



# Group Against Smog and Pollution, Inc. Hotline



Spring 2012

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

## In this issue

Allegheny County's First Marcellus Compressor Station Comes to Frazer Township	1
Can You Help Us <i>Not</i> Keep a Secret?	2
DTE Shenango Update	3
Climate Change and Global Warming	3
How Plants Can Affect Indoor Air Quality	4
Greening Your Bookshelf	6
Sandra Steingraber to speak at Washington & Jefferson College	6
Spotlight on a GASP Intern	7
Green Events	8

## Allegheny County's First Marcellus Compressor Station Comes to Frazer Township

by Lauren Burge, GASP Attorney

Allegheny County is slated to receive its first Marcellus compressor station. Superior Appalachian Pipeline, LLC has applied for a permit to construct a natural gas compressor station in Frazer Township, near the Pittsburgh Mills Mall. The Allegheny County Health Department (ACHD) released a draft permit for public review and comment on February 8, 2012. The company plans to include five compressor engines, three dehydrators/reboilers, and two produced water storage tanks at this facility. The station will accept gas from Marcellus wells in the area, process it to remove any liquids remaining in the gas, and then compress the gas so it can travel through a pipeline.

Although this facility will be a relatively small source of pollutants on its own, the impact that the rapidly growing oil and gas industry may have on air quality in this region is concerning. Two main pollutants of concern are nitrogen oxides (NO<sub>x</sub>) and Volatile Organic Compounds (VOCs). Both are ozone precursors which react in the atmosphere with sunlight to form ozone. Our region already fails to meet federal health-based standards for ozone, and by adding many widely dispersed small sources of ozone precursors, we risk worsening ozone pollution in this region and in areas downwind. Many oil and gas facilities currently are not required to receive an air permit, so it is difficult to know exactly what impact the natural gas industry is having on our air quality. It is important to ensure that the

first Marcellus compressor station in Allegheny County receives the strongest possible permit so that any future development will also be held to the same high standard.

GASP has been actively involved in the permitting process. In March we held a public meeting offering information about the facility and advice on how to submit effective comments. In addition, we submitted comments on the facility which were joined by Clean Air Council, Clean Water Action, and Penn Environment. Our comments focused on making sure the facility would be required to implement stringent pollution controls, that the facility's effects on the ambient air are adequately characterized to ensure they will not pose a threat to human health or the environment, and that the County conducts an analysis to determine whether the source must be aggregated with nearby related pollution sources such as wellheads. You can find these comments on GASP's website at [www.gasp-pgh.org](http://www.gasp-pgh.org). Additionally, in response to requests from GASP and others, ACHD held a public hearing on this facility. Thirty people spoke at the hearing, including concerned citizens, environmental groups, and company representatives. A final permit has not yet been issued.

For more information on the Frazer Township compressor station, including a summary of our community meeting, Powerpoint presentation, and informational handouts, visit the Marcellus Shale section of GASP's website.



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.

# Can You Help Us *Not* Keep a Secret?

by Jonathan Nadle, GASP President

Somewhat ruefully, we joke amongst ourselves that GASP is one of the best kept secrets in Pittsburgh. We've been in existence for 43 years now and do great work... and yet we only have hundreds of members, not thousands like we believe we should. Why is this? That's a question we've asked, and we've come up with a number of answers.

Some involve our organizational nature. We have a small staff and modest office space, and we tend to focus mainly on the work and less so on publicizing our successes. Even though we receive local media coverage at least once a week on average, we haven't been successful in parlaying that publicity into more dues paying members.

Various external factors also come into play, like the current economic climate, that have affected many nonprofits. There are many reasons why broader membership is important.

