

# CPLV NEWS      March 2016



## CITIZENS TO PRESERVE LIGONIER VALLEY

P. O. BOX 914 + LIGONIER, PA + 15658

*Dedicated to preserving the quality of life in the Ligonier Valley so that it remains a safe, healthy, and attractive place for living, working, recreation, and tourism, for now and for generations to come.*

<http://cplvweb.wix.com/preserveligoniertwp>

Please use Westmoreland Marcellus Citizens' Group Facebook site

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CPLV is posting articles, research, events, and meetings on the **Westmoreland Marcellus Citizens' Group facebook** page. We invite you to join the page.

### Take Action

#### \*\*\*Petition to DEP—Notifications to Townships Local Zoning to Play More Important Role

"Please take a moment to sign this petition: <https://goo.gl/mMiv67>. The Environmental Integrity Project would like to present this petition to Secretary Quigley of DEP asking for **changes in Act 14 Notifications that are sent to municipalities informing them about proposed oil and gas activities in the township**. The current notifications are woefully inadequate for two reasons. The first is that municipalities are *only given 30 days to respond* which is not enough time to ensure a township meeting is held and elected officials have the chance to discuss the notice. The second is because there is no required standard language in these notifications, and *elected officials are not realizing that this is their only time to comment on the activities*. The notification should prompt municipalities to alert the DEP of any issues, like if the proposed site is not zoned for oil and gas activities. **Local zoning is something that the SWPA DEP has stated publicly they will be considering more often** and changing the requirements of the Act 14 Notices would be a great step in the right direction.

Thank you for your time in considering and signing this petition. Please share with other Pennsylvanians working on or dealing with Shale gas issues."

Sincerely,  
Stephanie Novak, Community Organizer  
Mountain Watershed Association  
(724)455-4200 ext. 5#  
stephanie@mtwatershed.com

### Events

#### \*\*\*Fracking and Public Health-Mars Public Library

When: March 30th @ 6:30pm-8:00pm

Where: Mars Area Public Library, 107 Grand Ave, Mars, PA 16046

Presenters are:

- Dr. Marsha Haley, MD, Radiation Oncologist, "Public Health and Safety"
- Dr. Cynthia McCormick Richburg, Ph.D., Audiologist, "Environmental Noise and its Effects on Health and Well-being"
- Lisa Graves Marcucci, Environmental Integrity Project, "Restoring Public Participation"
- Environmental Organizations - Update on Methane Rules and Regulations

Please contact Patrice Tomcik with questions at [ptomcik@momscleanairforce.org](mailto:ptomcik@momscleanairforce.org) or 412-999-2360  
Sponsored by Moms Clean Air Force, Sierra Club, Clean Air Council

### **\*\*\*Teleconference on Endocrine Disruptors and Fracking April 7**

“TEDX is pleased to announce a spring teleconference series on how chemicals associated with unconventional oil and gas development (known as fracking) may be affecting endocrine function, reproduction and prenatal development. Learn directly from scientists presenting their recent research on this emerging issue. Our first presentation is:

*Unconventional oil and gas extraction and endocrine disruptors: Implications for human and animal health*

Join us Thursday, April 7, 2016 at 2:00 pm Eastern, to hear Dr. Chris Kassotis discuss his recently published research demonstrating increased endocrine disrupting activity in surface and ground water near fracking wastewater spill sites, as well as nuclear receptor antagonism for 23 commonly used fracking chemicals. His studies have shown prenatal exposure to a mixture of those chemicals at likely environmentally relevant concentrations resulted in adverse health effects in both male and female mice, including decreased sperm counts, modulated hormone levels, increased body weights, and more. Dr. Kassotis will also discuss his recent work showing increased receptor antagonism downstream from a wastewater injection disposal site. See the call's webpage for more information. Register now for the teleconference call!

<http://endocrinedisruption.org/chemicals-in-natural-gas-operations/uoged-kassotis>

### **\*\*\*Josh Fox Climate Film- April 13**

All are warmly invited to a special climate change event sponsored by the climate action group Pittsburgh350. As part of his national tour, Oscar Nominated director Josh Fox (GASLAND) will present his new movie

**“How to Let Go of the World and Love all the Things Climate Can’t Change“.**

7:00 pm, Wednesday, April 13, Carnegie Lecture Hall. (Behind the Oakland Carnegie Library)

Get your free ticket to Josh Fox Climate Film <https://www.eventbrite.com/e/premiere-of-josh-foxs-climate-change-film-tickets-24059544746>

In the film, Josh Fox uses his deeply personal style to investigate the greatest threat our planet has ever known - climate change. After traveling to 12 countries on 6 continents, Fox asks, “What is it that climate change can’t destroy? What is so deep within us that no calamity can take it away?”

