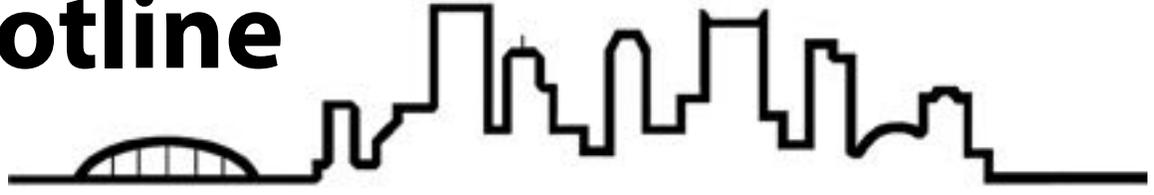




# Group Against Smog and Pollution, Inc. Hotline



Fall 2013

[www.gasp-pgh.org](http://www.gasp-pgh.org)

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Group Against Smog and Pollution, Inc. (GASP) is a nonprofit citizens group in southwestern Pennsylvania working for a healthy, sustainable environment. Founded in 1969, GASP has been a diligent watchdog, educator, litigator, and policy maker on many environmental issues, with a focus on air quality in the Pittsburgh region.

## GASP Founder Michelle Madoff, 1928-2013

by Rachel Filippini, GASP Executive Director

Before there was an EPA, a Clean Air Act, and a local air quality program there was Michelle Madoff. When GASP formed back in 1969 the skies were sootier and the public's ability to weigh in on the problem anything but easy. Michelle Madoff helped to change that. The story goes that one October evening she gathered a small crowd in her home to discuss Pittsburgh's chronically polluted air and what they as citizens could do about it... and from this GASP was born. Of course, Michelle was elected the first president.

I didn't have the pleasure of really getting to know Michelle. When I joined GASP back in 2001, she had already moved out of Pittsburgh. I did speak with... well, more accurately, listened to... her by phone (it was difficult to get a word in), as she would

occasionally call to learn about the latest environmental crisis in Pittsburgh. I listened to her stories of Pittsburgh past, including the infamous butt kissing under the Kauffman clock story, and her advice for our future efforts. She always, always ended the call by saying, "If you need anything, honey, you call me." And I knew she meant it.

A big part of GASP's success and Pittsburgh's cleaner air can be attributed to the late Michelle Madoff. Michelle passed away on October 12, 2013. As a token of our appreciation for all her contributions to GASP, we are dedicating this issue of the Hotline to her, with contributions from Walter Goldberg, Tony Picadio, Jeanne Clark, Barbara Hafer, Bernard Bloom, and Jim Longhurst.

*See pages 4-7 for tributes to Michelle Madoff*

## A Successful Clean Air Dash!

by Sam Thomas, Athletes United for Healthy Air Coordinator

On Saturday, October 19, 2013, GASP held the first Clean Air Dash and Festival. This community festival and 5K race was made possible thanks to the Heinz Endowment's Breathe Project and to the many sponsors, community partners, athletes and volunteers who came together to make the event a success. The run took place on the beautiful South Side Riverfront Trail.

The event highlighted the Athletes United for Healthy Air Campaign.



Photo by Joshua Franzos Photography

continued on page 8

# GASP's EPA School Flag Program Expands

by Karrie Kressler, SCA Green Cities Fellow for GASP

The EPA School Flag Program launch at the Environmental Charter School (ECS) last year drew a lot of positive attention, and now the program is set to expand to schools across southwestern Pennsylvania.

The program even continued to gain traction during the summer vacation. In July, GASP worked with the Swim and Water Polo teams through the Pittsburgh Public School Summer Dreamers Academy to bring the school flags to their five locations: Helen S. Faison Arts Academy, University Preparatory School (U Prep), Creative and Performing Arts School (CAPA), Pittsburgh Classical Academy (PCA) and Carmalt Elementary School.

Not all of the flags made it up onto the school's flagpole. Instead, some school locations developed creative ways to display the flags. Mark Rauterkus, Head Swim Coach at

Pittsburgh Public Schools, said that "at PCA we had our own setup and the kids walked with the flag to the field each day. The flag was like a banner. At U-Prep, the flag hung in the school cafeteria." At times, this made the colors even more visible to other students that were a part of the academy. "The kids got a much better awareness of the science and conditions and how those can impact our outdoor play thanks to the School Flag Program. Next year we'll do the same program as it is important to be aware of the air quality when getting our kids into race shape for a one-mile running contest in August."

The Southwest Pennsylvania Air Quality Partnership (SPAQP) also took an interest in the program and is now partnering with GASP to fund it in an additional 25 schools for the 2013-2014 school year.

This year's program expansion includes hoisting school flags at ECS's Lower School. Laura Micco, Environmental Education Coordinator at ECS, said that she is pleased with the program, and that this year the Upper School is planning some additions. "The School Flag Program has allowed us to continue using the outdoors as a classroom for real life science while keeping students safe. We plan on enhancing the Upper School flag program by incorporating club projects that will help advocate for cleaner air in our community."

Interested readers can read media coverage and keep a watchful eye on the program's locations by viewing the School Flag map on the GASP website:

<http://gasp-pgh.org/projects/au/epa-flags/>

Let your child's teacher or school administrator know about the program and encourage them to participate. 🚲



Five camp locations participated in the School Flag program this summer.

The **Hotline** is the quarterly newsletter of the Group Against Smog and Pollution, Inc.

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## GASP Mission Statement

The Group Against Smog and Pollution works to improve air quality to ensure human, environmental, and economic health.

## Methods of Achieving Mission

GASP is a citizens' group based in Southwestern PA which focuses on Allegheny County environmental issues. When pertinent to these concerns, we participate in state and national environmental decisions.

We believe in the public's right to receive accurate and thorough information on these issues and to actively participate in the decision making process.

To achieve our environmental goals on behalf of our membership, GASP will advocate, educate, serve as an environmental watchdog, mobilize action, and litigate when necessary.