Besides the more obvious ones of enhanced public stature and financial support, there are:

- more members to take part in campaigns and projects; to respond to GASP Alerts
- more volunteers to take part in activities like smoke reading, public testimony, and educational outreach.
- many foundations look for sufficient member support as a criteria for choosing groups to fund, and in what amount. Paradoxically, groups with higher membership funding may be eligible for larger grants as they won't exceed the desired grant to other donations ratio.
- events take a lot of time and effort to put together, and typically a certain percentage of members will attend. So the broader the membership base, the bigger the likelihood of a good turnout.
- for litigation, members living in an area affected by pollution are often needed to achieve legal "standing."

Rather than bemoan our lot, GASP is working harder to bring in and retain new members. Just this past year, we managed to almost double our membership, thanks in part to running a small door-to-door canvass and participating in the United Way Day of Giving. We also have more actively courted complimentary and lapsed members, which has had some success.

In early 2011, we rolled out a heavily revamped website that is "slicker" and has higher web production values than our previous version - but that provides even more of the solid content that GASP is known for, in a more easily searched format. We also update the content more frequently giving folks reason to check our site more often. We have an active social media presence, primarily via Facebook and Twitter, which seems to be achieving a critical mass of followers.

So please help us spread the word about GASP's good work! There's something alluring and exclusive sounding about being a "best kept secret." But when it comes to a grassroots, membership-based environmental group such as GASP, the more who know about and support our work, the more effective we can be.

We'd like to let all of Pittsburgh in on it. You can direct any interested family or friends to our website at [www.gasp-pgh.org](http://www.gasp-pgh.org).

For those who use **Facebook** and **Twitter**, we're @GASPPgh.

For those who would like to sign up to receive this **newsletter electronically**, visit: <http://gasp-pgh.org/publications/hotline/>.

For those who would like to receive our periodic **Action Alerts**, see the sidebar of our web site here: <http://gasp-pgh.org>.

*Thank you!*



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

GASP  
5135 Penn Avenue  
Pittsburgh, PA 15224

(412) 924-0604

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



Printed on 100% post-consumer recycled, processed chlorine-free paper at Forward Lithography, 4065 Irvine St., Pittsburgh, PA.

## GASP Mission Statement

GASP will act to obtain for the residents of southwestern Pennsylvania clean air, water, and land in order to create the healthy, sustainable environment and quality of life to which we are entitled.

## 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.

# DTE Shenango Update

by Karen Grzywinski, GASP Board Member

**G**ASP continues to monitor the progress of DTE Shenango in reducing air pollution violations at the Neville Island facility. Shenango operates a single coke oven battery with 56 ovens, producing mainly blast furnace quality coke for use in the steel making industry. The plant is a major source of carbon monoxide, nitrogen oxides, particular matter, particulate matter less than 10 microns and sulfur dioxide, and a minor source of volatile organic compounds and hazardous air pollutants. Between January and August of 2011 the plant was issued 114 violations totaling \$114,000 in fines by the Allegheny County Health Department's Air Quality Division. The plant has developed a written compliance plan which is enforced by the Air Quality Division in order to reduce violations. Shenango and the Health Department are currently negotiating the fine.

GASP board members Ted Popovich and Karen Grzywinski are members of the Neville Island Good Neighbor Working Group established to keep local residents apprised

of the progress the plant is making in reducing violations. A meeting of the group was held at the Neville Island plant on March 28, 2012. Allegheny County Air Program Manager, Jim Thompson, and Shenango plant manager, Steve Guzy, presented updates on the progress in facility repairs and operational refinements in reducing violations. While the violations have been significantly reduced, fugitive emissions from the coke batteries continue to be problematic. ACHD is now developing quantitative enforceable regulations for the "soaking" phase of the coking cycle. Soaking is a monitoring process during which an operator vents the oven to access the progress of the coking process, often releasing significant emissions from the oven.

The next meeting of the Working Group will be held on April 30, 2012 at 6pm at the Shenango plant office. In addition, ACHD will hold a public meeting on April 4, 2012, from 6-7:30pm at the Bellevue Borough Building (537 Bayne Avenue) to discuss the performance of Shenango and other local air quality issues. 

