

State Move Raises Health Risks for NC

NC Department of Environmental Quality's (DEQ) proposal to exempt 1,200 polluters from the permitting process would eliminate important public health safeguards at a time when many of NC's historic air quality protections recently have been dismantled, including eliminating air monitors and health-based limits on toxic air pollution. A public comment on the proposal ended in late November and Southern Environmental Law Center filed concerns on behalf of Clean Air Carolina and Medical Advocates for Healthy Air.

Under the proposal, about 1,200 facilities would be exempt from pollution limits if their annual emissions (including mercury, arsenic, hexavalent chromium, fine particles, and ozone precursors) into the air is up to 10 tons total and up to 5 tons per pollutant. All facilities exempted under this proposal also have the potential to emit pollution at levels above the exemption thresholds set out by DEQ. Once they are exempt, they could reduce or cease operating their pollution controls, thereby increasing toxic pollution back above the threshold without public knowledge. This means North Carolinians would no longer have access to air pollution data in their communities that impacts their health and that of their families. More than 50 percent of these polluters are within one mile of a school or hospital.

For more info, including a detailed map of the facilities, visit SELC's website at: selc.link/11A79v8.



Students Learn about Air Quality from their School Garden

Fourth graders at Shamrock Gardens Elementary School in Charlotte recently learned how to recognize symptoms of ozone damage on certain native plants sensitive to air pollution from *Clear the Air for Kids!* Coordinator Mary Stauble.

Starting in the classroom with a presentation, the lesson eventually migrated outside into the school garden where students saw for themselves the impact of poor air quality directly on their plants. Each class separated into two groups and rotated between two garden learning stations. At Station 1, students witnessed how scientists set up an experiment to monitor sensitive plants for ozone damage and recorded the information on a data sheet. At Station 2, the children had fun viewing cut-leaf

coneflower leaves through their very own hand lens. Their challenge: could they find the leaf with ozone damage? They learned to look for a leaf with tiny purple dots just on the top surface of the leaf but not on the underside... "YES! That's it!"

Students were excited to be learning in their outside classroom. Shamrock Gardens also has a pollinator garden. Butterflies fluttered about while caterpillars munched on leaves. Students identified a caterpillar with very dramatic black and red spikes and found a chrysalis on one of the leaves in the ozone garden. It was a great day to be in the garden with Shamrock students.

Learn more about Ozone Gardens on our website at www.cleanaircarolina.org.

Meet New Team Member, Martha!



Clean Air Carolina welcomes **Martha Fowler** as our new Membership Specialist. Martha joined us in November to ensure sustainable growth for the organization by managing the expansion of our database and developing strategic outreach initiatives for community engagement.

A graduate of UNC Chapel Hill, Martha grew up in Charlotte where she has worked with local businesses in a variety of communication positions and with nonprofit organizations in development, public relations, and management roles.

In her spare time, she enjoys walking, reading and spending time with friends and family. *Welcome, Martha!*

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EPA Ozone Standard Better, but Not Low Enough

The US Environmental Protection Agency (EPA) issued a new rule in October that limits smog pollution, also known as ground-level ozone, a powerful lung irritant. Created when sunlight mixes with pollutants emitted by burning fossil fuels, ozone pollution exacerbates respiratory ailments like asthma and COPD and inhibits the normal growth of children's lungs. While strengthening the standard is a step in the right direction, public health advocates are concerned the new ozone rule does not go far enough to protect communities.

Previously set at 75 parts per billion (ppb) by the Bush Administration, the new rule requires each county to attain levels of 70 ppb or less by 2025. While most NC counties will attain the new standard, we don't believe that this standard is strong enough to protect human health.

Certain at-risk groups, including children, the elderly, residents with respiratory diseases and anyone who works or exercises outside during the summer, will still find it difficult to take a breath when the ozone level reaches 70 ppb. In fact, one in ten North Carolinians have asthma, and it is the leading medical cause of

school absences, according to the N.C. Department of Health and Human Services. In order to adequately protect children, health professionals believe that the national standard for smog should be set at 60 ppb.

Dr. Larry Raymond of Carolinas HealthCare System of Charlotte and chair of Medical Advocates for Healthy Air, urged a lower standard to protect the future of respiratory health in N.C. *"While the standard of 70 ppb is an improvement, the EPA's Clean Air Scientific Advisory Committee found that this level is too high for sensitive groups such as young children with developing lungs. When ozone levels rise over 60 ppb on hot summer days, it may not be safe for children to play outside."*

Setting the standard at 70 ppb still results in important health benefits, according to EPA estimates. It will cost industry, state, and local governments \$3.9 billion, in return for annual health cost benefits of \$6.4 billion to \$13 billion. This includes significant reductions in premature deaths, missed school and work days, and days of restricted activities. With a standard of 65 ppb some of these benefits could have tripled in numbers.