The movie will be followed by Q and A session with director Josh Fox. Admittance is free, but a donation according to your means will be greatly appreciated. The Lecture Hall is fully ADA compliant.

## **Legal Cases**

**\*\*\*Act 13 Issues Argued on March 9 by Atts. John Smith, Jonathan Kamin, Jordan Yeager**

**Note that Judge Wecht asks the questions we want asked.**

**(These are the Act 13 Issues that are being heard-gag orders on doctors, eminent domain, severability, and notification of contamination to private well owners)**

“In a 90-minute marathon that saw six attorneys take turns responding to four discrete questions posed by the court, the justices heard argument over the government's right to eminent domain, its responsibility to notify citizens of oil and gas spills affecting their water supply, and whether Act 13's limits on doctors' ability

to share information about patients' chemical exposure harms the public health. The "whiplash" series of arguments in *Robinson Township v. Commonwealth*, as one attorney described them, largely focused on whether portions of Act 13 provide special treatment to the oil and gas industry in Pennsylvania.

In a related decision under the same caption, the Supreme Court in December 2013 struck down portions of the act requiring municipalities to adopt uniform zoning ordinances that would allow drilling in all zoning districts. The justices had asked the Commonwealth Court to further address some of the remaining provisions in the act, which was signed into law by former Gov. Tom Corbett in 2012.

#### [Water Supplies](#)

John Smith of Smith Butz, arguing on behalf of a group of municipalities, said Section 3218.1 of Act 13 unfairly treats Pennsylvanians who rely on private water sources by excluding them from the notification provided to public water systems following an oil spill. The distinction is made "without a rational basis," he said. **The Department of Environmental Protection could provide notification to those using private water, he said, but instead claims it isn't feasible.** Sean Concannon, arguing on behalf of the DEP, responded to a question from Justice Max Baer about the agency's available information by saying it doesn't know where all the private wells are located and who owns them. Instead, Concannon said, the DEP knows of a "small universe" of wells—only those within 3,000 feet of a well pad—but that universe doesn't consider many of the thousands of acres where spills could occur.

"How is this a rational classification that we can uphold?" asked Justice David N. Wecht.

The distinction was a policy choice by the General Assembly, Concannon replied.

Justice Debra M. Todd said the group excluded from notice by Section 3218.1 is not *de minimis*, noting that it includes 3 million Pennsylvanians.

"It seems to me the state's interest here is in protecting the drinking water," she said. "That's why I'm having trouble with the public-private distinction."

**Wecht, a vocal member of the bench in his first argument session, asked whether Act 13 requires rural citizens who use private wells "to wait until they or their animals grow three heads" before being made aware of contamination.**

**Smith closed his argument by saying that in hundreds of cases of contamination stemming from spills and releases of oil, those affected used private water sources in every case.**

#### [Doctors' Disclosure](#)

Addressing the constitutionality of Sections 3222.1(b)(10) and (b)(11), which prohibit health care professionals from disclosing without permission information deemed by companies to constitute trade secrets, Jordan Yeager of Curtin & Heefner argued the statute gives the oil and gas industry special treatment. He questioned whether there is any legitimate state interest served by creating a limitation that exists in no other industry.

"We're asking doctors to figure this out on the fly," he said.

Wecht pointed out that, even if the statute represents "horrible policy," the court needs more to invalidate it.

"Are you saying there's no rational basis for favoring this particular industry?" Todd asked.

"Absolutely," Yeager responded.

Howard Hopkirk of the Office of Attorney General said the appellants mischaracterized the statute by calling it a "gag rule."

But Hopkirk took a series of rapid-fire challenges from the justices in making his case.

"We don't need special legislation for this industry," Justice Max Baer said.

Justice Christine L. Donohue asked whether the statute is "absolutely clear" that a physician can share information with a patient when necessary, commenting that statutes that don't affect the oil and gas industry "explicitly" allow such disclosures.