# Climate Change and Global Warming

by Edward Gerjuoy, GASP Board Member

**A** book by U.S. Senator Jim Inhofe of Oklahoma, titled "The Greatest Hoax: How the Global Warming Conspiracy Threatens Your Future," has just been published.<sup>1</sup> This politicization of what are intrinsically purely scientific issues, concerning the validity of specific predictions by knowledgeable scientists, has stimulated me to write this article, which seeks to clarify those issues for the benefit of GASP's Hotline readership.

"Global warming" refers to increases in the Earth's average surface temperature, in both the observed past and the anticipated future. Although all of us, both scientists and the general public, speak unqualifiedly about global "warming," actually the Earth's average surface temperature is remarkably—really unbelievably—constant, when one considers how greatly the temperature varies at any point on the Earth's surface, from day to night, from season to season, from year to year. In particular, since 1880 the Earth's average temperature has increased by a total of no more than about 1.4 degrees Fahrenheit. The concerns about this increase stem from the fact that about two thirds of the increase has occurred since 1980. These concerns are heightened by the added fact that the Earth's average temperature during the past decade appears to be about 0.7 degrees Fahrenheit higher than in any decade during the two thousand years preceding 1940.

For the years prior to about 1850, the Earth's average surface temperatures have to be reconstructed via measurements on what are called "proxies," e.g., tree ring widths, coral growth, ice cores, etc. Thus the assertions in the preceding paragraph about the Earth's average temperatures in the years prior to 1850 not unreasonably might be questioned, although those assertions are based on reconstructions presented in a 2006 Report<sup>2</sup> by the U. S. National Academies of Sciences (NAS), by far the most prestigious organization of scientists in the United States, if not in the world. For the years after about 1850, however, the assertions in the preceding paragraph are based on direct actual temperature observations which, since 1950 surely, were recorded at thousands of monitoring stations distributed over the entire globe. Obviously these observations have to be appropriately weighted before they can be employed to yield average Earth temperatures, in order to avoid overemphasizing the influence of those Earth areas wherein monitoring stations are most heavily concentrated. These weighted averages have been computed by three different major research groups, working independently; the yearly average Earth temperatures since 1950 reported by these three groups agree to within one tenth of a degree Fahrenheit.<sup>3</sup>

continued on page 5

# How Plants Can Affect Indoor Air Quality

by Christine Rigby, GASP Intern

In his book, *How To Grow Fresh Air*, B.C. Wolverton, Ph.D. ranks indoor air pollution as one of the world's greatest health risks. This comes as no surprise, with evidence turning up everywhere that the objects we surround ourselves with for comfort are generally packed with chemicals, which must go somewhere, and so leak into the air we breathe. As an example, even something as simple as an inexpensive desk contains formaldehyde—an intrinsic part of today's wood pressing process—in multiple states, all ripe for emission by evaporation. Our increasing skill with scientific observation has brought these invisible threats into the light of day. The EPA acknowledges that indoor air pollution can have immediate effects upon healthy and asthmatic individuals, as well as more serious long-term effects such as heart disease, lung disease and cancer.

Aside from limiting and removing sources of volatile organic compounds, or VOCs (or floating, tissue-targeting attack units, if you will), what can be done to make the inside of your home safer? The answer is all around you, waving nonchalantly in the breeze, catching your peripheral vision with brilliant greens or sometimes shades of brown: plants! Those shoots and roots that we so love tending to out of doors can be brought inside, not just to increase your gardening workload, but to increase the amount of oxygen and decrease the amount of toxins in the air. The most-referenced study on this topic was done by National Aeronautics and Space Administration (NASA) researchers (including the aforementioned Wolverton), and it involved several common house plants and their ability to remove the three most common indoor air pollutants from sealed chambers.

