

Charlotte Area Air Awareness

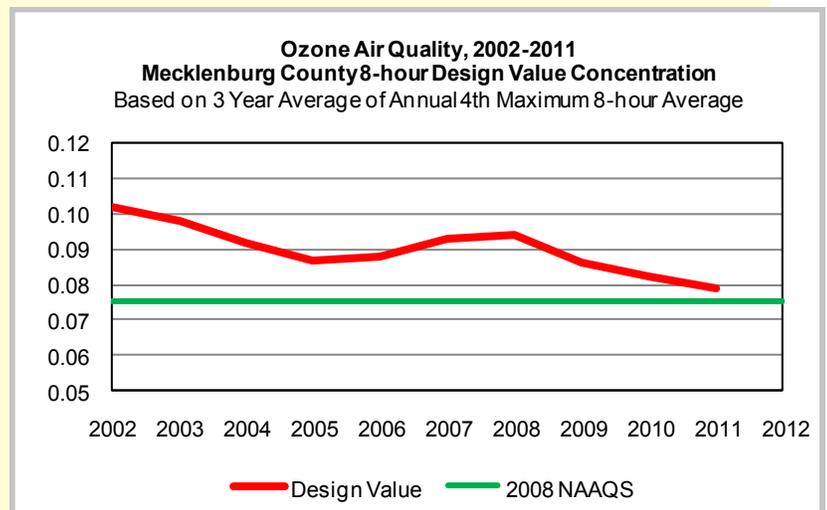
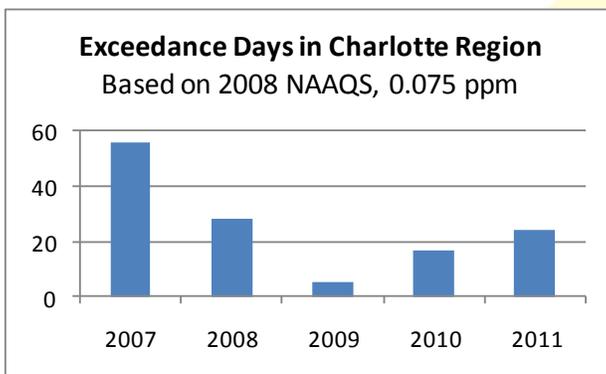
In Review: Ozone Season 2011

Take a **LOOK INSIDE!**

To date, the Charlotte Region has recorded twenty-four (24) exceedance days in 2011. Eighteen (18) of those exceedance days were recorded in June and July alone. Ground-level ozone concentrations are greatly dependent on the current weather conditions. Strong sunlight is required to form this pollutant and a stagnant atmosphere (light winds and no precipitation) allows air pollution concentrations to build to unhealthy levels. In 2011, the hot, stagnant weather conditions in June and July contributed to the increased number of recorded exceedance days.

- Spotlight on local businesses
- Changing Behaviors
- Be an Air Freshener!

It is especially important to reduce emissions in these hot summer months! Vehicular emissions remain the largest source of oxides of nitrogen in the Charlotte region. Remember to **“Drive Less, Smarter, Cleaner!”**



EPA finalizes 2008 NAAQS for ground level ozone, 0.075 ppm is the standard.

On September 2, 2011 the Office of Management and Budget issued a letter to EPA administrator Lisa Jackson stating that the President did not support finalizing EPA's draft reconsideration of the 2008 National Ambient Air Quality Standard (NAAQS) for ozone.

Therefore, the current NAAQS for ozone is 0.075 parts per million (ppm) and will not be further lowered at this time.

EPA will use ozone data from 2008-2010 to determine compliance with this standard. The Charlotte area's compliance value for this time period is 0.082 ppm indicating a violation of the standard. According to information provided to State and Local Air Directors, Charlotte will likely fall into a "Marginal" non-attainment classification. EPA has stated that it is their goal to officially designate areas as nonattainment (not meeting the NAAQS) by mid-2012. However, they acknowledge that this target date could change pending the outcome of legal challenges.

This recent decision to withdraw any recommendation to further lower the federal standard for ozone means that EPA as well as State and Local air quality programs can begin to work towards compliance with the 0.075 ppm standard set in 2008.



Spotlight on Local AQ Efforts

Energy Efficiency

These businesses have made operational changes to conserve energy:

- Bank of America
- Barnhardt Manufacturing Company
- Charlotte Area Transit System (CATS)
- City of Concord
- Coca-Cola Bottling Co. Consolidated
- Davidson College
- Duff-Norton
- Elmer's Products, Inc.
- Harper Corporation of America
- Mecklenburg County Government
- Rea Contracting (Lane Construction)
- Ritz-Carlton Charlotte
- URS Nuclear Center

\$120 to replace a single light fixture to an more energy efficient model.

\$80 to replace a single light switch with an occupancy sensor.

FREE! to turn off a light!

Even when budgets are tight, you can still conserve energy by turning off the lights!



Don't forget to encourage energy efficient behaviors in your colleagues as well!

Get Creative!



Kudzu can grow up to a foot a day requiring intensive maintenance.

Davidson College eliminated the need to use gas-powered mowers and weed eaters on the campus cross-country trail by leasing a fleet of all natural weed eaters:

GOATS!