**Wecht questioned whether the statute exposes doctors to tort liability by preventing them from discussing their observations with colleagues, thereby "hampering their ability to stay up on science" and treat patients accordingly.**

Todd cut to the heart of the issue, asking if any other industry gets such statutory "preferential treatment."

"Not in this specific way," Hopkirk conceded.

#### [Eminent Domain](#)

Looking to Section 3241, Jonathan Kamin of Goldberg, Kamin & Garvin, arguing for the townships, questioned the public benefit in allowing a gas company to condemn the final portion of a property once it has the majority.

"The whole industry has a public benefit to the Pennsylvania consumer," Baer responded.

Kamin noted that there is no requirement in the statute that companies deliver anything to the public once land has been taken.

**"If you're giving the supreme governmental right to take private property for the public good, there has to be a public component," he said.**

Matthew Haverstick of Kleinbard LLC, arguing on behalf of the Public Utility Commission, said the townships offered a facial challenge to Section 3241, which he said is "more than capable" of a constitutional reading.

"There's a private purpose in the taking, no?" Baer asked.

"Not in this case," Haverstick replied, adding that his opposing counsel was attempting to "crowbar" facts into the case.

Haverstick, responding to a question from Wecht about the court's role in scrutinizing the issue, said the court should determine the "outer boundaries" of what constitutes a public taking. A factual situation could arise on a challenge at a later date, he said, "but that's not today."

#### [Severability](#)

Yeager also addressed a fourth question from the court, on the severability of Sections 3305 through 3309 of Act 13, on challenges to government ordinances, from the sections invalidated in the first Robinson Township decision.

Following the 2013 ruling, those "provisions are incomplete and incapable of being executed," he said.

The court said the statewide uniform regime couldn't withstand a challenge, and the sections at issue "provide a mechanism for enforcing that statewide regime," Yeager said, adding that "each and every part" of those sections is wound up in the provisions deemed unconstitutional."

<http://www.thelegalintelligencer.com/id=1202751794212/Public-Relationship-to-Gas-Industry-Argued-in-Act-13-Case?mcode=0&curindex=0&curpage=ALL>

<https://pcntv.com/schedule/?d=1>

PCN-TV

### **\*\*\*Yeager Compound-Argued by Smith Butz, LLC**

**(Excerpts From the Petitioner's Brief)**

(This case is important for many reasons. In addition to proving contamination of a private water source, it establishes negligence on the part of the DEP. jan)

"The Petitioner, Smith Butz, LLC ("Counsel") is a law firm that represents several property owners in Amwell Township, Washington County, Pennsylvania who live in close proximity to the Yeager Impoundment and Yeager drill site.

..Shortly after the Yeager drill site and Yeager Impoundment were introduced into the area up-gradient from their properties, Counsel's clients became very sick and several of their pets and farm animals died. As Counsel's clients relied on water wells and natural springs for all of their domestic water needs and to support their animals, they called upon the Department (DEP, Jan) to inspect the Yeager Impoundment and Yeager drill site to make sure that these facilities were not impacting their water and air. The Department took limited action to investigate these citizens' claims and allowed for the continued operation of the Yeager drill site, including allowing the leaking Yeager Impoundment to remain in operation.

...Presently, Counsel represents these individuals in a number of proceedings in a variety of venues against the Department and against Range and its contractors. Counsel appears on behalf of its clients in an original jurisdiction mandamus proceeding before this Court, captioned *Voyles v. .E.P.*, at Docket Number 253 MD 11, wherein it is asserted that the Department failed to perform its statutory obligations to investigate and prosecute numerous violations of both Pennsylvania law and federal law at the Yeager drill site, which includes the Yeager Impoundment.

**Subsequent to this act it has now been confirmed that the Yeager Impoundment leaked, a fact previously denied by Range and the Department for years . ....IT (counsel, jan) also demonstrated that the Department withheld critical diagnostic results from water tests it conducted following complaints of contaminated water from Counsel's sick clients.**

*In the summer of 2010, the Yeager Impoundment became septic, producing substantial amounts of dangerous and potentially deadly hydrogen sulfide. Due to the magnitude of the hydrogen sulfide problem, Range used AcroClear, a product containing the highly toxic chemical acrolein, to scavenge the bacteria producing the hydrogen sulfide. Department representatives have testified that in late August, early September 2010, they did not conduct any inspection as to the soundness of the Yeager Impoundment liner so as to prevent acrolein and other known chemicals and heavy metals from leaching into the groundwater.*