The three chemicals in the NASA study, benzene, formaldehyde, and trichloroethylene, could all stand to be removed from your home, where you most likely spend plenty of time. According to the CDC, benzene works on humans by confusing cells into doing their jobs wrong, such as discouraging bone marrow from producing more red blood cells. Benzene is one of the twenty most-produced chemicals in the United States, and can be found in not only crude oil, gasoline, and cigarette smoke, but also in detergents, dyes, lubricants, glues, synthetic fibers, and plastics. Formaldehyde can shrink and swell cells, and even twist DNA to form irregular bonds

that could cause cancer. Formaldehyde can be found in fertilizers, paper, plywood, and other pressed wood products. Trichloroethylene (TCE) acts on our central nervous systems, and just inhaling it can cause dizziness, headaches, confusion and weakness. TCE is found in degreasers, greases, paint removers, waxes, spot removers and rug cleaners. It is overwhelming to consider the amount and types of components that go into creating something we purchase as a convenient whole in the store!

The study showed that the VOC load in the air could be reduced more quickly with plants than without them, but failed to detail the mechanism by which this was possible. A later study by Wolverton in a sealed 'Biohome' found that plants placed in a more porous growing medium with a fan beneath the roots would do the work of 15 regularly potted plants to rid the air of VOCs. Studies quickly progressed to target the increasing evidence that the entirety of the plant works together to digest the toxins in a way that humans cannot: openings called 'stoma' in plant leaves take in not only carbon dioxide but other airborne substances, and when releasing



Houseplants can grow in clay pebbles which allow the plants to remove VOCs from the air more quickly than if they were growing in soil.

water from the plant's roots, exchange these substances into the root system, where associated microbes adapt to their presence and begin converting them to food and energy. More than half of VOC removal is the work of microbes around the plant's base. Following this logic, and with the evidence from porous

growing medium studies and subsequent studies, we see that air can pass more easily to the rich, pollutant-converting microbial wildlife of a plant's root system when the plant is suspended in something other than tightly-packed soil. The European style of maintaining houseplants utilizes clay pebbles surrounded by water, which permits the roots to

## Pittsburgh-area Plant Sales and Garden Centers

Audubon Center For Native Plants Spring Native Plant Sale, **May 5**, 9am - 1pm, Beechwood Farms

Phipps Conservatory May Market, **May 11** 9:30am-7pm, and **May 12** 9:30am-5pm

Pittsburgh Botanic Garden 22nd Annual Spring Sale, **May 12**

The Urban Gardener, North Side

Home Hydroponics, Strip District

continued on next page

## Climate Change and Global Warming continued from page 3

In short, the assertions that during the last century there has been global warming, and that the warming appears to have accelerated since 1980, cannot reasonably be doubted; global warming is not a hoax! But it is reasonable to then ask whether this global warming has been man made, i.e., has been caused by human activities. Evidently the answer to this question, an answer which involves evaluating proposed causes and effects, cannot be offered as assuredly as was the opening sentence of this paragraph, whose validity rests on little more than careful averaging of accurate temperature measurements.

Nevertheless the vast majority of working scientists, including the NAS, agree global warming has been man made, largely because it is so difficult to construct believable natural causes for the warming. For instance the suggestion that the warming is a consequence of increased solar radiation is immediately contradicted by direct satellite observations. On the other hand observed increases in the atmospheric concentrations of the so-called “greenhouse gases,” e.g., carbon dioxide (CO<sub>2</sub>), methane, ozone and nitrous oxides, readily can quantitatively account for the observed temperature increases during the past century, using nothing more than established physics and chemistry doctrine at a level taught to college undergraduates; moreover, and most importantly, these greenhouse gas concentration increases are well correlated with increases in human activity. Especially impressive is a comparison of two curves shown in a NAS report, one curve displaying the measured atmospheric CO<sub>2</sub> concentrations as a function of time during the past century, and the second curve showing the estimated yearly CO<sub>2</sub> emissions from fossil fuel burning during the same period; since about 1980 these two curves are essentially parallel.<sup>4</sup>

