

Spring 2013



SOUTHWEST PENNSYLVANIA
AIR QUALITY
PARTNERSHIP, INC.



CHAIR'S COMMENTS

By Jayme Graham, Chair

Contact: JGraham@achd.net 412.578.8129

New regs

Alternative transportation

Lawnmower exchange

It's Spring!

2012 has come and gone. How did we do as a Partnership? Well, a number of exciting activities happened over the last year.

We had a student poster contest that filled our meeting room with creative and thoughtful perspectives on air quality from schools in several Southwest Pennsylvania counties.

Coach Air Quality popped up in too many events to count, to present information about air quality and what we all can do.

We started our lawn equipment exchange program, giving out a total of \$8,000 in \$30 to \$100 checks, to

to trade in gas and diesel lawnmowers and hand lawn equipment for electric, battery or manual. We are very pleased to expand this program this year, with support of both the state and Allegheny County air agencies.

The Partnership was a part of Sustainable Pittsburgh's Champions for Sustainability program, the Venture Outdoors program, and led our own vehicle program at Phipps Conservatory.

But this is so last year. Look for our new, improved lawn equipment exchange program in partnership with True Value Hardware stores. Pick up a kite at our 2013 Venture Outdoors booth on May 18. See us at Bike Pittsburgh events and other spring and summer

festivals. We will surprise you at the places we may be found.

However, a number of our education and emission reduction projects can't seem to get off the ground. Not for lack of funds, but for lack of volunteers. If your company, or if you, would like to become involved in a project with kids, with schools, with industry, with business, with your local Chamber of Commerce, in the outdoors or indoors, please contact us.

Sign up at our website, www.spaqp.org to become a partner. Call me, 412-578-8129, jgraham@achd.net. We are waiting for you.

Jayme

Air Quality Index Changes with Ambient Air Standard revisions

By Jayme Graham

On March 18, 2013, the Partnership made changes to the Air Quality Index (AQI) forecasts for the Pittsburgh and the Liberty areas. This is due to the recent revision of the national Ambient Air Quality Standards for Particulate Matter.

The AQI is EPA's color-coded tool for telling the public how clean or polluted the air is, and steps you can take to reduce their daily exposure to pollution.

The AQI converts concentrations for fine particles to a number on a scale from 0 to 500. EPA is changing the upper end of the range for the "Good" AQI category (an index value of 50) by setting it at the level of the revised annual PM_{2.5} standard (12.0µg/m³).

EPA also is setting the 100 value of the index at the level of the current 24-hour PM_{2.5} standard, which is 35 µg/m³. An AQI of 100 is the upper end of the "Moderate" range, and the level above which EPA begins cautioning at-risk groups. In addition, EPA is setting the upper end of the "Unhealthy for Sensitive Groups" range (AQI of 150) at 55 µg/m³.

EPA is retaining the existing level of 500 µg/m³ for the upper end of the "Hazardous" category (AQI of 500). The agency also is retaining the existing levels of 150 µg/m³ and 250 µg/m³ for the upper ends of the "Unhealthy" (AQI of 200) and "Very Unhealthy" (AQI of 300) categories.

Sean Nolan, meteorologist for the Pennsylvania Department of Environmental Protection, serves as the forecaster for PADEP and SPAQP. The forecasts for this regional have already adjusted to the new higher levels, so the only impact the region will see will be less "green" days, and more "yellow" days.

Based on the last three years the number of yellow days will increase to:

Pittsburgh : Old AQI: 144 days per year;
New AQI: 214 days per year (+70)

Liberty-Clairton : Old AQI: 125 days per year
New AQI: 170 days per year (+45)

The U.S. Environmental Protection Agency is charged to look at health data every five years, to determine if national Ambient Air Quality Standards are adequate to protect public health. Over the last several years a number of standards have changed, or tightened. SPAQP has been watching these changes closely, for they affect the areas of focus for this organization.

The nitrogen dioxide 1-hour standard, the PM_{2.5} annual standard, and the sulfur dioxide standard are all relatively new. EPA is also looking at lowering the ozone standard to between 0.06 and 0.07 ppm.

The Southwest Pennsylvania area has been measuring exceedances for ozone, PM_{2.5}, and sulfur dioxide. There is much work ahead for the state and local air agencies to meet the newer standards. But the work is also cut out for volunteer groups, such as SPAQP, to do our part. Are you doing your share for clean air?

The revised AQI breakpoints are outlined in the table below:

AQI Category	Index Values	Previous Breakpoints (1999 AQI) ($\mu\text{g}/\text{m}^3$, 24-hour average)	Revised Breakpoints ($\mu\text{g}/\text{m}^3$, 24-hour average)
Good	0 - 50	0.0 - 15.0	0.0 – 12.0
Moderate	51 - 100	>15.0 - 40	12.1 – 35.4
Unhealthy for Sensitive Groups	101 – 150	>40 – 65	35.5 – 55.4
Unhealthy	151 – 200	> 65 – 150	55.5 – 150.4
Very Unhealthy	201 – 300	> 150 – 250	150.5 – 250.4
Hazardous	301 – 400	> 250 – 350	250.5 – 350.4
	401 – 500	> 350 – 500	350.5 – 500

A primary standard is set to protect public health. A secondary standard is to protect plants, animals, and public welfare. Current air quality standards are listed below: ($\mu\text{g}/\text{m}^3$ is microgram for cubic meter, ppm is parts per million by volume and ppb is parts per billion by volume)

