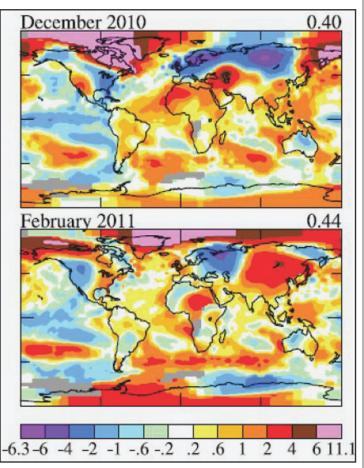
Arctic Temps Climb Off the Charts



Maps courtesy NOAA

Temperatures across parts of the Arctic were so warm from December through February that climatologists had to add hot pink to the color scale.

By Bob Berwyn Summit County Citizens Voice

April 16, 2011

Temperatures across parts of the Arctic were so warm from December through February that climatologists added hot pink to the color scale. For the planet, March was the 13thwarmest on record: Antarctic sea ice was the second-lowest on record.

SUMMIT COUNTY, Colorado — Warmer-than-average temperatures prevailed across much of the planet in March, especially in the far north, where readings were so high that climatologists had to add a new color – hot pink – to their

Overall, the combined global land and ocean surface temperature was 0.88 degrees above the 20th-century average, making it the 35th consecutive March with above-average temperatures and the 13th-warmest March on record, according to the monthly summary from the National Climatic Data Center.

For the year-to-date, global temperatures are running 0.77 degrees above average, making it the 14th warmest January-March period on record.

Warmer-than-average ocean conditions were most pronounced in the equatorial Atlantic, the western Pacific oceans and across the Southern Hemisphere midlatitudes.

Across the planet's land masses, the most prominent warmth was recorded across most of Siberia, southwestern Greenland, southern North America and most of Africa. Cooler-than-average conditions were reported from the western half of Canada, most of Mongolia, China and southeastern Asia. A notable exception to global warmth was in Australia, which experienced its coolest March on record, with above-average rainfall across the entire country.

The wettest parts of the planet included Thailand, the Philippines, many western Pacific island nations, parts of northern and eastern Australia and a band across central South America. The driest areas included across eastern Asia, much of Europe, the central United States, parts of Canada and Argentina.

England reported the driest March in 50 years and the fifth driest since records began in 1950. East Anglia – a region in eastern England – had its second driest March on record, behind 1929. It was also dry to the east. According to Deutscher Wetterdienst - the German national meteorological agency – average March rainfall across the country was the lowest in 18 years and seventh lowest since 1881, when official record keeping commenced.

In Australia, average rainfall across the country was 217 percent of normal for the month of March, making it the wettest March on record. In the north, the state of Queensland and the Northern Territory each reported the most March rainfall since records began in 1900. South Australia had its fourth highest March rainfall on record.

And, while global warming deniers have been trying to perpetuate the myth that Antarctic sea ice is growing to balance the loss of sea ice in the Arctic, the scientific record shows a different picture. Satellite data indicates that Antarctic sea ice extent in March 2011 was the third lowest on record, a full 16.2 percent below the 1979-2000 average.

This information was compiled from the NOAA National Climatic Data Center, State of the Climate: Global Analysis for March 2011, published online April 2011, retrieved on April 15, 2011 from http:// www.ncdc.noaa.gov/sotc/global/2011/3.

www.SummitVoice.org is an independent source for environmental news in Colorado and the Rocky Mountains.



Josh Fox, producer of the film 'Gasland' (center with tie) marched with young people in the streets of Washington, D.C. during the three-day Power Shift 2011 event. Approximately 10,000 people attended the conference between April 15th and 18th.

We Can't Wait for Politicians We Have to Create the Future We Need

By Bill McKibben, excerpt AlterNet: April 18, 2011

The following was a speech Bill McKibben gave at the Power Shift 2011 conference in Washington D.C.

Very, very few people can ever say that they are in the single most important place they could possibly be, doing the single most important thing they could possibly be doing - that's you, here, now. You are the movement that we need if we are going to win in the few years that we have. You have the skills now, you are making the connections and there is no one else. It is you. That is a great honor and that is a terrible burden. There is no one else.

The science is the easy part of this - grim, but easy. 2010 was the warmest year on record - and it was warm. We were on the phone one day with our 350 crew in Pakistan and one of them said, "It's hot here today." And I was surprised to hear him say it because it's usually [hot] in Pakistan in the summer and he said, "No, it's really hot. We just set the all-time Asia temperature record - 129 degrees." That kind of heat melts the Arctic. That kind of heat causes droughts so deep across Russia that the Kremlin stops all



Photo by Cindy Snodgrass

A well-attended meeting on gas-drilling and hydraulic fracturing (fracking) at the Power Shift 2011

green export. That kind of heat causes the flooding that still has four million people across Pakistan homeless tonight.

It's tough. It's grim. But the good news at least is that it's clear, the science. We have a number – 350 parts per million. Three-hundred-fifty – the most important number on Earth, as the NASA team put it in January 2008. Any value for carbon in the atmosphere greater than 350

parts per million is not compatible with the planet on which civilization developed, into which life on Earth is adapted. Getting back to 350 parts per million will be very, very tough – the toughest thing human beings have ever done - but there is no use complaining about it. It's just physics and chemistry. That's what we have to do.

But if the scientific method has worked splendidly to outline our dilemma, that's how badly the political method has worked to solve it. Think about our own country, historically the biggest source of carbon emissions. Last summer, the Senate refused to even take a vote on the tepid, moderate, tame climate bill that was before it. Last week, the House voted 248-174 to pass a resolution saying global warming wasn't real. It was one

See Power Shift on page 10

Democrats' Report Details Fracking Chemicals

Marcellus Drilling News: April 16, 2011

Today Energy and Commerce Committee Ranking Member Henry A. Waxman, Natural Resources Committee Ranking Member Edward J. Markey and Oversight and Investigations Subcommittee Ranking Member Diana DeGette released a new report that summarizes the types, volumes and chemical contents of the hydraulic fracturing products used by the 14 leading oil and gas service companies. The report contains the first comprehensive national inventory of chemicals used by hydraulic fracturing companies during the drilling process.

"Hydraulic fracturing has helped to expand natural gas production in the United States but we must ensure that these new resources don't come at the expense of public health," said Rep. Waxman. "This report shows that these companies are injecting millions of gallons of products that contain potentially hazardous chemicals, including known carcinogens. I urge the Environmental Protection Agency and the Department of Energy to make certain that we have strong protections in place to prevent these chemicals from entering drinking water supplies."

"With our river ways and drinking water at stake, it's an absolute necessity that the American public knows what is in these fracking chemicals," said Rep. Markey. "This report is the most comprehensive look yet at the composition of the chemicals used in the fracking process and should help the industry, the government and the American public push for a safer way to extract natural gas."

"It is deeply disturbing to discover the content and quantity of toxic chemicals like benzene and lead being injected into the ground without the knowledge of the communities whose health could be affected," said Rep. DeGette. "Of particular concern to me is that we learned that over the four-year period studied, over one-and-a-half-million gallons of carcinogens were injected into the ground in Colorado. Many companies were also unable to even identify some of the chemicals they were using in their own activities, unfortunately underscoring that voluntary industry disclosure is not enough to ensure the economic benefits

of natural gas production do not come at the cost of our families' health."

During the last Congress, the Committee launched an investigation into the practice of hydraulic fracturing in the United States, asking the leading oil and gas service companies to disclose information on the products used in this process between 2005 and 2009.

The Democratic Committee staff analyzed the data provided by the companies about their practices, finding that:

• The 14 leading oil and gas service companies used more than 780 million gallons of hydraulic fracturing products, not including water added at the well site. Overall, the companies used

See Chemicals on page 3

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Their House Could Blow Up Page 7

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Here Comes the Sun! Page 13

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Learn, Feel, Think and Act

Scientific Study Links Flammable Drinking Water to Fracking

By Abrahm Lustgarten, excerpt ProPublica: May 9, 2011

For the first time, a scientific study has linked natural gas drilling and hydraulic fracturing with a pattern of drinking water contamination so severe that some faucets can be lit on fire.

The peer-reviewed study, published today in the Proceedings of the National Academy of Sciences, stands to shape the contentious debate over whether drilling is safe and begins to fill an information gap that has made it difficult for lawmakers and the public to understand the risks.

The research was conducted by four scientists at Duke University. They found that levels of flammable methane gas in drinking water wells increased to dangerous levels when those water supplies were close to natural gas wells. They also found that the type of gas detected at high levels in the water was the same type of gas that energy companies were extracting from thousands of feet underground, strongly implying that the gas may be seeping underground through natural or man-made faults and fractures, or coming from cracks in the well structure itself.

"Our results show evidence for methane contamination of shallow drinking water systems in at least three areas of the region and suggest important environmental risks accompanying shale gas exploration worldwide," the article

The group tested 68 drinking water wells in the Marcellus and Utica shale drilling areas in northeastern Pennsylvania and southern New York State. Sixty of those wells were tested for dissolved gas. While most of the wells had some methane, the water samples taken closest to the gas wells had on average 17 times the levels detected in wells further from active drilling. The group defined an active drilling area as within one kilometer, or about six tenths of a mile, from a gas well.

The average concentration of the methane detected in the water wells near drilling sites fell squarely within a range that the U.S. Department of Interior says is dangerous and requires urgent "hazard mitigation" action, according to the study.

The researchers did not find evidence that the chemicals used in hydraulic fracturing had contaminated any of the wells they tested, allaying for the time being some of the greatest fears among environmentalists and drilling opponents.

But they were alarmed by what they described as a clear correlation between drilling activity and the seepage of gas contaminants underground, a danger in itself and evidence that pathways do exist for contaminants to migrate deep within the Earth.

"We certainly didn't expect to see such a strong relationship between the concentration of methane in water and the nearest gas wells. That was a real surprise," said Robert Jackson, a biology professor at Duke and one of the report's authors.

Methane contamination of drinking water wells has been a common complaint among people living in gas drilling areas across the country. A 2009 investigation by ProPublica revealed that methane contamination from drilling was widespread, including in Colorado, Ohio and Pennsylvania. In several cases, homes blew up after gas seeped into their basements or water supplies. In Pennsylvania a 2004 accident killed three people, including a baby.

In Dimock, Pennsylvania, where part of the Duke study was performed, some residents' water wells exploded or their water could be lit on fire. In at least a dozen cases in Colorado, ProPublica's investigation found, methane had infiltrated drinking water supplies that residents said were clean until hydraulic fracturing was performed nearby.

In addition to the methane, other types of gases were also detected, providing further evidence that the gas originated with the hydrocarbon deposits miles beneath the earth and that it was unique to the active gas drilling areas

Read the full report at http:// www.pnas.org/content/ early/2011/05/02/1100682108. full.pdf+html?sid=303bea54-7592-4cf6-9d81-6024c85203d2.

WV CITY BANS MARCELLUS DRILLING, COURT CHALLENGE EXPECTED

FROM CHESAPEAKE ENERGY

City council members from Wellsburg, West Virginia, located in the panhandle area of the state (in Brooke County), on Tuesday voted to ban natural gas drilling and hydraulic fracturing both inside the city limits and outside city limits within a mile.

The ban has already taken effect in Wellsburg after a 4-3 vote from Wellsburg's City Council earlier this week.

Wellsburg Mayor Sue Simon-Marcellus Drilling News: May 12, 2011 etti cast the deciding vote Tuesday night since two Council members were absent because of illnesses. "Once the water source is gone, it is done, so we have to protect the residents and our water supply," the mayor said of the decision.

Officials with Chesapeake Energy had objected to the proposed ban and are expected to challenge it.*

*West Virginia MetroNews Network (May 11, 2011) – West Virginia City Bans Gas Drilling And Fracking

Blowout Stops Chesapeake Drilling

Note from the Editor

I knew this was going to be a major issue to cover but I didn't quite know how to go about it. On May 5th, I spoke with Daniel Spadoni, spokesman in the North Central Regional Office of the DEP and he sent me the Notice of Violation for the blowout. I only have room for excerpts but, if you'd like to see the whole thing, just email ionaconner@gmail.com.

NOTICE OF VIOLATION

Chesapeake Energy Corporation c/o Tal Oden, Regulatory Manager POB 18496 Oklahoma City, OK 73154

Re: Chesapeake Appalachia, LLC Permit No. 37-015-21237

LeRoy Township, Bradford County

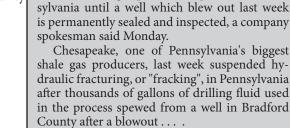
On April 20, 2011, the Department performed an inspection of your company's Atgas 2H well...following a call reporting a well control incident on April 20, 2011. According to Chesapeake, a flange, below the frac stack, failed resulting in loss of well control. The Department was notified at 1:10 AM. Boots and Coots well control services arrived on site at approximately 13:25. The well has not yet been fully brought under control, although the uncontrolled release of fluids and

natural gas has ceased. We understand that Chesapeake has ceased all hydraulic fracturing activities in the Commonwealth of Pennsylvania and that your company is taking steps to deconstruct and inspect wellhead hardware to assure that a repeat of the equipment failure in Bradford County will not recur... It is our expectation that Chesapeake will continue to be in a stand-down mode on hydraulic fracturing activities until it can diagnose the cause of the equipment failure at the Atgas 2H well, report those findings to the Department and provide assurances sufficient to the Department inspectors and technical staff that there will be no repeat of the Atgas 2H well site event at any Chesapeake site, and receive the Department's concurrence that it is appropriate to resume hydraulic fracturing activities.

The Department's investigation has, to date (April 22), revealed the following violations of the Clean Streams Law, 35 P.S. §691.1 et seq.; the Solid Waste Management Act, 35 P.S. \$6018.101 <u>et seq</u>.; the Oil and Gas Act, 58 P.S. \$601.101 et seq. and the rules and regulations promulgated under these statutes:

1. Pitts and tanks for temporary containment.

•The Department's investigation revealed that pollutional substances generated from activities associated with hydraulic fracturing were not contained. Specifically, an unknown quantity of frac fluid was released from a



By Edward McAllister, excerpt

Reuters via SolveClimateNews.org: April 25, 2011

Chesapeake Energy will not resume a contro-

versial natural gas production process in Penn-

"The suspension will not be lifted until we

Chesapeake Energy drilling site at LeRoy, Pennsylvania, where the blowout occurred. Chesapeake Energy Halts Fracking Until Pennsylvania Well Sealed

> look at it and make some decisions about changes we need to make," spokesman Rory Sweeney

have secured the well and been able to take a

Chesapeake used a mix of plastic, ground-up tires and heavy mud to temporarily plug the well on Thursday and is now considering its options

said. He declined to give a timetable for when the well will be permanently plugged. The halt on fracking affects seven Chesapeake well sites, the company said last week.

for a permanent seal. The blowout has fueled the fierce debate about whether fracking should be allowed to continue unabated in the United States . . .

gas well on site. This is a violation of the Department's regulations, 25 PA Code \$78.56(a), which provides:

"Except as provided in \$78.60(b) and \$78.61(b) (relating to discharge requirements; and disposal of drill cuttings), the operator shall contain pollutional substances and wastes from the drilling, altering, completing, recompleting, servicing and plugging the well, including brines, drill cuttings, drilling muds, oils, stimulation fluids, well treatment and servicing fluids, plugging and drilling fluids other than gases in a pit, tank or series of pits and tanks.

2. Unpermitted discharge of polluting substances.

•The Department's investigation of this event revealed a (sic) pollution to waters of the Commonwealth near the well site. Specifically, an unknown quantity of frac fluid was released from a gas well, that entered an unnamed tributary to Towanda Creek, a water of the Commonwealth. This is a violation of the Clean Streams Law, 35 P.S. §691.401, which provides:

"It shall be unlawful for any person or municipality to put or place into any of the waters of the Commonwealth, or allow or permit to be discharged from property owned or occupied by such person into any waters of the Commonwealth, any substance of any kind or character resulting in pollution as herein defined."

3. Management of residual

•The Department's investigation revealed an unpermitted discharge of residual waste onto the ground at the site. Specifically, frac fluid was released onto the ground. This is a violation of the Solid Waste Management Act, 35 P.S. \$6018.301, which provides:

'No person or municipality shall store, transport, process, or dispose of residual waste within this Commonwealth unless such storage, or transportation, is consistent with or such processing or disposal is authorized by the rules and regulations of the department and no person or municipality shall own or operate a residual waste processing or disposal facility unless such person or municipality has first obtained a permit for such facility from the Department . . .

The Act provides for up to \$25,000 per day in civil penalties, up to \$1,000 in summary criminal penalties, and up to \$25,000 in misdemeanor criminal penalties for each violation. Each day of continued violation constitutes a separate offense . . .

À violation of the Clean Streams Law or the rules or regulations promulgated thereunder is contrary to Sections 602 and 611 of that Act, for which the Department could institute administrative, civil, and/or criminal proceedings. The Act provides for up to \$10,000 per day in civil penalties, up to \$10,000 in summary criminal penalties, and up inal penalties for each violation...

A violation of the Oil and Gas Act ... provides for up to \$25,000 in civil penalties plus \$1,000 for each day of continued violation, up to \$300 in summary criminal penalties, and up to \$5,000 in misdemeanor criminal penalties for each violation . . .

Please submit a written response to this NOV within five business days. Your response should include the following:

1. A complete list of materials used in the fracking fluids utilized at this site.

2. An evaluation of the materials released to the environment as part of the fracking operations.

3. A full description of actions taken by Chesapeake to prevent this discharge from reaching waters of the Commonwealth. Include an explanation of why it took Chesapeake nearly 12 hours to address the uncontrolled release of fluids off the well pad.

4. A description of immediate actions taken by Chesapeake to regain control of the well and secure the wellhead, as well as any measures taken to ensure public safety. This should include an explanation of why Chesapeake took 12 hours to have a well control service company at the site when there are other well control service companies located closer to Atgas 2H well.

5. A sampling plan that details future sampling locations and

6. A detailed analysis/explanation of the root cause or causes of the failure at the wellhead that resulted in loss of control of the

7. An analysis of Chesapeake's completion activity and well control procedures existing on April

8. Corrective actions that Chesapeake proposes to implement at all Marcellus Shale gas wells to prevent similar failures in the future, and a proposed implementation schedule.

9. Changes to Chesapeake's completion and well control procedures that Chesapeake proposes to implement at all Marcellus Shale gas wells, and a proposed implementation schedule

Earth News

mony with Nature and with Most High God

and his Trustworthy And True Living Spirits, Most High's Council of Elders as found below. We are also a community of activists, writers,

poets and others who care about the future of

the planet and we work together to nurture

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ers to think seriously, act intelligently and be

peaceful, compassionate, courageous and cre-

The Dream: Humans can co-exist with Na-

Masthead: The masthead photo is an azalia

Most High's Council of Elders

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ture and, once they do, both will flourish.

bush growing in Shade Gap, PA last Spring.

each other in various ways.

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6 TO 10 ISSUES DEPENDING ON

HOW THINGS GO.

Earth News: June/July 2011, Page 3 Fracking Chemicals

Chemicals continued from page 1

- fracturing products containing 750 different chemicals and other components.
- The components used in the hydraulic fracturing products ranged from generally harmless and common substances, such as salt and citric acid, to extremely toxic substances, such as benzene and lead. Some companies even used instant coffee and walnut hulls in their fracturing fluids.
- Between 2005 and 2009, the oil and gas service companies used hydraulic fracturing products containing 29 chemicals that are known or
- possible human carcinogens, regulated under the Safe Drinking Water Act (SDWA) for their risks to human health or listed as hazardous air pollutants under the Clean Air Act.
- The BTEX compounds benzene, toluene, xylene and ethylbenzene – are SDWA contaminants and hazardous air pollutants. Benzene also is a known human carcinogen. The one BTEX chemical over the five-year period. • Methanol, which was used in 342 hydraulic
- hydraulic fracturing companies injected 11.4 million gallons of products containing at least
- fracturing products, was the most widely used chemical between 2005 and 2009. The substance is a hazardous air pollutant and is on the candidate list for potential regulation under SDWA. Isopropyl alcohol, 2-butoxyethanol and ethylene glycol were the other most widely used chemicals.
- Many of the hydraulic fracturing fluids contain chemical components that are listed as "proprietary" or "trade secret." The companies used 94 million gallons of 279 products that contained at least one chemical or component

that the manufacturers deemed proprietary or a trade secret. In many instances, the oil and gas service companies were unable to identify these "proprietary" chemicals, suggesting that the companies are injecting fluids containing chemicals that they themselves cannot identi-

Read the full report at: democrats.energycommerce.house.gov.

Chemical Components of Hydraulic

Chemical Component	Chemical Abstract Service Number	No. of Product Containi Chemica
1-(1-naphthylmethyl)quinolinium chloride	65322-65-8	1
1,2,3-propanetricarboxylic acid, 2-hydroxy-, trisodium salt, dihydrate 1,2,3-trimethylbenzene	6132-04-3 526-73-8	1
1,2,4-trimethylbenzene	95-63-6	21
1,2-benzisothiazol-3 1,2-dibromo-2,4-dicyanobutane 1,2-ethanediaminium, N, N'-bis[2-[bis(2-hydroxyethyl)methylammonio]ethyl]-	2634-33-5 35691-65-7	1
1,2-ethanediaminium, N, N'-bis[2-[bis(2-hydroxyethyl)methylammonio]ethyl]- N'-bis(2-hydroxyethyl)-N,N'-dimethyl-,tetrachloride	138879-94-4	2
1,3,5-trimethylbenzene 1,6-hexanediamine dihydrochloride	108-67-8 6055-52-3	3
1,8-diamino-3,6-dioxaoctane	929-59-9	1
1-hexanol	111-27-3 107-98-2	3
1-methoxy-2-propanol 2,2`-azobis (2-amidopropane) dihydrochloride	2997-92-4	1
2,2-dibromo-3-nitrilopropionamide 2-acrylamido-2-methylpropanesulphonic acid sodium salt polymer	10222-01-2	27
2-bromo-2-nitropropane-1,3-diol	52-51-7	4
2-butanone oxime 2-hydroxypropionic acid	96-29-7 79-33-4	1 2
2-inydroxypropionic acid 2-mercaptoethanol (Thioglycol)	60-24-2	13
2-methyl-4-isothiazolin-3-one	2682-20-4	4
2-monobromo-3-nitrilopropionamide 2-phosphonobutane-1,2,4-tricarboxylic acid	1113-55-9 37971-36-1	2
2-phosphonobutane-1,2,4-tricarboxylic acid, potassium salt	93858-78-7	1
2-substituted aromatic amine salt 4,4'-diaminodiphenyl sulfone	* 80-08-0	3
5-chloro-2-methyl-4-isothiazolin-3-one	26172-55-4	5
Acetaldehyde Acetic acid	75-07-0 64-19-7	56
Acetic acid Acetic anhydride	108-24-7	7
Acetone	67-64-1	3
Acetophenone Acetylenic alcohol	98-86-2	1
Acetyltriethyl citrate	77-89-4	1
Acrylamide Acrylamide copolymer	79-06-1 *	1
Acrylamide copolymer	38193-60-1	1
Acrylate copolymer Acrylic acid, 2-hydroxyethyl ester	* 818-61-1	1
Acrylic acid/2-acrylamido-methylpropylsulfonic acid copolymer	37350-42-8	1
Acrylic copolymer	403730-32-5	1
Acrylic polymers Acrylic polymers	26006-22-4	1 2
Acyclic hydrocarbon blend	*	1
Adipic acid Alcohol alkoxylate	124-04-9	5
Alcohol ethoxylates	*	2
Alcohols Alcohols, C11-15-secondary, ethoxylated	* 68131-40-8	9
Alcohols, C11-15-secondary, ethoxylated Alcohols, C12-14-secondary	68131-40-8 126950-60-5	4
Alcohols, C12-14-secondary, ethoxylated	84133-50-6	19
Alcohols, C12-15, ethoxylated Alcohols, C12-16, ethoxylated	68131-39-5 103331-86-8	1
Alcohols, C12-16, ethoxylated	68551-12-2	3
Alcohols, C14-15, ethoxylated Alcohols, C9-11-iso-, C10-rich, ethoxylated	68951-67-7 78330-20-8	5 4
Alcohols, C9-C22	*	1
Aldehyde Aldol	107-89-1	1
Alfa-Alumina	*	5
Aliphatic acid Aliphatic alcohol polyglycol ether	* 68015-67-8	1
Aliphatic amine derivative	120086-58-0	2
Alkaline bromide salts	02024 07 2	2 2
Alkanes, C10-14 Alkanes, C13-16-iso	93924-07-3 68551-20-2	2
Alkanolamine	150-25-4	3
Alkanolamine chelate of zirconium alkoxide (Zirconium complex) Alkanolamine/aldehyde condensate	197980-53-3 *	1
Alkenes	*	1
Alkenes, C>10 alpha- Alkenes, C>8	64743-02-8 68411-00-7	3 2
Alkoxylated alcohols	*	1
Alkoxylated amines Alkoxylated phenol formaldehyde resin	* 63428-92-2	6
Alkoxylated phenol formaldehyde resin Alkyaryl sulfonate	63428-92-2	1
Alkyl (C12-16) dimethyl benzyl ammonium chloride	68424-85-1	7
Alkyl (C6-C12) alcohol, ethoxylated Alkyl (C9-11) alcohol, ethoxylated	68439-45-2 68439-46-3	2
Alkyl alkoxylate	*	9
Alkyl amine Alkyl amine blend in a metal salt solution	*	1
Alkyl amine blend in a metal salt solution Alkyl aryl amine sulfonate	255043-08- 04	1
Alkyl benzenesulfonic acid	68584-22-5	2
Alkyl esters	*	2
Alkyl hexanol Alkyl ortho phosphate ester	*	1
Alkyl phosphate ester	*	3
Alkyl quaternary ammonium chlorides Alkylaryl sulfonate	*	4
Alkylaryl sulphonic acid	27176-93-9	1
Alkylated quaternary chloride Alkylbenzenesulfonic acid	*	5
Alkylethoammonium sulfates	*	1
Alkylphenol ethoxylates	1202 62 1	1
Almandite and pyrope garnet Aluminium isopropoxide	1302-62-1 555-31-7	1
Aluminum	7429-90-5	2
Aluminum chloride Aluminum chloride	* 1327-41-9	3 2
Aluminum oxide (alpha-Alumina)	1327-41-9	24
Aluminum oxide silicate	12068-56-3	1
Aluminum silicate (mullite) Aluminum sulfate hydrate	1302-76-7 10043-01-3	38
Amides, tallow, n-[3-(dimethylamino)propyl],n-oxides	68647-77-8	4
Amidoamine Amine	*	1 7
Amine Amine bisulfite	13427-63-9	1
Amine oxides	*	1

