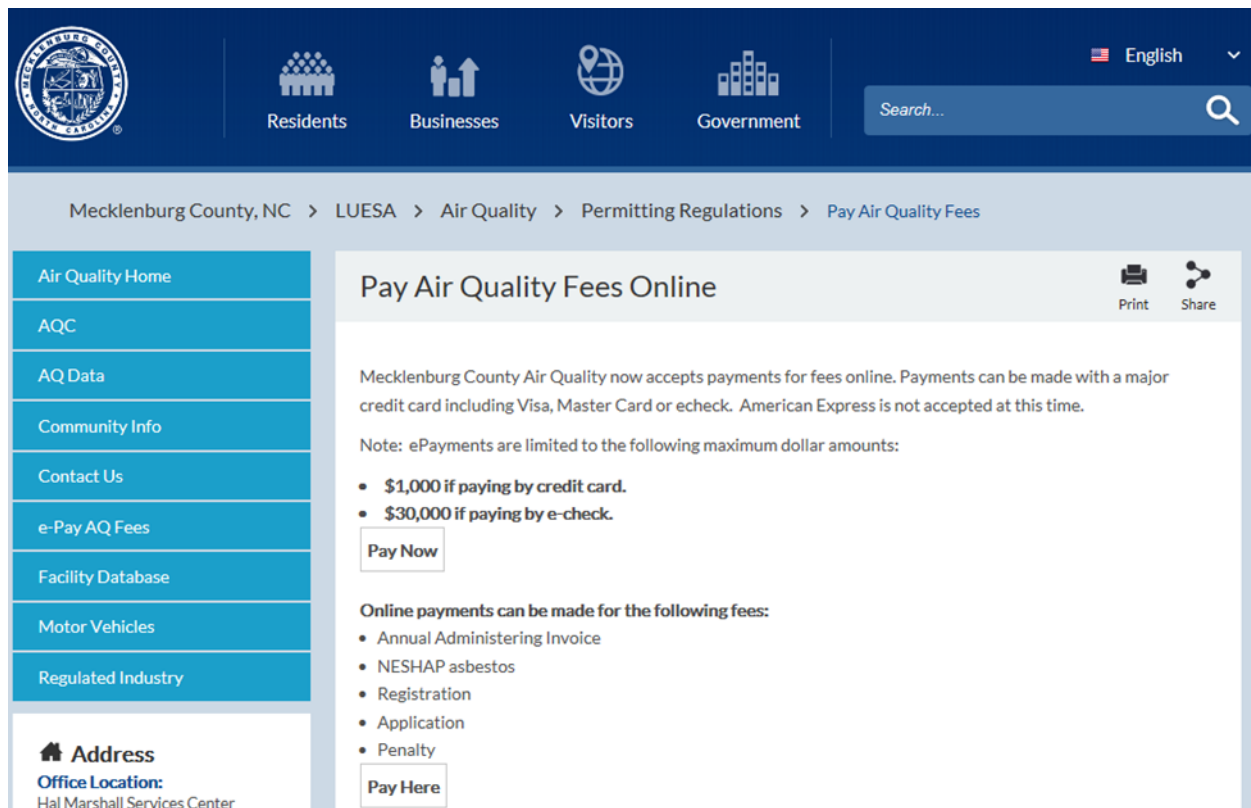
There are a couple of new pages within this section to help you prepare for this year's annual emissions and toxics inventory. (Don't forget these are due April 30th!) Our Annual Air Emissions Inventory Webpage details necessary supporting documentation, as well as submittal options. The 2014 Air Toxics Inventory Information page includes copies of all of the required forms for this year's submittal, with instructions, as well as a listing of air toxics inventory pollutants and SIC and NAICS codes. And please check out our page of Emission Calculation Spreadsheets to see if one of them might be able to help you in determining your pollutant emissions.



The last website improvement is the addition of our online pay system. This site can be reached by visiting <http://airquality.charmeck.org/payonline> or clicking on the e-Payment tab at the bottom of Air Quality's homepage.



As you can see from the webpage below, this system can be utilized for most any payments Air Quality collects: annual fees, registering a site or application fees, to name a few. Payments can be made using most major credit cards, with a limit of \$1,000 maximum payment, or via e-check, with a limit of \$30,000 maximum payment.



Report Tracker

The last improvement we wanted to mention, (which is not a website improvement), is MCAQ's new Report Tracker e-mail initiative. Facilities with more frequent reporting requirements other than annual (i.e. monthly, quarterly) received an e-mail this year from their primary Air Quality Contact identifying all required reports for the coming year, the date that they are due, and the rule providing the basis for the requirement. The majority of the Notices of Violations (NOVs) MCAQ issues relate to timeliness of submitted documentation, so we hope that by compiling a chronological schedule of reporting requirements, it will be a helpful reminder to facilities of exactly what is due and when.