Granting now that global warming is occurring, and that it is caused by human activity, the question that immediately comes to mind is: If this global warming continues for a non-trivial period of time, a century say, should we expect significantly deleterious climate change? Here “climate change” refers to changes in numerous aspects of average

weather conditions; those weather conditions include the temperature, but also include rainfall, windstorms, clouds and other characteristics of the environment in which we live. Obviously any answer to the immediately preceding question must be much less certain than any of the assertions made in preceding paragraphs. The Earth’s surface and atmosphere comprise a very complicated eco-system; we all know how difficult it is to predict the weather more than a week in advance. Yet we now are being asked to make predictions about the state of this eco-system a century from now, under global warming circumstances human civilization has not previously encountered.

Nonetheless the NAS has been willing to state, “Although the exact details cannot be predicted with certainty, there is a clear scientific understanding that climate change poses serious risks to human society... the environmental, economic, and humanitarian risks of climate change indicate a pressing need for substantial actions to limit the magnitude of climate change...”<sup>5</sup> In brief, the NAS has concluded that—despite the acknowledged uncertainties in the climate change consequences of global warming—it would be prudent to immediately begin reducing, to whatever extent possible, the burning of fossil fuels. Recognizing that, though a physicist, I surely haven’t anything like the relevant experience and scientific stature of the NAS experts who authored the cited NAS report, I do not disagree—and see no reason to disagree—with the just quoted NAS conclusion.

The foregoing brings my readers up to date on presently informed thinking about the subject of this article. I emphasize that, to keep my discussion focused and because of space limitations, I deliberately have ignored any consideration of the undoubtedly important immediate health effects of fossil fuel burning, e.g., of the particulate emissions therefrom.

1. WND Books, New York.
2. “Surface temperature reconstructions for the last 2,000 years” (2006). National Academies Press.
3. University of California Lawrence Berkeley National Laboratory Report, “Berkeley Earth Temperature Averaging Process” (2011).
4. “America’s Climate Choices,” (2011), National Academies Press. See Fig. 2.2 and pp. 24-27.
5. Ibid.



## Plants continued from page 4

wander freely and transpire effectively, thus removing VOCs at a more rapid rate than a standard houseplant (and without the soil-borne pests!).

A word of caution before you run to the closest nursery: some plants have been shown to release VOCs as well as mitigate others, but studies are inconclusive as to whether the blame lies in the material of the pot holding the plant,

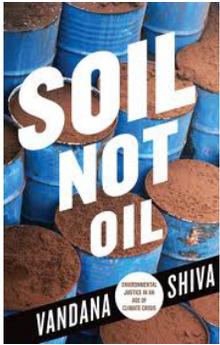
the type of fertilizer or pesticides used during the plant’s upbringing, or with the plant itself. It is best to buy your plants from a trusted, local source, or ask your friends for clippings. Here in Pittsburgh, we have several good options for acquiring healthy plants: everything from independent nurseries to annual plant sales (see sidebar on previous page).



# Greening Your Bookshelf

by Thalia Gray, GASP Board Member

In our *Greening Your Bookshelf* column, we review books that discuss themes of interest to GASP members whose concerns range far beyond particulate matter and fly ash. This column will hopefully be a landing pad and a take-off point for those interests. No endorsement by GASP of these books or ideas is implied or intended.