SAVE THE DATE

NC BREATHE Conference

Friday, April 8, 2016

8:00 am - 5:00 pm

UNCC Center City Building, Charlotte

NCBREATHEConference.org

Registration begins in January

Clean Air Partners File Appeal on Monroe Bypass

Clean Air Carolina and other conservation groups filed an appeal in federal court saying a district court judge failed to properly scrutinize the North Carolina Department of Transportation's review of the controversial \$838 million Monroe Bypass project. The Southern Environmental Law Center (SELC) filed the appeal to the U.S. Court of Appeals for the Fourth Circuit on behalf of Clean Air Carolina, the North Carolina Wildlife Federation and the Yadkin Riverkeeper.

Legal briefs to be filed in January will assert the NC Department of Transportation (NCDOT) and Federal Highway Administration violated federal law when they ignored a decade of changes along the US 74 highway corridor in Union County that have made alternative solutions, such as upgrades to the local road network, far more efficient and cost-effective solutions than the expensive Bypass.

Working with expert transportation planners, we identified a number of specific lower-cost improvements that would have a swift and direct impact on relieving congestion on the existing highway and improving driver safety. But the NCDOT has ignored these solutions.

"Spending more than \$800 million on a new bypass just doesn't make sense," said June Blotnick, Executive Director of Clean Air Carolina. "NCDOT's own data show that traveling on the toll road would save travelers only eight to 12 minutes, and make taxpayers spend \$100 million for every minute of time saved. NCDOT has a duty to taxpayers and a responsibility under federal law to properly investigate less expensive solutions that will provide real benefits for Union County."

A court decision on this case is expected in May 2016.



Participants answer our white-board question: "What Does Clean Air Mean to You?"

Bicycle Events Inspire Charlotte to keep "Pedaling Forward"

Uptown Charlotte was the center of the bicycle universe in North Carolina for several days in October when hundreds of bicycle enthusiasts, young and old, gathered for the **4th Annual NC Bike Summit** presented by BikeWalk NC in partnership with other regional and local advocacy organizations, including Clean Air Carolina. Workshops and break-out sessions were held throughout the three-day event to share and discuss best practices, challenges, and tips on bicycle infrastructure planning and design. Featured speaker, Gil Penalosa, spoke of his 8-80 Cities program that empowers elected officials and residents to promote walking and bicycling as activities, and to provide more open space areas, parks, and trails. Penalosa's talk inspired all participants to keep "pedaling" forward.

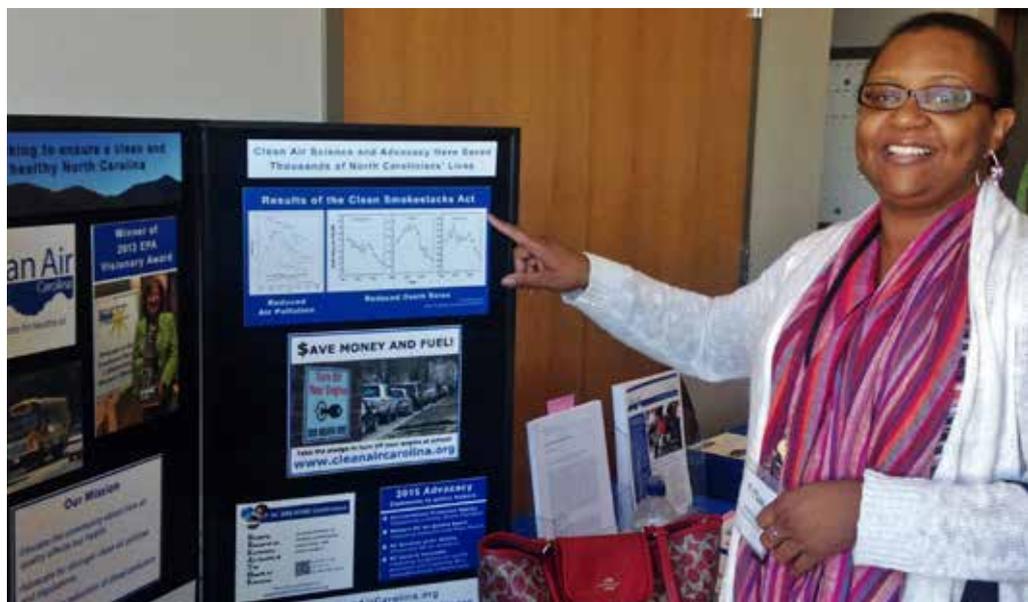
On the heels of the Summit's closing session was the beginning of the first annual **Biketoberfest** hosted by our partners at Sustain Charlotte. Over