Summary of June 17 and October 7, 2014 Revisions to the Mecklenburg County Air Pollution Control Ordinance

Regulations found in the Mecklenburg County Air Pollution Control Ordinance (MCAPCO) originate from either of two sources. Some are developed by Mecklenburg County, but many are adopted by reference from State rules. Descriptions of significant revisions to regulations and rules are included below; these are summaries and are not intended to be all-inclusive.

The Department of Environment and Natural Resources - Division of Air Quality (DENR-DAQ) held public hearing(s) state-wide prior to adoption into state rules.

Regulations Adopted June 17, 2014 by Reference From State Rules

The corresponding regulation/section number assigned in MCAPCO is listed in italics.

The following changes are from 15A NCAC 2D:

1. *Revisions to the following rules were made to implement recent changes to emission limits and control technologies for the subject facilities and processes:*

- .0530** **“Prevention of Significant Deterioration” (MCAPCO 2.0530)**
 - *revision deletes the alternate significance level for NOx emissions as a precursor for PM2.5 of 140 tons per year.*
- .0531** **“Sources in Nonattainment Areas” (MCAPCO 2.0531)**
 - *revision deletes the alternate significance level for NOx emissions as a precursor for PM2.5 of 140 tons per year.*
- .0961** **“Offset Lithographic Printing and Letterpress Printing” (MCAPCO 2.0961)**
 - *revisions clarify compliance requirements by adding specificity to compliance limits, retention and capture factors, and recordkeeping. Also, a 12-month rolling applicability threshold option is added for compliance flexibility.*
- .0962** **“Industrial Cleaning Solvents” (MCAPCO 2.0961)**
 - *revision adds compliance flexibility by adding alternate compliance requirements for solvents used for cleaning adhesive, ink and coating manufacturing equipment.*
- .1104** **“Toxic Air Pollutant Guidelines” (MCAPCO 2.1104)**
 - *revision changes the AAL for asbestos from 2.8×10^{-11} fibers/milliliter, determined on an annual basis, to 2.8×10^{-6} fibers/milliliter, determined on an annual basis.*

2. *Revisions to the following rules were made to implement the Maintenance and Contingency Plans, as submitted by the State to EPA, for the 1997 8-hour ozone standard maintenance area:*

- .0902** **“Applicability” (MCAPCO 2.0902)**
 - *revision establishes applicability, and incorporates the procedures and requirements for implementing the Plan. The revision also clarifies which sources are subject to VOC RACT regardless of the source’s capacity to emit VOCs and which sources are subject only if potential to emit VOCs is equal to or greater than 100 tons per year.*
- .0903** **“Recordkeeping: Reporting: Monitoring (MCAPCO 2.0903)**
 - *revisions are minor editorial changes that do not change the intent or interpretation of the rule.*
- .0909** **“Compliance Schedules for Sources in Ozone Nonattainment Areas” (MCAPCO 2.0909)**
 - *revision incorporates the schedules for compliance under the Plan.*
- .0951** **“RACT For Sources of Volatile Organic Compounds” (MCAPCO 2.0951)**
 - *revisions clarify how a source subject to VOC RACT is to comply with the applicable requirements.*

The following changes are from 15A NCAC 2Q:

1. *Revisions to the following rules were made to implement recent changes to the state Toxic Air Pollutant program as a result of NC Session Law 2012-19:*

- .0102** **“Activities Exempted From Permit Requirements” (MCAPCO 1.5211)**
 - *revision clarifies that the exemptions from permit requirements allowed by this Rule do apply to sources which are exempt from state toxics under 2Q.0702 (MCAPCO Regulation 2.0702 – “Exemptions”).*
- .0701** **“Applicability” (MCAPCO 1.5701)**
 - *revision deletes the requirement for the state to review the impact of combustion sources every five years and also deletes the applicability language for sources subject to a federal MACT/GACT standard.*
- .0702** **“Exemptions” (MCAPCO 1.5702)**
 - *revision adds exemptions for natural gas and propane fired combustion sources and emergency engines based on facility-wide aggregate capacity, and sources subject to a federal MACT/GACT standard.*
- .0703** **“Definitions” (MCAPCO 1.5703)**
 - *revision deletes the definition for unadulterated wood.*
- .0704** **“New Facilities” (MCAPCO 1.5704)**
 - *revision deletes applicability for sources subject to MCAT/GACT standards.*
- .0705** **“Existing Facilities and SIC Calls” (MCAPCO 1.5705)**
 - *this rule has been repealed.*
- .0706** **“Modifications” (MCAPCO 1.5706)**
 - *revision deletes applicability for sources subject to MCAT/GACT standards.*
- .0709** **“Demonstrations” (MCAPCO 1.5709)**
 - *revisions clarify that sources exempt under 2D .0702 (MCAPCO Regulation 1.5702 – “Exemptions”) are not included in evaluation and/or demonstration for toxics.*
- .0711** **“Emission Rates Requiring A Permit” (MCAPCO 1.5711)**
 - *revision adds a second set of TPERs for facilities at which all of the emission release points are vertical and unobstructed. It also changes the TPER for asbestos from 1.9×10^{-6} lbs/year to 5.7×10^{-3} lb/year.*

Regulations Adopted October 7, 2014 by Reference From State Rules

The corresponding regulation/section number assigned in MCAPCO is listed in italics.