..Written inspection report forms are completed by Department personnel after site inspections and then this information is manually inputted into eFACTS. . Each inspection report has its own unique Inspection ID number. *Despite the fact that the eFACTS system is predicated on written inspection records with Inspection ID numbers existing the Department incredibly maintains that there are no such records.*

**...Simply put, the Department does not want to admit that any records exist that further illustrate its reckless handling of an environmental catastrophe at the Yeager Impoundment that has sickened Counsel's clients, destroyed their property values and killed their pets and animals, the Department incredibly maintains that there are no such records."**

**\*\*\*Justice! Cabot Case is a Win!! 4.25 million dollars  
Cabot banned from Dimock**

"A jury ruled that Cabot Oil and Gas did contaminate wells belonging to two families in Susquehanna County. Cabot Oil and Gas must pay millions of dollars to the families involved in the federal civil suit.

Residents first reported problems in the wells in 2008. The water that came out of their faucets turned cloudy, foamy and discolored, and it smelled and tasted foul. Homeowners, all of whom had leased their land to Cabot, said the water made them sick with symptoms that included vomiting, dizziness and skin rashes.

A state investigation found that Cabot had allowed gas to escape into the region's groundwater supplies, contaminating at least 18 residential wells.

The Hubert family and the Ely family, both from Dimock Township, are the only residents who did not settle with Cabot Oil and Gas over water contamination.

The plaintiffs' attorney called the verdict a warning shot that will resonate beyond the courtroom.

"Cabot doesn't care. Industry doesn't care. They're the big bucks. Their influence is wide and far. ... It's fine with me if industry takes a big fat hit," Leslie Lewis said.

The Ely's were awarded \$2.6 million and their three children \$50,000 each. The Huberts were awarded \$1.4 million, with another family member awarded \$50,000.

It took jurors two days to reach the verdict.

"\$4.2 million will not bring back drinkable well water to the long-suffering families of Dimock, Pennsylvania," Sandra Steingraber, PhD, science advisor for Americans Against Fracking, told EcoWatch.

"No amount of money can do that. Once groundwater is polluted, it's polluted forevermore. But what this important jury decision does do is strip away the mirage of omnipotence that Cabot and other gas companies operate behind. Fracking poisons water. That's what the science shows. The frackers will be held responsible. That's what this court decision shows."

**A NPR StateImpact report, prior to the trial, said that Cabot Oil & Gas had already accumulated more than 130 drilling violations at its Dimock wells, yet insisted that methane migration in Dimock's water is naturally occurring. The company is currently banned from drilling in a 9-mile area of Dimock but is trying to lift the ban.**



A state investigation, according to the AP, found that Cabot had allowed gas to escape into the region's groundwater supplies, contaminating at least 18 residential water wells."

<http://wnep.com/2016/03/10/jury-find-cabot-oil-and-gas-responsible-for-well-contamination/#>  
<http://www.mcall.com/news/nationworld/pennsylvania/mc-pa-dimmock-gas-driller-lawsuit-20160310-story.html>  
<http://ecowatch.com/2016/03/10/cabot-dimock-fracking-case/>

## **Other news**

### **\*\*\*Thank you to David Ball-Letter to Editor**

(David is from Peters Twp. He is one of the leaders in the fight to protect the environment, and health, and property values of the region. Jan)

"I thank God for Peters Township Councilman David Ball and other dedicated civic volunteers who look out for our best interests. I believe it's fair to say that a lot of people who signed up for drilling now regret their decision or didn't really know the implications. Everyone is busy, and who has the time to do all the research on this complicated topic? Apparently David Ball has taken on that task, and I for one am grateful for his efforts. Let's applaud him, not criticize him.

Christine Posti  
Venetia"

[http://www.thealmanac.net/20160311/applaud\\_david\\_ball](http://www.thealmanac.net/20160311/applaud_david_ball)

### **\*\*\*Moratorium on Fracking**

There was a call for a moratorium on fracking on March 21 in Harrisburg. Members of the faith community asked for:

- \*a MORALtorium on permits for any new wells that involve hydraulic fracking.

- \*fully funding the examination of existing PA wells to monitor for methane leaks polluting the air and gas leaks polluting the water.

- \*the cleanup of contaminated wells which cause health and safety problems for Pennsylvanians.