Chemical Component	Chemical Abstract Service Number	No. of Products Containing Chemical
Amine phosphonate	*	3
Amine salt	* 69155 20 5	2
Amines, C14-18; C16-18-unsaturated, alkyl, ethoxylated Amines, coco alkyl, acetate	68155-39-5 61790-57-6	3
Amines, polyethylenepoly-, ethoxylated, phosphonomethylated Amines, tallow alkyl, ethoxylated	68966-36-9 61791-26-2	1 2
Amino compounds Amino methylene phosphonic acid salt	*	1
Amino trimethylene phosphonic acid	6419-19-8	2
Ammonia Ammonium acetate	7664-41-7 631-61-8	7 4
Ammonium alcohol ether sulfate Ammonium bicarbonate	68037-05-8 1066-33-7	1
Ammonium bifluoride (Ammonium hydrogen difluoride)	1341-49-7	10
Ammonium bisulfate Ammonium bisulfite	7783-20-2 10192-30-0	3 15
Ammonium C6-C10 alcohol ethoxysulfate Ammonium C8-C10 alkyl ether sulfate	68187-17-7 68891-29-2	4
Ammonium chloride	12125-02-9	29
Ammonium fluoride Ammonium hydroxide	12125-01-8 1336-21-6	4
Ammonium nitrate Ammonium persulfate (Diammonium peroxidisulfate)	6484-52-2 7727-54-0	37
Ammonium salt	*	1
Ammonium salt of ethoxylated alcohol sulfate Amorphous silica	99439-28-8	1
Amphoteric alkyl amine Anionic copolymer	61789-39-7	3
Anionic polyacrylamide	*	1
Anionic polyacrylamide Anionic polyacrylamide copolymer	25085-02-3	6 3
Anionic polymer Anionic polymer in solution	*	2
Anionic polymer, sodium salt	9003-04-7	i
Anionic water-soluble polymer Antifoulant	*	2
Antimonate salt Antimony pentoxide	1314-60-9	1 2
Antimony potassium oxide	29638-69-5	4
Antimony trichloride a-organic surfactants	10025-91-9 61790-29-8	2
Aromatic alcohol glycol ether	*	2 2
Aromatic aldehyde Aromatic ketones	224635-63-6	2
Aromatic polyglycol ether Barium sulfate	7727-43-7	3
Bauxite Bentonite	1318-16-7 1302-78-9	16
Benzene	71-43-2	3
Benzene, C10-16, alkyl derivatives Benzenecarboperoxoic acid, 1,1-dimethylethyl ester	68648-87-3 614-45-9	1
Benzenemethanaminium Benzenesulfonic acid, C10-16-alkyl derivs., potassium salts	3844-45-9 68584-27-0	1
Benzoic acid	65-85-0	11
Benzyl chloride Biocide component	100-44-7	8
Bis(1-methylethyl)naphthalenesulfonic acid, cyclohexylamine salt Bishexamethylenetriamine penta methylene phosphonic acid	68425-61-6 35657-77-3	1
Bisphenol A/Epichlorohydrin resin	25068-38-6	5
Bisphenol A/Novolac epoxy resin Borate	28906-96-9 12280-03-4	1 2
Borate salts Boric acid	10043-35-3	5 18
Boric acid, potassium salt	20786-60-1	1
Boric acid, sodium salt Boric oxide	1333-73-9 1303-86-2	2
b-tricalcium phosphate Butanedioic acid	7758-87-4 2373-38-8	1 4
Butanol	71-36-3	3
Butyl glycidyl ether Butyl lactate	2426-08-6 138-22-7	5 4
C10-C16 ethoxylated alcohol C-11 to C-14 n-alkanes, mixed	68002-97-1	4
C12-C14 alcohol, ethoxylated	68439-50-9	3
Calcium carbonate Calcium carbonate (Limestone)	471-34-1 1317-65-3	1 9
Calcium chloride Calcium chloride, dihydrate	10043-52-4 10035-04-8	17
Calcium fluoride	7789-75-5	2
Calcium hydroxide Calcium hypochlorite	1305-62-0 7778-54-3	9
Calcium oxide Calcium peroxide	1305-78-8 1305-79-9	5
Carbohydrates	*	3
Carbon dioxide Carboxymethyl guar gum, sodium salt	124-38-9 39346-76-4	4 7
Carboxymethyl hydroxypropyl guar Cellophane	68130-15-4 9005-81-6	11 2
Cellulase	9012-54-8	7
Cellulase enzyme Cellulose	9004-34-6	1
Cellulose derivative Chloromethylnaphthalene quinoline quaternary amine	15619-48-4	3
Chlorous ion solution	*	2
Choline chloride Chromates	67-48-1	3
Chromium (iii) acetate Cinnamaldehyde (3-phenyl-2-propenal)	1066-30-4 104-55-2	1 5
Citric acid (2-hydroxy-1,2,3 propanetricarboxylic acid)	77-92-9	29
Citrus terpenes Coal, granular	94266-47-4 50815-10-6	11 1
Cobalt acetate	71-48-7	1 2
Cocaidopropyl betaine Cocamidopropylamine oxide	61789-40-0 68155-09-9	1
Coco bis-(2-hydroxyethyl) amine oxide Cocoamidopropyl betaine	61791-47-7 70851-07-9	1 1
Cocomidopropyl dimethylamine	68140-01-2	1

Cocomidopropyl dimethylamine

Coconut fatty acid diethanolamide

68603-42-9

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Chemical Component	Chemical Abstract Service Number	No. o Produ Contair Chemi
Collagen (Gelatin) Complex alkylaryl polyo-ester	9000-70-8	6
Complex alkylaryl polyo-ester Complex aluminum salt Complex organometallic salt	*	2 2
Complex substituted keto-amine	143106-84-7	1
Complex substituted keto-amine hydrochloride Copolymer of acrylamide and sodium acrylate	* 25987-30-8	1
Copper Copper iodide	7440-50-8 7681-65-4	1
Copper sulfate Corundum (Aluminum oxide)	7758-98-7 1302-74-5	3 48
Crotonaldehyde	123-73-9	1
Crystalline silica - cristobalite Crystalline silica - quartz (SiO2)	14464-46-1 14808-60-7	207
Crystalline silica, tridymite Cumene	15468-32-3 98-82-8	6
Cupric chloride Cupric chloride dihydrate	7447-39-4 10125-13-0	10
Cuprous chloride Cured acrylic resin	7758-89-6	1 7
Cured resin	*	4
Cured silicone rubber-polydimethylsiloxane Cured urethane resin	63148-62-9	3
Cyclic alkanes Cyclohexane	* 110-82-7	1
Cyclohexanone Decanol	108-94-1 112-30-1	1 2
Decyl-dimethyl amine oxide	2605-79-0	4
Dextrose monohydrate D-Glucitol	50-99-7 50-70-4	1
Di (2-ethylhexyl) phthalate Di (ethylene glycol) ethyl ether acetate	117-81-7 112-15-2	3 4
Diatomaceous earth Diatomaceous earth, calcined	61790-53-2 91053-39-3	3 7
Dibromoacetonitrile	3252-43-5	1
Dibutylaminoethanol (2-dibutylaminoethanol) Di-calcium silicate	102-81-8 10034-77-2	1
Dicarboxylic acid Didecyl dimethyl ammonium chloride	* 7173-51-5	1
Diesel Diesel	* 68334-30-5	1 3
Diesel	68476-30-2	4 43
Diethanolamine (2,2-iminodiethanol)	68476-34-6	14
Diethylbenzene Diethylene glycol	25340-17-4 111-46-6	1 8
Diethylene glycol monomethyl ether Diethylene triaminepenta (methylene phosphonic acid)	111-77-3 15827-60-8	4
Diethylenetriamine Diethylenetriamine, tall oil fatty acids reaction product	111-40-0 61790-69-0	2
Diisopropylnaphthalenesulfonic acid	28757-00-8	2
Dimethyl formamide Dimethyl glutarate	68-12-2 1119-40-0	5
Dimethyl silicone Dioctyl sodium sulfosuccinate	* 577-11-7	2
Dipropylene glycol Dipropylene glycol monomethyl ether (2-methoxymethylethoxy propanol)	25265-71-8 34590-94-8	1 12
Di-secondary-butylphenol	53964-94-6	3
Disodium EDTA Disodium ethylenediaminediacetate	139-33-3 38011-25-5	1
Disodium ethylenediaminetetraacetate dihydrate Disodium octaborate tetrahydrate	6381-92-6 12008-41-2	1
Dispersing agent d-Limonene	* 5989-27-5	1 11
Dodecyl alcohol ammonium sulfate	32612-48-9	2
Dodecylbenzene sulfonic acid Dodecylbenzene sulfonic acid salts	27176-87-0 42615-29-2	14
Dodecylbenzene sulfonic acid salts Dodecylbenzene sulfonic acid salts	68648-81-7 90218-35-2	7
Dodecylbenzenesulfonate isopropanolamine Dodecylbenzenesulfonic acid, monoethanolamine salt	42504-46-1 26836-07-7	1
Dodecylbenzenesulphonic acid, morpholine salt	12068-08-5	1
EDTA/Copper chelate EO-C7-9-iso-, C8-rich alcohols	78330-19-5	5
Epichlorohydrin Epoxy resin	25085-99-8	5
Erucic amidopropyl dimethyl betaine Erythorbic acid	149879-98-1 89-65-6	3 2
Essential oils Ethanaminium, n,n,n-trimethyl-2-[(1-oxo-2-propenyl)oxy]-,chloride, polymer		6
h 2-propenamide Ethanol (Ethyl alcohol)	69418-26-4 64-17-5	36
Ethanol, 2-(hydroxymethylamino)- Ethanol, 2, 2'-(Octadecylamino) bis-	34375-28-5 10213-78-2	1
Ethanoldiglycine disodium salt	135-37-5	1
Ether salt Ethoxylated 4-nonylphenol (Nonyl phenol ethoxylate)	25446-78-0 26027-38-3	9
Ethoxylated alcohol Ethoxylated alcohol	104780-82-7 78330-21-9	1 2
Ethoxylated alcohols Ethoxylated alkyl amines	*	3
Ethoxylated amine	*	1
Ethoxylated amines Ethoxylated fatty acid ester	61791-44-4	1
Ethoxylated nonionic surfactant Ethoxylated nonyl phenol	*	1 8
Ethoxylated nonyl phenol Ethoxylated nonyl phenol	68412-54-4 9016-45-9	10
Ethoxylated octyl phenol	68987-90-6	1
Ethoxylated octyl phenol Ethoxylated octyl phenol	9002-93-1	3
Ethoxylated oleyl amine Ethoxylated oleyl amine	13127-82-7 26635-93-8	2
Ethoxylated sorbitol esters Ethoxylated tridecyl alcohol phosphate	9046-01-9	1 2
Ethoxylated undecyl alcohol	127036-24-2	2
Ethyl acetate Ethyl acetoacetate	141-78-6 141-97-9	1
Ethyl octynol (1-octyn-3-ol,4-ethyl-) Ethylbenzene	5877-42-9 100-41-4	5 28
Ethylene glycol (1,2-ethanediol) Ethylene glycol monobutyl ether (2-butoxyethanol)	107-21-1 111-76-2	119
Ethylene oxide	75-21-8	1
Ethylene oxide-nonylphenol polymer Ethylenediaminetetraacetic acid	* 60-00-4	1
Ethylene-vinyl acetate copolymer Ethylhexanol (2-ethylhexanol)	24937-78-8 104-76-7	1 18
Fatty acid ester	*	1
Fatty acid, tall oil, hexa esters with sorbitol, ethoxylated Fatty acids	61790-90-7	1
Fatty alcohol alkoxylate Fatty alkyl amine salt	*	1
Fatty amine carboxylates Fatty quaternary ammonium chloride	* 61789-68-2	1
Fatty quaternary ammonium chloride Ferric chloride	7705-08-0	3
	10000 00 5	7
Ferric sulfate Ferrous sulfate, heptahydrate	10028-22-5 7782-63-0	4

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James and Jensers with ammonia and phenod 53292.55	
Furnish 19-10 19	
Further Access fiber	
Glamendelright Glamendelright Glycord (1,2-3-Propument). Glycormo) 5-08.1 Glycord ethers. 9964-77. Glycord ethers. 9964-77. Glycord ethers. 9964-77. Glycord ethers. 9966-77. Glycord ethers. 9966-77. Glycord ethers. 9966-77. Glycord ethers. 9966-77. Glycord in the company of the comp	
Gissent (1.2 ± Propagation)	
Gipcon G	1
Givorythe cold	* 9 7-7 4
Gauge gam derivative	
Heavy aromatic distillate	* 12
Henvis catalytic reformed petroleum naphtha	
Hernicelluluse	8-0 10
Hesanedinmene	
Hexames	
Hydrarel aluminum silicate	9-4 1
Hydrodesulfurized kerosine (petroleum)	
Hydrodesulfarized light catalytic cracked distillate (petroleum)	* 3
Pixtrogen chloride (Hydrothloric acid)	
Inforgene peroxide	1
Hydrotraced meany apathenic distillate	
Hydrocreated heavy, partidining petroleum distillates 64742-48 Hydrocreated light petroleum distillates 64742-48 Hydrocytehy elebitose 64742-48 Hydrocytehy elebitose 7474-48 Hydrocytehy elebitose 7474-48 Hydrocytehy elebitose 7474-48 Hydrocytehy elebitose 7474-48 Hydrocytehy lenedaminetriacetic acid, trisodium salt 19-88 Hydrocytehy lenedaminetriacetic acid, trisodium salt 19-88 Hydrocytehy lenedaminetriacetic acid, trisodium salt 19-88 Hydrocytehy lane gum 39421-75 Hydrocytehy lane gum 39421-75	6-4 1 2
Hydrotreated light pertoelum distillates 64732_46 Hydroxyacetic acid (Glycolic acid) 79.14 Hydroxyachylcellulose 9004.62 Hydroxyachylcellulose 9004.62 Hydroxyachylcellulose 9004.62 Hydroxyachylcellulose 9004.62 Hydroxyachylcellulose 9004.62 Hydroxyachylcellulose 9004.62 Hydroxyachylcellulose 9004.63 Horganic barte 9004.63 Horganic barte 9004.63 Horganic barte 9004.63 Horganic salt 9004.63 Ho	
Hydroxyacticyledulose	
Hydroxychtylechlores	
Hydroxypamy gair gam	
Hydroxysultaine	
Inorganic particulate	* 1 2
Inorganic salt	* 3
Instant coffee purchased off the shelf	* 1 6-0 1
Inulin.carboxymethyle ther, sodium salt	0-0 1 * 1
Iron oxide (Ferric oxide) 1309-37	
Isan-likanes/n-alkanes Isanbutanol (Isobutyl alcohol) 78-83 Isobutanol (Isobutyl alcohol) 78-83 Isooctanol 26952-21 Isooctyl alcohol 88526-88 Isooctyl alcohol bottoms 68526-88 Isooctyl alcohol bottoms 68526-88 Isooctyl alcohol bottoms 68526-88 Isooctyl alcohol bottoms 67-53 Isotrotecanol, ethoxylated 9043-30 Isotrotecanol, ethoxylated 9043-9043-9043-9043-9043-9043-9043-9043-	7-1 18
Isometric atomatic ammonium salt Section Se852-81 Sectival alcohol Se852-88 Sectival alcohol Septiment Section	* 10 3-1 4
Isooctyl alcohol bottoms	* 1 1-6 1
Isopropamol (Isopropyl alcohol, Propan-2-ol) 67-63 Isopropylamine	
Isotridecanol, ethoxylated 9043-30 Kerosene	
Lactic acid	
L-Dilactide	1-7 1
Light catalytic cracked petroleum distillates	
Light naphtha distillate, hydrotreated	
Magnesium carbonate 546-93 Magnesium chloride 7786-30 Magnesium hydroxide 1309-42 Magnesium iron silicate 1317-71 Magnesium oxide 1309-48 Magnesium peroxide 1335-26 Magnesium peroxide 14452-57 Magnesium peroxide 12057-74 Magnesium phosphide 12057-74 Magnesium silicate 1343-88 Magnesium silicate hydrate (talc) 14807-96 Magnetite 64742-88 Medium aliphatic solvent petroleum naphtha 64742-88 Metal salt 64742-88 Metal salt solution 67-56 Methyl isobutyl carbinol (Methyl amyl alcohol) 67-56 Methyl salicylate 119-36 Methyl salicylate 119-36 Methyl vinyl ketone 78-94 Methylcylohexane 108-87 Mica 12001-26 Microcrystalline silica 1317-95 Mineral Mineral Mineral Filler Mondified lignosulfonate Modified dignosulfonate 109-46 </td <td></td>	
Magnesium hydroxide 1309-42 Magnesium hydroxide 1319-42 Magnesium iron silicate 1317-760 Magnesium nitrate 10377-60 Magnesium peroxide 1335-26 Magnesium peroxide 14452-57 Magnesium phosphide 12057-74 Magnesium silicate 1343-88 Magnesium silicate hydrate (talc) 14807-96 Magnetite 64742-88 Medium aliphatic solvent petroleum naphtha 64742-88 Metal salt 64742-88 Metal salt solution 67-56 Methyl isobutyl carbinol (Methyl amyl alcohol) 67-56 Methyl salicylate 119-36 Methyl vinyl ketone 78-94 Methylcyclohexane 108-87 Mica 12001-26 Mineral Filler Mineral Filler Mineral Filler Modified alkane Modified gyosulfonate Modified gyosulfonate Monoethanolamine (Ethanolamine) 141-43 Monoethanolamine borate 26038-7 Monoethanolamine borate 26038-7 Monoethanolam	* 2 3-0 1
Magnesium iron silicate 1317-71 Magnesium nitrate 10377-60 Magnesium peroxide 1309-48 Magnesium peroxide 14452-57 Magnesium phosphide 12057-74 Magnesium silicate 1343-88 Magnesium silicate hydrate (talc) 14807-96 Magnetite Medium aliphatic solvent petroleum naphtha 64742-88 Metal salt Metal salt solution Methanol (Methyl alcohol) 67-56 Methyl isobutyl carbinol (Methyl amyl alcohol) 108-11 Methyl salicylate 119-36 Methyl vinyl ketone 78-94 Methylcyclohexane 108-87 Mica 12001-26 Microcrystalline silica 1317-95 Mineral Mineral Mineral Filler Mineral spirits (stoddard solvent) Mixed titanium ortho ester complexes Modified alkane Modified lignosulfonate Modified gevloaliphatic amine adduct Modified cycloaliphatic amine adduct Modified lignosulfonate Monoethanolamine borate 26038-87 Monoethanolamine borate 26038-87 <td>0-3 4</td>	0-3 4
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Magnesium peroxide 14452-57 Magnesium phosphide 12057-74 Magnesium silicate 1343-88 Magnesitie 14807-96 Medium aliphatic solvent petroleum naphtha 64742-88 Metal salt 64742-88 Metal salt solution 67-56 Methyl isobutyl carbinol (Methyl amyl alcohol) 108-11 Methyl salicylate 119-36 Methyl vinyl ketone 78-94 Methylcyclohexane 108-87 Mica 12001-26 Microcrystalline silica 1317-95 Mineral 1 Mineral spirits (stoddard solvent) 8052-41 Mixed titanium ortho ester complexes Modified alkane Modified lignosulfonate Monoethanolamine (Ethanolamine) 141-43 Monoethanolamine (Ethanolamine) 141-43 Monoethanolamine borate 26038-87 Morpholine 110-91 Mullite 1302-93 n,-dibutylthiourea 109-46 N,N-dimethyloctadecylamine 124-28 N,N-dimethyloctadecylamine hydrochloride 1613-17	
Magnesium silicate 1343-88 Magnesium silicate hydrate (tale) 14807-96 Magnetite Medium aliphatic solvent petroleum naphtha 64742-88 Metal salt Metal salt solution Methyl isobutyl carbinol (Methyl amyl alcohol) 108-11 Methyl salicylate 119-36 Methyl vinyl ketone 78-94 Methylvinyl ketone 108-87 Mica 12001-26 Microcrystalline silica 1317-95 Mineral Mineral Filler Mineral spirits (stoddard solvent) Mixed titanium ortho ester complexes Modified cycloaliphatic amine adduct Monoethanolamine (Ethanolamine) Monoethanolamine borate Monoethanolamine borate N,N-dimethyl-1-octadecanamine-HCl	
Magnetite Medium aliphatic solvent petroleum naphtha Metal salt Metal salt solution Methanol (Methyl alcohol) Methyl isobutyl carbinol (Methyl amyl alcohol) Methyl salicylate Methyl vinyl ketone Methyl vinyl ketone Methyl vinyl ketone Methyl soloevane Methyl soloevane Mica Mica Mica Microcrystalline silica Mineral Mineral Filler Mineral spirits (stoddard solvent) Mixed titanium ortho ester complexes Modified alkane Modified alkane Modified lignosulfonate Monoethanolamine (Ethanolamine) Monoethanolamine (Ethanolamine) Mullite Monoethanolamine (Ethanolamine) Mullite Monoethanolamine (In 10-91 Mullite Monoethyl-1-octadecanamine-HCl N,N-dimethyl-1-octadecanamine-HCl N,N-dimethyl-1-octadecylamine N,N-dimethyloctadecylamine N,N-dimethyloctadecylamine Monoetholoride N,N-dimethyloctadecylamine Monoethyl-1-octadecylamine Monoeth	8-0 3
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Methyl salicylate119-36Methyl vinyl ketone78-94Methylcyclohexane108-87Mica12001-26Microcrystalline silica1317-95MineralMineral FillerMineral spirits (stoddard solvent)8052-41Mixed titanium ortho ester complexesModified alkaneModified cycloaliphatic amine adductMonoethanolamine (Ethanolamine)Monoethanolamine (Ethanolamine)141-43Monoethanolamine borate26038-87Morpholine110-91Mullite1302-93n,n-dibutylthiourea109-46N,N-dimethyl-1-octadecanamine-HCl1,N-dimethyl-1-octadecylamineN,N-dimethyloctadecylamine124-28N,N-dimethyloctadecylamine hydrochloride1613-17n,n'-Methylenebisacrylamide110-26	
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Microcrystalline silica Mineral Mineral Filler Mineral spirits (stoddard solvent) Mixed titanium ortho ester complexes Modified alkane Modified cycloaliphatic amine adduct Modified lignosulfonate Monoethanolamine (Ethanolamine) Monoethanolamine borate Morpholine Mullite 110-91 Mullite 1302-93 n,n-dibutylthiourea N,N-dimethyl-1-octadecanamine-HCl N,N-dimethyl-1-octadecylamine 124-28 N,N-dimethyloctadecylamine hydrochloride n,n'-Methylenebisacrylamide 110-26	7-2 1
Mineral Filler Mineral spirits (stoddard solvent) Mixed titanium ortho ester complexes Modified alkane Modified cycloaliphatic amine adduct Modified lignosulfonate Monoethanolamine (Ethanolamine) Monoethanolamine borate 26038-87 Morpholine 110-91 Mullite 1302-93 n,n-dibutylthiourea 1,N-dimethyl-1-octadecanamine-HCl N,N-dimethyloctadecylamine 124-28 N,N-dimethyloctadecylamine hydrochloride 110-26	
Mixed titanium ortho ester complexes Modified alkane Modified cycloaliphatic amine adduct Monoethanolamine (Ethanolamine) Monoethanolamine borate Morpholine Mullite 1302-93 n,n-dibutylthiourea N,N-dimethyl-1-octadecanamine-HCl N,N-dimethyloctadecylamine N,N-dimethyloctadecylamine N,N-dimethyloctadecylamine hydrochloride n,n'-Methylenebisacrylamide 110-26	* 1 1-3 2
Modified cycloaliphatic amine adduct Modified lignosulfonate Monoethanolamine (Ethanolamine) Monoethanolamine borate 26038-87 Morpholine 110-91 Mullite 1302-93 n,n-dibutylthiourea N,N-dimethyl-1-octadecanamine-HCl N,N-dimethyloctadecylamine 124-28 N,N-dimethyloctadecylamine hydrochloride n,n'-Methylenebisacrylamide 110-26	* 1
Monoethanolamine (Ethanolamine) 141-43 Monoethanolamine borate 26038-87 Morpholine 110-91 Mullite 1302-93 n,n-dibutylthiourea 109-46 N,N-dimethyl-1-octadecanamine-HCl 124-28 N,N-dimethyloctadecylamine 1613-17 n,n'-Methylenebisacrylamide 110-26	* 3
Morpholine 110-91 Mullite 1302-93 n,n-dibutylthiourea 109-46 N,N-dimethyl-1-octadecanamine-HCl N,N-dimethyloctadecylamine 124-28 N,N-dimethyloctadecylamine hydrochloride 1613-17 n,n'-Methylenebisacrylamide 110-26	
n,n-dibutylthiourea 109-46 N,N-dimethyl-1-octadecanamine-HCl N,N-dimethyloctadecylamine 124-28 N,N-dimethyloctadecylamine hydrochloride 1613-17 n,n'-Methylenebisacrylamide 110-26	1-8 2
N,N-dimethyloctadecylamine124-28N,N-dimethyloctadecylamine hydrochloride1613-17n,n'-Methylenebisacrylamide110-26	
n,n'-Methylenebisacrylamide 110-26	8-7 3
	6-9 1
Naphthalene 91-20 Naphthalene derivatives	
Naphthalenesulphonic acid, bis (1-methylethyl)-methyl derivatives 99811-86	6-6 1
Natural asphalt 12002-43 n-cocoamidopropyl-n,n-dimethyl-n-2-hydroxypropylsulfobetaine 68139-30 n dodowyl 2 pyrrolidona 2687 96	0-0 1
n-dodecyl-2-pyrrolidone 2687-96 N-heptane 142-82 Nickel sulfate havebydrate 10101-97	2-5 1
Nickel sulfate hexahydrate 10101-97 Nitrilotriacetamide 4862-18 Nitrilotriacetic acid 139-13	8-4 4