These companies have idle reduction policies for fleet vehicles:

- American & Efird
- City of Concord
- Charlotte Area Transit System (CATS)
- Coca-Cola Bottling Co. Consolidated
- Elmer's Products
- Mecklenburg County Government
- Rea Contracting (Lane Construction)

Turn Off Your Engine



**BREATHE BETTER
SAVE MONEY**

N.C. Division of Air Quality
www.ncair.org

Representatives from **American & Efird** and **Rea Contracting** presented how idle reduction has been implemented for those fleets at the annual Charlotte Area Air Awareness Training Session. Both companies emphasize the importance of visual prompts and managerial expectation for successful idle reduction campaigns!

Changing Behaviors

CBSM is Key to Successful Outreach

The Community-based Social Marketing (CBSM) model of creating outreach campaigns is based on identifying and overcoming barriers to encourage adoption of sustainable behaviors. Dr. Doug McKenzie-Mohr stresses that informational campaigns must be supplemented with personal contact and commitment from participants. This model has been proven to enact changes towards more sustainable behaviors.

“Information alone doesn’t work!”
Dr. Doug McKenzie-Mohr



The CBSM Process

1. Uncover Barriers and Select Behaviors
2. Design Program to Overcome Barriers to Selected Behaviors using “Behavior Change Tools”
3. Pilot the Program
4. Evaluate Program When Broadly Implemented

This CBSM model was applied in the creation of the following outreach campaign that will be available to local businesses and organizations!

Behavior Change Tools

- Commitment
- Prompts
- Norms
- Communication
- Incentives

Could a plastic crab make you turn off your light? The answer might surprise you!

Behavior Change Tools

- **Commitment**
 - Adopt-a-Light
- **Prompts**
 - Plastic crab
- **Norms**
 - Coworker accountability
- **Communication**
 - Involve the audience
- **Incentives**
 - Raffle prizes
 - Ice Cream Social

Fiddler crabs are attracted to light making it the perfect mascot for this energy efficiency game!

If employees leave their offices for more than 15 minutes and forget to turn off their light, a coworker could remind them to turn off their light with a friendly fiddler crab! If employees return to find a crab on their desk, they are “it.” The goal is to get rid of the crab by finding another coworker who needs a reminder to turn off the lights.

In addition to their own workspaces, employees can assume responsibility for common areas (break rooms, copy rooms, halls, etc.) by signing up to “Adopt a Light.” These employees that adopt a switch can be entered into a raffle for a prize, like vacation time!



The percentage of lights being left on unnecessarily was 37% at Mecklenburg County Hal Marshal Center before the pilot phase of the Lights Out campaign. After the campaign, that percentage decreased to 10%! This decrease is greater when looking only at daytime behavior. During business hours employees are turning off unused lights 38% more often than before the campaign.

The final report for this campaign is available on-line at

<http://charmec.org/mecklenburg/county/AirQuality/Documents/CBSM%20Final%20Report.pdf>. A step-by-step guide for this campaign will be released to Business Coalition

members in January 2012!

Sign up to
ADOPT this Light
and you could WIN
a vacation day!

(that you're legally to be entered in vacation day raffle)

By Adopting-a-Light you've committed to:
Turn off this light when you notice this area is not being used
OR
Turn off this light on your way out at the end of the day

Be an Air Freshener!

Onroad mobile sources emit 65% of the oxides of nitrogen in the Charlotte region, DAILY! Reducing emissions in this source category will have the biggest impact on our regional ground-level ozone concentrations. Here are a few tools that your business or organization can use to encourage your colleagues to reduce emissions from their heavy-duty fleet vehicle and/or their personal vehicles!

Which green car is most compatible with your lifestyle?



Take the eCARmony Quiz to find out!

<http://airquality.charmeck.org>

Implement idle reduction for heavy-duty fleet vehicles!

**Save Money • Protect Employees' Health
Comply with NC Idle Reduction Rule • Improve Local AQ**

First, evaluate current idling behaviors of employees and contractors and idling requirements of heavy-duty fleet vehicles. Based on these observations, review or adopt a written Idle Reduction policy for fleet vehicles. This policy should include a definition of unnecessary idling based on Manufacturer's recommendations, time limits on idling, and exemptions.

Inform employees and contractors of management expectations of idling behavior and importance of limiting time spent idling. Post visual prompts and be prepared to confront non-compliance. Maintaining ongoing communication with employees and contractors is CRITICAL to establishing an environment of compliance with idle reduction policy!

Tools are available FOR FREE to help you implement idle reduction!

Visit <http://charmeck.org/mecklenburg/county/AirQuality/MobileSources/Pages/HeavyDutyIdling.aspx>.



Race to the Beach to encourage clean commuting!

In 16 work days, Charlotte area commuters travel enough miles to and from work to drive to the beach and back! Participants *Race to the Beach* by choosing to clean commute (carpool, bus, LYNX, walk, bike, telecommute, or compressed work days) at least 16 times to work. Clean commutes are entered on the interactive website that displays other participants progress towards the goal as race cars en route. Once participants enter at least 16 clean commutes, they are eligible for the grand prize!

In 2011, Mecklenburg County employees were given the chance to win a donated trip to beach and vacation time for entering a clean commute at least 16 days in June, July, and August.

At least 2,849 round-trips were avoided by the 217 Race to the Beach participants; reducing about 72,000 miles that are driven, over \$11,000 worth of fuel, and **35 TONS of air pollution**!** 143 participants finished the Race and were eligible for the beach vacation.

Race to the Beach will be offered to the Business Coalition during Ozone Season 2012 to encourage increased participation in clean commuting!