***Soil Not Oil, Environmental Justice in a Time of Climate Crisis* by Vandana Shiva. South End Press, Cambridge, MA, 2008. 144 pages.**

In 1992 I began graduate school in Anthropology in New York City. One of the texts I had to read that first year was an ethnographic study entitled *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia* by Aihwa Ong. I brought the

book home with me on a visit to my family and my mother picked it up with interest. “It seems to be written in English” she said, “but I can’t understand a word. Is this how all academics have to write?” For her, the book was a comic example of the inaccessibility of academic jargon, and the title became shorthand for anything completely incomprehensible. A couple years later, my mother and a friend were co-opted to show a visiting scholar from India around New York City for the evening as a favour to a friend. They took the visitor to a jazz club on Cornelia St and asked if there was anything she was interested in during her time in the city. “Well,” she said, “I am looking for a particular book. It’s called *Spirits of Resistance and Capitalist Discipline: Factory Women in Malaysia* and I would really like to buy a copy.” My mother was as astonished at that coincidence as I was to find out that the visiting scholar was Vandana Shiva.

A radical scientist and environmental leader, Vandana Shiva has published many books on the environment, agriculture, activism and feminism. Her books and lectures are electrifying. Published in 2008, her book *Soil Not Oil* particularly resonates for Americans and Pittsburghers during the current fuel development crisis. She discusses the triple crisis of climate change, peak oil, and the food and agrarian crisis and how they are related. Dr. Shiva claims that this crisis convergence creates an impetus for a transition to an “age beyond oil”. The problems created by global warming, the decline of peak oil production, and a food crisis engendered by industrialization and globalization of agriculture threaten our survival as a species, with particular hardship on the poor.

Dr. Shiva proposes soil as the solution to all three threats to our global ecology. Climate change and the diversion of food to biofuels are ensuring additional pressure on food supplies already under siege by industrialized agriculture.

Dr. Shiva recommends biodiverse ecological agriculture as the solution here, with food production through local organic food systems. Organic farming and agro-forestry also sequester carbon from the atmosphere, capturing it in the soil and serving as carbon sinks, addressing the issue of greenhouse gases. She calls for a cultural transition, reducing energy demands of the rich and minimizing non-sustainable production and consumption that create oil dependence.

The globalized economy is based on the assumption that perpetual growth is both possible and desirable, and that pollution and resource burden should be shifted onto the poor. ‘Eco-imperialism’ is a term she uses for allowing corporations to gain increasing control of resources, such as energy, water, air, land and biodiversity to maintain the industrialized global economy. In contrast, a post-fossil fuel economy uses renewable energy, depends on human energy and physical work and encourages biological and cultural diversity. This requires a political transition where people become active agents for change. “The lands of the poor are becoming the next oil fields” seems to echo vividly in western Pennsylvania these days. I recommend reading her books not only for the dilemmas she outlines so precisely, but also for the inspiring examples of an alternate future she describes. 

## Sandra Steingraber to speak at Washington & Jefferson College

Tuesday, April 24, 7 pm, Olin Theater, Washington, PA

Dr. Steingraber came to prominence with her best-selling 1997 book *Living Downstream: An Ecologist’s Personal Investigation of Cancer and the Environment*, which has recently been updated (2010) and adapted into a film of the same title.

Called “the new Rachel Carson” by *Sierra Magazine*, Dr. Steingraber is the recipient of numerous prestigious awards for her work as a writer, scientist, and human rights activist, including a Heinz Award in November 2011 as an individual “whose remarkable mix of vision, creativity and passion has produced significant achievements benefitting the environment.” Dr. Steingraber is currently a Distinguished Scholar in Residence at Ithaca College in Ithaca, New York.

For more information about this event, contact Candy DeBerry at 724 223-6120 or [cdeberry@washjeff.edu](mailto:cdeberry@washjeff.edu).

# Spotlight on a GASP Intern

Christine Rigby is GASP's newest Student Conservation Association (SCA) intern, having started her ten month stint at the end of this January. She originally planned on joining the Peace Corps but discovered the SCA and its unique Green Cities internships, which seemed a good fit for her interests and experience. She applied and ended up at GASP.