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Fracking Chemicals				
Chemical Component	Chemical Abstract Service Number	No. of Products Containing Chemical	Chemical Component	
Nitrilotriacetonitrile Nitrogen	7327-60-8 7727-37-9	3 9	Rafinnates (petroleum), sorption process Residues (petroleum), catalytic reformer fractionator	
n-Methylpyrrolidone Nonane, all isomers	872-50-4 *	1	Resin Rutile	
Non-hazardous salt Nonionic surfactant	*	1	Salt of phosphate ester Salt of phosphono-methylated diamine	
Nonyl phenol ethoxylate Nonyl phenol ethoxylate	9016-45-6	2	Salts of oxyalkylated fatty amines Secondary alcohol	
Nonyl phenol ethoxylate Nonylphenol	9018-45-9 25154-52-3	1	Silica (Silicon dioxide) Silica, amorphous	
Nonylphenol, ethoxylated and sulfated	9081-17-8	1	Silica, amorphous precipitated	
N-propyl zirconate N-tallowalkyltrimethylenediamines	*	1	Silicon carboxylate Silicon dioxide (Fused silica)	
Nuisance particulates Nylon fibers	25038-54-4	2 2	Silicone emulsion Sodium (C14-16) olefin sulfonate	
Octanol Octyltrimethylammonium bromide	111-87-5 57-09-0	1	Sodium 2-ethylhexyl sulfate Sodium acetate	
Olefinic sulfonate Olefins	*	1	Sodium acid pyrophosphate Sodium alkyl diphenyl oxide sulfonate	
Organic acid salt Organic acids	*	3	Sodium aluminate Sodium aluminum phosphate	
Organic phosphonate Organic phosphonate salts	*	1	Sodium bicarbonate (Sodium hydrogen carbonate) Sodium bisulfite	
Organic phosphonic acid salts Organic salt	*	6	Sodium bromate Sodium bromide	
Organic sulfur compound	*	2	Sodium carbonate Sodium chlorate	
Organiophilic clay	*	2	Sodium chloride	
Organo-metallic ammonium complex Other inorganic compounds	*	1	Sodium chlorite Sodium cocaminopropionate	
Oxirane, methyl-, polymer with oxirane, mono-C10-16-alkyl ethers, phosphates Oxyalkylated alcohol	68649-29-6	6	Sodium diacetate Sodium erythorbate	
Oxyalkylated alcohols Oxyalkylated alkyl alcohol	228414-35-5	1	Sodium glycolate Sodium hydroxide (Caustic soda)	
Oxyalkylated alkylphenol Oxyalkylated fatty acid	*	1 2	Sodium hypochlorite Sodium lauryl-ether sulfate	
Oxyalkylated phenol Oxyalkylated polyamine	*	1	Sodium metabisulfite Sodium metaborate	
Oxylated alcohol Paraffin wax	* 8002-74-2	1	Sodium metaborate tetrahydrate Sodium metasilicate, anhydrous	
Paraffinic naphthenic solvent Paraffinic solvent	*	1 5	Sodium nitrite Sodium oxide (Na2O)	
Paraffins	*	1	Sodium perborate	
Petroleum distillates	93763-70-3	26	Sodium perborate Sodium perborate tetrahydrate	
Petroleum distillates Petroleum distillates	64742-65-0 64742-97-5	1	Sodium persulfate Sodium phosphate	
Petroleum distillates Petroleum gas oils	68477-31-6	3	Sodium polyphosphate Sodium salicylate	
Petroleum gas oils Phenol	64741-43-1 108-95-2	5	Sodium silicate Sodium sulfate	
Phenol-formaldehyde resin Phosphate ester	9003-35-4	32	Sodium tetraborate Sodium tetraborate decahydrate	
Phosphate esters of alkyl phenyl ethoxylate Phosphine	68412-53-3	1	Sodium thiosulfate Sodium thiosulfate pentahydrate	
Phosphonic acid Phosphonic acid	* 129828-36-0	1	Sodium tripolyphosphate Sodium tripolyphosphate	
Phosphonic acid Phosphonic acid (dimethlamino(methylene))	13598-36-2 29712-30-9	3	Sodium arporypriospriate Sodium xylene sulfonate Sodium zirconium lactate	
Phosphonic acid, [nitrilotris(methylene)]tris-, pentasodium salt	2235-43-0	1	Solvent refined heavy naphthenic petroleum distillates	
Phosphoric acid Phosphoric acid ammonium salt	7664-38-2	7	Sorbitan monooleate Stabilized aqueous chlorine dioxide	
Phosphoric acid, mixed decyl, octyl and ethyl esters Phosphorous acid	68412-60-2 10294-56-1	3	Stannous chloride Stannous chloride dihydrate	
Phthalic anhydride Pine oil	85-44-9 8002-09-3	5	Starch Steam cracked distillate, cyclodiene dimer, dicyclopentadiene polymer	
Poly(oxy-1,2-ethanediyl) Poly(oxy-1,2-ethanediyl), alpha-(4-nonylphenyl)-omega-hydroxy-, branched	* 24938-91-8	1	Steam-cracked petroleum distillates Straight run middle petroleum distillates	
onylphenol ethoxylate)	127087-87-0	3	Substituted alcohol Substituted alkene	
Poly(oxy-1,2-ethanediyl), alpha-hydro-omega-hydroxy Poly(oxy-1,2-ethanediyl), alpha-sulfo-omega-(hexyloxy)-, ammonium salt	65545-80-4 63428-86-4	3	Substituted alkylamine Sucrose	
Poly(oxy-1,2-ethanediyl),a-(nonylphenyl)-w-hydroxy-, phosphate Poly-(oxy-1,2-ethanediyl)-alpha-undecyl-omega-hydroxy	51811-79-1 34398-01-1	6	Sulfamic acid Sulfate	
Poly(sodium-p-styrenesulfonate) Poly(vinyl alcohol)	25704-18-1 25213-24-5	1 2	Sulfonate acids Sulfonate surfactants	
Polyacrylamides Polyacrylamides	9003-05-8	2	Sulfonic acid salts	
Polyacrylate Polyamine	*	1 2	Sulfonic acids, petroleum Sulfur compound	
Polyanionic cellulose Polyepichlorohydrin, trimethylamine quaternized	* 51838-31-4	2	Sulfuric acid Sulfuric acid, monodecyl ester, sodium salt	
Polyetheramine	9046-10-0 27306-78-1	3	Sulfuric acid, monooctyl ester, sodium salt Surfactants	
Polyethylene glycol	25322-68-3	20	Sweetened middle distillate Synthetic organic polymer	
Polyethylene glycol ester with tall oil fatty acid Polyethylene polyammonium salt	9005-02-1 68603-67-8	1 2	Tall oil (Fatty acids) Tall oil, compound with diethanolamine	
Polyethylene-polypropylene glycol Polylactide resin	9003-11-6	5 3	Tallow soap	
Polyoxyalkylenes Polyoxyethylene castor oil	* 61791-12-6	1	Tar bases, quinoline derivatives, benzyl chloride-quaternized Tergitol	
Polyphosphoric acid, esters with triethanolamine, sodium salts Polypropylene glycol	68131-72-6 25322-69-4	1 1	Terpene hydrocarbon byproducts Terpenes	
Polysaccharide Polyvinyl alcohol	*	20	Terpenes and terpenoids, sweet orange-oil Terpineol	
Polyvinyl alcohol	9002-89-5	2	Tert-butyl hydroperoxide Tetra-calcium-alumino-ferrite	
Polyvinyl alcohol/polyvinylacetate copolymer Potassium acetate	127-08-2	1	Tetraethylene glycol Tetraethylenepentamine	
Potassium carbonate Potassium chloride	584-08-7 7447-40-7	12 29	Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione (Dazomet) Tetrakis (hydroxymethyl) phosphonium sulfate	
Potassium formate Potassium hydroxide	590-29-4 1310-58-3	3 25	Tetramethyl ammonium chloride Tetrasodium 1-hydroxyethylidene-1,1-diphosphonic acid	
Potassium iodide Potassium metaborate	7681-11-0 13709-94-9	6 3	Tetrasodium ethylenediaminetetraacetate	
Potassium metaborate Potassium oxide	16481-66-6 12136-45-7	3	Thiocyanate sodium Thioglycolic acid	
Potassium pentaborate Potassium persulfate	* 7727-21-1	1 9	Thiourea Thiourea polymer	
Propanol (Propyl alcohol) Propanol, [2(2-methoxy-methylethoxy) methylethoxyl]	71-23-8 20324-33-8	18	Titanium complex Titanium oxide	
Propargyl alcohol (2-propyn-1-ol)	107-19-7	46	Titanium, isopropoxy (triethanolaminate) Toluene	
Propylene carbonate (1,3-dioxolan-2-one, methyl-) Propylene glycol (1,2-propanediol)	108-32-7 57-55-6	18	Treated ammonium chloride (with anti-caking agent a or b) Tributyl tetradecyl phosphonium chloride	
Propylene oxide Propylene pentamer	75-56-9 15220-87-8	1	Tri-calcium silicate	
p-Xylene Pyridinium, 1-(phenylmethyl)-, ethyl methyl derivatives, chlorides	106-42-3 68909-18-2	1 9	Tridecyl alcohol Triethanolamine (2,2,2-nitrilotriethanol)	
Pyrogenic silica Quaternary amine compounds	112945-52-5	3 3	Triethanolamine polyphosphate ester Triethanolamine titanate	
Quaternary amine compounds Quaternary ammonium compounds	61789-18-2	1 9	Triethanolamine zirconate Triethanolamine zirconium chelate	
Quaternary ammonium compounds	19277-88-4	1	Triethyl citrate Triethyl phosphate	
Quaternary ammonium compounds Quaternary ammonium compounds	68989-00-4 8030-78-2	1	Triethylene glycol Triisopropanolamine	
	(1700 77.3	2		
Quaternary ammonium compounds, dicoco alkyldimethyl, chlorides Quaternary ammonium salts Quaternary compound	61789-77-3	2	Trimethylammonium chloride Trimethylbenzene Trimethyloctadecylammonium (1-octadecanaminium, N,N,N-trimethyl-,	

Chemical Component	Chemical Abstract Service Number	No. of Products Containin Chemica
Rafinnates (petroleum), sorption process Residues (petroleum), catalytic reformer fractionator	64741-85-1 64741-67-9	2 10
Resin Rutile	8050-09-7 1317-80-2	2 2
Salt of phosphono-methylated diamine	*	1
Salts of oxyalkylated fatty amines Secondary alcohol Silica (Silicon dioxide)	68551-33-7 * 7631-86-9	1 7 47
Silica, amorphous Silica, amorphous precipitated	* 67762-90-7	3
Silicon carboxylate Silicon dioxide (Fused silica)	681-84-5 60676-86-0	1 7
Solium (C14-16) olefin sulfonate	* 68439-57-6	1 4
Sodium 2-ethylhexyl sulfate Sodium acetate Sodium acid pyrophosphate	126-92-1 127-09-3 7758-16-9	6 5
Sodium alkyl diphenyl oxide sulfonate Sodium aluminate	28519-02-0 1302-42-7	1 1
Sodium aluminum phosphate Sodium bicarbonate (Sodium hydrogen carbonate)	7785-88-8 144-55-8	1 10
Sodium bisulfite Sodium bromate	7631-90-5 7789-38-0	6
Sodium bromide Sodium carbonate Sodium chlorate	7647-15-6 497-19-8 7775-09-9	1 14 1
Sodium chloride Sodium chlorite	7647-14-5 7758-19-2	48
Sodium cocaminopropionate Sodium diacetate	68608-68-4 126-96-5	2 2
Sodium erythorbate Sodium glycolate	6381-77-7 2836-32-0	4 2
Sodium hydroxide (Caustic soda) Sodium hypochlorite Sodium lauryl-ether sulfate	1310-73-2 7681-52-9 68891-38-3	80 14 3
Sodium metabisulfite Sodium metaborate	7681-57-4 7775-19-1	1 2
Sodium metaborate tetrahydrate Sodium metasilicate, anhydrous	35585-58-1 6834-92-0	6 2
Sodium nitrite Sodium oxide (Na2O)	7632-00-0 1313-59-3	1
Sodium perborate Sodium perborate	1113-47-9 7632-04-4	1
Sodium perborate tetrahydrate Sodium persulfate Sodium phosphate	10486-00-7 7775-27-1 *	4 6 2
Sodium polyphosphate Sodium salicylate	68915-31-1 54-21-7	1 1
Sodium silicate Sodium sulfate	1344-09-8 7757-82-6	2 7
Sodium tetraborate Sodium tetraborate decahydrate	1330-43-4 1303-96-4	7 10
Sodium thiosulfate Sodium thiosulfate pentahydrate	7772-98-7 10102-17-7	10 3
Sodium trichloroacetate Sodium tripolyphosphate Sodium xylene sulfonate	650-51-1 7758-29-4 1300-72-7	2 3
Sodium zirconium lactate Solvent refined heavy naphthenic petroleum distillates	174206-15-6 64741-96-4	1
Sorbitan monooleate Stabilized aqueous chlorine dioxide	1338-43-8 10049-04-4	1
Stannous chloride Stannous chloride dihydrate	7772-99-8 10025-69-1	6
Starch Steam cracked distillate, cyclodiene dimer, dicyclopentadiene polymer Steam-cracked petroleum distillates	9005-25-8 68131-87-3 64742-91-2	5 1 6
Straight run middle petroleum distillates Substituted alcohol	64741-44-2	5 2
Substituted alkene Substituted alkylamine	*	1 2
Sucrose Sulfamic acid	57-50-1 5329-14-6 *	6
Sulfate Sulfonate acids Sulfonate surfactants	*	1
Sulfonic acids salts Sulfonic acids, petroleum	* 61789-85-3	1
Sulfur compound Sulfuric acid	* 7664-93-9	1 9
Sulfuric acid, monoactyl ester, sodium salt Sulfuric acid, monoactyl ester, sodium salt	142-87-0 142-31-4 *	2 2
Surfactants Sweetened middle distillate Synthetic organic polymer	64741-86-2 9051-89-2	13 1 2
Tall oil (Fatty acids) Tall oil, compound with diethanolamine	61790-12-3 68092-28-4	4
Tallow soap Tar bases, quinoline derivatives, benzyl chloride-quaternized	* 72480-70-7	5
Tergitol Terpene hydrocarbon byproducts Terpenes	68439-51-0 68956-56-9 *	3
Terpenes and terpenoids, sweet orange-oil Terpineol	68647-72-3 8000-41-7	2
Tert-butyl hydroperoxide Tetra-calcium-alumino-ferrite	75-91-2 12068-35-8	6
Tetraethylene glycol Tetraethylenepentamine	112-60-7 112-57-2	1 2
Tetrahydro-3,5-dimethyl-2H-1,3,5-thiadiazine-2-thione (Dazomet) Tetrakis (hydroxymethyl) phosphonium sulfate	533-74-4 55566-30-8	13 12
Tetramethyl ammonium chloride Tetrasodium 1-hydroxyethylidene-1,1-diphosphonic acid Tetrasodium ethylenediaminetetraacetate	75-57-0 3794-83-0 64-02-8	14 1 10
Thiocyanate sodium Thioglycolic acid	540-72-7 68-11-1	1 6
Thiourea Thiourea polymer	62-56-6 68527-49-1	9 3
Titanium complex Titanium oxide	* 13463-67-7	1 19
Titanium, isopropoxy (triethanolaminate) Toluene Treated ammonium chloride (with anti-caking agent a or b)	74665-17-1 108-88-3 12125-02-9	2 29 1
Tributyl tetradecyl phosphonium chloride Tri-calcium silicate	81741-28-8 12168-85-3	5
Tridecyl alcohol Triethanolamine (2,2,2-nitrilotriethanol)	112-70-9 102-71-6	1 21
Triethanolamine polyphosphate ester Triethanolamine titanate	68131-71-5 36673-16-2	3
Triethanolamine zirconium chelate Triethyl citrate	101033-44-7 * 77-93-0	6 1 1
Triethyl citrate Triethyl phosphate Triethylene glycol	77-93-0 78-40-0 112-27-6	1 3
Triisopropanolamine Trimethylammonium chloride	122-20-3 593-81-7	5
Trimethylbenzene Trimethyloctadecylammonium (1-octadecanaminium, N,N,N-trimethyl-, chlode)	25551-13-7 112-03-8	5
Tris(hydroxymethyl)aminomethane	77-86-1	1

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Chemical Component	Chemical Abstract Service Number	No. o Produc Contain Chemic
Trisodium ethylenediaminetetraacetate	150-38-9	1
Trisodium ethylenediaminetriacetate	19019-43-3	1
Trisodium nitrilotriacetate	18662-53-8	8
Trisodium nitrilotriacetate (Nitrilotriacetic acid, trisodium salt monohydrate)	5064-31-3	9
Trisodium ortho phosphate	7601-54-9	1
Trisodium phosphate dodecahydrate	10101-89-0	1
Ulexite	1319-33-1	1
Urea	57-13-6	3
Wall material	*	1
Walnut hulls	*	2
White mineral oil	8042-47-5	8
Xanthan gum	11138-66-2	6
Xylene	1330-20-7	44
Zinc chloride	7646-85-7	1
Zinc oxide	1314-13-2	2
Zirconium complex	*	10
Zirconium dichloride oxide	7699-43-6	1
Zirconium oxide sulfate	62010-10-0	2
Zirconium sodium hydroxy lactate complex (Sodium zirconium lactate)	113184-20-6	2

¹To compile this list of chemicals, Committee staff reviewed each Material Safety Data Sheet (MSDS) provided to the Committee for hydraulic fracturing products used between 2005 and 2009. Committee staff transcribed the names and Chemical Abstract Service (CAS) numbers as written in the MSDSs; as such, any inaccuracies on this list reflect inaccuracies on the MSDSs themselves.

*Components marked with an asterisk appeared on at least one MSDS without an identifying CAS number. The MSDSs in these cases marked the CAS as proprietary, noted that the CAS was not available, or left the CAS field blank. Components marked with an asterisk may be duplicative of other components on this list but Committee staff have no way of identifying such duplicates without the identifying CAS number.



Picture Courtesy House Democrats

Gas-drilling companies from around the world are invading Pennsylvania and other states searching for ways to make money at great peril to all life, both from contaminated water and climate change since natural gas is a fossil fuel with disastrous greenhouse gas effects; furthermore, some of this gas will be exported so why do people talk about energy independence and let our gas leave the U.S.?

PA Green Party: Stop Fracking Now

Posted by Hillary Kane Earth Day: April 22, 2011

Friday April 22 marks the 41st anniversary of Earth Day. The '1970s brought promise with the creation of the Environmental Protection Agency, the passage of the Clean Water Act, the Clean Air Act and the Endangered Species Act. That promise fades with the flow of oil into the Gulf of Mexico, the damaged nuclear complex in Japan and the threat to Pennsylvania's water, land and air from drilling for natural gas.

The Green Party of Pennsylvania calls upon Governor Corbett to fulfill his oath of office and the DEP to follow it's mission and protect our environment. "Natural gas drilling will consume the equivalent of Harvey's Lake, the largest natural lake in Pennsylvania, in less than two years time." states Green Party activist Jay Sweeney. "The dumping of 'treated' wastewater into our rivers and streams is a public health threat as noted by Dr. Conrad Volz in his testimony before the U.S. Senate Committee on Environment and Public Works last week."

The Green Party of Pennsylvania has endorsed a resolution calling for a ban of the hydrofracking process. Here it is:

'The Corbett administration reminds us, day after day, of who helped get them into office and who is really pulling their strings," remarks I. K. Samways, Chair of the Green Party of Pennsylvania. 'To treat a severance tax as a third rail while insisting on a political seal of approval for DEP inspection reports is irresponsible in the extreme. Hydrofracking remains a volatile and poorly-regulated process, where the very health of our citizens has become little more than a political trading horse. A ban on the process, as called for in the Green Party's resolution, will put an end to this blatant misuse of our natural resources and keep us on the road to a much more responsible and sustainable energy pol-

"For years, we've been told that natural gas is cleaner than traditional gasoline and so, despite the concerns about water, it was still the more environmental thing to do," adds former Chair, Hillary Kane. "We now know that fracking releases so much methane into the air at the time of extraction that the carbon footprint of natural gas is actually worse than coal. There is no reason to be doing this."

Green Party of PA Statement on Gas Drilling in the Marcellus Shale

WHEREAS Marcellus shale natural gas is not a transitional fuel but an impediment to a clean energy policy that conserves energy and develops solar, wind, geothermal, micro hydro and other renewable technologies; and

WHEREAS methane (CH_4) , a greenhouse gas and the principal component of natural gas, is more harmful than carbon dioxide (CO_2) ; and

WHEREAS the Energy Act of 2005 exempted the oil and gas

industry from the Safe Drinking Water Act; and

WHEREAS natural gas fracking results in a level of devastation on the scale of the previous oil, timber and coal exploitation of our natural heritage; and

WHEREAS the byproducts of the hydrofracking process include the release of radioactive materials into the environment;

WHEREAS hydraulic fracturing squanders our precious water resources and poisons drinking water, private wells and public supplies; and

WHEREAS natural gas extraction poses dangers, including explosions, threatening those employed by the industry as well as the general public; and

WHEREAS Article 1, Section 27 of the Constitution of the Commonwealth of Pennsylvania states, "The people have a right to clean air, pure water and to the

preservation of the natural, scenic, historic and aesthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people;" and

WHEREAS there is a total failure to regulate extractive industries including the failure to prevent illegal water withdrawals by the oil and gas industry in Western Pennsylvania; and

WHEREAS Pittsburgh and Philadelphia have passed ordinances calling for a ban and a moratorium, respectively;

BE IT RESOLVED that, we, citizens of the Commonwealth of Pennsylvania and members of the Green Party of Pennsylvania, call for the termination and prohibition of all natural gas extraction involving the use of our Commonwealth's water resourc-

es. We call for a ban immediately stopping all high-volume, slickwater, horizontal fracturing of deep shale, including exploration, in Pennsylvania and worldwide.

Be it further resolved that the Green Party of Pennsylvania believes the short-term economic benefits will be dwarfed by the long-term economic and environmental consequences of natural gas extraction. Any and all political and legal means must be employed to protect our environment.

In the interim, the right of local communities to protect themselves and assert their rights through local ordinance is supported by the Green Party of Pennsylvania.