We will work both independently and in cooperation with like-minded individuals and groups as determined by the Board of Directors.

We will uphold GASP's reputation for scientific integrity, honesty, and responsible involvement.

# GASP's Recent Legal Actions Reduce Compressor Station Emissions

by Lauren Burge, GASP Staff Attorney

**G**ASP's legal team regularly comments on draft air permits and files appeals when necessary to reduce harmful emissions from natural gas compressor stations. Our recent work on two compressor stations in Southwestern Pennsylvania has helped limit air pollution from these sources and ensure that regulators are correctly applying air quality standards.

## DEP aggregates natural gas compressor station with nearby well

In response to comments submitted by GASP, the Pennsylvania Department of Environmental Protection (DEP) recently aggregated a natural gas compressor station with a nearby well site for purposes of air permitting.

The Jupiter Compressor Station is located in Greene County and operated by EQT Gathering, LLC. In April, GASP submitted comments on this station's draft operating permit. Our comments pointed out that there are a number of facilities near Jupiter whose emissions should be grouped together, or "aggregated," and treated as a single source for air permitting purposes. Under the Clean Air Act, sources of air pollution must be aggregated if they are contiguous or adjacent to each other, under common control, and share the same Standard Industrial Classification (SIC) code. This rule can be challenging to apply in the oil and natural gas industries, which often involve many relatively small sources spread out over a large area.

Last October, DEP issued a guidance document explaining how these single source determinations should be made for the oil and natural gas industries. The application of this policy has been very restrictive and has impermissibly limited the aggregation requirement. DEP's policy states that sources located within ¼ mile of each other are presumed to be "adjacent" to each other; sources located at a greater distance may be considered adjacent on a case-by-case basis. In practice, however, DEP has tended to ignore any sources located beyond ¼ mile, even though U.S. EPA has clearly stated that there should be no bright-line rule about how far apart sources can be located and still be considered adjacent to each other.

In this case, the Jupiter station and the Pyles Well Pad are located within ¼ mile of each other; as such, under DEP's policy, these sources are presumed to be "adjacent" to each other. Jupiter is operated by EQT Gathering, LLC, and the Pyles Well Pad is operated by EQT Production; these are

both wholly owned subsidiaries of EQT Corporation, and thus Jupiter and the Pyles Well Pad are considered to be under common control. These facilities also share the same first two digits of their SIC codes. GASP pointed out that all three aggregation requirements were met here, and DEP agreed. As a result, emissions from the Pyles Well Pad were considered in the Jupiter Station's operating permit.

This station is the first example we have seen where DEP has aggregated a compressor station with a nearby well site in response to public comments. GASP has argued many times in comments and in litigation that similar sources should be aggregated, but DEP has not agreed with those arguments in the past. Although the decision in this instance did not result in any significant changes to Jupiter's permit, it provides a useful example of a case where DEP has correctly aggregated these sources.

## GASP appeal of Kriebel Compressor Station results in emission reductions

In response to an appeal filed by GASP, the Allegheny County Health Department's (ACHD) Air Quality Program and Kriebel Minerals, Inc. agreed to reduce nitrogen oxide (NOX) emissions from the Rostraver Rt. 51 Compressor Station by 87%.

Kriebel Minerals' Rostraver Rt. 51 facility is located in Forward Township, Allegheny County. It compresses and dehydrates natural gas received from nearby conventional wells. GASP appealed the permit, arguing that greater engine emissions reductions were technically and economically feasible, and required as a matter of law.

Ultimately, Kriebel Minerals and ACHD agreed. Kriebel will install a more effective engine exhaust catalyst, and maximum allowable NOX emissions from the engine will be reduced from 5.12 tons per year to 0.66 tons per year. While engines like the one operating at the Kriebel facility are relatively small, emissions from this type of source are worth the attention because there are so many small stationary engines in operations, and add-on controls to reduce their emissions are incredibly cost-effective. Better controlling this category of sources has the potential to greatly improve air quality at minimal cost, and would be a wise approach for air pollution control agencies to consider as they work to meet revised National Ambient Air Quality Standards for NO<sub>2</sub> and ozone.



# GASP Founder Michelle Madoff, 1928-2013

## Michelle Madoff: "Warrior Against Injustice"

Michelle Madoff was a force of nature. Passionate, outspoken, and committed, she was a warrior against injustice. She was willing to take on any fight and any person no matter how powerful, if she thought she needed to. And she was willing to risk whatever was necessary to achieve her goals.

I wasn't lucky enough to work with Michelle at GASP, although I am forever grateful for her work there. I did work closely with her for women's rights, and I supported her on City Council. She was perhaps the most courageous political leader I have ever known. She broke barriers for women, at a time when there were few women in office, and most owed their careers to the male establishment. She never hesitated to stand up for women—as candidates, as citizens, and as workers, regardless of the cost.

She could also be a helluva lot of fun. When I think back on my friendship with Michelle, I remember laughing a lot. She never failed to be amused by her opponents, nor to see the absurdity of the need to take on certain fights, like everyone's right to clean air. When she was elected to Pittsburgh City Council, one of the first fights she had to take on was for her right to use a bathroom. As a female member, she didn't have access to the Councilmembers' bathroom; she and other women members were to walk an entire city block to use the women's staff bathroom. How ridiculous.

But it wasn't just about her. Because the male members could just walk a few steps, use the bathroom, and quickly return to the session, women members and their constituents were disenfranchised by having to take more time. She also knew that many of her colleagues didn't share her passion for justice and would cheerfully call for votes in her absence.

She won that fight, but at great cost. It harms your dignity to have to fight for the right to attend to nature's call (as the women of the U.S. Senate found in 1993, where there was no women's bathroom, and again in 2013, when their numbers swelled to 20 and they demanded that the bathroom be expanded from two stalls.) But it was fight she took on not just for herself and her constituents, but for the women who would follow.