The following changes are from 15A NCAC 2D:

1. *Revisions to the following rules were made to implement recent changes to the acceptable ambient level (AAL) for arsenic:*

- .1104** **“Toxic Air Pollutant Guidelines” (MCAPCO 2.1104)**
 - *revision changes the AAL for arsenic and inorganic arsenic compounds from 2.3×10^{-7} milligrams/cubic meter, determined on an annual basis, to 2.1×10^{-6} milligrams/cubic meter.*

The following changes are from 15A NCAC 2Q:

1. *Revisions to the following rules were made to implement recent changes to toxics permitting emission rate (TPER) for arsenic:*

- .0711** **“Emission Rates Requiring A Permit” (MCAPCO 1.5711)**
 - *revision changes the TPER for arsenic and inorganic arsenic compounds from 0.016 lb/year to 0.053 lb/year.*

Charlotte-Mecklenburg Storm Water Services News & Updates



Discolored Water



Active discharges from businesses



Dead aquatic life

Charlotte-Mecklenburg has nearly 3,000 miles of creeks. That's about the same distance as from Charlotte to Los Angeles. Charlotte-Mecklenburg Storm Water Services calls on all citizens to be Water Watchers and help us spot creek, lake, and pond pollution as well as illegal dumping down storm drains.

Do you enjoy neighborhood walks or recreating near waterways? Remember to report funny smelling creeks, discolored creek water, aquatic life problems like fish kills, or illegal dumping. Reporting gives you the ability to help Storm Water Services pin point water pollution issues and correct them in a timely manner.

Citizens can call 311, visit stormwater.charmeck.org or use the Water Watchers App to report water pollution. Go ahead, become a Water Watcher today and help Storm Water Services keep our waterways clean and clear!

Interested in more Water Watchers opportunities? Visit STORMWATER.CHARMECK.ORG for Adopt-A-Stream and other volunteer programs.

REPORT

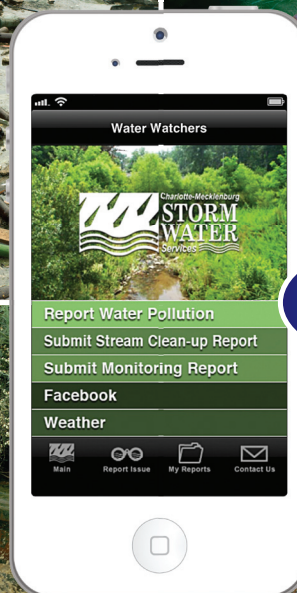
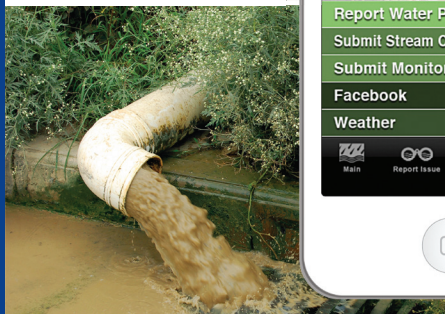
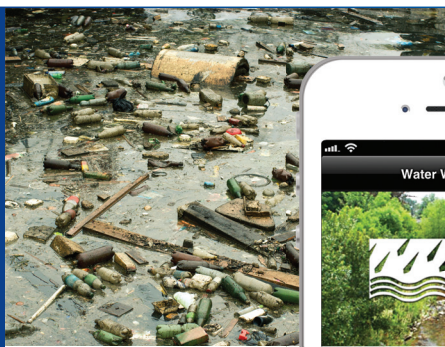
Water Pollution

 Call 311 or

 Use The  waterwatchers App!

- Free to download & easy to use.
- Send pictures. They help us a lot!

STORMWATER.CHARMECK.ORG



Anonymous reporting 24/7



Charlotte-Mecklenburg Storm Water Services News & Updates

DO YOU KNOW YOUR FLOOD RISK?

Check out Charlotte-Mecklenburg's
interactive 3-D Floodzone Maps at
STORMWATER.CHARMECK.ORG.



3D FLOODMAPS SHOW:



- Land at greatest risk for flooding within the mapped floodplain.
- Where flood insurance is required.
- How often property is expected to flood and how deep.

Remember: Flooding can occur outside mapped floodplains.

Make Volunteering A Family Activity!



WATER POLLUTION can be in **STREETS & PARKING LOTS**



**STORM DRAINS
lead directly to our
WATERWAYS**



“Green” Lawn Care

PROTECT OUR STREAMS & LAKES.

Minimize the use of fertilizers and herbicides,
and keep storm drains clear.