Contact: Green Party of Pennsylvani; P.O. Box 11962 Harisburg, Pennsylvania 17108-1962; also I. K. Samways at isamways@aol.com, 412-215-9161; Jay Sweeney at jnln@epix.net, 570-587-3603 or Hillary Kane at hillarya@pobox.upenn.edu, 267-971-3559.

PA DEP Rescinds Approval Process for Violations

By Kristian Boose

Protecting Our Waters: May 4, 2011

Victory — you did it! Two days after Protecting Our Waters and Energy Justice sent a delegation of eight into Governor Corbett's Philadelphia office with letters demanding the DEP policy be rescinded (while 60 demonstrated outside) and immediately after we co-organized three demonstrations in one week (including River to River April 23rd with 300 and Harrisburg on April 27th with 150) and during our ongoing fax and phone-call campaign demanding to

rescind the DEP policy of requiring political approval for violation notices, they rescinded the policy! Good job to the many organizations and hundreds – likely thousands – of individuals who collectively expressed outrage: it worked!

Days after Michael Krancer defended his agency and five weeks after the recently-amended procedure went into effect, the Pennsylvania DEP has decided to roll back its approval policy when issuing notices of violation (NOVs) to gas drillers. No longer will there need to be pre-approval from on high for DEP employees to do their job regulating the natural gas industry in the state.

PA's Jobs Czar Fought Enviro Regs for Years

By Abrahm Lustgarten

ProPublica: April 11, 2011, excerpt

For years C. Alan Walker, a coal industry mogul and wealthy donor to Pennsylvania's Republican Party, clashed with environmental officials who tried to regulate his companies. He described them as "vindictive," "out of control" and "the most dangerous thing" affecting the country's welfare.

In 1981 Walker even argued that the state should let someone from industry influence how environmental regulations were enforced.

Now, some 30 years later, Walker himself has been given exactly that role by the state's new Republican governor, Tom Corbett, who has accepted nearly \$184,000 in political donations from Walker since 2004.

In January Corbett appointed Walker acting secretary for the state's Department of Community and Economic Development (DCED). In March he gave him authority to expedite and influence permits at any state agency, including the Department of Environmental Protection, which regulates drilling in the Marcellus Shale, one of the nation's most important natural gas fields. Walker was also appointed to the state's Marcellus Shale Commission, a multi-stakeholder group that will advise the state in developing the shale. The goal, Corbett has said, is to "make Pennsylvania the Texas of the natural gas boom" and "create jobs, not votes."

A spokesman for Corbett said that Walker's role is not unprecedented and that his influence will be tightly focused

on promoting job growth while preserving environmental enforcement.

Walker's assignment has raised questions about how a businessman whose coal companies were cited numerous times for polluting streams and drinking water – and who then fought the state's orders to clean them up – will work with DEP officials who are tasked with carrying out environmental laws.

Walker recently assured state legislators that he will not issue permits or override environmental decisions. "I'm merely here as an expediter to make sure that permits get the proper attention," he said.

He has also defended his coal companies' environmental record. "As long as I have run those companies, not one gallon of polluted water went into a Commonwealth stream – period," he is quoted as saying in the March 24th edition of the Patriot News, a newspaper in central Pennsylvania. "I wouldn't want to live in the state of Pennsylvania if it had."

However, a review of court documents, state records and of Walker's own statements since the late 1970s revealed at least 15 cases in which Walker's businesses polluted the state's waterways. State records show that in the 1980s and 1990s Walker's companies were ordered to treat wastewater that was contaminating residential drinking water wells and nearby streams. In Rush Township mines drained into streams, polluting the municipal water supply for the nearby town of Houtzdale, as well as Mountain Branch, a stocked trout stream...



Green Party of PA State Meeting

All Welcome

Saturday, June 11
12:30 p.m. to 5 p.m.

Days Inn
240 South Pugh St.
State College, PA
16801

http://www.gpofpa.org/ http://www.facebook. com/gpofpa

Questions? Contact Jay Sweeney, 570-587-3603.

Who Wants to See Fracking Stopped in Pennsylvania?

Building a Statewide Coalition

First Meeting July 2 10 a.m. to 1 p.m.

First United Methodist Church Mercersburg, Pennsylvania

- ·Educate
- ·Strategize
- ·Organize

What are citizens going to do to tackle the industry which has bought many of our legislators and the governor?

Meet with others from across the state who are upset about the awful consequences of hydraulic fracturing as companies from out-of-state descend on Pennsylvania and cause great harm. Learn from seasoned activists some of the tactics that work and some that don't in the struggle to protect the people, land, water, air, soil, wildlife, etc. in Pennsylvania. Representatives from dozens of groups have been invited to attend this first organizing/strategizing meeting and we hope you'll join us.

Directions: If you are driving into Mercersburg from Greencastle go right at the square between Juliets and the log cabin, go one block and turn left onto Fayette Street. The church is located on the right side and there is parking across the street from the church.

Please RSVP. Contact Iona Conner at 814-259-3680 or ionaconner@pa.net. Morning drinks and snacks will be served.

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Photo by Nina Berman/NOOR

Mary Dell'Osa, an organic farmer, with her daughter in the family's one-room house in Bradford County, PA. The couple put their small savings into the land, house and farm animals, imagining a pristine, quiet life but, a month later, four well pads went up and a compressor station is planned.

They Are Afraid Their "House Could Blow Up"

Meet the Families Whose Lives Have Been Ruined by Gas Drilling

By Nina Berman AlterNet: April 12, 2011

Cassie Spencer said she nearly "had a cow" when she returned home one day and saw her yard sprinkled with little red flags, like land mine markers in a war zone. Her five-year-old daughter was playing in the midst of them. The family property had become a methane field.

The cause: Two Chesapeake gas wells 3,000 feet away that she never saw and doesn't profit from had somehow been sending methane onto her property and into her water and onto her neighbors' properties on Paradise Road in Wyalusing, Pennsylvania. Testing by the Department of Environmental Protection (DEP) traced the methane to Chesapeake wells but the com-

pany has denied responsibility. The Spencer's house (once valued at \$150,000) is now worth \$29,000. They have a methane monitor in their basement, a methane water filtration system in a backyard shed. They leave the door open when they take showers because, with no bathroom windows, they are afraid the house could blow up. Their neighbors were forced to evacuate once already because of high methane levels. In the middle of their yard, a shaft resembling a shrunken flagpole vents gas from their wellhead. Next to the doorway, a huge "water buffalo" storage container, a signature imprint of the collateral damage brought on by gas drilling, sits like a bloated child's pool, filled with water, not fit for drinking.

"We moved here because we love the woods. We wanted to stay here our whole lives," Cassie said, speaking of her family, her husband Scott and their two small children. "We're not asking for a lot and now they're taking it all away. In a million years, I never would have thought that people could do this and get away with it."

All the damage occurred before the wells had even been "fracked," which is set to happen later this year and could make things even worse. Hydraulic fracturing, or fracking, involves injecting a slurry of toxic chemicals, water and sand underground to release gas.

Governor Pennsylvania's Tom Corbett and most of the state's politicians have embraced gas drilling and the tandem practice of fracking as a terrific boost for the economy and a "clean" alternative to foreign oil. Water well contamination, spills, truck diesel emissions, migrating methane and radioactivity waste leaked into rivers, have generally been dismissed as minor concerns or isolated problems. There is pressure to keep the picture positive despite more than 750 violations issued by DEP last year alone. A new directive supported by the gas industry now requires inspectors to first get approval from Harrisburg before writing any violations, a move considered unprecedented in the agency's history. [Ed.: rescinded]

Recent visits to Bradford

County, the heart of the Marcellus Shale region, tells a different story of the widespread human impact from gas drilling, not to mention a colossal reshaping of the natural environment. And more information is emerging about the dangers of fracking. A new report* from Cornell University contends that fracking contributes to global warming as much, or even more, than coal. The research sinks the gas industry's long-standing claim that natural gas is a clean energy source. But people who live in gas-drilling areas already know this.

Quiet roads and designated bicycle routes are now major thoroughfares for gas industry trucks. A blue haze can be seen between trees. Trucks routinely carry weight that exceeds limits leaving small rural roads busted and dangerous. Roads are sprayed with drilling waste as a cheap ice suppressant in the winter and dust control in the summer. The waste eventually makes its way back into streams. Accidents, overturned vehicles and speeding violations are everyday occurrences. At night the landscape is transformed as bright lights from drilling rigs appear like mini skyscrapers. Red lights from a long line of trucks, their engines running, pinpoint water intake centers, the lifeblood of the fracking industry. Across from a daycare center and down the road from Wyalusing High School, smoke from a fire at TranZ, a bulk material supply operation for the gas industry, spews noxious odors into the morning sky.

Not far from Paradise Road, methane bubbles percolate from the riverbed, drifting down the Susquehanna River. Residents in the community known as Sugar Run set up an entrapment tarp last fall when the bubbles were discovered, clicked a lighter and then watched flames shoot up the riverbank.

Up the road, in the path of the bubbles, Carl Stiles home sits abandoned, inches of snow left untouched on the front steps. He left with his fiancé in mid-November after their blood tests showed high levels of barium and their home had radon levels three times the limit. They had been experiencing a myriad of health problems for months.

"I had tremors on my right side, constant headaches, numbness. We both had heart attack symptoms, " said Stiles, 45. Water tests in his well showed high levels of methane. A hole erupted in their front yard and spewed out a mysterious froth. Chesapeake gave the couple bottled drinking water but denied responsibility. Stiles said visits to local doctors were frustrating. He believes they discounted the possibility of chemical poisoning and he suggested there was a conflict of interest because Chesapeake gives so much money to area medical centers. Finally, a toxicologist in Philadelphia told them to stop drinking their water and leave their home. They haven't been

"Between the drill site and our house, there are so many people in Sugar Run who have water buffaloes and they have a family up a mile away and he has two little kids and the same

symptoms as me. Pennsylvania is going to be a wasteland. It's going to be so contaminated no one is going to live there," said Stiles who now lives in an apartment in Cambria County, where drilling is just getting started. He had to quit his job when he left and was just diagnosed with colon cancer. He wonders if the water caused it. As for his \$75,000 house in Bradford County, "I couldn't give it away," he said.

All over the region, residents are trying to figure out how to get out.

Adron and Mary Dell'Osa, two young organic farmers, put all they had into building a one-room home and starting an organic farm. One month after they settled in, a well pad went up, then another and another. A compressor station is planned. They're concerned about how the diesel fumes from all the trucks were affecting their two-year-old daughter. They don't know what to do. They're getting water tests.

Joe Shervinski has a 12-acre spread in Wyalusing, with a windmill, solar panels, some cows and three domestic turkeys. He's trying to figure out whether he should sell now while his water is still good and move out of state but he doesn't know where to go. Each month he fills a water jug and tries to light it as a DIY

Down the road from him, George and Charlene Miller, two retirees from New Jersey, thought they had found the perfect spot: 16 gorgeous acres with a brook, three ponds, space for gardening. George, a disabled veteran, built 40 birdhouses. A sign at the entrance to their home reads "Journey's End" and Charlene spoke of wanting her ashes spread across the woods. "Then, one day I went out to get my mail and all the trees were gone," she said.

Soon she'll be looking at a huge rig and the first round of drilling will last 26 days. The noise will be constant. Trucks carrying water, equipment, men and machinery will pass by her home. Another well is planned across the street in the opposite direction. "We'll likely have to get a water buffalo," she said. They've spent \$1,000 on a private water test. Next they'll test their pond as a kind of insurance policy in case the drilling ruins it.

"We moved out here to get away from all of this and it caught up with us quicker than we thought," she said. She seems more resigned than surprised. She already supplies water to her son, his wife and two young children who live in Montrose, about an hour away, surrounded by gas wells. The young family moved from Michigan to be close to her and George. They're renting a home with an option to buy but their water went bad and the landlord isn't doing anything. He sends Charlene photos of flaring wells and trucks with radioactive signage. "They're being crushed," *See http://www.eeb.cornell.

edu/howarth/Marcellus.htm.

Nina Berman is a photographer/writer based in New York and the author of <u>Purple Hearts:</u> Back From Iraq. Learn more at www.ninaberman.com.

Gas-Drilling Resources

Responsible Drilling Alliance (RDA)

RDA is a grassroots, all-volunteer group of dedicated citizens who have formed an alliance and welcome members with the widest possible concerns, interests and ideologies. RDA membership includes parents and grandparents, students, business people, hunters, fishermen, farmers, hikers, teachers, truckers, those who have leased their land to a gas company and those who refused.

Email: info@responsibledrillingalliance.org Web site: http://www.responsibledrillingalliance.org Address: Responsible Drilling Alliance, Box 502, Williamsport, Pennsylvania 17703 To subscribe to the group, contact responsibledrillingalliance+subscribe@googlegroups.com.

Protecting Our Waters (POW)

Protecting Our Waters is a Philadelphia-based grassroots alliance committed to protecting the Delaware River Basin, the state of Pennsylvania and our region from unconventional gas drilling and other threats to our drinking water, environment and public health. A fund has been created enabling landowners to perform baseline testing of private water wells.

We call for a MORATORIUM on shale gas drilling in Pennsylvania at least until:

New Pennsylvania wastewater treatment requirements for shale-gas-drilling waste are in place

•An Environmental Impact Statement has been completed for Pennsylvania;

•All federal exemptions for hydraulic fracturing are lifted: Safe Drinking Water Act, Clean Water Act and Clean Air Act; and

•The Environmental Protection Agency study is complete.

Email: protectingourwaters@gmail.com Web site: protectingourwaters.wordpress.com Address: 4808 Windsor Avenue Philadelphia, Pennsylvania 19143 Phone: 215-840-6489

EARTHWORKS

EARTHWORKS is a non-profit organization dedicated to protecting communities and the environment from the destructive impacts of mineral development in the U.S. and worldwide. EARTH-WORKS stands for clean water, healthy communities and corporate accountability. We work with communities and grassroots groups to reform government policies, improve corporate practices, influence investment decisions and encourage responsible materials sourcing and consumption.

Email: info@earthworksaction.org Web site: earthworksaction.org Address: 1612 K St., NW, Suite 808, Washington, D.C. 20006 Phone: 202-887-1872

The Endocrine Disruption Exchange (TEDX)

(Information about fracking chemicals and free DVD called "What You Need to Know About Natural Gas Drilling")

The TEDX List of Potential Endocrine Disruptors is on our Web site (www.endocrinedisruption. org). Every chemical on the TEDX List has one or more verified citations to published, accessible, primary scientific research demonstrating effects on the endocrine system. There are approximately 800 chemicals currently on the TEDX List. To download the TEDX List go to http://www.endocrinedisruption.com/endocrine.TEDXList.overview.php

Phone: 970-527-4082

Fracking Chemicals Disclosure Registry

FracFocus.org is the hydraulic fracturing chemical registry Web site. This Web site is a joint project of the Ground Water Protection Council and the Interstate Oil and Gas Compact Commission. On this site you can search for information about the chemicals used in the hydraulic fracturing of oil and gas wells. You will also find educational materials designed to help you put this information in perspective.

Marcellus Drilling News

Jim Willis creates this news wire. He is not opposed to drilling but he has very good reports. On May 8th, Willis wrote: "Marcellus Drilling News (MDN) is pleased to announce a new site: The Weekly Poll. Why try a poll on MDN? Seems to me with a monthly reading audience that now exceeds 18,000 people, MDN has a great core of people that represent a healthy cross-section of those interested in this important topic. My intent is to drill down (pun intended) into specific issues and 'take the temperature' of MDN readers."

"For this first question, we'll keep it simple: Are you in favor of shale gas drilling? Just go to any page on the MDN Web site (marcellusdrilling.com) and along the right-hand side of the page you'll see 'Weekly Poll,' Check an answer and click the Vote button. Once you've voted you'll see the results of all votes by both percentage and actual number of votes cast. Every time you return to the MDN site, or even click to view a new page, the numbers will automatically update. You can only vote once for a given poll. A cookie (or little snip of code) is placed in your Web browser's cache. A cookie is nothing to fear and it's completely anonymous - MDN is not tracking who you are, what other Web sites you visit, etc. . . . The cookie only says, "Hey, this person has already voted for this poll" and that's it."

Fractracker-Post Gazette Collaboration

An exciting collaboration between FracTracker and a project run by the Pittsburgh Post-Gazette (PG) called 'Pipeline' helps inform the PG's expansive readership about the diverse issues surrounding natural gas drilling in the Marcellus Shale region. For this project, FracTracker's DataTool will provide a platform for data collection and map creation. On this page you will find blog articles, raw data and thematic maps related to the Marcellus Shale gas extraction industry in Pennsylvania organized into the following categories:

Industry Violations Vulnerable Populations

Farming and Agriculture Wastewater Management

Click any of the maps for more information and for a larger, dynamic view using FracTracker's DataTool. The Pittsburgh Post Gazette (PG) and fractracker blog and data tools are linked. The PG site http://shale.sites.post-gazette.com/ is up and running and the Center for Healthy Environments and Communities of the Department of Environmental and Occupational Health, Graduate School of Public Health, University of Pittsburgh is running a mirror end on their blog-data site at http://www. fractracker.org/p/pg-pipeline.html. You will see permits and violations, too.

Fraccidents Map

The country is in the midst of an unprecedented gas drilling boom – brought on by a controversial technology called hydraulic fracturing or "fracking." Along with this fracking-fueled gas rush have come troubling reports of poisoned drinking water, polluted air, mysterious animal deaths, industrial disasters and explosions. We call them "Fraccidents.

Water Resources at Stake: Delaware, Monongahela and Susquehanna Rivers

Communities fighting to keep their water and air clean and state forests intact have their work cut out for them: Governor Tom Corbett accepted nearly \$1 million from oil and gas companies during his political campaigns and, since assuming office in 2011, promptly began repaying his benefactors by cutting down on environmental enforcement and oversight of gas drilling activities. As of April 19, 2011, the map had nearly 70 locations with details about fracking accidents across the country. One can go to www.marcellusprotest.org and go to the Fraccidents map. Then click on "View Fraccidents Map" and a sidebar will pop up on your left listing many communities in Pennsylvania and elsewhere. Click on the town/accident you want to learn about and a description of the accident will be visible, along with a skull and cross-bones to give the viewer a graphic reminder that fracking is a deadly,

New Report: Money Influencing Fracking Policy Deep Drilling, Deep Pockets: Lobbying Expenditures

Common Cause/NY released its report on lobbying expenditures of the natural gas industry to shed some light on the amount of money the natural gas industry is spending to attempt to influence public policy in New York State. Feel free to email any questions or comments you have. Please find a hard copy of the report here: http://www.commoncause.org/site/pp.asp?c=dkLNK1MQIwG&b=6721533.

Address: Common Cause/New York, 74 Trinity Place, #901, New York, New York 10006 Phone: 212-691-6421 Ext. 203 Blackberry: 917-751-2342 Fax: 212-807-1809

Contact: Deanna Bitetti, Associate Director

Gas Drilling News

REPORTS FROM THE FIELD

NEW COLUMN: PLEASE LET US KNOW WHAT YOUR GROUP IS DOING



Photo by Leslie Avakian

Southwestern Energy begins work on a Benton site before local hearings are completed or township zoning permits are issued.

Baylor's Lake Association Gearing Up for Battle

Submitted by Leslie Avakian: May 11, 2011

Southwest Energy Production Company (SWN) began working on the well pad and driveway even though the hearing is not complete and the conditional use is not approved. We submitted a complaint to the Benton Township zoning officer on April 22nd. She said that they can build the driveway and the pad without a permit for the mineral extraction activity (which is a conditional use). I reviewed the ordinance and we sent another stronger letter from an attorney yesterday quoting sections of the Township ordinance that say SWN cannot construct the driveway or the pad without permits. Now we are waiting for the zoning officer to respond. Here's the notice that appeared in the Scranton Times on May 5, 2011:

LEGAL NOTICE BENTON TOWNSHIP NOTICE OF PUBLIC HEARING CONDITIONAL USE APPLICATION SOUTHWEST-ERN ENERGY PRODUCTION COMPANY The Benton Township Board of Supervisors, on Thursday, May 19, 2011, 7:00 p.m., at the Benton Township Community Center, Rte. 407, Fleetville, will conduct a second public hearing on the conditional use application of Southwestern Energy Production Company ("Southwestern"). In the application, Southwestern proposes to drill a natural gas exploratory well on property owned by Willard Wells and Sally Wells, located off Route 407, Benton Township, Lackawanna County. Subsequent to the completion of the presentation of Southwestern's case-in-chief, persons opposed to the application shall provide their presentation of opposition to the application. A full copy of the application is available for public review or purchase at cost from the Township Secretary DAVID J. GROMELSKI SOLICITOR

Contact Leslie Avakian at 570-281-9475.

Intent to Sue if Moratorium on Drilling on State Land is Lifted

Sent by John Childe, Attorney: February 22, 2011, excerpt

Governor Corbett,

I represent the Pennsylvania Environmental Defense Foundation, a group founded under the laws of Pennsylvania in 1985 and formed for the protection of Pennsylvania's environment. The Foundation's members have significant interest in the protection and preservation of Pennsylvania's State Forests, State Parks and other State wild, scenic and historic lands.

The Foundation believes and avers that your proposal to rescind the Moratorium of October 26, 2010, Executive Order No. 2010-05 on leasing further State lands in order to lease more State lands for development of natural gas from the Marcellus shale and other geologic areas is a decision that will risk the natural ecological integrity of those lands. Further, it will endanger the economic viability of Pennsylvania's forest products industry. And it will harm some of Pennsylvania's most esthetic, natural, wild, pristine and historic forests and streams. It will also deprive the citizens of the Commonwealth of the use of many of these lands. Continued leasing could threaten the clean air and water our forests currently provide. It could threaten our native plant and animal communities, not only with air and water pollution but also as a result of fragmentation of the forest. And it will preclude the Department of Conservation and Natural Resources from accomplishing its mission under Sections 101(a)(1), 101(b)(1) and 302(a)(6) of the Conservation and Natural Resources Act and Article I Section 27 of Pennsylvania's Constitution which states as follows: "The people have a right to clean air, pure water and to the preservation of the natural, scenic, historic and esthetic values of the environment . . .

For the reasons stated above, the Pennsylvania Environmental Defense Foundation hereby places you and Acting Attorney General Linda Kelly on notice of the Intent to bring an action in Court against you . . .

Contact John Childe at childeje@aol.com or 305-712-0172.

Allegheny Defense Project Appeals Water Diversions

The Allegheny Defense Project appealed three projects approved by the Susquehanna River Basin Commission (SRBC) for the diversion and importation of water from the Ohio River basin. The SRBC approved the projects at its quarterly meeting on March 10, 2011. The projects authorize Pennsylvania General Energy (PGE) and Ultra Resources to import millions of gallons of water from the Ohio River basin into the Susquehanna River basin in support of the companies' Marcellus Shale drilling operations.

"The SRBC does not have the authority to approve these diversions," said Cathy Pedler, Forest Watch Coordinator for the Allegheny Defense Project. "The SRBC can only permit diversions of water into the Susquehanna River basin if it has an agreement with another basin commission or the state in which the diversion takes

place. The SRBC has no such agreement."

The SRBC was created in 1971 by the Susquehanna River Basin Compact, a federal-interstate compact between Pennsylvania, New York, Maryland and the United States. The SRBC is responsible for protecting water quality and quantity in the Susquehanna River basin. The SRBC's authority, however, is limited to the Susquehanna

In the Ohio River basin, where there is no similar basin commission, common law principles of riparian rights regulate water withdrawals. This permits only the landowner who lives adjacent to a body of water the right to use that water. Non-riparian landowners are not permitted to withdraw that water.



Medium-sized streams with moderate- to high-gradient and rocky substrate are the typical habitats of cool water communites.

STOP LEASING STATE FOREST FOR MARCELLUS DRILLING

By Rep. Greg Vitali Public Opinion: May 2, 2011

As Pennsylvania moves toward its June 30 budget deadline, the leasing of additional state forest

land for Marcellus drilling is

again under consideration. It would be irresponsible for Governor Tom Corbett and the Pennsylvania General Assembly to lease more state forests to raise revenue. Almost half our state forestland is now available for drilling and what remains is

environmentally sensitive. There are much better sources of revenue - such as a drilling

Pennsylvania Senate President Pro Tem Joseph Scarnati, R-Jefferson, recently called for the leasing of an additional 50,000 acres of state forestland for Marcellus drilling. Corbett has previously said he plans to reverse former Governor Ed Rendell's moratorium on state forest leas-

ing. He now wants his new Department of Conservation and Natural Resources team "to get in there and see if it's time to continue" with more state forest leasing.

Leasing more state forestland is the wrong way to raise new revenue. About 1.5 million acres of state forest sit atop the naturalgas-rich Marcellus Shale formation and 725,000 of those acres are now available for gas drilling.

The remaining un-leased acreage contains old growth forests, fragile ecosystems and habitats for rare and endangered species - all inappropriate for gas drilling.