Michelle was also a crusader for sound governmental practices and problem solving. She attempted more than once to end City Council's policy to ask for proposals "not to exceed" a certain amount. She believed that the policy weakened the city's ability to negotiate by stating what the



maximum acceptable bid would be. And when our parking garages were increasingly crime-ridden during late hours, she took on the garage owners, a powerful lobby. She wrote and successfully passed legislation that required safe lighting and security in every garage. Anyone who has ever walked alone through a garage to her car late at night has Michelle to thank for ending the dark and dangerous conditions that used to be the rule.

Unfortunately, as happens all too often to women, the media and the political establishment derided her for her passionate advocacy. Even in some recent obituaries, her career was not honored, with quotes and verbiage deriding her style over her substance. But Pittsburghers have her to thank for our cleaner air, our vibrant progressive advocacy, and for blowing the whistle and opening up the political process.

Perhaps the great suffragist Susan B. Anthony said it best: "Cautious, careful people, always casting about to preserve their reputation and social standing, never can bring about a reform. Those who are really in earnest must be willing to be anything or nothing in the world's estimation, and publicly and privately, in season and out, avow their sympathy with despised and persecuted ideas and their advocates, and bear the consequences..."

Thank you, Michelle. Pittsburgh is a better place because of you.

*Jeanne Clark is Pittsburgh-based grassroots organizer, trainer, author, and media strategist for feminist, civil rights, LGBTQ, the environment, and other social justice causes. She served as national press secretary for the National Organization for Women; was the founding director of communications for PennFuture, where she served for 13 years; is an author for Ms. Magazine; and media strategist for the Allegheny County Democratic Party.*

## Michelle Madoff: "A Take No Prisoners Type"

As the newspaper accounts say, Michelle Madoff was an aggressive "take no prisoners" type. She was a close friend of mine until the end.

At the time when GASP was born, Pittsburgh was dotted with large steel plants, but we also had three coke factories in town. With the help of Carnegie Mellon University engineers we learned that our dominant pollution came, not from steel-making, but from the conversion of coal into coke. That coke is then mixed with iron to make steel.

With help from the United Steel Workers, the Pittsburgh Post Gazette, and the US Dept of Health Welfare (there was no EPA then), a few of us held meetings to educate the public about the laughable weakness of the State's pollution regulations. (As you might expect, the steel industry wrote them.)

Michelle, who suffered from asthma herself, attended one of those meetings and decided that the public should get into the act. Her first action was to gather a few souls in her living room, where she created GASP. The rest of us nodded in assent.

At that time Michelle wrote poorly and knew almost no science, but it didn't take long for her to change all that. There were scientists in her living room, and she tapped what little we knew then about coke-making and pollution control. Michelle was a quick study and soon put most of us in the shade when it came to familiarity about the most up-to-date control technologies.

But it was her brashness, aggressiveness, and energy that made her so successful. She had a fine sense of public relations and quickly made her presence known to regulators, elected officials, and those running for office, including a candidate for Pennsylvania governor. She was great at identifying the worst actors in the steel industry and instinctively knew how to excoriate and make fun of them in the media.

Like many others, I had to hold the phone away from my ear as Michelle gushed on. But when it came to sensing the difference between right and wrong, Michelle's instincts were always on the mark. That is why I cared for Michelle so much; that is why I sharply feel our loss.

*Dr. Walter Goldberg is a board member of GASP and Professor Emeritus at the University of Pittsburgh.*



## Michelle Madoff: "My Erin Brockovich"

Whenever I interviewed Michelle Madoff over the last decade, I never had any problem imagining that the slight woman I was talking to was the subject of all of the wild stories Pittsburghers told about her. For example, when I spoke to her at her home in Arizona, she proposed that I make major changes to the book I was writing about Pittsburgh. She suggested I rename it "My Erin Brockovich"—after the environmental activist and title character of the Julia Roberts movie—and that I should make Madoff the heroine of the re-named book. No one ever accused Michelle Madoff of lacking confidence.

In the later 1960s and early 1970s, when Madoff was a prominent spokesperson for GASP, Pittsburghers came to know her by a variety of descriptions: "a quasi-legend," "colorful," "peppery," and "outspoken." An out-of-state newspaper called her a "Joan of Arc type." To some, Madoff was known simply as "That Woman."

When GASP wrote a scathing report in 1972, Madoff hand-carried a copy to its target: "I went up to the building to deliver it... and went to the 60th floor [of the U.S. Steel tower]... and a bunch of men were sitting there,... and as I walked down the hall, I heard one say, 'Oh my God, we're not even safe in our own building.'"

Madoff referenced this story in a 1975 GASP film. She said if you believed that you belonged there, "then you can walk right up in the corridors of power, on the 60th floor of the U.S. Steel building and say, look, this is my air; you don't own it because you sit in this oak-paneled office. This is my air, my daughter's air, my husband's air... and you have absolutely no right to take it as your own."

In its first five years, GASP brought an active group of volunteer women together with local experts in science and engineering, but more often than not it was Madoff's voice speaking for both groups. She truly believed that she had a right to be in any meeting, hearing, or courtroom; she truly believed that she belonged in the corridors of power, going toe-to-toe with all comers. This is why they called her "outspoken," and worse. No one ever accused Michelle Madoff

of lacking confidence, which is exactly what GASP needed.

*James Longhurst is an Associate Professor of History at the University of Wisconsin – La Crosse, and is the author of Citizen Environmentalists (2010), on the history of air pollution control in Pittsburgh.*

## Michelle Madoff: "A Force of Nature"

Everyone who knew Michelle Madoff will tell you that she was a force of nature. She was also a remarkable force for good. I first met her during my last year in law school when she was organizing GASP and trying to recruit law students to help form a GASP legal committee. She signed me up, and the first time I walked into a courtroom as a lawyer, it was as a lawyer for GASP in an air pollution case against a local steel company. GASP had intervened as a party, and Michelle was there to lend moral support to her baby lawyer.

That was the first of many cases in which I acted as GASP's lawyer. And Michelle was deeply involved in every case. Later, as Chairman of the Allegheny County Air Pollution Variance Board, I presided at over 80 hearings in which GASP participated, usually through Michelle Madoff. She was the vanguard, the leader and the public face of the movement for clean air in Allegheny County in the early 1970s.

