January 4, 2018

2017 Annual Report to the Board of County Commissioners

Article I of the Charter of the Mecklenburg County Air Quality Commission (AQC) provides that the AQC shall submit an annual written report as to its activities, programs, and progress to the Board of County Commissioners (BOCC). Pursuant to that Charter provision, the AQC submits this report to the BOCC.

To begin, the AQC can report very good news with respect to County air quality. The AQC is pleased to report that in November of 2017, the USEPA announced it had determined that air quality in the County complies with the newest national ozone standard and therefore intends to designate Mecklenburg County as "attainment" for the standard (along with all counties in North Carolina and South Carolina). The BOCC will recall that, in its annual report last year, the AQC informed the BOCC that the State of North Carolina had petitioned the United States Environmental Protection Agency (USEPA) to change the County's designation to attainment (from nonattainment) of the 2008 national ambient air quality standard for ozone. The AQC reported that the State was uncertain how the USEPA would respond to that request because the national ambient air quality standard for ozone had become more stringent since 2008, and the County was still developing data with respect to compliance with the new, more stringent standard. The attainment designation is a significant achievement for the County.

The County made significant additional achievements in air quality in 2017 as well. For example, in 2017, Mecklenburg County funded 20 new projects through the Grants to Replace Aging Diesel Engines (GRADE) Program. These projects will result in estimated decreases of 32.66 tons of ozone-forming emissions. Challenges remain, of course. The AQC believes continued attainment of the national ozone standard, and continued improvement of air quality generally will remain important factors in maintaining the County's vibrant, healthy growth. The AQC asks the BOCC to keep these challenges in mind as they consider the affairs of the County in 2017.

Finally, the AQC would like to remind the BOCC that in January 2015, the AQC presented a report to the BOCC that included an in-depth analysis of the air quality issues and challenges we expect the County to face in the next few years. The AQC refers the BOCC to that report as additional background on air quality issues generally.

AQC Membership

Current Members of the AQC:

Members	Member Allocation	
Adair, Brian	Environmental	
Baker, Jeff	Public	
Curtis, Daryl	Public	
Hackler, Marcus	Industrial	
Lansdell, Terry	Transportation	

Levy, Aaron	Health Professional
Magi, Brian	Scientist
McGrath, Peter	Attorney
Miller, Gordon	Public
Newman Salvador, DeAndrea	Public
Paterson, Fern	Public
Watts, James (Jamie)	Engineer

Chair: Peter McGrath Vice-Chair: Marcus Hackler

New Member Appointed in 2017: 1

New Member Orientation date: Dr. Aaron Levy's new member orientation was held on Monday, May 22, 2017.

Air Monitoring

At the end of 2017, Mecklenburg County met all health-based NAAQS. The AQC received regular updates on air monitoring data collected for Mecklenburg County.

Green = Good Air Quality

Yellow = Moderate Air Quality

Orange = Unhealthy for Sensitive Groups

Red = Unhealthy

Year	Total number of	# of Code	# of Code	# of Code	# of Code Red
	Sampling Days	Green Days	Yellow Days	Orange Days	or Higher Days
2016	366	244	115	6	1 (wildfire related)
2017*	365	228	134	3	0

^{*2017} data is preliminary and has not been certified.

Air Quality Permit Reviews

Article (d) of the AQC Charter provides that the AQC shall "conduct public hearings and review and advise on air program actions, pursuant to the local air pollution control ordinance." The Mecklenburg County Air Pollution Control Ordinance, Regulation 1.5213 – "Action on Application; Issuance of Permit," provides that Air Quality permit application approvals are placed on the agenda of the AQC, initiating the specified public comment period. Inclusion on the AQC agenda does not imply or infer any action or opinion by the AQC or its members regarding any permit. In 2017, the AQC agenda included the following notices:

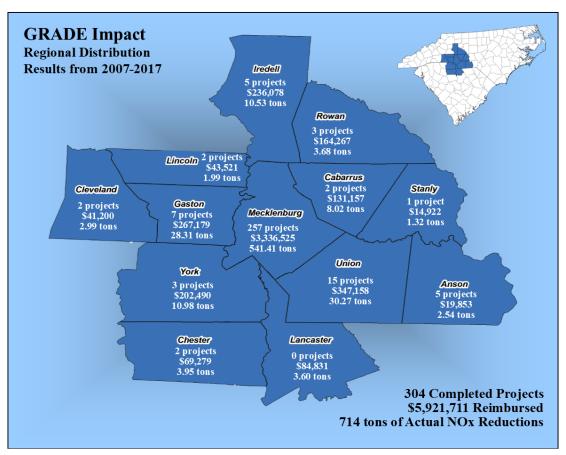
Permit TypeNumberStationary Sources:40Gasoline Dispensing Facilities:14

Grants to Replace Aging Diesel Engines (GRADE)

The AQC Chair participated in selection committee meetings resulting in the selection of 20 GRADE projects for funding. The total funding awarded by the 2017 selection process was \$160,091. These projects will result in an estimated decrease of 32.66 tons of ozone-forming emissions over the life of the

projects. At a lifetime cost of \$8,390 to reduce one ton of ozone-forming emissions, GRADE remains one of the most cost-efficient ways to improve air quality. 1

GRADE is designed to reduce ozone-forming air pollution by providing businesses and organizations funding incentives to replace or repower heavy-duty non-road equipment with newer, cleaner, less polluting engines. Since 2007, when the BOCC authorized \$500,000 of property tax revenue as "seed" money for GRADE, Air Quality staff have secured over \$6.6 Million in state and federal grants to further support the program.



Actual NOx reduction data is updated semi-annually and is current through June 2017. The total number of projects is based on the award recipient's home county. Total funds reimbursed and NOx reductions are not limited to the above counties. Dollar figures per county may fluctuate between GRADE Summary Reports based on increased/decreased percentage of use in each county.

Meeting Topics

Article I (b) of the AQC Charter requires the AQC "continually to study and evaluate methods of air pollution management and control as may be required or appropriate to keep the local air pollution control ordinance abreast of modern technology and scientific developments and make recommendations to local elected officials and local government agencies relating to new advances in the technology of prevention and control of such pollution."

¹ Federal Highway Administration. (n.d.). FHWA - Cost Effectiveness Tables Summary. Retrieved from http://www.fhwa.dot.gov/environment/air-quality/cmaq/reference/cost-effectiveness.pdf.

Pursuant to that Charter provision, the AQC, during its regular monthly meetings, examined the following topics in 2017:

- 2045 Metropolitan Transportation Plan (MTP)
- FY2018 Budget Presentation
- NC Periodic Review of Rules
- 2017-2018 Annual Monitoring Network Plan
- AQ Monitoring Presentation
- 2016 Mecklenburg County Fleet Inventory
- Ozone Formation
- Citizen Science Station Proposal
- Ozone Advance
- Ozone Season 2017
- Online Asbestos Notification System (GovOnline project) update