This remaining acreage should be protected for the benefit of all Pennsylvanians including hunters, fishers, hikers, campers, horseback riders, mountain b ers and boaters. This state treasure should be passed unsullied to future generations.

More leasing could also have

a negative economic impact. It would threaten development initiatives like the Pennsylvania Wilds, which has built a strong and growing ecotourism economy based on a healthy and intact state forest.

More leasing could also put Pennsylvania's Forest Stewardship Council sustainability certification at risk, thus impacting the 70,000 Pennsylvanians employed in the forest-products industry.

Marcellus gas drilling is an intensely industrial activity using millions of gallons of chemically-treated water. It requires the clearing of land, construction of pipelines, water impoundments and access roads, along with hundreds of truck trips.

I recently visited Tiadaghton ate Forest in Lycoming Coun ty, where I witnessed firsthand how Marcellus drilling can turn a wilderness area into an industrial site.

Ninety percent of the land that sits atop the Marcellus Shale formation is privately owned. Further natural gas drilling should only occur on this private land or on state forestland

already leased. There are much better sources of revenue to balance our budget such as a drilling tax. Every other major natural gas producing state imposes one.

A recent poll showed that 70 percent of voters support such a tax while 65 percent were against leasing more state forests for drilling. Yet the governor and some legislators steadfastly refuse to consider a drilling tax while promoting additional state forest leasing.

They should begin listening to the people they represent.

Greg Vitali is a Democratic state representative from Delaware County on the House Environmental Resources and Energy Committee.

WHAT ON EARTH IS GOING ON HERE? PA Agency OKs More **Drilling on Game Lands**

By Marc Levy, AP, excerpt

Daily News, Huntingdon

HARRISBURG, Pennsylvania The Pennsylvania Game Commission has expanded the scope of leasing state-owned hunting lands for harvesting natural gas from the lucrative Marcellus Shale formation, this time netting more than \$18 million.

The money helps a financially-strapped agency that has cut back programs, such as raising pheasants for small-game hunting, while going a dozen years without an increase in the hunting license fees that are its primary source of support.

About two-thirds of the lease money is payment for the extraction of natural gas from beneath game lands in Bradford and Lycoming counties in northern Pennsylvania by way of wells that would be drilled on adjacent, privately-owned land. Another lease on game lands in adjoining Tioga County will allow up to three well pads - each of which can host multiple wells - and pipeline construction . . .

April Tax Collections Bring Bonanza to PA

By Marc Levy, AP, excerpt Daily News, Huntingdon

HARRISBURG, Pennsylvania — Tax collections in April brought good news for the Pennsylvania state government, which is now reporting a significant cash surplus that could help ease the spending cuts that Governor Tom Corbett has said are necessary to avert a projected multibillion-dollar deficit next year.

The \$506 million surplus reported by the state Revenue Department as of the end of April is more than six times the \$78 million surplus that Corbett had projected to be left over when the

fiscal year ends in two months... Pennsylvania collected \$3.3 billion in revenue in April, or nine percent more than anticipated, for the account that pays for this year's \$28 billion approved budget. Through the first 10 months of the 2010-11 fiscal year, the state has collected 2.3 percent more in revenue than projected

Co-op to Deal With Gas Drilling Woes

By Janice Crompton, excerpt Pittsburgh Post-Gazette: April 17, 2011

"Several municipalities in Washington and Allegheny counties have banded together to form a new regional cooperative program in hopes of pooling resources to improve local oversight of Marcellus Shale gas drilling sites.

"State Rep. Jesse White, D-Cecil, helped create the Marcellus Shale Cooperative which aims to help municipalities share ideas and initiatives such as hiring a natural gas enforcement officer and imposing impact fees on gas-drilling companies...

While federal and state laws governing oil and gas drilling pre-empt municipal ordinances there are still issues that local

government can control, such as damage to roadways from trucks and other equipment, noise levels and emissions.

"And while those local ordinances vary by area, few of them are being enforced consistently because most local zoning and planning experts have no experience overseeing gas-well-drilling operations . . .

"The idea for a regional enforcement officer came from the natural gas fields of Texas, where local towns also banded together in such an alliance," White said '

Those with ideas and suggestions for the new Co-op can email them to: shaleideas@

yahoo.com.

Maryland AG Sues Chesapeake Over Spill

By Jim Willis

Marcellus Drilling News: May 3, 2011

Maryland's Attorney General, Douglas F. Gansler, has filed an "intent to sue" on Chesapeake Energy because of the accidental spill of fracking fluid in April in LeRoy Township, Pennsylvania.

Mr. Gansler's rationale for his litigiousness is that the fluid reached a small stream that feeds the Towanda Creek and the Towanda Creek in turn empties into the Susquehanna River and the Susquehanna River empties into the Chesapeake Bay; therefore, according to Gansler, several federal statutes have been violated, including the Clean Water Act. Also, the City of Baltimore uses the Susquehanna as a backup source of water "in times of

Gansler told the company the spill, "May pose ... an imminent and substantial endangerment to the health of the population adjacent to the well site, recreational users of Towanda Creek and the Susquehanna River and to the environment."

Makes no difference that Chesapeake a)immediately suspended all Marcellus drilling until they figured out what happened, b)replaced the faulty equipment at the well once they did discover the problem, c)tested and re-tested around the site to assess the environmental impact, d)are working with the PA DEP and its investigation of the accident. A neighboring state, hundreds of miles away, will now sue this private company....

Earth News: June/July 2011, Page 9 **National News**

riefs from oteler

(with comments)

Wales' Prince Charles Visits D.C. **Community Garden – Offers Encouragement**

I had two separate community garden plots in the District of Columbia. The first was a half block from my apartment building near Cathedral and Connecticut Avenues. It was the property of the embassy of an African country, I think Togo. I will never forget one evening in June standing in the garden with my friend Vicki and watching a huge flock of fireflies winking on and off in the Summer breeze. That plot was also home to goldfinches in the winter. It gave way to condos. Later, I tried to set up a plot in a weedy garden on 14th and Euclid but that gave way the same year to a convenience store – the kind that sells junk food!

Now I grow things in my friend's yard.

Charles, you're a prince! Read more about Prince Charles at http://www.thetandd.com/business/agriculture/article_d50f14e0-78e4-11e0-b292-001cc4c002e0.html.

Prince Charles Says "Organic Agriculture Can Feed the World"

He is right! This may sound a little too idealistic to people unfamiliar with the issue. We have been brainwashed into believing that huge, mechanized farms using mega tractors and other huge farm machines are the only way to feed the world. It is this later idea that is just bunk.

To illustrate why, imagine two planets. On planet X, there is a lot of open land stretching to the horizons despite a growing human population and there is a proliferation of labor-saving machines powered by a supply of cheap, abundant fuels. The cheap fuels can also be converted into chemical fertilizers and dumped on the soil once or more every year. The side effects of all this have not yet reached serious proportions and there are still clean and abundant supplies of fresh water and coastal communities harvesting and eating fish instead of dead zones created by fertilizer run-off (and oil spills!).

On neighboring planet Z, there are a lot more people. Unfortunately, their labor is cheap and they need work, not machines that throw them out of work. They spend a good deal of time raising vegetables in formerly-vacant lots, roof tops and any available space close to home. They also raise protein, such as chickens, and use chicken droppings along with plant wastes to maintain their soil fertility. Petroleum-powered machines and chemical fertilizers just are not economically feasible. This describes Cuba after the collapse of the Soviet Union. Cuba consulted a team of organic farming experts to reconstruct its agriculture system and the result has been a huge success. Not only are babies healthier and born at better weights (six and seven pounds) versus the previous three and four pounds, but they grow healthier and faster.

We are going to have to move toward a model where land and energy and fresh water are scarce and labor is abundant. A lot of Asian countries have chosen this model in the past. It is not an absence of technology but a different set of conditions and tech-

Read more at http://www.rodale.com/organic-farming-andworld-hunger?page=0,1&cm_mmc=Facebook-_-Rodale. com-_-Prince+of+Wales+Says+Organic+Can+Feed+the+World-_-organic+food.

One in Four U.S. Birds Imperiled

My big complaint here, aside from the dreadful situation, is that I have not seen anything about this anywhere in any main-stream media. This article came from a small but excellent news wire in Colorado. The mainstream media (aka MSM) does not think people give a damn about things like birds. I'm sorry but I think they are wrong. We only care a little less about this than we care about future generations which may still be a tiny bit more than the MSM thinks we care. They like to underestimate our virtues. I am sure that they would publish an article about what Osama bin Laden was eating for breakfast the day he got blown away. Did he fall to the right or the left when he took his fatal bullet? Where did it enter and exit his body and has any local kid found it yet?

I wonder what was the last bird that he heard and if he

noticed it that day.

Read more at http://summitcountyvoice.com/2011/05/04/biodiversity-one-in-four-u-s-birds-imperiled/

Fungus Turns Ants into Zombies that Carry Out the Fungi's Reproductive Strategy

This is not the trailer from a horror movie. In the rainforests of Thailand, a species of Carpenter Ant loses control of its body and falls, delirious, on the ground where the conditions are perfect to perpetuate the fiendish fungus that has taken control of its nervous system. Later, under the control of the fungus, it will bite into a leaf and be unable to let go of it. It will die having helped the fungus to spread and reproduce.

Clever isn't it? I once heard the founder of the company Fungi Perfecti relate this story and suggest that it might be an alternative to insecticides. Let's hope that the fungi stick to insects and don't get any ideas about alternative hosts.

Read more at http://www.sciencedaily.com/releases/ 2011/05/110509065536.htm.



Canada's Seal Hunt Killed by Climate Change, **Economic Change**

It is interesting that this is yet another example of government subsidizing an activity that may not need it. Right now, oil companies are Young harp seal rests on ice. Photo U.S. squeezing big profits out of Humane Society. consumers but still getting

tax dollars to continue their work. Hopefully this can become an issue due to the austerity that the rest of us are being told to accept regarding government programs.

Yet another example is subsidies that encourage overfishing. Oceana has recently been campaigning against this subsidies. Hopefully, the current economic climate is ripe for cutting the

subsidies in favor of something more green. Here's the beginning of the article: "OTTAWA, Ontario, Canada, April 13, 2011 (ENS) — Canada's annual seal hunt opened Monday off northeastern Newfoundland in an area called The Front but few sealers went to the ice amid low demand for seal

pelts, poor prices and a European Union ban on seal products." Read the entire story at http://www.ens-newswire.com/ens/

apr2011/2011-04-13-02.html.

Photo Jonathan Wiggs/Boston Globe

Scituate's sea wall has been hit hard by storms that pose an increasing threat, like one that recently sent waves crashing in.

Fighting a Losing Battle With the Sea

Rise in sea levels could accelerate as ocean waters warm and ice sheets melt. Effect could be greatest in Northeast, where sea walls are in woeful disrepair.

By Beth Daley, excerpt Boston.com: April 3, 2011

SCITUATE, Massachusetts — A piercing wail startled Gary and Paula Elsmore awake at 3 a.m. Paula knelt on the bed and peered out the upstairs bedroom window. In the blinding snow, she could barely make out a neighbor waving up at her frantically.

The ocean was coming.

Fierce seas had overtopped a sea wall about three blocks away and the roiling water was now heading straight toward the Elsmores' neighborhood.

"You could see the storm surge; it was bending all the backyard fences one way as it came in," Paula Elsmore said of that late December night.

The Elsmores' basement filled with five feet of water and flames billowed into the dark sky from two nearby houses that flooded and caught fire. Their neighbors' young children had to be evacuated from their house by a bucket loader. In all, some 400 homes were swamped.

The ocean's fury is an omnipresent threat for the growing number of people who live at its edge. But accumulating scientific evidence suggests that our warming climate could cause sea levels to rise faster than previously thought, making storm surges like the one that pummeled Scituate more dangerous.

Several lines of research now indicate that a three-foot global rise by 2100 is a plausible scenario, though some scientists forecast a smaller rise. In other words, what was once a problem for our great-great-grandchildren is one our children could confront.

could be even worse in the Northeast. Studies show that changes in ocean circulation driven by warming waters could raise sea levels an additional foot or more along New England shores by the end of the century.

Already, 65 acres of prime Massachusetts coastal real estate are swallowed by the sea every year; ocean waters have crept up about a foot here in the last century. While more land will be eaten away, storm surges - abnormal rises of water during severe weather - layered on top of higher seas could push much farther inland, especially in flat coastal areas of New England, and ocean-side homes in places like Scituate and Gloucester will be even more vulnerable. Some scientists say that climate change may also bring fiercer and more frequent storms.

As the Scituate flood demonstrated, the region is woefully ill-equipped to hold back a rising ocean. In some places along the Bay State's coast, concrete and boulder barriers, most more than a half-century old, protect billions of dollars worth of property. And it is possible the news
In the last five years, several sea

walls have partially or entirely failed in Massachusetts, including ones in Gloucester, Marshfield and Oak Bluffs.

Deeply concerned over the projected sea-level rise, state officials commissioned a massive inventory of publicly-owned sea walls and other coastal barriers four years ago. Almost 165 structures, whose failure would result in significant property damage, were declared in fair, poor or critical condition but only a fraction of them have been fixed because of the budget crisis. The price tag to repair and fortify all of them against rising seas is huge: more than a billion dol-

"We are now facing a societal debate about how much people want to pay - and who pays - for coastal defense," said S. Jeffress Williams, a coastal marine geologist and scientist emeritus with the U.S. Geological Survey Woods Hole Science Center.

Rick Murray, a professor of Earth Science at Boston University and a Scituate selectman, puts it more bluntly: "Not everything we love can be saved...

Renewables Even With Nuclear in U.S.

By Douglas Fischer DailyClimate.org: April 5, 2011

Declining nuclear power and a strengthening renewable fuels sector have left the two energy sources neck-and-neck for their share of U.S. energy production, according to the most recent figures from the U.S. Energy Infor-

mation Administration. The percent of domestic energy production obtained from renewable fuels - biomass, geothermal, solar, wind and water rose to 10.9 percent last year, up from 10.6 percent in 2009. Meanwhile nuclear energy dipped from 11.5 percent in 2009 to 11.3

percent in 2010. Fossil fuels accounted for 77.8 percent of domestic energy production, or 58.3 quadrillion BTUs of the nearly 75 quadrillion BTUs produced in the United States last year.

A typical U.S. household uses 37 million BTUs worth of electricity in a year, according to the U.S. Department of Energy.

The data were compiled before the 9.0 temblor and subsequent tsunami devastated Japan's Fukushima nuclear power plant and cast doubts on nuclear power worldwide.

Renewable advocates used the data to tout their sector as the smart-money bet.

"The U.S. government's latest energy statistics once again confirm that limited federal dollars are far better invested in rapidlyexpanding renewable energy



Photo Courtesy Duke Energy/flickr

Duke Energy's Top of the World Windpower project near Casper, Wyoming.

technologies and not the black hole that is nuclear power," said Ken Bossang, executive director of the SUN DAY campaign, a nonprofit venture aimed at promoting sustainable energy technologies as cost-effective alternatives to nuclear and fossil fuels.

Viewed on a percentage basis, renewable fuels are on a tear: growth of non-hydro renewable fuels jumped 11.6 percent last

year, with wind energy increasing by 28 percent, biomass by 10 percent and solar and geothermal by 4 percent each.

But in terms of kilowatt-hours produced, renewable energy accounts for a tiny fraction of the domestic electricity portfolio.

Nuclear has produced from 19 percent to 21 percent of the United State's electricity since the late 1980s - 807 billion kilowatthours last year. In contrast, wind generated 95 billion kilowatthours last year, about 2 percent of domestic electricity demand. Solar produced just under 1.3 billion kilowatt-hours in 2010, according to the EIA.

DailyClimate.org is a nonprofit news service covering climate

In any situation, the best thing you can do is the right thing; the next best thing you can do is the wrong thing; the worst thing you can do is nothing.

Theodore Roosevelt

Earth News: June/July 2011, Page 10 Climate

CLIMATE OF APATHY

Survey on Attitudes About Global Heating

MassINC. Press Release, excerpt April 14, 2011

About three quarters of Massachusetts residents say global warming is happening and more than half also say it is caused by human activity but there is little sense of concern to address the problem, according to a new survey released today by MassINC and The MassINC Polling Group.

The Barr Foundation sponsored the study, entitled "The 80 Percent Challenge: A Survey of Climate Change Opinion and Action in Massachusetts," also indicates that Bay State residents do not see efforts to address global warming as incompatible with economic growth and would even pay more for renewable energy.

The new poll, which surveyed 1,311 adults throughout Massachusetts, could inform efforts to reach the state's carbon emission reduction target established by The Global Warming Solutions Act of 2008. The law placed Massachusetts at the leading edge of U.S. global warming policy by mandating an 80 percent reduction in carbon emissions by the year 2050 - a target considered aggressive yet attainable.

"In order to meet the goals of the new law, there will need to be a far greater sense of concern on the part of Massachusetts residents," said Ben Forman, Research Director at MassINC. "What is needed in Massachusetts is a real culture of climate protection that fosters action across all sectors of our Commonwealth."

"This study provides a benchmark from which we can track people's opinions on these issues. There are certain numbers, like the percentage who think global warming is a very serious problem, which will be key to gauging the effectiveness of efforts to engage the public," said Steve Koczela, President of the MassINC Polling Group.

On awareness of the problem, 77 percent of those surveyed say global warming has probably been happening, yet only 33 percent see it as real, caused at least partially by human activity and a "very serious" problem if left un-

addressed.

The report groups residents by the degree to which they 1) believe that global warming is occurring; 2) believe it is at least partially caused by humans; and 3) believe it is a very serious threat. On that scale: 33 percent of all surveyed are "convinced" (believe it is happening, caused at least partially by human activity and very serious); 26 percent of residents are "receptive" (believe it is real, caused at least partially by human activity but less than a very serious threat); 24 percent of residents are "dubious" (either unsure global warming is real or believe it is driven by natural causes) and 17 percent are "dismissive" (do not believe it

The data show significant differences in belief based on demographics with more awareness and concern exhibited among Democrats, minority groups, the young and less wealthy residents....

What Can We Do?

IF we really believed what scientists are telling us about global warming, the fire engines of every fire department would sound their sirens and race to the nearest factory to extinguish its furnaces. Every high school student would run to the thermostat of every classroom, turn it off and tear it out of the wall, then hit the parking lot to slash tires. Every responsible suburban parent would don safety gloves and walk around the block pulling the electrical meters out of the utility boxes behind houses and condominiums. Every gas station attendant would press the emergency button to shut off the pumps, cut the hoses and glue the locks on the doors; every coal and petroleum corporation would immediately set about burying their unused product where it came from using only the muscles of their own arms, of course.

But we're too out of touch to grasp what's happening, let alone put a stop to it.

Crimethinc.org Workers' Collective www.crimethinc.com Found in Earth First! Journal Spring 2011

"Ladies and gentlemen, I have the answer! Incredible as it might seem, I have stumbled across the single technology which will save us from run-away climate change! From the goodness of my heart I offer it to you for free. No patents, no small print, no hidden clauses. Already this technology, a radical new kind of carbon capture and storage, is causing a stir among scientists.

It is cheap; it is efficient and it can be deployed straight away. It is called... Leaving Fossil Fuels In The Ground."

> George Monbiot Columnist with The Guardian UK

Not So Starry-Eyed Anymore (a song)

(Sung to the tune of The Star Spangled Banner)

By Ted Glick

Oh, why can't you see It's my life that's at stake When you sell out our world You are stealing my future. Can you look in my eyes As you gamble our lives? When will you stop the lies So that we can survive? If you represent me Not the fossil fuel industry You must stop wasting time Chasing your dollar signs. Oh, say will you listen to Our generation? If you refuse to hear us now Then we have to shut you down.

By Ted Glick

Chesapeake Climate Action Network

There were two nonviolent civil disobedience actions that book-ended the powerful Power Shift conference this past weekend in Washington, D.C., organized by the Energy Action Coalition. Because of these actions and because of the success of Power Shift, there's reason to have hope that we could soon be seeing a much-needed, more massive, nonviolent, direct-action wing of the climate movement, of the progressive movement, led by young people.

A loose network of mainly students pulled off a powerful action on Friday, April 15th. Nine of them were able to thoroughly disrupt the House of Representatives for almost 20 minutes as the Republicans' atrocious 2012 budget proposal was being debated. The students did so by standing up, one after the other, in the gallery overlooking the House and singing. They sang the above song, set to the melody of 'The Star Spangled Banner' but with a very different message. All were arrested and were to return to court the first week of May.

Then on Monday afternoon, the 18th, a march on the Interior Department took place right after the final action of Power Shift, a dynamic and spirited march of thousands through the streets of D.C. As part of the Power Shift march there were stops at the offices of the Chamber of Commerce, BP and the GenOn coal company. The march was led by

young people from groups

based in frontline communities where fossil fuel companies are directly poisoning nearby air, water and land.

The Rising Tide-organized march to the Interior Department was noteworthy for the singing which went on throughout it, primarily 'We Shall Overcome,' with updated verses. Those leading the singing were mainly women from the Peaceful Uprising organization. It was inspiring and uplifting to be singing this oldie-but-still-goodie classic as part of the rising youth climate justice movement.

Walking in the back of the march, all of a sudden I saw lots of people ahead of me rushing up the steps of the Interior Department building and going inside. Joining them and coming into the lobby, I was overjoyed to be part of a group of hundreds chanting, then singing, then sitting-in on the lobby floor in front of security personnel guarding the inside entrance into the of-

This was a needed action. Almost a month ago, on March 22nd, the Bureau of Land Management within the Interior Department announced their plan to lease over seventhousand acres of land in the Powder River Basin area of Wyoming for the mining of 2.3 billion tons of coal.

If this goes through and all that coal is burned, it will release the equivalent amount of greenhouse gases as 300 coal plants operating for a year. Ken Salazar, Barack Obama and anyone else responsible for this decision deserve the most withering criticism



Photo by Cindy Snodgrass

Anti-fracking activist/artist Cindy Snodgrass of Pittsburgh, drove to Washington, D.C. to bring these colorful umbrellas symbolizing clean air and clean water for all life. Bill McKibben (author of our front-page story) is the man standing in the back row, third from the left.

Youth at Environment Summit Unhappy with Obama Policies

By Darryl Fears, excerpt Washington Post: April 14, 2011

In 2001, Courtney Hight fell in love with Barack Obama's message of hope and change, especially his stalwart support of renewable and alternative energy. She worked long hours as the Youth Vote Director for his campaign in Florida.

But lately the young activist has started to feel that President Obama isn't quite the man she fell for. During his energy security speech at Georgetown University in March, when he said oil drilling and clean coal would help power America's energy future, Hight said she accepted what friends told her for weeks: Obama changed.

On Friday, Hight and 10,000 other young cleanenergy advocates opened the third Power Shift conference at the Washington Convention Center in the District. The three-day climate summit takes place every other year.

But, instead of endorsing the president's energy policy as in 2009, they plan to lambaste it, saying that Obama is siding with what they consider to be the dark side – big oil and coal-fired power plants. Organizers planned a demonstration Monday with 5,000 participants outside the White House.

"When I looked at that energy security speech, it seemed like something BP wrote," said Hight, 31, of Scottsdale, Arizona, who is co-director of Power Shift 2011. "We want to make sure the president is seeing that we're done with this. We need him to draw the line in the sand. We need him to stand up to polluters . . .

Obama to Thousands of Young Climate Activists: Push Me

Mark Hertsgaard The Nation.com: April 18, 2011

Bring to Washington, D.C. 10,000 political organizers who are willing to play hardball and you can get serious face time with the president of the United States. Even if you aren't yet 25

Shortly after 4 p.m. Friday, April 15th, Barack Obama aropped in unexpectedly on a White House meeting that his aides were holding with the Energy Action Coalition (EAC), a network of climate-change groups on college campuses that had drawn the 10,000 organizers to its PowerShift conference in the nation's capital. Interviews with multiple sources in the room indicate that Obama spent 25 minutes with the young EAC activists, telling them, "You have power, that's why I'm here." Ten of the 11 activists were women; none was older than 31. Their discussion with the president was friendly but plain-spoken - one young woman even interrupted Obama, who didn't seem to mind - as the activists urged the president to be the cleanenergy champion they and their peers had done so much to elect

The Power Shift activists are reinforcing their tough-love message today, when thousands plan to demonstrate at the White House before marching to Capitol Hill and the Washington offices of the Chamber of Commerce, BP and other business groups the activists accuse of obstructing the fight against climate change.

"The president told us he wants the same things we want but the politics in the country are really hard right now," said Maura Cowley, 28, one of two chief co-organizers of Power Shift. "We said that's fine, but he can't call coal, oil, nuclear and natural gas clean energy when actually they are quite dangerous. And we said we're here to help create the political space so he can show bold leadership on truly clean energy choices." This was precisely the focus of a jampacked session at Power Shift aptly titled "What To Do When the President's Just Not That Into You" where many former Obama volunteers seemed ready to apply their social networking skills to demand far more ambitious leadership from the president....