Michelle Madoff demonstrated that an individual citizen can accomplish enormous good against even the most sophisticated and resourceful adversaries. She also demonstrated that success does not come easy. She accomplished what she did by deploying a single-minded devotion and enormous personal energy. Hers is an example we can all learn from.

The great success of the effort to clean up the air in Allegheny County is the result of the efforts of numerous individuals, many of whom were recruited or influenced by Michelle. And although there were many, no one's contribution was as important and as effective as that of Michelle Madoff.

Thank you Michelle.

*Anthony P. Picadio is an environmental attorney in Pittsburgh.*

## Michelle Madoff: "A Big Personality"

In the 1970's I was a public health nurse in the Mon Valley, McKeesport, Homestead, Duquesne, Clairton, and Elizabeth/Forward areas. Michelle Madoff had started GASP and I was involved with the Oakland Healthcare Coalition. I was also a new mother and living in Elizabeth Borough. The Elrama power plant and Clairton Coke mills were across the river and every morning I would sweep off the dirt, dust and black particles from my porch, deposited by the mill and power plant. I became a coordinator for GASP, having admired Michelle and her efforts. I considered her a friend, not that we saw each other much, but phone calls and a few meetings gave me some experience with a top notch organizer and mission driven person. Michelle was a big personality and focused on results. She accomplished much good for the benefit of the citizens of Allegheny County and western PA.

Her "Dirty Dozen" was catchy and pinpointed the need to clean up the air, rivers, and environment. Her effort to light up dark garages and clean up dirty exhaust from cars and trucks was a great service to all of us that breathe in dirty, smoky air. I remember chasing trucks through the Mon Valley to record their license plate numbers to report to the GASP office.

Michelle Madoff was a real live "shero" before the term was coined. She contributed much and asked for little in return. The last time I talked to Michelle she called me from Arizona when I was PA State Treasurer. She said "Barbara, I'm over 70 years old, I look fabulous, I have a wonderful husband, and I'm doing great." I loved her attitude and her zest for life. RIP Michelle.

*Barbara Hafer is a former County Commissioner in Allegheny County (1984-1988), PA State Auditor General (1989-1997) and PA State Treasurer (1997-2005).*

## Michelle Madoff: "GASP's Guiding Spirit"

...Standing guard over the industrial city of Pittsburgh, Pa.... are some 20th century sentinels designed by men to monitor the air they breathe... The list of devices to pinpoint areas, types and levels of pollution is impressive testimony to man's inventive genius. But the real environmental watchdogs are people themselves— ordinary citizens who are concerned about the quality of the world they live in and the world they will pass on to their children... GASP, a Pittsburgh organization which is remarkable, but not unique to Pittsburgh has as its guiding spirit and president Mrs. Henry R. Madoff; its solid backbone is a determined band of thousands of citizens in Allegheny County who decided it was time they took a stand for clean air. The County's air pollution control code which became effective on January 1, 1970, is one of the strictest in the nation... More than 3,000 citizens— students, housewives, labor leaders, lawyers and physicians— had a hand in formulating the new regulations. Many thousands more have given their support. A law on the books will not clean the air; government officials must enforce it, and citizens must obey it.

*This tribute comes from former U.S. Congressman William Moorhead and was published in the Congressional Record on May 27, 1971.*

## Michelle Madoff: "One-of-a-Kind"

I knew Michelle for about twelve years, from late 1969 through my time in Pittsburgh and then into my time at EPA in Washington, DC. I worked with her during my volunteer work with GASP in 1970-1972 and more informally after that.

When I learned she had died, my first thoughts were of the times in those early years when Michelle and whomever else she could dragoon were interveners in the first round of Air Pollution Variance Board hearings in the Gold Room downtown. They were the best cheap seats to be found in town. Woe befell the unprepared petitioner who had to face the unorganized but very effective questions thrown out by Gatling Gun Michelle Madoff.

Then there was the first hearing for the state-proposed

western Pennsylvania SIP, under the then-very new 1970 Clean Air Act. The hearing attracted many hundreds of people and GASP was presenting testimony. The night before, with Michelle promoting attention to this hearing on the telephone to her wide universe, my colleague Dr. Albert Smith and myself were in her living room in Squirrel Hill, completing the testimony that he would deliver on the morrow. Michelle was into "Madoff-mode"; if we could have tapped that energy, we would have seriously lowered our carbon footprint.

The woman was one-of-a-kind, and I will miss her presence on this Earth.

*Bernie Bloom is a former Allegheny County air pollution engineer; currently owner of BSEA, LLC. and member of GASP.*

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The following letter from the GASP archives is Michelle Madoff's first appeal to the public to join GASP in October 1969.

Dear Fellow Breather:

Have you breathed enough polluted, poisonous air? If so, we hope you will join us - "GASP" (Group Against Smog and Pollution). GASP is composed of citizens, teachers, scientists, physicians, housewives, businessmen, union leaders, senior and junior citizens. We first came together during the recent State and County hearings to testify and press for the same regulations as Saint Louis and other cities are adopting to protect their people, and the generation yet unborn.

The Board of Health has indicated a need and desire for tough regulations, which would furnish clean, healthy air for the citizens of Allegheny County. The final enforcement, as well as adoptions of these rules will be up to the Commissioners.

Even, if by some miracle, we should get a tight set of regulations by the end of this year, this is only the beginning. Enforcement can only be achieved by STRONG PUBLIC SUPPORT of the men who must enforce these laws; The Air Pollution Control Director, and the Public Health Department. The ability to perform their jobs, will again come from Public Pressure on the COMMISSIONERS.

DON'T COMPLAIN ABOUT THE AIR YOU BREATHE! DO SOMETHING! Join "GASP" ... Ask your friends to join. OUR ONLY STRENGTH LIES IN NUMBERS OF CONCERNED CITIZENS, WHO WILL NOT BE QUIET, NOW THAT THE HEARINGS ARE OVER. The Commissioners must know by a VAST MEMBERSHIP IN "GASP" that they must ACT NOW, not only in the public interest, but in their own.