Pollutant [final rule cite]	Primary/Secondary	Averaging Time	Level	Form	
Carbon Monoxide	primary	8-hour	9 ppm	Not to be exceeded more than once per year	
		1-hour	35 ppm		
Lead	primary and secondary	Rolling 3 month average	0.15 $\mu\text{g}/\text{m}^3$	Not to be exceeded	
Nitrogen Dioxide	primary	1-hour	100 ppb	98th percentile, averaged over 3 years	
	primary and secondary	Annual	53 ppb	Annual Mean	
Ozone	primary and secondary	8-hour	0.075 ppm	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years	
Particle Pollution	PM _{2.5}	primary	Annual	12 $\mu\text{g}/\text{m}^3$	annual mean, averaged over 3 years
		secondary	Annual	15 $\mu\text{g}/\text{m}^3$	annual mean, averaged over 3 years
	primary and secondary	24-hour	35 $\mu\text{g}/\text{m}^3$	98th percentile, averaged over 3 years	
	PM ₁₀	primary and secondary	24-hour	150 $\mu\text{g}/\text{m}^3$	Not to be exceeded more than once per year on average over 3 years
Sulfur Dioxide	primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years	
	secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year	

Alternative transportation discussed

Partnership board vice-president Al DePaoli and new staffer, Karen Houlihan, attended a Washington County Chamber of Commerce Transportation Event last month to gain information on current transportation issues and opportunities.

The panel discussion quickly led to the State transportation funding shortfall of \$3.5 billion adding \$1 million per day. The speakers offered their solutions to the shortfall that equated to \$2.5 per week cost to consumer and another estimate of \$0.30 per gallon of additional gasoline tax.

Various lawmakers have recommendations as to funding solutions, but all involve the consumer paying the cost. The speakers emphasized that the continued shortage of funds will lead to bridge and road closures due to inability to fund the maintenance.

During the Q&A session, one question came up about public transportation and a response was that there are parts of the funding bills that covered public transportation. It was noted that the Philadelphia area public transportation system (SEPTA) should be used as a model for SW PA. Currently each county has their own transit authority and cannot make stops along the route of other counties leading to downtown. Centralizing the Transportation may be a way to save.

The speakers emphasized that the continued shortage of funds will lead to bridge and road closures due to inability to fund the maintenance.

During the Q&A session, one question came up about public transportation and a response was that there are parts of the funding bills that covered public transportation.

It was noted that the Philadelphia area public transportation system (SEPTA) should be used as a model for SW PA. Currently each county has their own transit authority and cannot make stops along the route of other counties leading to downtown. Centralizing the Transportation systems may be a way to save.

Nearly 50 percent of downtown Pittsburgh workers rely on transit. — The Allegheny Conference

The Partnership's spring meeting will take a new format on May 15. We are looking at an after work meeting at Phipps Conservatory and will feature Home Warrior kits—free kits worth \$50 to \$100 with items, like CFL light bulbs. Elections for new officers, too! More details to come!

Coach AQ visits with the Easter Bunny and friends.



Residents Can Mow Down Air Pollution

The Partnership's Clean Mower Exchange rebate program began April 1 and Southwest Pennsylvania residents can exchange gasoline-powered lawn equipment for a rebate toward the purchase of an electric or battery-powered mower and/or trimmer, chainsaw, leaf blower or push mower at 15 participating True Value stores in Allegheny, Beaver, Butler, Greene, and Westmoreland Counties.

"Residents have an opportunity to help mow down air pollution by replacing the gasoline-powered lawn equipment with an electric or battery-powered or hand-powered version that doesn't produce volatile organic compounds that bake in the summer sunlight to produce ground-level ozone," Betsy Mallison, Partnership Clean Mower Exchange Program Coordinator said. "We have plenty of rebates available, so it's time to take action on this opportunity."

Ground-level ozone affects everyone, but the young, the old and those with respiratory problems are most at risk. However, when ground-level ozone concentrations are unhealthy, particularly during Air Quality Action Days, everyone is at risk.

The Partnership is offering

400 rebates available on a first-come, first-serve basis, one rebate per household for a lawnmower, trimmer, chainsaw, leaf blower or push mower provided a piece of working lawn equipment is exchanged. Residents, at their convenience, may visit their local participating True Value Store to exchange the lawn equipment.

The purchase of the new electric or battery-powered lawn equipment must be completed by June 1 and the rebate information mailed into the Partnership by

June 15. To claim the rebate, residents need to send a copy of a receipt, the UPC code from the product box, and the rebate coupon they received at the True Value Store. Residents will receive the following rebates: \$150 toward an electric mower, \$100 toward a battery-powered or push mower, \$30 toward an electric or battery leaf blower or trimmer and \$50 toward an electric or battery-powered chainsaw. The Partnership will work with Evey True Value to drain the oil and gasoline and to recycle the equipment from all of the True Value stores.

Participating True Value Stores

Allegheny County

Able True Value, 500 Lincoln Highway, North Versailles
 Coraopolis True Value, 1029 Fifth Ave., Coraopolis
 Evey True Value, 5779 Library Road, Bethel Park
 Homecraft True Value, 3407 Library Road, Pittsburgh
 Montour True Value, 1503 Fifth Ave., Coraopolis
 Option True Value, 5141 Brownsville Road, Pittsburgh
 R C & Sons, 1441 Boston Hollow Road, Rt. 48, Boston
 Sarasnick's, 512 Washington Avenue, Pittsburgh
 South Hills True Value, 758 Brownsville Road, Pittsburgh

Beaver County

C&I True Value, 2481 Brodhead Road, Aliquippa

Butler County

Pfeifer True Value, 300 Marshall Way, Mars
 Slippery Rock True Value, 239 Grove City Road, Slippery Rock
 Sarver True Value, 551 South Pike Road, Sarver

Greene County

Dry Tavern True Value, Corner, Rts, 88 & 188, Rices Landing

Westmoreland County

Latrobe True Value, 712 Industrial Blvd, Suite 2, Latrobe