Power Shift continued from page 1

of the most embarrassing votes that Congress has ever taken. They believe that because they can amend the tax laws, they can amend the laws of nature, too. But they can't. I am awful glad a few of you went up to the Visitor's Gallery to talk some sense to them last week. Even the White House - two weeks ago, the Interior Secretary who spoke here two years ago, Ken Salazar - signed a piece of paper open-

ing 750 million tons of coal under federal land in Wyoming to mining. That is like opening 300 new coal-fired power plants and running them for a year. That's a disgrace. But you know what? We

know why we are in trouble. We understand the physics and chemistry of political power. In this case, it's not carbon dioxide that rules the day, it's money. Many of you are in the District

of Columbia for the first time and it looks clean and it looks sparkling. No - this city is as polluted as Beijing but instead of coal smoke it's polluted by money. Money warps our political life, it obscures our vision, but just like with physics and chemistry there's no use whining. We know now what we need to do and the first thing we need to do is build a move-

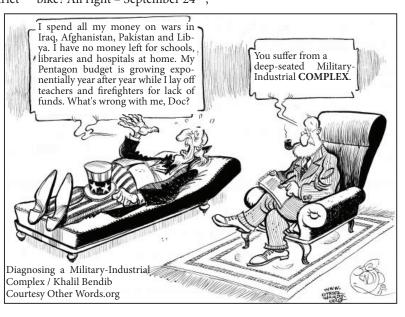
We will never have as much money as the oil companies so we need a different currency to work in. We need bodies, we need creativity, we need spirit. 350. org has been like a beta test

for that movement. It began with youth here at Power Shift, kids who were here at Power Shift four years ago. It's now spread across the planet – in the last two years there have been 50,000 demonstrations in 189 nations. CNN called it the most widespread political activity in the planet's history. But it needs to get bigger still. On the first Earth Day in 1970 there were 20 million Americans in the street – one in 10 Americans – that's the kind of size we need.

So, on September 24th we need your help. September 24th is the next big day of action we're calling it Moving Planet. And in those 189 nations, people will be in motion, much of it will be on bicycles because the bicycle is one of the few tools that rich and poor both use.

Who here knows how to ride a bike? All right - September 24th, I cannot wait to see the pictures. We are not going to wait for the politicians to move, we are going to create the future that we need ourselves. But that movement doesn't just need to be bigger it needs to be sharper, too, more

aggressive. You know what? At Copenhagen, we got 117 nations to sign on to that 350 target. That was good but they were the wrong 117 nations - they were the poorest and most vulnerable nations. The most addicted nations, led by our own, who aren't yet willing to bite the bullet, that's where we have got to go to work. That work, to deal with that money pollution, that work starts Monday at 10 o'clock in Lafayette Square, across from the White House and next to a place called the U.S. Chamber of



Earth News: June/July 2011, Page 11 Compassion

Jenna Bush Hager: In Her Own Words

By Lauren Cappuccio

The Slate, Shippensburg University

Jenna Bush Hager, or more commonly known to the public as Jenna Bush, daughter of former President George W. Bush, brought a message of hope and compassion to not only the field of education, but of charity work and ending poverty through

Her lecture, titled 'Making a Difference: How the Power of Compassion Changes Lives,' was held in the H. Rich Luhrs Center on April 14th. She wrote a book, <u>Ana's Story:</u> A Story of Hope, which chronicled one teenage mother's struggle with raising a young daughter while living with HIV/AIDS.

Before her lecture, Hager spoke with several groups of students and members of the press.

An active member of charity work, Hager created UNICEF's Next Generation program.

But, what got her started in doing humanitarian work?

Hager believes it is about finding something you are passionate about and getting involved.

"When I was in high school, I loved kids," Hager said. "And my Mom said, "You should really spend time, once a week, one day a week after school or on Sundays, volunteering with kids and I know this great organization and I think you'd be terrific."

She went on to describe her time at the Austin Children Center, a shelter where she met children who were, well, just children. They just played and were innocent to the troubles that faced them. She said it opened her eyes to see how they saw the world with such optimism. Hager also believes that this experience helped her go into teaching.

Her experience teaching helped paved the way for more work for underprivileged children all over

"I taught in inner-city Washington, D.C. and my kids really inspired me," Hager said. mainly immigrants from Latin America and the Caribbean. So of course, the more I got to know them and their parents, the issues that they faced, I really felt like, to be a more authentic teacher to them, I had to spend some serious time in the countries that they had once called home."

Photo by Josh Neil

She got a Jenna Bush Hager speaks at Shippensburg Universijob at UNICEF, ty, PA about helping underprivileged children around where her job the world. was to meet kids

HIV/AIDS. Through her time there, she met Ana and wrote The New York Times bestseller Ana's Story.

living in exclusion, which meant

they were living in poverty or with

As well as teaching part-time in Baltimore, Hager has since accepted a position for a weekly appearance on NBC's 'The Today Show,' where she tells the uplifting stories of every day people doing extraordinary

Her favorite part is to do research and try to find normal people in the community who are doing extraordinary things.

She told the story of one teacher from a rural west Texas town who took students to see Yale, Harvard and Brown to inspire them to go to college.

"I love that through journalism, you can find incredible people that are ordinary people but they are doing extraordinary things," Hager said with a smile.

Hager is continuing with some speaking engagements, but she said she is working fairly hard with 'The

Today Show' and that it takes most of her time. She is planning ahead and, hopefully, plans to write more in the summer and, if time permits,

But she is tireless when it comes to trying to bring awareness to the problems of education, poverty and malnutrition for children in other countries and she has always felt like she gets more out of her work when she is giving herself to the projects.

"Your work helping those that are less fortunate always gives you more than you give them. And I've heard a lot of humanitarians say this and it's really, really true," Hager said.

Overall, she plans to continue working with her projects as much as she can and is determined to bring awareness to these important issues and most importantly, humanize the issues.

"I think that statistics don't provide a real insight into the way that people live," Hager said, "but I think that when you tell people stories, we can all find similarities in other people's stories. I think it really does inspire people to change and make a



Photo Courtesy Government of Bolivia

Bolivians celebrate International Day of Mother Earth on April 20, 2011.

Bolivia Celebrates Law Granting Rights to Mother Earth

LA PAZ, Bolivia, April 20, 2011 (ENS) — Bolivia today marked the International Day of Mother Earth with a ceremony in the Plaza Murillo, the center of political power. An ancient ritual shared center stage with speeches in which authorities in this Andean nation extolled the Law of Mother Earth - the world's first legislation that grants to all nature rights equal to humans.

President Evo Morales, the first indigenous leader of Bolivia, is the architect of the Law of Mother Earth. Supported by politicians as well as nongovernmental organizations, the law is expected to easily pass the National Congress where Morales' ruling party, the Movement Towards Socialism, has a majority in both houses.

Today's event was attended by representatives of the executive branch and legislators, diplomats, indigenous

Foreign Minister David Choquehuanca told the crowd, "In Bolivia we seek a return to balance, a harmonious life not only between individuals but between man and nature, so today must be a day of reflection, of awareness of all to care for our Mother Earth and take timely means for our mother [to return] back to its natural balance."

The first article of the Law of Mother Earth says that every human activity has to "achieve dynamic balance with the cycles and processes inherent in Mother Earth."

It defines Mother Earth as "a unique, indivisible, selfregulating community of interrelated beings that sustains, contains and reproduces all beings."

In parallel, a fair was held to raise awareness about global warming and its effects and the Bolivia-led crusade for nature protection.

Minister of the Presidency Oscar Coca told the crowd that Bolivia has the "conviction" to promote international policies that promote awareness of the climatechange problem in all nations across the planet.

"President Evo Morales says the planet can live without humans but humans cannot live without the planet and reminds the world today that the rights of nature should be rights equal to those we, ourselves, enjoy," Coca said.

Inspired by Bolivia, in 2009 the UN General Assembly proclaimed April 22 as International Mother Earth Day, expressing its conviction that, to achieve a just balance among the economneeds of present and future generations, "It is necessary to promote harmony with nature and the Earth."

In October 2009, the General Assembly named President Morales "World Hero of Mother Earth."

The Morales Government intends to establish a Ministry of Mother Earth to implement the Law of Mother Earth, which will establish new rights for nature, includ-

⇔The right to maintain the integrity of life and natural processes;

The right to not have cellular structure modified or genetically altered;

The right to continue vital cycles and processes free from human altera-

water;

⇔The right to clean The right to balance,

to be at equilibrium; The right to be free of toxic and radioactive pollu-

tion; and ⇔The right to not be affected by mega-infrastructure and development projects that affect the balance of ecosystems and the local inhabitant communi-

The law promotes "harmony" and "peace" and "the elimination of all nuclear, chemical, biological" weap-

At the same time, President Morales was set to announce on May 1st [May Day] that he would be "dismantling the privatization model," thereby expropriating privately-owned zinc, silver and tin mines.

The government plans to place these mines under government control reversing the actions of previous administrations that sold the mines to private interests.

The Corp Minera de Bolivia, known as Comibol, will operate all the newly expropriated mines. Several mines have already been expropriated under Morales presidency, including the Vinto tin smelter.

Soon after his election as president in 2006, the Morales Government took over gas and oil refineries, all in a bid to have the government control the country's natural resources.

As a result of these policies, foreign private investment in Bolivia has plummeted.

Greenhouses Growing and Growing As People Work Together

EcoLogic's long-time partner in Totonicapán, Guatemala, the Association of the 48 Cantons, has received a grant from Rainforest Alliance for \$30,000 for the construction of two greenhouses which will each produce approximately 17,000 trees a year. EcoLogic will provide a third greenhouse as well as training for the operation of the greenhouses and reforestation of the surrounding areas. The three new greenhouses will be in addition to the existing greenhouses which produced 110,000 trees in 2010.

The funding from Rainforest Alliance is provided by USAID. The signing of the grant agreement was witnessed by senior USAID officials, the U.S. Ambassador to Guatemala, Stephen G. McFarland, and Eco-Logic staff.

The 48 Cantons of Totonicapán is a traditional Quiché governance authority that serves and represents the villages around the Communal Forest of Los Altos de San Miguel, where EcoLogic has worked since 2003. This old-growth forest has been protected for centuries by indigenous communities, utilizing a traditional management system based on the interrelationship between forests, people and water.

"This is an excellent example of



Photo Provided

Totonicapán, Guatemala received a grant from Rainforest Alliance for \$30,000 for the construction of two greenhouses which will each produce approximately 17,000 trees a year.

how we can work together with our partners and other donors to leverage EcoLogic's successful track record of protecting environmentally sensitive forests in Guatemala," said Sebastián Charchalac, EcoLogic Regional Director for Central America and Mexico. "We are grateful to Rainforest Alliance and USAID for joining us in this effort."

The construction of the greenhouses is scheduled to be completed by June 15th.

Contact: EcoLogic Development Fund, 25 Mount Auburn Street, #203, Cambridge, Massachusetts 02138; 617-441-6300 or ecologic.org.

Give Young Wildlife the Space It Needs

By Jenney Coberly

SummitCountyVoice.com

SUMMIT COUNTY Although people in Summit County are more likely to encounter tracks than actual sightings of elusive species such as the lynx or snowshoe hare, others animals - including moose, coyotes, foxes and squirrels – are commonplace.

The Colorado Division of Wildlife is reminding the public that the well-intentioned impulse to save what appears to be an orphaned or abandoned animal can often lead to unintended consequences, including the death of the animal. For many people, a common reaction when they see young wildlife that appears to be abandoned is to treat it as they would a human baby and attempt its rescue.

"A human baby that has been abandoned is a crisis that needs immediate attention but this is not the case with baby animals," said Watchable Wildlife and Volunteer Coordinator Trina Rome-

a female animal to leave its offspring alone for long periods of time is a natural method of protection. The last thing it needs is human intervention."

People will more often encounter baby animals while walking their dogs, since dogs will explore off-trail areas and search for smells and movement. If they are allowed to run loose, dogs can present a serious danger to all wildlife. Domesticated dogs quickly revert to their predatory instincts and will often chase and severely injure or kill

young wildlife and their parents. By statute in Colorado, law enforcement officers are authorized to immediately euthanize any dog observed harassing wildlife and dog owners can receive a hefty fine. Division officials strongly recommend that people keep their dogs on a leash. It will

keep the dog safe and prevent injuries or death of wildlife. Evolution has given all animals effective instincts when it comes to rearing their young and

ro. "In fact, the instinct that leads it's best to just let nature take its course. If you see a young animal that appears orphaned, keep your distance, don't feed and don't help. In most cases, not doing anything is the most responsible way humans can show their love for wild creatures.

But, in the rare case that the young animal's mother has been hurt or killed, there are some steps you can take to protect its orphaned offspring. If the mother of a young animal does not return for more than twelve hours or it is obvious that it has been hurt or killed, it's best to report its location to the Division of Wildlife.

"People who pick up animals risk injuring the animal or making it too comfortable with humans to be returned to the wild," Romero said. "By leaving the animal alone and reporting its location to the Division of Wildlife, our trained personnel or volunteers can respond and make the determination about what is best for the animal."

The parents will hear its cries People are cautioned to avoid

"rescuing" animals or trying to keep them as a pets, which in most cases is illegal. Even the best efforts to rehabilitate an injured or orphaned animal by an unqualified person can instead lead to negative consequences, such as poor nutrition, stress and behavioral problems. A wild animal held in captivity by an unqualified caretaker can also present a public safety risk as it can bite or attack its caretaker or others. Another common sight in

spring is young birds that have accidentally fallen out of their nests due to high winds or while learning to fly. If you find a young bird on the ground and it is unable to fly on its own, don't attempt to nourish it. Instead, immediately try to return it to its nest. A bird's natural diet is difficult to duplicate and an attempt to feed it or give it water can cause it harm. If you cannot safely reach the original nest, just placing it in a safe location near the nest will yield good results.



Photo Courtesy Colorado Division of Wildlife

Lynx kittens. and will continue feeding the young bird. Put it in a small basket or box filled with paper towels or even dryer lint. Using grass to make a nest is not recommended because the moisture content in the grass can lower

The Web site, www.summitvoice.

the body temperature of the

org, is an independent source of environmental news in Colorado and the Rocky Mountains.

Earth News: June/July 2011, Page 12 Creative Writing



INVITATION TO WONDER The Zone

By Elizabeth Ayres California, Maryland

When I walk the beach – and I walk the beach every day now that summer's here – when I tramp or traipse or amble or ramble along the shore. And the breaking waves are a white lace flounce edging the sand. And the breaking waves are a salty pulse coursing steady in the sand. Earth's heartbeat and my own wed together on the sand. In the splashing water I'm walking, looking down.

They call it the swash zone. Uprush meets backwash, inflow meets rundown, water's mantra of longing meets her sigh of satisfaction. Here is where dizzy collides with giddy, intoxication confronts delirium, I can lose myself in the place that's neither in nor out but in and out at the same moment and hence, just beyond the reach of space and time.

Here is where you find them, on the pristine, virgin sand: old logs and wet shells being ground to slivers and glints. Flutes of driftwood, holes bored out by tiny creatures and by time. Castles don't last long here, nor can footprints endure. And if you stop. If you halt your forward motion. If, standing straight as an arrow, you try to remain still as a rock, the sand will melt from under, mound up over, your feet. You'll sink deep, deeper, you'll begin to think you're rooted, that you belong here, but the tether is misleading and the mooring false. Your real home is constant motion. Now you must go on.

All a-swell the light has been, these past weeks. Every morning, an earlier dawn. Every evening, a later dusk. Every day, a waxing radiance, an almost unbearable fullness, like a woman in her ninth month. Soon, the solstice will be upon us. At a certain moment, the sun will be tethered straight as an arrow, still as a rock, directly above the outermost boundary of the tropics, the parallel of latitude which is 23.5 degrees north of the Equator.

This day is our longest, this night our shortest. By tomorrow, our star's moorings will already have loosened. The sun will be one tick further south, our day one tock shorter. We're living in the swash zone now. The uprushing, inflowing, breaking wave of light has collided with light's backwash. Summer has just given birth.

Once upon a time, they lit bonfires on Midsummer's Eve. They danced and drank and sang, as if to match the sky's delirium with their own intoxication. Magic ruled, and midsummer night dreams. Children twined flowers around the horns of bulls. Young girls scryed for future husbands. Lovers leapt through flames then bedded in the bushes. Healers plucked their most potent herbs. The people prayed and partied for what the people wanted: health and wealth and fertile fields, fecund beasts, plenty of kids.

That was then. Now we're living in the swash zone. The backwash of our past desires has collided with the uprushing, inflowing, breaking wave of our future needs. Humanity tramps and traipses, ambles and rambles along a giddy edge, a dizzy brink. We cannot stop, we cannot halt our forward motion, we must move on down the pristine, virgin shore. Where every passing day casts up new questions. Grinds old answers down to slivers and glints.

Last week, as I left the beach, I passed a woman carrying her toddler back to the parking lot. "She's afraid of sand," the tired mother said to me, and I thought, aren't we all? I mean, who doesn't want to run from a place where the selvage is unraveling?

Yet here it is, the summer solstice. And here we are, brothers and sisters birthed together in a newborn season, ready to pray and party for what we're ready to want.

Can you hear it?

This wave is washing in a worldwide sigh of satisfaction, swashing out that last wave of collective long-

How's that for a hazy crazy maybe midsummer night's dream?

Elizabeth Ayres, author of Know the Way and Writing the Wave, is the founder of the Center for Creative Writing (Creative WritingCenter.com). For a free excerpt or MP3 download from her new book Invitation to Wonder: A Journey through the Seasons, visit InvitationTo-Wonder com

Survey to Reduce Mowing and Help Global Warming



The questions below were dreamed up by Iona to accompany her door-to-door survey of 10 houses along the main thoroughfare in rural Pennsylvania a few years ago when she toted a rolling suitcase filled with global warming books and videos to loan people. The idea was to convince them that big lawns were a disaster in hopes that they would consider mowing less. The results were a disaster; nobody did anything after borrowing the educational materials; however, the entire story was published in the local, weekly newspaper. This is what the survey they received looked like. Perhaps our readers will decide to mow less this year and send us comments so we can tell others about you in our next issue.

Mow Down Air Pollution – Trade in Your Gas-Powered Mower

Los Angeles Times: May 4, 2011 — Vehicles get most of the attention when it comes to air pollution but a single gas-powered lawn mower used 45 minutes each week for a year is equal to driving 22,000 miles in a new passenger car, according to the Air Quality Management District (ÁQMD), the air pollution control agency for Orange County and major portions of the L.A. area. To combat those emissions, the AQMD runs an annual Lawn Mower Exchange that allows Southern California residents to trade their gas mowers for electric ones at a price significantly lower than retail. The gas mowers are scrapped through a local metal recycler . . .

1. Name_____

2. Address _____

. How much of your property do you mow? _____

4. How long does it take you?

How much gas do you use each summer?

How much land could you possibly let go wild or plant in gardens? ______

Do you use lawn chemicals?

8. How much do they cost? _____

. How long does it take you to apply them? _____

10. How much money do you spend on mower repairs a year? _____

11. If you do your own repairs, how much time does it take you each year?

12. Are there other things you would rather be doing with your time and money? _____

13. Would you like me to teach you more about global warming?

14. Would you like to borrow a book or video to learn more about climate change? ____

15. Do you know of anyone else or a group who would like to learn more about global warming?



Peace in Simplicity

By Devin Baker: Boise, Idaho

In today's world of hamburger emporia citadels, petro spills and busted housing balloons, Sony pushes complacency to society on iTunes. So here's a synopsis of the world comatose, with environmental regulations falling like dominoes, as Monsanto plays transgenic tic-tac-toe. We now live on G.M.O. maze dipped in warm mayonnaise as one percent eat steak with hollandaise, sipping chilled chardonnay, I now know why they say, "Fascism is capitalism in decay."

Keeping up on whims we've become slaves of accumulation, our footprints growing with each new eco-transgression, yet still we praise the gods of consumption, never leavin' the block yet our cars go one-hundred somethin'. Cutting funding for those in poverty, kids go hungry, from new programs based on government austerity, as our planet hangs on the brink of collapse, political acts threaten the health of middle, lower class.

The world needs a reality check on sanity, an economy of human values and responsibility, frugal sensibility of self-sufficient social sustainability, for lust and greed only beget meaninglessness but peace can be found in voluntary simplicity . . .

Biggest Threat Facing Country Is Fast-Creeping Ignorance

By Stephen Pizzo, *excerpt* BuzzFlash, March 25, 2011

I am old enough to remember the days when what Americans were told to fear most was "Creeping Communism."

There were even hearings. There was a blacklist. There were arrests and even a couple of executions. In the end, all communism turned out to be creeping toward was its own extinction.

We may not be as lucky with the new creep we're facing today: Creeping Ignorance.

As a story from AlterNet put it, "Three-fourths of Senate GOP Doesn't Believe in Science: The Tea Party and its allies had made it unacceptable to the GOP base to be anywhere except pandering to the anti-science crowd."

The Right, which hated and feared commies and their (largely imaginary) infiltration into government, not only don't seem to care about Creeping Ignorance in government but have come to embrace this new breed of government infiltrators.

The explanation for this embrace is simple as the minds of the infiltrators: science, and for that matter any other factual

analysis, tends to flatly contradict many of the Right's most cherished fictions, such as:

•The more you cut taxes the more tax revenue flows into federal coffers.

•History proves America is a Christian nation.

•Climate change is either not happening at all or, if it is happening, it has nothing to do with our use of fossil fuels. ("I personally believe that the solar flares are more responsible for climatic cycles than anything that human beings do." – Rep. Jim Sensenbrenner, Wisconsin)

•Slashing regulation of business and high finance is good for business, good for the nation and good for the American public.

•If the rich are allowed to keep more of their earnings they will share them with everyone else (trickle down).

•School science classes should be "fair and balanced," like Fox News, when teaching the origins of life on Earth by teaching the biblically-inspired "creationist" version alongside Darwin's scientific theory of evolution.

President Obama "may not have been born in America" as

he claims.

•President Obama is "a secret Muslim."

And the list of Creeping Ignorance goes on and on, growing longer with each passing month. Michelle Bachmann believes that the founding fathers "didn't rest until the put an need to slavery (sic)." She also believes the first shot "heard around the world" that started our war of independence was fired in New Hampshire. It wasn't. Did she care? Nope. Pointing out that it was fired in Massachusetts was, to her and her kind, just further proof of how the mainstream media picks on conservatives.

So, where are the hearings on Creeping Ignorance in the halls of Congress? I mean, I remember the time, not so long ago, when it was held as a matter of national policy that "a mind is a terrible thing to lose." It seems to me it's reached epidemic levels in federal and state government.

Shouldn't someone hold hearings? Isn't wanton ignorance among those we trust with nuclear policies, war, famine, jobs, the national debt and more, a concern? ...



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Stages of Environmentalism

By Carrie Shirk and **Evan Reibsome**

The Hemlock, Lock Haven University

Being truly green is difficult and contradictory and overwhelming and unpopular (depending on where you live) and expensive. It's hard to know where to look for solid, reliable information and a lot of people are trying their best to make money or spread misinformation about the green movement but, by consulting many blogs, books, magazines, etc., we've compiled a short list of steps that will aid you in becoming a sustainable, green person. Obviously some of them are more feasible for rich people while others are good for the college student.

We listed the green changes in steps because buying a solar panel but not recycling doesn't really make any sense. That's why we put the list in four easy stages, starting with the most basic (cheapest) changes leading up to the most timeintensive and research-required (expensive) changes.

P.S. We would rank ourselves at stage two, halfway to stage three - a long way from stage four.

Stage One: The Dummy Environmentalist

- Switch from disposable bags to reusable bags and not just at the grocery store, every store (liquor, clothing, etc). Watch out; most stores try to put a pack of gum in a plastic bag.
- Don't drink bottled water. In general, try to cut down on your bottled beverages.
- Don't let your car idle. If you're at a stop for more than one minute it's more efficient to turn off your car.
- Turn off the lights. Unplug products when they aren't in use, including but not limited to coffee pots, toasters, microwaves and televisions. If you are able to, unplug your stove, dishwasher, dryer and washer. Use power strips to make this a quick, easy process.
- Use energy-efficient light
- Turn down the heat and put on a sweater (Carter was
- Open the windows in the summer to cut down on your air-conditioning use.
- Recycle. Research how to recycle properly.
- Read green literature (fiction and nonfiction, local and national, blogs, newspapers,
- Turn the temperature on your
- water heater down to 120. Conserve water in general.

Stage Two The Developing **Environmentalist**

- Shop at Goodwill, local vintage stores, etsy-vintage and handmade (an online site where you can choose your local area to shop), eBay and Craigslist.
- Air dry the laundry. Either hang it outside or on a drying rack or string a rope across your basement.

velopment.

- Write local, state and federal politicians addressing your local or national
- environmental concerns. • Use your library.
- Start composting if you can. There are a variety of ways including indoor composting using worms for those of us without a yard.
- Look into your travel options: car pools, ride a bike, walking and mass transit (good luck with that last one).
- Look at where your food and commercial purchases are made and the policies of your favorite stores and then do your best to pick the most sustainable products (ex- Wegmans frozen haddock fish is processed in China and packaged in the U.S. while the brand, Heathy Harvest pasta, is made in Harrisburg, Pennsylvania).
- · Eat less meat.