PLEASE RETURN THE ENCLOSED CARD; your membership and financial support is urgently needed. (No money necessary to join - but a contribution would be greatly appreciated). DO WHAT YOU CAN. Together, we can do something constructive.

For additional information: Mrs. Michelle Madoff (521-7470), Chairman - or Mrs. Arlene Nadelhoff (421-5989), or Mrs. Nancy Bowdler (661-8409).

MRS. HENRY R. MADOFF,  
Chairman, "GASP"  
Box 2850  
Pittsburgh, Pa. 15230

## Clean Air Dash continued from page 1

Athletes United strives to educate local athletes about air quality issues in the Pittsburgh region, give them the tools to minimize their exposure, and empower them to help champion healthier air.

In the wee early hours of October 19th, GASP employees and board members filtered into the South Side Riverfront Park under the glow of a full moon. Despite the chill in the air and the lingering darkness, race volunteers soon followed suit. Volunteers were greeted with hot coffee, bagels, official race shirts and the gratitude of race coordinators. Soon enough, they were deployed to race stations. Banners were hung, barriers were set, and race shirts and bibs were prepared for runners.

Before long, the sponsors, community partners, and food vendors began filing in. Activities at the festival included the Venture Outdoors Climbing Wall, yoga classes from Yoga Hive, football drills with a member of the Pittsburgh Passion, pumpkin painting with Women for a Healthy Environment and air quality monitoring from Carnegie Mellon University's mobile air quality lab.

Soon the runners began showing up, and the park was transformed into a sea of athletes adorned in kelly green Clean Air Dash shirts.

GASP was pleased to see that many athletes opted to ride their bikes to the event. The free bike valet provided by Friends of the Riverfront and Bike PGH quickly filled up.

GASP Executive Director Rachel Filippini led the event off with some words about GASP, air quality, and Athletes



Over 300 runners raced for clean air. Photo by Joshua Franzos Photography.

United for Healthy Air. Rachel also took the time to say a few words in remembrance of Michelle Madoff, GASP co-founder and former City Councilwoman, who passed away on October 12, 2013.

Dr. Karen Hacker, director of the Allegheny County Health Department, and City Councilman Bruce Krauss also spoke to kick off the Dash.

After initial remarks, the Yoga Hive led runners in a pre-race yoga stretch. Wattle, Duquesne Light's mascot tried keep up, but it's awfully tough for a light bulb to touch its toes.

Dr. Hacker then led kids and their parents on a fun run/walk courtesy of Mom's Clean Air Force. Children were given the opportunity to walk along the scenic South Side Riverfront Park, learn about air quality, and receive a t-shirt and a medal.

Soon enough, it was time for the race to start. Councilman Krauss was kind enough to man the starting pistol, and with a bang more than 300 athletes were off!

The runners ranged from first time racers to experienced 5K veterans. The top female finisher ran a stellar time of 21:11, while the top male finisher arrived at the finish line in a blistering 16:45. Also in the race were several GASP board members and friends, a cadre of students from Clairton, and teams from Clean Air Dash sponsors such as Clean Water Action, Copies at Carson, G-Tech Strategies and pair Networks.

After the last runners crossed the finish line, the fun really began. Fes-



A pre-race yoga stretch was led by the Yoga Hive. Photo by Joshua Franzos Photography.

tival attendees roamed the park and met with local businesses and non-profits. The Steer N' Wheel, The Vegan Goddess and The Musclemaker Grill vended delicious food. The Yoga Hive took the stage again and led the crowd in some more yoga.

After a truly fantastic day, the final festival attendees filtered out of the park. The first ever Clean Air Dash and Festival was over. Zero Waste Pgh hauled off the last of the recyclables, compostables, and trash. The vendors packed it in, and the GASP staff had the opportunity sit back and take a breath.

GASP and Athletes United for Healthy Air would like to thank all the volunteers, runners and sponsors who made this fantastic event a success. A big thank you goes out to the Breathe Project for all their support and guidance. GASP would also like to thank Councilman Bruce Krauss and Dr. Karen Hacker for their roles in the race. Check out Athletes United for Healthy Air on Facebook for event pictures, and follow AU on twitter @athletesforair.



Above: This family-friendly event encouraged student participation, thanks to a Levin Furniture sponsorship which provided scholarships for 65 students.

Below, left to right: The festival included a climbing wall from Venture Outdoors. Awards were given to runners in all age categories. Dr. Hacker of the Allegheny County Health Department led the Fun Run and Walk.

Photos by Joshua Franzos Photography.



## Thank you to our event sponsors!



Allegheny Millwork & Lumber  
City Theatre Company  
Conservation Consultants, Inc.  
Pittsburgh Opera



# Air Monitoring Near Unconventional Shale Gas Operations in Southwest PA And West Virginia

by Sue Seppi, GASP Project Manager

A natural gas drilling rig rising next door, along with a moving panorama of trucks and equipment, not surprisingly, can become a neighborhood hot topic. For much of the public, being so up close and personal with a natural gas operation can create apprehension as well. Neighbors of growing unconventional natural gas operations began wondering how their air quality might be affected. With that in mind, GASP started a program in summer 2011 continuing to early 2013 that made summa canisters available to concerned residents. Monitored sites were in the general southwest Pennsylvania area and some in nearby West Virginia sites.



This summa canister samples air near natural gas drilling operations.

A summa canister is a metal canister under vacuum. Samples are taken by opening a valve, allowing ambient air to enter the canister. A regulator can be added to prolong the air intake timeframe. Most sampling was done over 24

hour periods but a few were momentary grab samples. The canisters were then closed and sent to a laboratory for sample analysis. A suite of 75 volatile organic chemicals were targeted including the BTEX hazardous compounds (benzene, toluene, ethylbenzene and xylenes). Some non-target compounds in the sample were also sometimes detected in the lab (tentatively identified compounds or TICs). Formaldehyde was measured but with a different method. The survey was therefore limited and did not include measurement of other ambient compounds, metals or particulates.