- \*the retraining of workers displaced from fossil fuel-related jobs for the emerging renewable energy sector.

### **\*\*\*Fracking Study Finds Toxins in Wyoming Towns Groundwater**

"Hydraulic fracturing and other oil and gas operations contaminated the groundwater in Pavillion, Wyoming, according to a new study by Stanford University scientists. The findings raise concerns about possible water pollution in other heavily fracked and geologically similar communities in the U.S. West. Tests of nearby groundwater showed dangerous concentrations of diesel-related and volatile organic compounds, such as benzene, a known carcinogen, and the neurotoxin toluene. Extremely high levels of diesel-related organic compounds were found in the monitoring wells. Also, low molecular weight organic acids were detected in high concentrations in the monitoring wells.

The researchers also found that energy companies frequently fracked at much shallower depths than previously thought, sometimes very close to drinking

water wells. In addition, companies fracked into underground sources of drinking water, or USDWs, defined under federal law as aquifers that could supply a public water system. Fracking into USDWs is legal, but the oil and gas industry has long insisted that fracking occurs far deeper than where aquifers are located." Published in Environmental Science & Technology, 2016  
<http://insideclimatenews.org/news/29032016/fracking-study-pavillion-wyoming-drinking-water-contamination-epa>

**\*\*\*Interesting Email From State Senator Dinniman About Landmen**

(A similar action should have taken place before thousands of Pennsylvanians signed leases for gas wells with landmen before fully understanding the implications of that action. Jan)

"As more and more pipeline projects are planned for our region, with them come not only environmental concerns but also threats to individual property rights and historic preservation.

You are invited to join me ...for a special press conference in support of Senate Bill 991, **legislation to regulate land agents in Pennsylvania**. I will be joined by residents, business owners, and homeowners who feel that they have been intimidated, harassed and bullied by land agents.

To negotiate easements and rights of way with property owners, pipeline companies employee or contract with land agents. These agents perform title or contract functions and negotiate the acquisition of land and property rights. There is no reason why they shouldn't be held to the same standards and scrutiny as realtors. However, currently in **Pennsylvania they operate without any oversight whatsoever**. It seems like **some of these agents, according to residents, will do or say practically anything to get landowners to sign over their property rights**.

In response to numerous complaints from residents, businesses and homeowners about the aggressive tactics employed by such land agents, I have introduced Senate Bill 991. The bill would amend Pennsylvania's Real Estate Licensing and Registration Act to **define the role of "land acquisition broker" and require registration with the Pennsylvania Real Estate Commission**. Senate Bill 991 also calls for allowing public access to a listing of registered brokers, requiring criminal history background checks of brokers, and providing the commission with the authority to revoke or suspend them for a number of reasons such as fraud or misrepresentation.

In addition, you may know that Ship Road Park is located near several properties that are impacted by Sunoco Logistics' proposed Mariner East pipeline project. Interestingly, the park is also adjacent to a potentially historically significant property that is believed to be the site of the encampment of the Pennsylvania First Militia during what became known as the "Battle of the Clouds" during the Revolutionary War. The event, which occurred on September 16, 1777, near present-day Malvern, was so-named because a sudden thunderstorm and torrential downpour prevented an imminent clash between General Howe's British forces and the Continental Army under the command of General Washington. As a member of the Pennsylvania Historical and Museum Commission, I will be requesting that the



commission conduct an archeological survey of the site to determine any historic artifacts.

Thank you and please join me.. to support Senate Bill 991 and stand up for individual property rights, our environment, and our history.

Sincerely,

Andy Dinniman

State Senator - 19th District

### **\*\*\*Mt Pleasant Twp. Residents Request Evacuation plans**

**“Residents of Westland were requesting info on evacuation plans, and that’s where this came from. They evacuated a couple of times, so we’re looking into what we can do in that respect,”** Reed said.

Board discussion revolved **around how residents would differentiate between fire sirens and sirens that indicated specific emergencies, such as gas explosions.**

Jane Worthington of 135 Main St., Hickory, said during public comment Fort Cherry School District doesn’t have an evacuation plan in place in regard to oil- and gas-drilling accidents or railroad explosions.

“The township doesn’t have exhaustive, complete evacuation plans for these types of situations, either,” Worthington said. “Is that what that motion does? I think this is a bigger potential problem than sweeping this under a plan to buy some sirens.”

