



Interior of Arlington monitoring site

## Air Quality Monitoring in Northern VA

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# 2013 Annual Project Listing

	CY 2013 Project Listing	Start Date
1	Remove SMV monitoring Site	1/2/2013
2	Phase II-III Data Acquisition System	1/1/2013
3	Remove PM10 Culpeper	1/2/2013
6	Move the Auto GC to MSIC	1/10/2013
9	Ozone Season Start-up/Shutdown	3/1/2013
11	Annual Monitoring Network Review	2/1/2013
14	Near Road Monitoring site - Northern VA	10/1/2013
17	Relocate CO monitor to Northern NR site	12/1/2013
20	Install particulate monitor at Northern NR site	12/1/2013
21	Change AQI breakpoints on PM2.5	2/16/2013

# Remove SMV monitoring Site



## Redskins moving training camp to Richmond in 2013

Washington Post, 6/6/2012

## Richmond Council Approves Agreement For Redskins Training Camp Facility

Richmond Times Dispatch, 12/28/2012



# New DEQ Air Monitoring Data Web Page

1. Web page went live April 1, 2012.
2. Part of larger project to automate the continuous monitoring stations.
3. <http://vadeq.ipsmtx.com/>

## Updated Data Acquisition System is proceeding along 3 pathways

1. Upgrading the communications infrastructure – All the dial up connections at the continuous sites are being replaced by Cradlepoint Router/modems
2. Installing a fixed hardware infrastructure at all the ozone only sites – We are currently working with the Environics and Sutron Meteostar programming personnel to get the Environics calibrators and the Sutron Meteostar dataloggers to consistently “talk” to one another.
3. Training and installation on the multi-pollutant sites – Sutron Meteostar will be sending their monitoring site programmer/operator to Richmond to assist with the upgrading of the MathScience Center site. AQM will then upgrade the remaining monitoring sites to support remote, automated QAQC procedures.