Seventeen canisters were placed, primarily by participants and most often on their property in rural areas near unconventional shale gas operations. Placement distances to gas operations varied, ranging from about 50 feet to a half mile.

Sampling was done for six compressor stations, six well pad sites and an impoundment, most having ancillary storage tanks and equipment. Three sites were monitored twice. An additional site was background farming. The monitoring was mostly done during warmer months, with users instructed to be downwind of the monitored site on a low wind day if possible. The variations in the sampling relating to distance, size and location of natural gas operation produced results that related more to individual sites than overall community exposure.

## Observations

Of the 75 target compounds, 25 were detected at least once. An additional 26 TICs were noted. The number of compounds detected generally decreased as samples were taken farther away from the natural gas operations. Many target compounds, such as toluene and acetone registered at multiple sites (>10). Compound maximum concentrations were more often found in the near range of ~150 feet to fence line. None of the 25 target compounds, formaldehyde (separate measurement) or acetaldehyde (TIC) were detected at concentrations sufficient to exceed short or intermediate term health exposure values.<sup>1</sup> However, the majority of the Survey compounds maximum concentrations exceeded the highest values of matching compounds reported from yearlong monitoring efforts at nearby air toxics sites operated by the Allegheny County Health Department (ACHD) and Pennsylvania Department of Environmental Protection (PA DEP).

## Background

To give some comparative context to the Survey measurements, the maximum concentration of each of the target compounds was compared to the maximum for the same compound (if monitored) in air toxic measurements done by two other agencies in the region.

- The ACHD Air Program measures air toxics with 24 hour summa canisters (generally once every six days) in downtown Pittsburgh at Flag Plaza, which is a heavy traffic area. Of the Survey target compounds including formaldehyde and acetaldehyde, there were 20 matching compounds measured in Pittsburgh. Of the matching compounds, the Survey compound maximums were higher than all but five of the Pittsburgh annual compound maximums, using the most recent 2011 data.

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## Air Monitoring Near Gas Operations continued from page 10

- Comparison of Survey results to three southwest Pennsylvania DEP Air Toxic Monitoring Sites (Slippery Rock, Charleroi and Greensburg with 2011 and 2012 data measured usually every six days) identified 17 matching compounds. The majority of the matching compound maximums were higher in the Survey group. The Survey maximums were generally near range site specific measurements where the DEP sites were monitoring a broader area but the significantly larger number of DEP measurements makes for a closer comparison given the modest number of Survey canisters.
- As a background comparison, a Survey monitor in Washington County with no nearby operating natural gas operations or immediate farming/industrial activity registered comparatively few compounds at low comparative concentrations.

Elevation may be an important component of natural gas operation air emissions and their impact on nearby residents. Two canisters were used in the same 24 hour period near an impoundment and condensate tanks. One site was approximately 750 feet closer to these gas operations but elevated 25 feet above them as compared to the more distant site which was about 50 feet lower than the gas operations. Interestingly, the more distant but lower site had more compounds registering, as well as additional TICs. A possible explanation is that the location of the more distant canister was in a valley type of depression that also traveled close to the natural gas operations and could allow for pooling and channeling of heavier-than-air compounds, which includes many volatile organic compounds.

Benzene, a known carcinogen was detected near four compressor stations in a concentration range of .21 ppbv to .52 ppbv (parts per billion by volume) with the maximum concentration at 150 feet of a compressor station fence line. Benzene, was one of the few comparative maximums to be higher in downtown Pittsburgh (1.49 ppbv) than in the Survey. While these Survey benzene measurements were generally in closer proximity to natural gas operations than Pennsylvania regulatory distances for housing, it does increase confidence that the monitored benzene is associated with the natural gas operations. Benzene was not found at any of the other monitored Survey sites.

Formaldehyde, a probable carcinogen, was detected in one out of six Survey samples. This canister was located at 150 feet from the fence line of a compressor station. The Survey sample measured 5 ppbv and the Pittsburgh annual maximum was 5.11 ppbv with an average of 1.84 ppbv.

Measurements should be taken for at least a year for a calculated comparison to lifetime concentrations that would indicate excess cancer risk. Nevertheless, it is possible that this Survey site measurement could be a representative lifetime exposure concentration. For formaldehyde this would mean that the lifetime risk for excess cancer near this site is close to 1 person in 10,000<sup>2</sup>. The target of the EPA is excess cancer risk no greater than approximately 1 person in 1,000,000 for the greatest number of people possible.

Even when measured ambient compounds are below agency health related concentrations, there are other circumstances that could increase the health effects. A synergistic effect can occur between compounds, increasing the health impact of a particular chemical. Similarly, various compounds at low concentrations in air, water and food targeting the same body system, collectively can increase the possibility of health effects. Some compounds may sink and concentrate in low lying areas. Some of the detected chemicals in the Survey can potentially affect the endocrine system and emerging information indicates that very low concentrations of endocrine disrupting compounds may have critical health effects.

Unconventional shale gas operations continues to expand in Pennsylvania communities. As residents have expressed health problems, many similar in nature, coincident with the growing footprint of unconventional shale gas activities, local monitoring and a thorough public health risk analysis are needed. Evaluation should include considering the ways that lower-than-benchmark concentrations of air toxics near unconventional shale gas operations could have health impacts, especially as some of these compounds may be somewhat higher than other ambient concentration levels measured in the region.