[http://www.observer-](http://www.observer-reporter.com/20160301/mt_pleasant_township_without_manager_mulling_evacuation_plans#.VuK2HYfDHEk.mailto)

[reporter.com/20160301/mt\\_pleasant\\_township\\_without\\_manager\\_mulling\\_evacuation\\_plans#.VuK2HYfDHEk.mailto](http://www.observer-reporter.com/20160301/mt_pleasant_township_without_manager_mulling_evacuation_plans#.VuK2HYfDHEk.mailto)

### **\*\*\*IUP Students Test Westmoreland Water Supply**

(You rarely read anything about the fracking at Beaver Run Reservoir. For those who are not aware, IUP students and staff test the water quarterly at the Beaver Run Reservoir. Many questions remain including the extent of testing and specific chemicals tested for. This article from 2015 provides some background information.jan)

“The Municipal Authority of Westmoreland County will pay Indiana University of Pennsylvania \$80,000 this year to test and analyze water samples at and around its Beaver Run Reservoir.

It will be the fourth year the school's chemistry and science department has worked to review water quality issues near the 11-billion-gallon reservoir and surrounding property.

**The authority has leased property at the reservoir to Consol Energy, which has built nearly 40 deep wells to probe for Marcellus shale natural gas. Some of the wells are located just a stone's throw from the reservoir.**

IUP students and staff take samples from tributaries and streams that feed the reservoir, the reservoir itself and other ground water locations on the property.

Results are posted on a website, run by the school, at least four times a year. Results from IUP's last round of tests showed no abnormality with the water supply at Beaver Run, authority officials said.”

The results can be found at IUP's website:

[http://www.iup.edu/page.aspx?id=120005.](http://www.iup.edu/page.aspx?id=120005)

Read more: <http://triblive.com/news/westmoreland/8363051-74/reservoir-iup-authority#ixzz3apbBMdeM>

### **\*\*\*Highly Polluting Petrochemical Plants Increase Due to Fracking**

“The boom in cheap natural gas is spawning a wave of petrochemical plants that, if built, will emit massive amounts of greenhouse gases. The Washington-based Environmental Integrity Project said hydraulic fracturing has resulted in a boom -- United States has begun exporting gas.

The group calculated that **if 44 large-scale petrochemical developments proposed or permitted in 2015 were built they would spew as much pollution as 19 new coal-fired power plants would. All these projects potentially could pump about 86 million tons of greenhouse gases into the atmosphere each year.** That would be an increase of 16 percent for the industry's emissions in 2014, the report found.

The report combined new natural gas, fertilizer and chemical plants and petroleum refinery expansions projects. Natural gas is a prime ingredient in ammonia, a basic element in fertilizers.

Similarly, the report said natural gas is important for chemical manufacturers of plastics and other products.”

<http://www.thestate.com/news/business/national-business/article63147767.html#storylink=cpy>

### **\*\*\*First Gas Leaves USA For Europe**

“The INEOS Intrepid, the world's largest LNG multi gas carrier, today left the Markus Hook terminal near **Philadelphia bound for Norway carrying 27,500m3 of US shale gas ethane.**

This is the first time that US shale gas has ever been shipped to Europe and represents the culmination of a long-term investment by INEOS.

The shale gas is cooled to -90°C (-130°F) for the journey of 3,800 miles, which is expected to take nine to ten days. US shale gas will complement the reducing gas feed from the North Sea.

Jim Ratcliffe, chairman and founder of INEOS, says, "This is an important day for INEOS and Europe. We know that shale gas economics revitalized US manufacturing and for the first time Europe can access this important energy and raw material source too"

<http://www.bizjournals.com/pittsburgh/blog/energy/2016/03/first-ethane-shipment-from-marcellus-heads-europe.html>

### **\*\*\*“Fracking Linked to Increased Infant Mortality in Alarming Study”**

(This study was not publicized in the media. Nor were several other studies that indicate a link between fracking and perinatal mortality, low weight births, premature births and cancer in children. jan)

“Pennsylvania has issued more than 10,000 drilling permits over the past decade. Infants and children may be paying a heavy price.

**A study has linked fracking to a higher incidence in infant mortality, perinatal mortality, low-weight births, premature births and cancer in infants and children.**

Funded by the Pittsburgh Foundation and written by Joe Mangano, co-founder and president of the Radiation and Public Health Project, a nonprofit educational and scientific organization that studies the relationship between low-level, nuclear radiation and public health, **the study used data from state agencies to examine eight heavily fracked counties in Pennsylvania — four in the northeast and four in the southwest region of the state**, counties that account for the majority of the state's natural gas drill wells and gas production. In all categories but child cancer, increases were greater in the northeast counties than they were in the four southwest counties.