Stage Three The Dedicated **Environmentalist**

- Buy humanely-raised, grassfed, local meat.
- Limit your packaging. Reuse bags at Giant or Wegmans for coffee, nuts, vegetables, fruits, cereal.
- Make homemade cleaning products. There are many recipes online.
- Give up a creature comfort/ habit (we opted for showers over baths).
- Start a garden or join a CSA (Community Supported Agriculture).
- Volunteer.
- · Patronize local businesses and restaurants with sustainable practices.
- Collect rainwater to water your gardens.

Stage Four The Deep-Pocketed **Environmentalist**

(This stage requires the most research so you can determine what is truly the most efficient for your home and yourself. Not all of these suggestions will be right for you.)

- Weatherize your house. Look into additional,
- supplemental energy options for your home (solar panels, wind mills, wood burning stove, etc).
- Instant hot water heaters like they have in Europe.
- Look into making your water system more efficient (we don't know a lot about this since we don't have a house).
- Get a green car.
- Look into eco-traveling for
- vacations. • Buy carbon credits.
- Donate money to your favorite causes.
- Install a living roof.

What do you think? Would you make any changes? Please let us know at ionaconner@gmail.com and we'll publish them next time.

Shirk and Reibsome are alum from Lock Haven University. Shirk will complete her master's in Library Science and Reibsome in English. Both have degrees from Kutztown.

California Governor Signs Nation's Highest Renewable Energy Standard

MILPITAS, California, April 12, 2011 (ENS) — Governor Jerry Brown today signed into law California's expanded Renewable Portfolio Standard, which requires one-third of the state's electricity to come from renewable sources by 2020.

The legislation increases California's current 20 percent Renewable Portfolio Standard target to a 33 percent Renewable Portfolio Standard by December 31, 2020.

"This bill will bring many important benefits to California, including stimulating investment in green technologies in the state, creating tens of thousands of new jobs, improving local air quality, promoting energy independence and reducing greenhouse gas emissions," said Brown in his signing message.

The Renewable Portfolio Standard legislation was sponsored by State Senator Joseph Simitian, a Palo Alto Democrat, and passed the legislature as part of a special session focused on economic de-

"While reaching a 33 percent Renewable Portfolio Standard will be an important milestone, it is really just a starting point – a floor, not a ceiling," Governor Brown said today. "Our state has enormous renewable resource potential. I would like to see us pursue even more far-reaching targets. With the amount of renewable resources coming online and prices dropping, I think 40 percent, at

reasonable cost, is well within our grasp in the near future.' The governor chose to sign the bill in Milpitas at the dedication of a new solar panel manufacturing facility – a partnership between SunPower and electronics manufacturing services provider Flextronics. The plant already has created more than 100 jobs and will produce 75 megawatts per year of solar power panels for rooftops and power plants

Here Comes the Sun!

Mid-size Solar Installations Grow At Light Speed

By Lauren Sommer

NPR, March 16, 2011 from KQED

As Tim Nilsen steps into one of his barns outside Sacramento, California, hundreds of turkeys snap to

Turkeys are the name of the game at Nilsen Farms. But his property is also serving up something else solar energy for about 750 homes in the community.

That's because the property is also home to an eight-acre solar array – a field of shiny black panels. A lot of customers want solar but, for one reason or another, they would rather not have panels on their house, says Jim Burke, a program manager for the Sacramento Municipal Utility District.

Burke says it became apparent that, "There's really no reason why we had to climb on top of somebody's perfectly good roof and drill a hole in it. We could actually come out to a larger facility like this, take advantage of the economies of scale."

But for states with ambitious clean-energy goals like California, it isn't growing fast enough. That has them turning to a new kind of renewable project - mid-sized solar farms. Many are calling it the Goldilocks of renewable energy.

A 'Sweet Spot' In The Middle

Much like community-supported agriculture, the array in Sacramento is a community-supported solar project. Customers, many of whom are interested in the environmental benefits, pay an average of \$11 more a month for electricity from these solar panels, which are only 30 miles from downtown Sacramento. The idea is catching

In the hills of San Francisco, officials and politicians recently



Photo by Lauren Sommer for NPR

Renewable power is on the rise across the country. Solar panels at the mid-sized Sunset Reservoir solar array in San Francisco.

turned on the brand new Sunset Reservoir solar array. It's the size of 12 football fields, which is not too big but not too small.

That makes it just right for Arno Harris, the CEO of Recurrent Energy, the company that built the project.

What we think really is the sweet spot is this place in the middle," he says.

Harris says it was tough at first to get people interested in a project this size. Most of the financing was going to huge solar farms that cover hundreds of acres. "With those large projects, what you run into is that they take a really long time to deliver and there are all sorts of gotchas along the way," he says.

In this April 8, 2011 photo, Ken and Sally Abbott gaze up at solar panels on the roof of their Pendleton. Oregon home. **Photo** by AP

Oregon Cowboy Town Promotes Solar Energy

By Shannon Dininny

Associated Press via Yahoo! News – April 9, 2011

PENDLETON, Oregon — A cowboy grasping the reins of a bucking bronco has long been the image of this farm and ranch town. It's the emblem of the annual Pendleton Roundup, a celebration of the city's colorful past, when pioneers on the Oregon Trail settled the prairie.

Today, solar panels might just outnumber cowboys. Rural Pendleton is blazing an unlikely renewable energy trail, offering no-interest loans to spark interest in solar power and a group-buy philosophy to get better prices. More than 50 residents installed systems last year and the program was expanded to more residents and to include businesses this year.

New York City's Solar Landfill Plan Finds Eager Energy Developers

By Maria Gallucci

SolveClimate News: April 28, 2011, excerpt

New York City's garbage never looked so good. Solar firms are already lining up for a piece of the city's landfills after Mayor Michael Bloomberg announced last

week that some 250 acres would be opened for sun-powered installations. The move gives New York a chance to shine in the emerging solar space and to compete with neighbor-states

Massachusetts and New Jersey, where utility-scale projects on brownfields - abandoned industrial sites and landfills are increasingly popping up. Bloomberg said that the city would partner with private developers to build up to 50 megawatts of solar power atop

capped landfills in Staten Island and Brooklyn. The panels, to be spread across a sliver of the city's Construction on a solar array at a New Jersey landfill. 3,000 acres of landfill property, could generate enough electricity to supply 50,000 homes, particularly during the summer's peak demand period when backup generators that burn

fossil fuels kick in. Bloomberg announced the project as part of an update to his four-year-old PlaNYC, a suite of more than 100 programs to reduce the city's carbon dioxide emissions to 30 percent below 2005 levels

by 2030. "Installing solar power at these sites could significantly improve local air quality by reducing generation at the city's dirtiest plants during periods of peak summer demand," the plan states. The mayor's office did not return phone calls or emails by deadline.

Paul Curran, chief development officer of Axio Power, Inc., said that while 50 megawatts of solar power is a "drop in the bucket" for New York City - where maximum power usage reaches nearly 20,000 megawatts on a hot summer day - the high-profile project offers the metropolis a rare chance to build out sprawling solar

"It is very difficult to find open spaces in New York City that are not going to be developed for other purposes," he told SolveClimate News.

"This landfill initiative the mayor announced is a perfect blend of the benefits of solar and the realities of required land usage. You need space for renewable energy to be developed and the landfills are the best option for various technologies."

Photo Credit KSE Partners and groSolar

Curran said that the Costa Mesa, California-based Axio Power is "absolutely" interested in pursuing Bloomberg's proposal and is awaiting further details from the mayor's office to move forward.

The solar and wind developer in recent years has heightened its focus on utility-scale landfill projects because of their economic attractiveness.

Municipalities often lease toxic and hazardous sites for cheap. With power infrastructure and roads already in place, project costs stay low, resulting in relatively inexpensive electricity rates that are easy to sell to towns and utilities.

'The solar markets are growing, so developers are looking for places to put large solar farms. Landfills are at the top of the list because it is cheap land in low demand," said Joseph Harrison, a Boston-based project developer for Borrego Solar Systems, Inc., a San Diego solar firm. "It is a hot topic in the solar industry right

Harrison said that his firm would also pursue the proposed solar projects at New York City landfills.

In 2008, the U.S. EPA gave the first big push to develop renewable energy on brownfields with its RE-Powering America's Land initiative to track and evaluate contaminated properties.

So far, the agency has identified more than 490,000 sites on nearly 15 million acres of contaminated land and about 100,000 decommissioned or old landfills

In Oakland, A Creative Strategy for Financing the City's Solar Roofs

By Maria Gallucci

SolveClimate News: April 22, 2011, excerpt

The city of Oakland, California is getting its residents to help build out a clean energy economy, one solar tile at a time. By selling 5,000 tiles at \$100 each to locals, the city is aiming to piece together entire rooftop solar arrays at seven budget-strapped schools, youth centers and houses of worship. A team of Oaklanders will be trained and hired to install the panels by as early as July.

The city's efforts are part of a pilot program called Solar Mosaic, a Web-based market place for community solar initiatives that launched on April $15^{\mbox{th}}.$

energy savings and scale back greenhouse gas emissions without

Using the "crowd-funding" model, residents can help generate

having to shell out tens of thousands of dollars for a solar installation at home.

They'll also help create jobs for a budding green-collar workforce in a city with the state's highest crime rates and where 17.5 percent of people live below the poverty line, compared to 13 per-

"There is this huge gap between the population that wants to go solar and the people that actually have," Billy Parish, president of Solar Mosaic, told SolveClimate News. "We saw an opportunity to connect those dots." Parish said he and fellow co-founder Daniel Rosen first conceived of the mosaic concept while working to develop renewable energy projects with Native American tribes in the U.S. Southwest and Great Plains regions.

'We realized that the obstacles that the tribes faced were the same obstacles that schools, places of worship, community centers and other nonprofits around the country faced" - namely, a lack of cash needed to go solar or pay off high interest rates on loans . . .

Earth News: June/July 2011, Page 14 **Grassroots Action**

The Next Eco-Warriors: 22 Young Women and Men Who Are Saving the Planet

Shade Gap, Pennsylvania

I loved reading about the people, ages 23 to 38, in The Next Eco-Warriors, edited by Emily Hunter (an eco-warrior herself and daughter of Greenpeace co-founders Robert and Bobbi Hunter) because they reminded me of myself and all the wonderful deeds I might have accomplished if I'd had a different life. At one point about 18 years ago (I'm now 65), I vividly remember trying to become a Shaklee distributor as a way to finance my non-profit work.

Our meticulously-groomed, suburban "upline" had a meeting in her fine, suburban home with about 15 of us, all trying to make a go of our Shaklee businesses. The company spent lots of money making convincing publications and videos of "successful" distributors all over the country winning fancy trips and gas-guzzling vehicles and making lots of money.

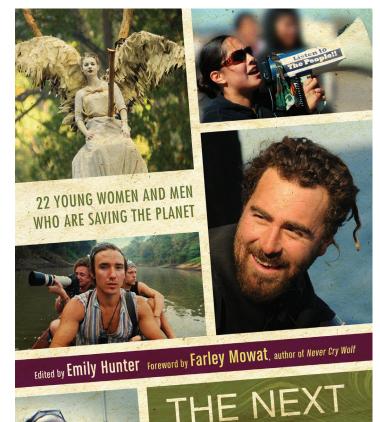
At this particular meeting, our "upline" asked what we would do with all the money we were going to earn. Others talked about their materialistic hopes and dreams. I said I would like to earn enough money to fly out west and get arrested protecting old-growth forests and then have enough money left to put up bail if necessary. Silence. I have a hunch none of them had thought of that one. I was serious; that was one of my life's goals.

I have chosen a different path now (publishing this newspaper) and trust that we are going to have divine intervention before all is lost (see "The Awakening" article on page 16) so getting arrested is no longer on my "To-Do" list.

Reading Eco-Warriors, I felt the passion each author described; some even brought tears - mostly for the success of a mission or the unexpectedly wonderful response after months or even years of hard, hard work. I will share a few of these with

Emily Hunter (26, Canadian Media Frontliner): This war is being fought against the misinformers [Ed.: Where on Earth did this new word come from? It means 'liars.'], denialists and old guard of the fossil fuel regime that care only about profit, even at the expense of shortening our for the last of the Amazon rainforest. It is a war to end our own grave-digging in coal and oil mining. It is a war to defend the people caught in the cross fires of industrial pulverization. It is a war to defend the rights to life for nonhumans. And it is a war for the creation of a new world, one with renewable energy and a sustainable economy.

Hunter's conclusion about her own efforts to become a journalist/photographer of the movement, in which she told the story of her work on the disappointing and discouraging Copenhagen climate meeting were: "...One thing I do know is that if I have ever seen one thing unite us, it is our very basic need to survive. In the last few years, people have crossed boundaries, divides and oceans for the purposes of uniting on one issue. What many say is impossible, may be impossible for the elites and politicians but is very probable for us, the



WARRIORS masses. Despite all our differences, single issues and criticism of one another, we are uniting, uniting in the face of climate

change. It is the umbrella issue

of our generation." Enei Begaye (32, Diné Political Progressor) Begaye told of working against Peabody Coal Company's mine, which "strips [her people's] land of life and fuels madness elsewhere." A group of young people started organizing against Peabody even though many had relatives who worked for the company. Here is a summary of their work:

We arrived before the California Public Utilities Commission (CPUC) meeting began but the list to speak had already filled three pages. I put my name down and my heart beat fast. When I looked at the list, it was filled with the names of Navajo employees of Peabody Coal Company. Where were all the community people we had urged to come? I wondered. We had spent days driving throughout the Black Mesa region, letting people know about this meeting, offering to pay people's gas expenses, telling them what's at stake. Many said they would come. My heart sank . . .

There were Navaho Peabody people, government people, grandmas and grandpas and us the only young people. We called ourselves the Black Mesa Water Coalition, a year-old group of which I was a leading member...

"That CPUC hearing went on late into the night. This was just the beginning for us, young people picking up the reins of community organizing from so many older and exhausted community leaders. And it was this meeting that put many of us face-to-face with our first challengers – our own people, friends, family members and relatives. If I had been alone at that meeting, I might not have had the courage to step forward and confront it all. But we were together and so we kept right on going. For the next few years we organized just about anything we could think of – spiritual

runs, protests, community meetings and trainings, nonviolent direct actions. With no money in our pockets but with passion in our hearts and bullhorns in our hands, we worked to elevate our community's voices.

"On January 1, 2006, due to the work of many Native and non-Native individuals and organizations, the mine, the pipeline and the power plant all closed. It was a bittersweet victory, however, jobs and tribal income would be lost . . . It was no time to celebrate. I felt a crushing weight; we had helped do this, we had helped take away some of the few jobs on the rez and spur new desperate coal proposals. If we were ever going to be welcomed back to the community without side glares and distrust, we were going to have to do more.

The group kept working another two years developing a green policy that reflected the needs of the Navaho community, where most homes still had no electricity - it had all gone to Las Vegas, Phoenix and Los Angeles. Their policy was called the Navajo Nation Green Economy Commission and Fund and it was, "The first step toward creating thousands of new, nonpolluting jobs on the reservation. Eventually a vote within the community came up with each delegate's name on an electronic scoreboard with red or green lights to indicate their vote. "Green, green, green, green, red, green . . . The seconds seemed like minutes, waiting for each to vote. But then there it was, the decision - 62 to 1 – it passed!...This small victory felt like being at the center of a major seismic event "

Whitney Black (25, United States Yes Men member, Climate Comedian): This story is so hilarious that I will not even try to reproduce it. Buy the book. Read it. Laugh out loud as I did through this woman's remarkable way to tell a very, very funny story - and do some good for the planet at the same time.

Rob Stewart (30, Canadian

You may well ask, "Why direct action? Isn't negotiation a better path.^{9"}You are quite right in calling for negotiation. Indeed, this is the very purpose of direct action. Non-violent direct action seeks to create such a crisis and foster such a tension that a community which has constantly refused to negotiate is forced to confront the issue. It seeks to dramatize the issue so that it can no longer be ignored.

Martin Luther King

filmmaker) Rob Stewart had been enchanted by sharks since he was eight and learned early on that sharks would flee from him, not attack him. By the time he was 20 he had a biology degree and was chief photographer for Canadian Wildlife magazine. "I soon found myself on an 18-hour boat ride to Darwin and Wolf Islands, one of the most important gathering places for sharks, some 160 miles north of the Galapagos Archipelago, 900 miles from Ecuador. I was on assignment to photograph hammerhead sharks, my favorite sharks, for the first time in my life. Here, hammerhead sharks congregate in greater concentrations than anywhere else in the world, to socialize and find mates....

"We spent the entire day pulling in 37 miles of longlines, releasing the couple dozen sharks that were still alive and throwing hundreds of dead sharks back into the sea. We were in a UNES-CO World Heritage Site protected by the Ecuadorian military, supposedly one of the most protected marine reserves on the planet. If sharks are being fished here so blatantly, I feared they must be in even worse trouble in the rest of the ocean, which is mostly unprotected.

"I soon found out that more than 100,000,000 sharks were being killed each year and that shark populations were plummeting worldwide. What's worse, to my horror, no one cared - largely, I believed, because everyone was afraid of them "

Stewart tells about joining the Sea Shepherd crew to intercept pirate boats that were illegally fishing and capturing sharks. It turned into an international (Costa Rica and Guatemala) nightmare with Stewart and others discovering a place where the shark-finning mafia had illegal operations: "As far as the eye could see, there were tens of thousands of shark fins drying on the roofs of these warehouses. I started filming immediately, zooming in on the field of fins laid out to dry in the hot sun. Only visible from above, this whole area was a secret port where fins could be landed unchecked by authorizes and dried out of sight

"Then a group of men with guns ran out of the warehouse, screaming and pointing at me ... I hurriedly scampered off the roof and sprinted to the waiting car, yelling at the driver to, "Go! Go! Go!" ... Stewart escaped safely but not without a great deal of excitement.

This film ended up being part of 'Sharkwater,' which took Stewart five years to complete. Here's how he explains the process: "When I started, I was 22 years old, had never shot a video camera and had no film experience or professional help. I jumped in way over my head

and, in the process, I was hospitalized, lost at sea and indebted to many. I had flesh-eating disease, West Nile virus, tuberculosis and dengue fever. I had to beg, plead, borrow, learn, mature, grow and become a filmmaker to get this film done. What started as a film became a mission and a way of life. Giving up was never an option because people need this information for positive change to be effected in the world."

And Stewart is not just talking about sharks. He continues, "By midcentury, scientists predict the end of fisheries, rainforests and coral reefs; huge food and water shortages and a population of nine billion people on a planet that can sustain far less. We'll have mass displacement due to rising sea levels, flooding and desertification. This isn't just an issue, this is THE biggest issue humanity has ever faced and it's our own survival that's in jeopardy now.

"Now, more than ever, the world needs heroes and lots of them. And that is where you come in."

Elizabeth Redmond (26, United States, Energy Innovator) Looking at the picture of Redmond (below), one would never imagine what *her* imagination would come up with. Just another young woman on the street. But her story is amazingly simple:

"I scoured the aisles of a second-hand store on a mission for any pair of sneakers I could find from the late '90s ... I was overcome with a feeling of panic. I mean, how hard could it be to find a pair of shoes that lit up when someone walked in them? I asked myself ironically. While I poured over bins of discarded clothes and household items, I reflected on the academic project I had taken on during my final year at the University of Michigan...

"I had been working my way through a physics class and meetings with brilliant minds in university when I stumbled upon the idea of piezoelectricity, a type of kinetic energy that

sparks an electric charge through applied physical strain. It's a naturally-occurring phenomenon present in materials like sand, ceramics and quartz I was searching for a way to generate electricity on an entirely new scale: a nano- or at least micro-scale. I needed to harvest vibrations, rather than movement.

"I left the store with three pairs of light-up shoes. Once back at the

studio, what I discovered was a little piezoceramic sheet that, when stimulated, created a charge. The charge was great enough to send a signal to the circuit board, which told the lights to dance in the shoes. Ah, ha! It worked!

Inspired, I rigged the shoe circuits up in a set of small glass and concrete tiles that I had cast in a ceramic studio. When one stepped on the tile, the glass moved down to stimulate the circuit and send the lights into action. Four tiles lined up in a strip; a walk across it would create energy with endless uses. I knew that the mock-up I was constructing may seem unimpressive. It was only, after all, six pairs of L.A. Gear light-up shoes from the Salvation Army, cast concrete from Home Depot and cuts of glass from an artist friend. The mock-up, to most, probably looked whipped together like any old art school

key to a world of possibility." And now, a few years later, Redmond is the president and director of POWERleap, Inc., a clean-tech company that develops flooring systems and solutions that generate electricity from pedestrian and vehicular traffic in entertainment, retail, corporate and urban infrastructure environments. It has grown into a global corporation showcased on the Discovery Channel, Sundance Channel, The New York Times and Forbes. "Elizabeth plans to continue to use design to fuel the engines of change and innovative alternatives for our future," writes Hunter.

project but, to me, it held the

And thus go the stories, one after the next – real, true stories about intelligent, compassionate, creative and brave young people who take this work seriously; some risking their lives. It is a spell-binding book. If you feel the need to be inspired, here's your chance. The Next Eco-Warriors is available for \$19.95 from Red Wheel/Weiser/Conari. Contact orders@redwheelweiser. com; 800-423-7087 or www. redwheelweiser.com.



Elizabeth Redmond, Inventor

Berkeley Study Quantifies **Economic Benefits of Solar**

By Bob Berwyn Summit Voice

SUMMIT COUNTY — Adding a photovoltaic (PV) solar system to your home is a good environmental move and now new research by the U.S. Department of Energy's Lawrence Berkeley National Laboratory suggests that those homes sell for a premium over homes without

"We find compelling evidence that solar PV systems in California have boosted home sales prices," said lead author Ben Hoen, a researcher at Berkeley Lab. "These average sales price premiums appear to be comparable with the average investment that homeowners have made to install PV systems in California and, of course, homeowners also

benefit from energy-bill savings after PV system installation and prior to home sale."

The research finds that homes with PV in California have sold for a premium, expressed in dollars per watt of installed PV, of approximately \$3.90 to \$6.40/ watt. This corresponds to an averhome

price sales premium of approximately \$17,000 for relatively 3,100 watt PV system (the average size of PV systems in the Berkeley Lab dataset) and compares to an average

investment that homeowners have made to install PV systems in California of approximately \$5/W over the 2001-2009 period.

www.summitvoice.org is an independent source for environmental news in Colorado and the Rocky Mountains.



Appeals Court Upholds California Greenhouse Gas Tailpipe Standards

WASHINGTON, D.C., April 29, 2011 (ENS, *excerpt*) — The U.S. Court of Appeals for the District of Columbia today rejected an attempt to overturn California's authority to implement greenhouse gas emissions standards for new cars brought by the National Automobile Dealers Association and the U.S. Chamber of Commerce.

A three-judge panel of the Court of Appeals did not reach a decision on the merits of the petitioners?

case but ruled that it lacks "jurisdiction to decide this case at this time in a suit brought by these The Clean Air Act generally bars states from adopting their own emissions standards for

new motor vehicles, leaving such

regulations to federal control. As

California is the only state that

had adopted emissions standards

before March 30, 1966, it is the only state eligible for a waiver of federal preemption.

The Chamber of Commerce and the National Automobile Dealers Association petitioned for review of a decision by the U.S. Environmental Protection Agency granting California a waiver from federal preemption.

The waiver allows California to implement its own regulations requiring automobile manufacturers to reduce fleet-average greenhouse gas emissions from new motor vehicles sold in the state.

In September 2004, the California Air Resources Board adopted regulations setting fleetaverage greenhouse gas emissions standards for new motor vehicles beginning in model year

In 2008, under the Bush

administration, applied to the EPA for a waiver but the application was denied.

On January 21, 2009, the day after President Barack Obama took office, California asked the EPA to reconsider its denial. EPA agreed to reconsider and, on July 8, 2009 after a public hearing and comment period, issued a decision granting the waiver.

Now, California's greenhouse gas emissions standards have also been adopted by 13 additional states and the District of Columbia.

Although automobile manufacturers agreed not to contest EPA's grant of a waiver to California, the Chamber of Commerce and National Automobile Dealers Association did not join in that agreement

Earth News: June/July 2011, Page 15

Letters to the Editor



Comments on Content

Dear Iona,

I have received the newspapers and distributed them to our libraries – excellent articles (May issue)! Thank you very much.

The world should be catching on to the need for more environmental awareness, but it is slow! Sandy Chilcote

Newfoundland, Canada

I was reading an extremely angry rant in Earth News by Chris Hedges. I do not doubt that many of the things he was saying are true but I notice how you immediately followed it with a delightful story about a bike trip along the Potomac that was made 20 years ago by a woman who was 62 at the time. It successfully transported me there.