1. Health related benchmark values from the following agencies: United States Department of Health and Human Services Agency for Toxic Substances and Disease Registry (ATSDR), the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA), the United States Environmental Protection Agency's Integrated Risk Information System (IRIS) and the National Institute for Occupational Safety and Health (NIOSH)
2. United States Environmental Protection Agency's Integrated Risk Information System (IRIS)

*Funding for this project was provided by the John and Margaret Johnston Barron Memorial Fund and the Oscar and Marjorie F. Balter Fund of The Pittsburgh Foundation.* 

# The W&J College Center for Energy Policy and Management Encourages Sustainability

from the Center for Energy Policy and Management at Washington & Jefferson College

In the fall of 2011, Washington & Jefferson College (W&J) recognized that our region faced a tough policy problem: how to respond to the rapid growth of various energy industries and channel it into a sustainable energy future? Believing that there was no better place to tackle that problem than a small liberal arts college with over 200 years of experience in identifying policy solutions to society's problems, W&J opened its Center for Energy Policy and Management (CEPM).

It fell to CEPM Director Diana Stares, former Regional Counsel for the Pennsylvania Department of Environmental Protection's Pittsburgh Office, to figure out how W&J could help the region to form good energy policy. Ms. Stares concluded that the solution lay in providing general education about the issues, convening and providing the public with access to energy experts and fostering collaboration among the stakeholders interested in energy policy. "The foundation of sound policy development is civilized and meaningful discussion among participants who are well-informed and willing to work together in a spirit of mutual respect and concern for the common good. Preparing individuals for such discussions and convening experts to collaborate in shaping policy related to the full array of energy sources is the focus of the CEPM."

A key component of the Center's educational efforts is research that will broaden the region's knowledge about energy activities. Currently, one of the Center's Research Fellows, Dr. Yongsheng Wang, is analyzing the economic impacts of Marcellus Shale development on Washington County during 2011 and 2012, two key years of development.

Partnering with the Environmental Law Institute, the Center also is conducting a study of the Marcellus Shale development in relation to boom and bust cycles. The researchers, a group made up of W&J professors and students as well as outside experts, will identify potential economic, social, health and environmental effects which communities hosting natural gas development may experience and strategies that the communities can implement to assure their long-term sustainability.

The CEPM's Energy Lecture Series, a series of evening programs, further advances the public's understanding of different aspects of energy. The 2013-2014 Lecture Series, entitled "Meeting Tomorrow's Energy Needs" opened on October 4, with a presentation on solar energy technology

and policy. The Series continued on October 23 with a showing of the new documentary film, Pandora's Promise, which explores the history and future of nuclear power. The film was followed by an audience discussion led by Dr. Joel Cannon, W&J Physics Professor, and Ingmar Sterzing, Westinghouse Electric Co.'s Director of Commercial Operations. Three additional programs will address the new Center for Sustainable Shale Development (November 20), the nexus of water and energy (February 27), and the role of coal in our energy mix (March 26).

The Lecture Series, which is free and open to the public, has been very successful. "We have been pleased that the lectures have been well-attended not only by the W&J community but also by the local community – business persons, government officials and citizens. Their attendance reflects the local community's desire to better understand the energy dilemmas facing our region and nation," stated Diana Stares.

The final aspect of the CEPM's educational outreach is the W&J College Energy Index, a tool to measure the nation's progress toward energy independence and energy security. Developed by W&J economists and CEPM Research Fellows, Drs. Robert and Leslie Dunn, the Energy Index relies upon publicly available data to analyze the nation's energy production, importation and consumption practices. "Using the W&J Energy Index, we will be able to determine how world events, energy supply and changes in consumer activity affect energy independence and security. This tool will be of great use to policy-makers, economists, government officials, and other decision-makers," Stares said.

The CEPM's annual Energy Summits provide an important opportunity to engage the region in discussions of energy issues of national significance. The CEPM's April 2013 Energy Summit focused on energy security and featured General Charles Wald (USAF Ret.) who outlined how the military's use of fossil fuels, particularly by expeditionary forces, endangers our energy security and what must be done to change this paradigm. Complementing General Wald's presentation were panel discussions by experts exploring how the domestic oil and natural gas booms, including the potential for expanded U.S. exports of natural gas, affect energy security.

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# Clairton Students Get Clean Air Lessons

In collaboration with Clairton's After-School Teaching and Learning Experience (CASTLE) Program and Sense of Place Learning, GASP is teaching students at Clairton Middle School all about air quality. Our participation was made possible by a grant from the Grable Foundation. Students involved in the program will learn about the various air pollutants affecting the region, their health effects and their sources. They will get to also utilize a variety of air monitoring equipment, learn the art of smoke reading, launch the EPA School Flag Program at their school, and learn about lichens as a bio-indicator of air quality.



Clairton students search for and find lichens on the Montour Trail.



Instructed by GASP's Karrie Kressler, students use water and drops of food coloring to see how their daily choices add up in the air we breathe.



GASP's Sam Thomas teaches Clairton students about air quality.

## Center for Energy Policy and Management continued from page 12

Educating and convening lay the groundwork for the final prong of the CEPM's efforts, collaboration. The CEPM has participated in regional roundtables tasked with making recommendations for policies governing the development and use of energy sources, including the Shale Gas Roundtable convened by the University of Pittsburgh's Institute of Politics and the Allegheny County Executive's Energy and Environment Vision Team. The CEPM also has successfully collaborated with other centers of excellence, such as the Jackson Hole Center for Global Affairs (JHCGA) in Wyo-

ming. The CEPM was able to assist with JHCGA's regional initiative to advance the use of natural gas as a transportation fuel.

Reflecting on the work of the CEPM, Ms. Stares notes, "W&J's identity as a small liberal arts college dedicated to the region has allowed the CEPM to take an active and meaningful role in assisting the region to better understand the energy challenges and opportunities we face and to make good decisions in responding to them. We hope to continue and expand our work in the future." 

# Think Twice Before Burning

by Rachel Filippini, GASP Executive Director

**A**utumn rings in many things—pumpkin pie, beautifully colored fall leaves, ghosts and goblins at Halloween, and often, the smell of wood smoke in the air.

Humans have been burning wood since prehistoric times. Back then it was essential for heat, light, and to ward off wild animals... today not so much. Of course there are still some families in rural Pennsylvania who rely on wood to heat their homes, but for the majority of those living in Pittsburgh it isn't a necessity.