After an initial period of "powering through the learning curve" and doing "Jamin-shadowing" of our Education and Outreach Coordinator, she started work to increase community awareness and involvement with GASP's Athletes United campaign. She also researches current events to keep our outreach programs and blogs up-to-date. In time, she will help plan events and develop project partnerships with other public interest groups. She'd like to develop "innovative material and strategies to make our organization 'pop'".

Since arriving in Pittsburgh from Florida, Christine moved into a recently renovated, colonial-era house in Pittsburgh's Larimer neighborhood with fellow SCA interns as housemates. They are involved with their local green team and hope to help generate positive change in that transitioning neighborhood.

Christine received a BS in Cardiopulmonary Sciences, with honors, from the University of Central Florida, which she mentions is the second largest university in the country. In an unplanned nod to the physicists on GASP's board, she has been educating herself in quantum theory through intensive reading and webinar attendance.

Outside of her work with GASP and in her community, Christine spends much of her free time reading and thinking. Christine has "mysteriously compounded a hefty collection of Vietnam-era typewriters," with which she "plans to make tons of noise in my vast, echoing old home." Other hobbies include sewing and tinkering with bikes.

When asked if she had any interesting stories to tell, Christine responded, "I have many interesting stories - heck, I am an interesting story! But it all sounds so much better in person." So if you see Christine out and about doing GASP outreach, please say "Hi" and take a minute to talk with her. You'll be happy you did!



## Join GASP Today!

- \$40 Grassroots Supporters (\$15 low income/student rate)
- \$60 Grassroots Contributors
- \$100 Grassroots Patrons
- \$250 Clean Air Defenders
- \$500 Clean Air Protectors
- \$\_\_\_\_\_ Other

*Call GASP at (412) 924-0604 to learn about automatic monthly giving, deducted directly from your checking account or charged to your credit card. An easy, hassle-free way to support GASP all year round!*

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_

E-mail \_\_\_\_\_

Check    Visa    Mastercard    American Express

Card # \_\_\_\_\_

Exp. Date \_\_\_\_\_ Amount \$ \_\_\_\_\_

Signature \_\_\_\_\_

All contributions are tax-deductible to the extent allowed by law. Group Against Smog and Pollution, Inc. is a 501 (c)(3) nonprofit organization. The official registration and financial information of GASP may be obtained from the Department of State by calling 1-800-732-0999. Registration does not imply endorsement.

# Green Events in Pittsburgh

Look for GASP at some of these upcoming events happening in and around Pittsburgh this spring.

## Earth Day Celebration at Frick Park

**April 21**, Frick Environmental Center, Squirrel Hill  
[http://www.city.pittsburgh.pa.us/parks/earth\\_day.htm](http://www.city.pittsburgh.pa.us/parks/earth_day.htm)

## Earth Market

**April 23-27**, Market Square, downtown Pittsburgh  
[http://apps.pittsburghpa.gov/mayor/earth\\_market\\_invite.pdf](http://apps.pittsburghpa.gov/mayor/earth_market_invite.pdf)

## Eco-Days at the National Aviary

**May 9-10**, Allegheny Commons West, North Side  
<http://www.aviary.org/vis/ecodays.php>

## Silent Spring at 50

**May 11-12**, National Aviary and Chatham University  
<http://www.chatham.edu/sse/events/silentspring50/agenda.cfm>

## 11th Annual Great Outdoors Week

**May 11-20**  
<http://www.wallsarebad.com/goweeek.aspx>

## National Bike to Work Day to kick off Car-Free Fridays

**May 18**  
<http://bike-pgh.org/events/car-free-fridays>

## Venture Outdoors Festival

**May 19**, Point State Park, downtown Pittsburgh  
<http://www.ventureoutdoors.org/vofest.aspx>



RETURN SERVICE REQUESTED

5135 Penn Avenue  
Pittsburgh, PA 15224

Group Against Smog and Pollution, Inc.



NON-PROFIT ORG.  
U.S. POSTAGE  
PAID  
PITTSBURGH, PA  
PERMIT No. 712