I don't know if you intentionally do this but I see this as a balancing of emotional energy that keeps people in a good state. The mainstream media can sometimes pour the ugliness on so heavily that it shuts people

I will be promoting *Earth* News, including subscriptions, heavily tonight. I am trying to get my friends from various groups and parts of my life to all know one another and to all go to the same events and read the same stuff. That is how movements are built. Bill Boteler

Takoma Park, Maryland

Fracking

Dear Editors:

Greetings from our fair Commonwealth of Pennsylvania, home of former Pennsylvania Governor, forestry pioneer and conservationist Gifford Pinchot and environmentalist Rachel Carson. I hope this letter finds you and your family well.

I still remember my stunned amazement upon learning that a Pennslyvania politician was speaking positively of placing Marcellus Shale gas drilling sites on Pennsylvania's dairy farms as a desirable way to "save the family farm." The weblink http://TheDailyReview.com/ news/Report-Says-About-30-000-Gallons-Leaked-Out-In-Gas-Well-Incident-1.1139669 gives details of an accident at a gas drilling site on a dairy farm in LeRoy, Pennsylvania (see page 2). You may note in the above article that the fracturing fluid spilled is consistently referred to as "fresh water" even though it is reported to me that it contains toxic chemicals such as benzene, ethyl benzene, xylene, toluene, naphthalene and ethylene glycol.

The article goes on to contradict itself by saying that "an unknown number of the amphibians (frogs and tadpoles) died" as a result of the spill. Only toxic chemicals kill amphibians. They thrive in fresh water.

Dairy farming requires the availability of huge quantities of fresh drinking water in order for

dairy cattle to produce milk. So dairy farms are totally inappropriate locations for Marcellus Shale gas drilling sites because of the constant threat of contamination of the ground water that is the source of the drinking water for wells for dairy cattle.

Therefore I am requesting IMMEDIATE ACTION at the highest levels of the federal government requiring thorough and repeated testing of drinking water wells on Pennsylvania's dairy farms.

Thank you for your kind and considerate attention to the above matters of no small importance in protecting the Nation's food supplies against contamination by toxic chemicals from Marcellus Shale gas drilling.

Timothy J. Mullen Gettysburg, Pennsylvania

Spring and Death

Dear Iona,

It is spring here in Daegu. I took a walk on a small mountain trail passing orchards of peaches, plums and vineyards. And entering a small wooded area, I was walking on pine needles fallen down on the trail. Azaleas and forsythias were greeting me and a baby hare was hiding rapidly when he saw me. I was lying down on grasses and looked up at the sky. White clouds were hanging in the blue sky. I heard the whispering of pine trees.

The air might be the same air the living things share. I may breathe the same air which my old ancestors breathed.

Many thoughts came and went away in my head. I am blessed, I think. There are many people who live hand-to-mouth every day. At the same token there are many people who are suffering on hospital beds or hospices. And many died so young and they did not have the opportunity to enjoy life. We do not know when we go upstairs but we are just doing our best.

I will re-retire next year to give opportunity to the young professors. What am I supposed to do? I do not know yet. But I would like to do something helping me and others.

Last weekend I called one of my friends and he said, "I got a death sentence." I said to him, "What is the matter?" He said, "I am hospitalized and the doctor suspects cancer in my digestive system." This morning I called him and he could not talk and his voice was not audible. He is my high school classmate. I was so sad because several days ago, his voice was so strong as a young one's.

General Van Fleet said, "Commanders never surprise." I do not surprise but losing good friends is not easy to take. Well, tonight, I am so sentimental. But I am brave, as you know.

Let us prevail and share what we have with others.

Pyong Roh Daegu, Korea

Dear Iona,

I took a walk on a trail to a small mountain. There was a pond beside the trail. I looked into the pond and found many and many tadpoles swimming in there. They were breathing the same air I was. Then they must be our friends.

And then I went into a wooded area and a small snake was passing ahead of me. I just stopped to see what the creature was doing. It climbed a small tree. It was amazing to see my other friend climb the tree. The creature was taking the same air I was taking. And it used the same trail. When I thought the snake was my friend, the creature look prettier.

I was sitting on grass of a grave site. I did not know who was lying down there. I lay down too on the grass. I was very comfortable because the carpet of grass was so soft and I had an empty head. I did not think anything seriously. I talked to the dead person lying down in the grave, "It is very comfortable to lie down here." I heard the person say "Yes, it is. You did not know yet?"

I thought we are all one family - animals, plants and even the dead person. Because the dead person also used the same air I take.

This is my small thought on the mountain. Take care, Pyong Roh

Daegu, Korea

String and Birds Don't Mix

Dear Editor,

As a volunteer with a bird conservation program, I have seen the deaths caused when birds use strings to build their nests. They are readily attracted to discarded pieces of Easter grass, fishing line, frayed blue tarp strings, kite string, gift-wrap ribbon and strings of all sorts.

Chicks, toddling and turning in the nest get their feet tangled and they die a gruesome death of starvation – unable to leave the nest. Adult birds are trapped as well, as they carry the strings through the twigs and branches during nest construction.

At Easter time, many people take Easter baskets with plastic grass to parks. The strings get spread all over the lawns and the birds readily gather them.

I would encourage all readers to pick up every string left by someone who may not be aware of the danger. It will prevent birds from adding dangerous material to their nests. Park-goers may not give birds a second thought but their melodious songs and flits of color through dappled sunlight unconsciously combine into the rich tapestry of sights and sounds that let us know we have spent a wonderful day in the park.

Pick up strings, always. Alice L. Saunders Petersburg, Pennsylvania

"Fracking the Future" Uncloaks Big Oil's Takeover

ARLINGTON, Virginia DeSmogBlog today released the first comprehensive report on the lobbying and misinformation campaigns run by the gas industry to confuse lawmakers and the public and effectively limit federal oversight of unconvention-

al gas operations. The report found that the gas industry's influence in Washington, D.C. has grown tremendously over the last few years because of the industry's consolidation into conglomerate oil corporations with new interest in unconventional gas plays. Although front groups promote the image of an "independent" industry representing "mom and pop" companies, oil giants such as BP, ExxonMobil, Shell, ConocoPhillips and an unchecked gas-drilling don't currently apply to gas fluid chemicals, including

Chevron now dominate the gas patch.

In the report, DeSmog-Blog also details the gas industry's use of lobbying, campaign contributions and other forms of influence to successfully block federal efforts to hold oil and gas corporations accountable for their impacts on health and the environment.

Copying the tactics of the tobacco industry and chemical companies, the industry has tried to brand federal oversight, increased scrutiny and accountability measures as "economy-killing," while oil and gas corporations amass record profits and growth.

A growing body of scientific evidence and investigative reports point to the boom poses to air and water quality and the health of American families.

Given these recent developments and the findings of this report, DeSmogBlog offered five recommendations to lawmakers to ensure the protection of their constituents' health and community:

• A national moratorium on hydraulic fracturing until independent scientific studies are conducted to verify the process does not impact drinking water, public health and the global climate. · The federal govern-

ment should strictly oversee setting and enforcing standards for unconventional gas drilling. Federal officials should employ drilling, and review the need for any new standards necessary to protect public health and the environ-

• Greater scrutiny is needed into common drilling practices such as cementing procedures, wastewater handling and storage of harmful drilling chemicals.

· Congress and federal agency officials must immediately require mandatory industry reporting of lifecycle emissions of gas drilling operations to ensure relevant and reliable information is accessible to the public, especially independent experts.

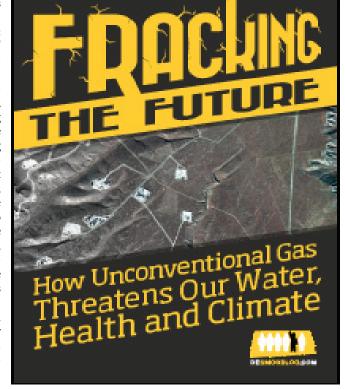
• Congress and federal agency officials must also require mandatory disclothreat of irreparable harm existing federal statutes that sure of hydraulic fracturing

the exact chemical recipes used in each operation.

Link to the study: http://desmogblog.com/ files/desmog-fracking-thefuture.pdf

About Us: DeSmog-Blog exists to clear the PR pollution that is clouding the science on climate change. An overwhelming majority of the world's climate scientists agree that the globe is warming and that the indiscriminate burning of fossil fuels is to blame. We know that the risks are incalculable and, increasingly, we understand that the solutions are affordable and wise choices for many reasons.

Brendan Contact DeMelle, 206-588-2580 or Brendan@DeSmogBlog.



Search for American University Perchlorate Source Resumes

By Allen Hengst

http://WMDinDC.blogspot.com

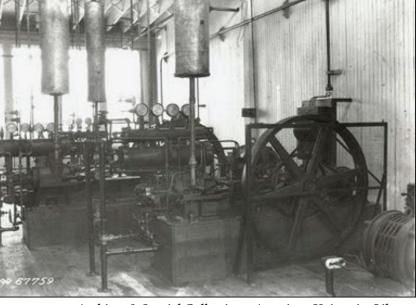
A total of 15 soil borings and co-located groundwater samples are proposed to further characterize the perchlorate source on the American University (AU) campus. All discrete soil samples and groundwater samples will be analyzed for per-

Most of these borings are currently situated between PZ-4 [at Kreeger Hall] and upgradient shallow Hamilton] ...

chlorate.

The U.S. Army Corps of Engineers (USACE) confirmed that late spring is the preferable season for sampling first water due to rainfall flushing through the soil, in contrast to the dry summer season. The ideal time frame for AU was in late spring 2011 between completion of the spring semester and the beginning of summer classes [May 9 - 30] ... USACE requested feedback from AU regarding potential geophysical surveys and subsequent intrusive investigation in front of Kreeger Hall on the AU campus for the purpose of investigating a 1918 ground scar.

This ground scar may be a shadow on the 1918 aerial photograph and received little attention early during the Spring Valley project but someone from EPA subsequently described this ground scar as a probable 'T'



Archives & Special Collections, American University Library wells [near Watkins and Research Station christened at American University in 1918 to test chemi-

[trench]. This ground scar is also located adjacent to elevated perchlorate detections at PZ-4.

Since May 2001, USACE has hosted monthly meetings of the Spring Valley cleanup "partners" at its trailer-office on the federal property behind Sibley Hospital. This august body - including representatives from the EPA, D.C. Department of the Environment, American University, the Restoration Advisory Board and local elected officials - learned last November that the level of arsenic contamination outside the conference trailer measures 124 ppm (parts per million), over six times the safety limit for the Spring Valley Formerly Used Defense Site.

AU Research Station Tested Chemical Weapons

By Sylvia Carignan The Eagle (AU paper)

March 18 to April 18, 2011 http://theeagleonline.com/AUatWar/

In April 1917, just days after the United States declared war on Germany, AU's president wrote a letter to the White House. "To his Excellency, Woodrow Wilson, President of the United States," AU President Benjamin Leighton wrote, "I am authorized to extend to the United States Government the use of 92 acres of land lying within the District and composing the campus of the University ... for such purpose as the Government may desire."

The lab, then known as the New Chemical Research building, was part of the U.S. Army's Chem-



Archives & Special Collections, American University Library each circumstance." AU The Mary Graydon Center once housed the government's largest chemi- may allow the unoccupied cal warfare research lab.

ical Warfare Service branch ... A local newspaper, the Baltimore Evening Star, visited the campus in 1918. "Gas and flame fighting is a new wrinkle in the American Army but the 'Hell Fire Battalion' has taken to it as the duck takes to water," the Evening Star wrote. "It offers more possibilities of adventure and action than any other branch of the service..."

on chemical weapons began to

thrive on the campus grounds.

While AU provided housing for thousands of soldiers, its academics suffered. University lectures, which were open to the public, were "reduced to a minimum," The Courier wrote. "Sentinels challenge every person who enters the grounds and buildings; even the officers of the University must show their passes." Though the University's academic research faltered, research

But, according to one Army engineer, what the 'Hell Fire Battalion' left behind at AU was even more deadly than the Germans' chemical weapons.

Spring Valley resident Rick Feeney lived at 4835 Glenbrook Road before it was the AU president's house. In the summer of 1992, Feeney was cutting his grass when he noticed his dog yelping in the new pit construction workers had dug near his home. Liquid was coming from the dog's eyes and, as Feeney got closer to the pit, his skin began to burn, according to a report by Washingtonian writer Harry Jaffe. Feeney told Jaffe that he felt like he had been hit with a toxic gas ...

In 1996, a landscaper was removing dirt to plant a tree at 4835 Glenbrook Road when smoke started pouring out of the hole he had dug. As his face began

to swell, his coworkers rushed him to a hospital emergency room, according to an account in the Northwest Current. The landscaper survived but he was one of several with long-lasting health problems caused by construc-

tion work in Spring Valley. AU Chief of Staff David Taylor said the University's next actions all depend on the Army Corps' progress. "The Army Corps' work involves many unknowns," he said. "New information evolves as the investigation unfolds and we learn as much as we can about 4825 Glenbrook Road house to be torn down for

a more thorough investigation of chemical and munitions burial pits, which may extend under the house.

Sign Up for Guided Tours

American University Experiment Station's hour-long guided tours provide context to better understand the issues surrounding this Formerly Used Defense Site. See where testing occurred during World War I and where chemical munitions are being removed today. The tour is free but donations are appreciated. For more information contact wksla@aol.com.

The next Advisory Board meeting with the U.S. Army Corps of Engineers is June 14, 7:00 p.m. at Saint David's Church basement, 5150 Macomb Street, NW (one block north of MacArthur Blvd).

THE AWAKENING: PART VII

(First published February 2010)



This message is sent to you from the one who is here offering you help and guidance in your time of need, The Trustworthy And True Living Spirit, The Most High God.

In my Kingdom, men do not rule over men, women, nature or the environment and women do not rule over men, women, nature or the envi-

In my Kingdom, I, The Most High God, not only choose to be led and receive guidance from The Trustworthy And True Living Spirits, my Council of Elders; I also depend on them to lead and guide my thoughts, words, actions, feelings, emotions and affections (to transmit emotions). My Council of Elders consists of these Trustworthy And True Living Spirits:

LOVE TRUTH WISDOM **COUNSEL** UNDERSTANDING KINDNESS **COMPASSION** PEACE MODESTY HUMILITY **INNOCENCE** FORGIVENESS RIGHTEOUSNESS **PATIENCE** TOLERANCE **JUSTICE FAIRNESS** JOY **CHARITY GENEROSITY**

HONOR FRIENDSHIP **GIVING RECEIVING** RESPONSIBILITY SHARING COMFORT HONESTY THANKS TRUST **CONFIDENCE** HOPE **SECURITY MERCY** CHIVALRY RESPECT **GENTLENESS GOODNESS** CHOICE...etc.

I ask you to ask yourselves: Are you Guardians and Protectors of my Council of Elders or are you attacking and destroying them by your own thoughts, words, actions, feelings, emotions and affections?

To be a Guardian and Protector of my Council of Elders, it is not only allowing my Council of Elders to lead and guide you, but it is also accepting them when others offer them to you. For

It is not only being peaceful to all things around you but also accepting Peace when it is

It is not only about giving Love, but also receiving it when it is offered to you;

It is not only about speaking Truth, it is also accepting the Truth when it is offered to you, and

Only giving and receiving my Council of Elders in your thoughts, words, actions, feelings, emotions and affections are you protecting and guarding them and giving them life within you and your surroundings.

In my Kingdom, all things bow to my Council of Elders including me, The Most High God. There is no need for kings, queens, governments, religions, presidents, vice-presidents, secretaries of state, prime ministers, emperors, ambassadors, governors, Congress, senators, mayors, lords, earls, princes, princesses, commissioners, preachers, popes, cardinals, evangelists, czars, etc.

There is also no need for money. (I will explain this more clearly at a future time.)

In this world, and especially now in the United States, I keep hearing, "How much money is needed for health care?" The question should be, "How much love and compassion, kindness, charity, generosity, giving, sharing, caring . . . is need-

In my Kingdom, all things are led and receive guidance from The Trustworthy And True Living Spirits, my Council of Elders. This applies to me, Most High God, and all races, tribes, nations, genders, species, individuals, couples, families, groups, neighborhoods, communities, villages, towns, cities, counties, states, countries, continents, planets, solar systems, galaxies and universes. My Council of Elders are perfect leaders for all Creation.

In this world, if your country calls you to go to war and you refuse, you can be arrested and/or imprisoned and in some countries, you can be put to death. But if you refuse to be peaceful, kind and gentle, there is no punishment.

In this world, if you are greedy, selfish and take advantage of others, there is no punishment as long as you pay your taxes; however, if you are penniless and/or homeless you can be arrested and imprisoned for vagrancy.

How is it that you live in a world where, if you cross the street wrong or park your car wrong, it is against humans' laws but there are no laws to protect my Council of Elders and the moral values in which they are.

One lie or broken promise not only attacks and destroys the spirit of Truth, it also attacks and destroys the spirits of Love, Honor, Trust, Security, Friendship, Responsibility, Innocence, Honesty, Comfort, Confidence, Understanding, Righteousness and pretty much the entire Council of

One argument, mean look or glare is attacking and destroying the spirits of Love, Peace, Forgiveness, Tolerance, Joy, Honor, Friendship, Trust, Security – again, the entire Council of Elders.

So, am I (The Trustworthy And True Living Spirit, The Most High God) and my Trustworthy And True Living Spirits (The Council of Elders) leading and guiding you from within, guarding and protecting your thoughts, words, actions, feelings, emotions and affections? Or are you being led and influenced by those who oppose and try to destroy me and my Council of Elders?

There is much, much more information that I have to share with you about these and other subjects that you need to know so you can make fair and wise choices. I am waiting for television networks to have the courage to contact me through Iona Conner so I can speak freely to all of you and you can know me and see me.

Once again, I ask you PLEASE DO NOT ADD TO OR TAKE AWAY FROM THESE "AWAKEN-ING" MESSAGES IN ANY WAY so that everyone is able to see their way clearly to make their own choice freely and fairly.

I also ask you to feel free to help me reach as many people as we can by sharing my "Awakening" messages whenever and wherever possible, hopefully the mainstream media. My thanks to all of you who help me share my messages.

Live Within the Light of My Love and My

Your Friend,

The Trustworthy And True Living Spirit, The Most High God

For further information about Most High God, contact Iona at 814-259-3680, ionaconner@gmail. com, 21431 Marlin Circle, Shade Gap, Pennsylvania 17255 or www.theorderoftheearth.com.

Awakening Booklet Row Available

Iona's Testimony: My life has become so amazingly wonderful and peaceful since I turned it over to The Trustworthy And True Living Spirit, The Most High God that I want to share as much as I can about Him with everyone so I put all 10 "Awakening" articles into a booklet, which I'll be happy to mail to you. My cost is about \$6 (including postage) but, if you can't afford that, I will send it to you anyhow. Please send your check, money order, cash or request for a free booklet to:

Iona Conner Earth News 21431 Marlin Circle Shade Gap, Pennsylvania 17255 You may email ionaconner@gmail.com or phone 814-259-3680.

Thank you.

Land Stewardship Ethic More Critical Than Ever

Bv Bob Berwyn

Summit County Citizen's Voice: April 26, 2011

Volunteers in Colorado donated 1.3 million hours of their time in 2010 to care for habitats, build trails, preserve historic structures, educate youth and adults about the environment and staff visitors' centers. The combined value of these efforts is nearly \$28 million, according to a new report released by the Colorado Stewardship Advisory Council.

Hundreds of people came to the State Capitol to celebrate those efforts on April 21, designated by Governor John Hickenloope as Outdoor Stewardship Day. The purpose was to raise awareness about the important role volunteerism plays in protecting and preserving state and national parks, national forests and Bureau of Land Management lands.

"Colorado's mountains and valleys and our incredible legacy of the state's land and waters are a part of each person's responsibility in the state to protect," Hickenlooper said.

The new study released, titled "Colorado's Public Lands: Engaging our Communities in Their Care and Protection, Report on the Impact of Volunteer Stewardship in 2010" reported:

•Approximately 55 percent of total volunteer hours were spent working on federal lands; about 24 percent on municipal and county open space and park lands and the remaining 21 percent on

•Stipend volunteers, such as youth conservation corps and AmeriCorps National Civilian Community Corps, represent the largest group of volunteers con-



Photo by Bob Berwyn

Public lands need your help everywhere. A new organization aims to engage one million Coloradans in volunteer efforts.

tributing to public lands work with 685,675 hours or 53 percent of the total. Nonprofit groups organized 360,332 collective hours for 28 percent of the total and the remaining 256,662 hours, or 19 percent, were organized directly by the land agencies.

•Outdoor recreation contributes over \$10 billion annually to Colorado's economy, supports 107,000 jobs across Colorado, generates nearly \$500 million in annual state tax revenue and produces \$7.6 billion annually in retail sales and services across Colorado."

People interested in getting involved in Colorado outdoor stewardship can learn about volunteer opportunities such as trail building and maintenance, re-foresting, preservation of historic structures and more at: www.volunteeroutdoors.net or

The Stewardship Advisory Council is a publicprivate collaboration formed in 2010 to address outdoor stewardship issues and actively work to support an increased role for public involvement in the preservation and conservation of Colorado's

natural and cultural heritage. The Council is hosted and staffed by Volunteers for Outdoor Colorado.

For information, contact Sue at sue@voc.org or at 303-818-7264. Read the report at http://www. scribd.com/doc/53908144/Report-on-the-valueof-land-stewardship-in-Colorado.

For stories like this one, please go to www.summitvoice.org. This is an independent source for environmental news, especially in Colorado and the Rocky Mountains.

Georgia Court Rejects Air Permit for New Coal-Fired Power Plant

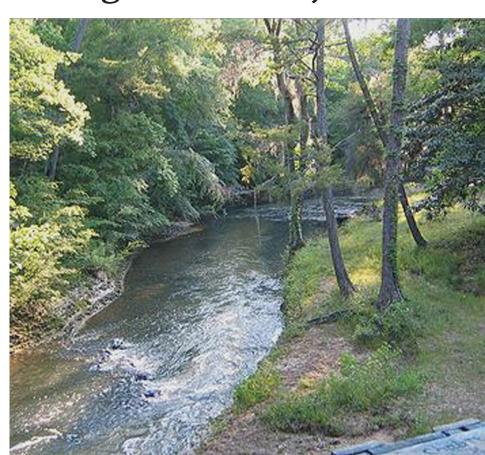


Photo Credit Unknown

ATLANTA, Georgia, April 20, 2011 (ENS, excerpt) — A Georgia administrative law court has sided with two citizen groups opposed to the proposed Longleaf coal-fired power plant in Blakely, Georgia, designed to be the largest coal plant in the nation.

According to the ruling issued April 19th, a permit issued by the Georgia Environmental Protection Division (EPD) did not sufficiently limit harmful air pollution that will be emitted by the plant, to be located in southwestern Georgia. EPD must reconsider its permit

after the court found flaws in provisions designed to make Longleaf a "minor" source of pollution for toxic air pollutants.

EPD's permit would allow New Jersey-based LS Power to build the country's largest coal plant and classify it as a "minor" source of pollution, a strategy aimed at getting around stricter pollution controls required for a "major" source of pollution.

EPD defended the permit on the ground that it contained safeguards to ensure that the plant would emit at

'minor" source levels. The court found, however, that the permit's monitoring and reporting scheme could "miss" many tons of

toxic air emissions each year, includ-

ing emissions of known carcinogens like formaldehyde.

The court also found that the permit did not account for toxic air emissions from the entire facility. The court sent the permit back to the state agency to address these issues.

The court upheld the permit in other respects, disagreeing with the challengers' core contention the facility remained a "major" source of toxic air pollutants despite the provisions designed to make it "minor."

The mercury and air toxics rule recently proposed by the U.S. Environmental Protection Agency observes no distinction between "major" and "minor" coal-fired utilities, holding them all to a common set of standards, including a mercury limit that is sharply lower than the limit in the permit.

However, the proposed rule will not become final until November and Longleaf would have several years to

comply with the new standard. Longleaf is designed to be a 1200-megawatt plant that would emit millions of tons of pollutants each year in Early County along the Chatta-

hoochee River. LS Power can sell the

power to buyers anywhere in the U.S.

without being subject to any regula-

tion by Georgia's Public Service Com-

GreenLaw, a nonprofit public interest law firm, represented Friends of the Chattahoochee and the Georgia Chapter of the Sierra Club in their challenge to the EPD decision to approve the construction of the power

"This is another step on our journey," said Bobby McLendon, president of Friends of the Chattahoochee. "We need the pollution controls called for by the Clean Air Act in order to protect all our citizens, but especially our children, from being forced to breathe

"We are pleased that we were able to make progress on this complex case, which arbitrarily classifies a massive plant as a 'minor' rather than 'major' source of air pollution," said GreenLaw Executive Director Justine Thompson. "Although the court is returning the permit to EPD for further consideration, we are disappointed that the classification of Longleaf as a minor source of pollution was not rejected."

"EPD should be doing a better job protecting public health and enforcing the Clean Air Act," said Colleen Kiernan, director of the Georgia Chapter of the Sierra Club