GASP cautions homeowners to think about the implications of burning wood. If you live in a city neighborhood, chances are the homes are relatively close together, and the smoke from your chimney could be entering your neighbor's home. While wood smoke may seem benign as compared to air pollution created by vehicles and factories, in fact it is quite toxic.

Wood smoke is made up of a complex mixture of gases and fine particles produced when wood and other organic matter burn. Carbon monoxide and organic gases such as benzene, dioxin, phenols, aldehydes, polycyclic aromatic hydrocarbons (PAH), nitrogen oxides and sulfur oxides are also released when wood is burned. The biggest health threat from smoke comes from the fine particles. In the short-term, fine particulates have been known to aggravate lung disease, triggering asthma attacks and acute bronchitis, and may also increase susceptibility to respiratory infections. In the long-term, they have been linked to reduced lung function, the development of chronic bronchitis, cancer, heart attacks, and premature death. Children, the elderly, and those with cardiovascular or respiratory disease are especially at risk.

According to the University of Pittsburgh's Center for Healthy Environments and Communities' *Pittsburgh Regional Environmental Threats Analysis* (PRETA) Report on particulate matter (PM), the second most common source of PM in Allegheny County is residential fuel consumption for heating. CHEC says, "Interestingly, burning of wood (fireplaces, wood stoves, etc.) contributes the vast majority of this source (1,600 tons) compared with less than 20 tons from the use of gas or oil heat."

In addition to the deleterious air pollution you may be creating when lighting up the fireplace, be aware that using a fireplace may actually rob your house of heat because a draft is created which pulls the heated air inside your home up the chimney.

GASP recommends that you consider alternatives other than wood burning, such as weatherization and insulation to reduce household heating costs.

You might think that the air pollution regulations in Allegheny County only affect industrial sources, but in fact, homeowners are also prohibited from allowing foul odors to leave their property. In addition, smoke emissions can not exceed an opacity of 20% for more than three minutes in any sixty minute period, or exceed an opacity of 60% at any time. If you do, you are in violation of the County's Visible Emissions Regulation.

If you smell malodors or see excessive smoke you should call the Allegheny County Health Department (ACHD) at 412-687-2243 each and every time. ACHD has acknowledged that wood smoke is a large contributor to ACHD-received citizen complaints. Roughly one-third of all complaints are about wood burning.

On Saturday, September 7th, ACHD hosted its first ever collection event for uncertified wood stoves in South Park. ACHD offered \$200 gift card bounties for any uncertified wood stoves and a \$500 cash incentive for non-Phase-II compliant outdoor wood-fired boilers (OWBs) in the County. The purpose of the program was to remove older, less efficient, more polluting stoves and boilers from use in the county to help reduce fine particulate pollution. Fifty-nine wood stoves and one outdoor wood-fired boiler manufactured before the U.S. Environmental Protection Agency set emission standards for such equipment were turned in at the collection event. Because of the success of the program, a second collection event is being planned.



# Smokereader Urges Action for Shenango Coke

*The following comments were made by GASP Board Member Karen Grzywinski at the Allegheny County Health Department's Air Pollution Control Advisory Committee Meeting on October 8, 2013.*

**M**y name is Karen Grzywinski. I am a resident of Ohio Township, but for over 18 years—from 1986 to 2004—I lived in Ben Avon. My family and I experienced the pollution and odors generated by Shenango and other Neville Island plants on a regular basis. I became involved with GASP and Clean Water Action because of the problems we experienced. I am a member of the GASP Board; through GASP, I became a smokereader to better understand and monitor the Shenango plant. I also participate in the Shenango community meetings organized by Clean Water Action.

I was hopeful that when DTE bought the facility, performance at Shenango would improve. DTE is more approachable and has an ongoing conversation with community members. From what I understand, they have completed the requirements of last year's consent agreement. Progress, however, isn't evident from what I have observed of the plant.

I've now been a member of the smokereaders group for 11 years. I've observed Shenango under the previous owners and under DTE. The battery stack has typically been in compliance. Other emissions from the battery continue to be discouraging.

I last observed Shenango a week ago, on Tuesday, October 1, 2013. Between about 8 and 9AM, I saw five quenches; three of the quenches included dark grey emissions from the quench tower prior to the vapor emissions. I believe that emissions during quenching have become more frequent over the last year. I also observed two separate emissions through the side of the shed; each was of 100% opacity. And, as I've come to expect during every observation, there were emissions from several sections along the battery. Last Tuesday, there were nine individual emissions, ranging from 30% to 100% opacity, at various points along the battery. I also observed a continuous light grey emission from the center of the battery during the entire hour. This type of performance is typical of what I have seen over the past 11 years. Based on what I have observed, there has been little long-term improvement. If Shenango has indeed made the required repairs to the facility, are they negligent in following proper procedures and keeping up with adequate maintenance? Is it more economical to just pay the fines?

Since I moved to Ben Avon in the 1980s, we have all learned so much more about the negative effects of air pollutants on our health. Yet we are still fighting the same battle with Shenango. It's time to use 21st century

information and technology to evaluate Shenango and Clairton Coke works. I commend the Air Quality Division for adding new soaking regulations for coke facilities, but it's time to go further. The coke plants must acknowledge the negative health effects their operations have on the community while the Health Department must develop additional regulations for our protection. Allegheny County is home to two of about 18 coke facilities in the country. If these plants choose to continue operating here, they must be held accountable to 21st century standards. I would hate to watch this same performance repeat for another 11 years. 🚲



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Photo by Maren Cooke

## Clean Air Ideas

**What can Pittsburgh mayor-elect Bill Peduto do to improve air quality in the city?**

Answer this question in 200 words or fewer, and we may print your response in the next Hotline issue and on the GASP website. E-mail your response to [hotline@gasp-pgh.org](mailto:hotline@gasp-pgh.org) by January 6, 2014, the day Bill Peduto is inaugurated as mayor of Pittsburgh. Please include your full name in your response.

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