300 people of all ages participated in this wheels-on event: biking, walking, and/or riding transit to a variety of destinations in Center City and South End Charlotte while collecting stamps in their official Biketoberfest Passport. Avid bicyclist and Clean Air Carolina Program Director Terry Lansdell encouraged participants to respond to our question "What Does Clean Air Mean to You?" to earn a stamp for visiting our booth. The level of excitement and participation for this first-time event proved cycling is growing in Charlotte.

Clean Air Carolina was a proud sponsor of both cycling events in Charlotte. Whether through advocacy, education, or engagement, we are committed to making positive changes in our communities across the state. Thank you to everyone who shared their stories about what clean air means to them and for sharing event photos of how they #TakeABreath when exercising and having fun outdoors.

Recent AQ Research

- ◇ Casey, J.A., et.al. **Unconventional natural gas development and birth outcomes in Pennsylvania, USA.** *Epidemiology* 2015; 1.
A study of pregnancies from 2009 to 2013 found that 25% of mothers most exposed to fracking were 40% more likely to give birth preterm than the quarter least exposed.
- ◇ Chen, J.C., et al. **Ambient air pollution and neurotoxicity on brain structure: Evidence from women's health initiative memory study.** *Annals of Neurology* 2015; 78(3).
Older women with greater PM2.5 exposures had significantly smaller WM, but not GM, volumes, independent of geographical region, demographics, socioeconomic status, lifestyles, and clinical characteristics, including cardiovascular risk factors. PM2.5 exposure may contribute to WM loss in older women.
- ◇ Kirrane, E.F., et al. **Associations of ozone and PM2.5 concentrations with Parkinson's Disease among participants in the agricultural health study.** *Journal of Occupational & Environmental Medicine* 2015. 57:5.
Positive associations of Parkinson's disease with ozone and fine particulate matter were observed in North Carolina but not in Iowa. The authors recommend additional studies to address uncertainties related to confounding and to examine temporal aspects of the observed associations.
- ◇ Ostro, B., et al. **Associations of Mortality with Long-Term Exposures to Fine and Ultrafine Particles, Species and Sources: Results from the California Teachers Study Cohort** *Environmental Health Perspectives* 123:6.
One of few studies on the effects of long-term exposure to ultrafine particles (smaller than PM2.5) the exposure model found significant positive associations between mortality from ischemic heart disease and both fine and ultrafine particle species and sources.



NC Division of Air Quality Environmental Engineer **Phyllis Jones** points to the decline in premature deaths from respiratory disease that resulted from the 2002 Clean Smokestacks Act, on which she worked. Jones now focuses on vehicle emissions and visited MAHA's booth at the NC Clean Transportation Tour in Raleigh.

Medical Advocates Update

Recent revelations have shown that some major corporations willfully disregard the health and environmental consequences of their actions. In North Carolina, we are seeing similar disregard for air quality by some state policy makers. A provision introduced on the last night of the 2015 legislative session allows fracking (hydraulic fracturing) activities to override **local government** regulations. Using such furtive tactics to avoid public debate is questionable democracy, and the provision undermines our most directly representative level of government. MAHA supports strong regulations and local input regarding proposed fracking to protect health.

The EPA released the **Clean Power Plan** in August as the nation's first effort to reduce climate changing carbon emissions from power plants. Our state's response was to join other states in a lawsuit against the EPA's rule. MAHA prescribes a plan harnessing our potential for clean, renewable energy. Advisory Board Members Dr. Layton Long and Dr. Stephen Keener helped share the American Public Health Association's policy statement supporting the Clean Power Plan at the **NC Public Health Association** conference. MAHA also discussed the plan at the **NC Pediatric Society** conference and in health department and residency presentations. Visit our website to sign our **letter to the governor** and learn about public hearings MAHA will attend in December and January in support of a strong Clean Power Plan for North Carolina.

Medical Advocates for Healthy Air participated in the **NC Clean Transportation Tour** in Charlotte and Durham in October. The tour, an initiative of the NC Clean Energy Technology Center at NC State, highlighted initiatives local governments are taking to reduce emissions from transportation. Ambulance fleets in Durham and fire department trucks in Charlotte are using new technology and training to reduce emissions to help improve air quality.

A special thank you to our fall MAHA intern Katherine Walker, who is working towards a certificate in Sustainable Technologies at Durham Technical Community College.