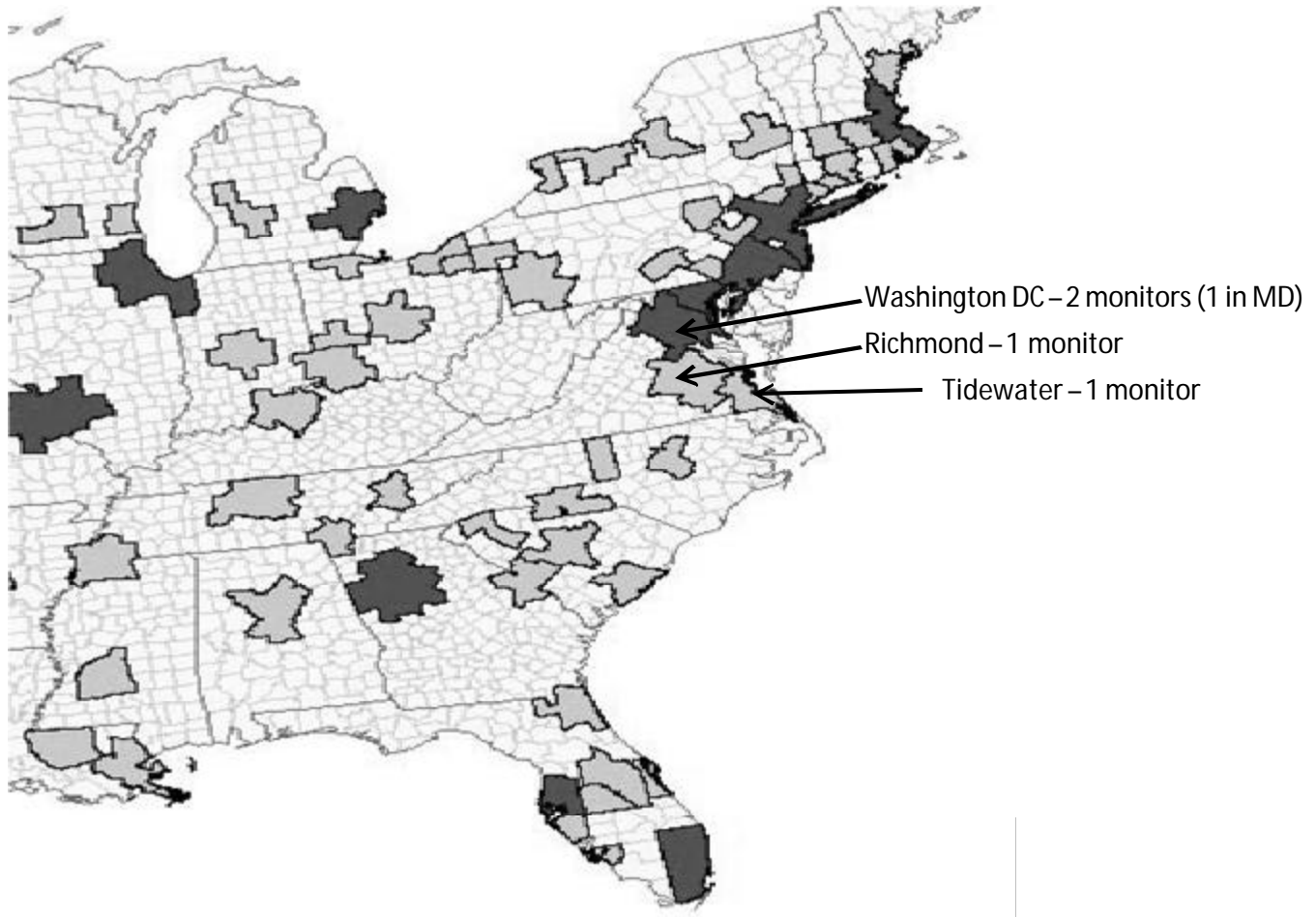
# Ozone Season Start-up/Shutdown

1. EPA will include the change in the ozone season (beginning March 1) in the next proposed ozone standard which is due in 2013.
2. AQM will attempt to have all the ozone sites upgraded to the new automated hardware by the fall of 2013. This will enable remote, scheduled QAQC procedures to be performed at each site.
3. Once this hardware is installed and operating the QAQC procedures can be performed through automated scheduling.

# Annual Monitoring Network Review

1. Each year AQM is required by regulation to perform a monitoring network review.
2. This year's Network Review is going to have more components to it than the report has had in the past.
3. The annual report is posed on the web page for 2011. We will provide updated information during the regional meetings.

# Near Road Monitoring sites





# Near Road Monitoring sites

EPA is requiring changes to the monitoring network that will capture short-term NO<sub>2</sub> concentrations such as those that occur near roads, community-wide NO<sub>2</sub> concentrations, and low income or minority at-risk communities

## – **Near Road**

- At least one monitor would be located near a major road in any urban area with a population greater than or equal to 500,000 people.
- A second monitor would be required near a major road in areas with either:
  - population greater than or equal to 2.5 million people, or
  - one or more road segments with an annual average daily traffic count greater than or equal to 250,000 vehicles

# Near Road Monitoring sites

1. On October 5, 2012, the U.S. Environmental Protection Agency (EPA) issued a proposed rule to revise the deadlines by which the near-road monitors within the nitrogen dioxide (NO<sub>2</sub>) monitoring network are to be operational. This monitoring network will collect data that are compared to the National Ambient Air Quality Standards (NAAQS) for NO<sub>2</sub>.
2. EPA is proposing to establish a series of deadlines that would require states and local agencies to begin operating the near-road component of the NO<sub>2</sub> network in phases between January 1, 2014 and January 1, 2017. This would replace the 2010 rule requirement that all new NO<sub>2</sub> monitors are required to begin operating no later than January 1, 2013.
3. A phased deployment of near-road NO<sub>2</sub> monitors allows more time for state and local air monitoring agencies to establish the required monitors based on the agencies' anticipated available resources.
4. These proposed revisions do not change the number of monitors already required.

## Near Road Monitoring sites



Each site will be outfitted with an 8 ft x 12 ft shelter similar to the above

Northern Virginia will be the third site – projected for FFY 2014 (Springfield interchange)



# Relocate CO monitor and install particulate monitor

EPA is requiring one CO monitor to be collocated with a subset of nitrogen dioxide (NO<sub>2</sub>), monitors that are required as part of the January, 2010 revision to the NAAQS for NO<sub>2</sub>. Specifically, EPA is requiring the collocation of one CO monitor with a “near-road” NO<sub>2</sub> monitor in urban areas having populations of 1 million or more.

EPA will require near-roadway PM<sub>2.5</sub> monitoring at one location in each urban area (a core-based statistical area, or CBSA) with a population of 1 million or more. These monitors will likely be located at existing near-road monitoring sites also measuring nitrogen dioxide or carbon monoxide. The near-roadway monitoring will be phased in, beginning with the largest urban areas (population of 2.5 million or more) by Jan. 1, 2015; and extending to the remainder of the areas by Jan. 1, 2017.

# And finally...

Change AQI breakpoints on PM2.5

AQI Breakpoint Definitions		
AQI Range	24hr PM-2.5 in $\mu\text{g}/\text{m}^3$ (current)	24-hr PM2.5 in $\mu\text{g}/\text{m}^3$ , (revised)
0 - 50	0 - 15.4	0.0 – 12.0
51 - 100	15.5 - 35.4	12.1 – 35.4
101 - 150	35.5 - 65.4	35.5 – 55.4
151 - 200	65.5 - 150.4	55.5 – 150.4
201 - 300	150.5 - 250.4	150.5 – 250.4
301 - 400	250.5 - 350.4	250.5 – 350.4
401 - 500	350.5 - 500.4	350.5 – 500.4
500+	500.5 - 999.9	500.5 - 999.9

Questions?