"The information presented in this report supports the hypothesis of a link between exposure to toxic chemicals released in fracking and increased risk of disease and death,"

writes Mangano. "While it is virtually impossible to estimate a 'dose' to a community from chemicals generated by fracking, **it is clear that residents of the eight most-fracked counties received far greater exposures than those in the rest of Pennsylvania.**"

Analyzing publicly available **data from the Pennsylvania Department of Health** and the U.S. Centers for Disease Control and Prevention, Mangano found that, since the early 2000s and compared to the rest of the state, **the heavily-fracked counties have seen a rise in infant mortality (13.9 percent), perinatal mortality (23.6 percent), low-weight births (3.4 percent), premature births/gestation less than 32 weeks (12.4 percent) and cancer incidence in age 0-4 (35.1 percent).**

Mangano asserts that the advent of large-scale fracking "has added considerable amounts of toxic chemicals into the environment, including various greenhouse gases and radiation. While potential health consequences of fracking has been become a national issue, very little research on health trends among affected populations has been conducted."

Over the past decade, Pennsylvania and other parts of the U.S. have seen a rapid rise in fracking operations. Between January 1, 2005, and March 2, 2012, the Pennsylvania DEP issued 10,232 drilling permits, and denied only 36 requests.

With 66 operators currently drilling 7,788 active wells, fracking has dramatically changed the landscape of northeastern and southwestern Pennsylvania. So too has the scientific evidence of fracking's negative impact on public health. The fracking process produces diesel particulate matter, the exposure of which may lead to asthma, headaches, high blood pressure, anemia, congenital heart defects, heart attacks and cancer.

Fracking has also been linked to drinking water pollution and the release of radon gas, a known carcinogenic. *Some 600 chemicals are used in fracking fluid, including known carcinogens and toxins such as lead, benzene, uranium, radium, methanol, mercury, hydrochloric acid, ethylene glycol and formaldehyde.*

Epidemiological studies on the effect of fracking on infants and children can be more useful than similar studies on adults. "Any environmentally-caused health problems in the very young are the result of a recent insult, while health problems in adults can be a result of a much earlier exposure with a long lag period before the disease is diagnosed," Mangano notes. "The very young are most susceptible to the harmful effects of environmental radiation, so any unusual patterns in morbidity or mortality would show up quickest in these groups."

Clearly, there are **problems with the methods used in Pennsylvania: Between January 2009 and March 2015, fracking operators in the state have been issued more than 4,000 violations with fines totaling \$6.1 million.**

"The abstract is alarming," said Rebecca Roter, founder and chairperson of Breathe Easy Susquehanna County (BESC), a nonpartisan community advocacy group based in Montrose, Pennsylvania, seeking to reduce air pollution from natural gas drilling. Roter, who wrote a letter in support of Mangano's grant application for the study, advocates working with the oil and gas industry to achieve a common good: clean air. "It doesn't matter what side of the issue of drilling you are on: you are breathing, too. We can all agree on maintaining air quality."

<http://www.alternet.org/environment/fracking-linked-increased-infant-mortality-alarming-new-study>

<https://www.einpresswire.com/article/277887528/pennsylvania-study-links-fracking-to-health-hazards-in-fetuses-infants-and-young-children>

## **Frack Links**

**\*\*\*Link to Shalefield Stories-Personal stories of those affected by fracking**

<http://www.friendsoftheharmed.com/>

**\*\*\*To sign up for Skytruth notifications of activity and violations for your area:**



<http://alerts.skytruth.org/>

**\*\*\* List of the Harmed**--There are now over 1400 residents of Pennsylvania who have placed their names on the list of the harmed when they became sick after fracking began in their area. <http://pennsylvaniaallianceforcleanwaterandair.wordpress.com/the-list/>

**\*\*\* To See Water Test Results of the Beaver Run Reservoir**

IUP students test for TDS, pH, metals- arsenic, chromium, and strontium.

We have not seen results for other frack chemicals including the organics BTEX group, or cesium for example. Here is a link to the IUP site:

<http://www.iup.edu/page.aspx?id=120005>