From: **Bob Perciasepe/DC/USEPA/US**
Sent: 3/20/2012 7:03:23 PM

To: Bob Sussman/DC/USEPA/US@EPA; Betsaida Alcantara/DC/USEPA/US@EPA
CC: Brendan Gilfillan/DC/USEPA/US@EPA; Lisa Feldt/DC/USEPA/US@EPA; Mathy Stanislaus/DC/USEPA/US@EPA; Richard Windsor/DC/USEPA/US@EPA
Subject: Re: ProPublica: So, is Dimock's Water Really Safe to Drink?/ Josh Fox Press Release

Ex. 5 - Deliberative

Heading back to DC now.
Bob Perciasepe
Deputy Administrator
(o)202 564 4711
Ex. 6 - Personal Privacy

----- Original Message -----
From: Bob Sussman
Sent: 03/20/2012 06:57 PM EDT
To: Betsaida Alcantara
Cc: Brendan Gilfillan; Lisa Feldt; Mathy Stanislaus; Richard Windsor; Bob Perciasepe
Subject: Re: ProPublica: So, is Dimock's Water Really Safe to Drink?/ Josh Fox Press Release

Ex. 5 - Deliberative

Robert M. Sussman
Senior Policy Counsel to the Administrator
Office of the Administrator
US Environmental Protection Agency
(202) 564-7397

From: Betsaida Alcantara/DC/USEPA/US
To: Richard Windsor/DC/USEPA/US@EPA, Bob Sussman/DC/USEPA/US@EPA, Brendan Gilfillan/DC/USEPA/US@EPA, Mathy Stanislaus/DC/USEPA/US@EPA, Lisa Feldt/DC/USEPA/US@EPA
Date: 03/20/2012 06:47 PM
Subject: ProPublica: So, is Dimock's Water Really Safe to Drink?/ Josh Fox Press Release

Ex. 5 - Deliberative

Contact:

Josh Fox, Gasland (Sommer Hixson):
Ana Tinsly, Water Defense:

EPA Water Test Results Prove Fracking Contamination in Dimock

Gasland Director, Water Defense call results "a vindication" of residents' complaints, Call on EPA to Compel PA to Action and Provide Replacement Water

Gasland Director Josh Fox and Water Defense today said that the Environmental Protection Agency's preliminary water test results for Dimock, PA vindicated long-standing allegations from residents that their water was contaminated from nearby gas drilling. Despite initial pronouncements from EPA Region 3 that the water poses no immediate health threat, the test results reveal the water is anything but safe, with explosive levels of methane, heavy metals, and hazardous chemicals associated with gas drilling. Gasland and Water Defense commended the EPA for undertaking the tests, and called on EPA Administrator Lisa Jackson to compel the state of Pennsylvania to provide long-term water relief for the affected residents.

"The science in this case triumphs over the spin. After a media rollercoaster ride the EPA test show conclusively that Dimock families' water wells are contaminated with high and explosive levels of methane. The families are vindicated and their calls for a permanent water line should be heeded by US EPA," said Josh Fox, Director of Gasland. "I've been working with these families for three years now. Their resilience is remarkable and I am still moved and impressed by their endurance and dignity."

"The building that houses my water well has a built in bomb shelter," said resident Sheila Ely, commenting on the explosive levels of methane in her well water that could blow up her house if her water well was reconnected.

"For three years, the families of Carter Road have had to endure not only dangerous, explosive conditions, but slander and attacks from a powerful industry dedicated to silencing its critics and concealing the truth about its practices," Claire Sandberg, Executive Director of Water Defense. "Administrator Jackson affirmed her commitment to protecting public health when she announced the EPA would undertake this water testing. Now that the facts are in, it is incumbent on her to take action and compel the state of Pennsylvania to provide long-term replacement water for the affected families."

EPA withheld water test summaries from the press and the public when it made its announcement last week, even as they implied in a statement that Dimock's water had been given a clean bill of health. Josh Fox and Water Defense procured the tests directly from six of the affected families, who are all in litigation with Cabot Oil and Gas. Five families who are also in litigation with Cabot have not yet received their test results from the EPA, although initial media reports implied that the 11 families who received test results were the same infamous 11 families in litigation. Five of the families who have thus far received their results are not currently suing Cabot.

All six of the results obtained by Gasland/Water Defense contained at least one serious health concern, either from chemicals present or methane levels. In four of the six summaries obtained by Gasland/Water Defense, methane levels exceeded the 7 mg/l actionable threshold necessary for mitigation under Pennsylvania law—the standard previously cited by former Pennsylvania Department of Environmental Protection Commissioner John Hanger to justify the construction of a water pipeline for the residents of Carter Road. One of the test results showed methane levels seven times the PA limit.

The test results also showed dozens of other contaminants, including heavy metals and dangerous chemicals used in the hydraulic fracturing process. Safe levels have not been established for a majority of these chemicals, although many can cause serious health ailments including cancer with short or long-term exposure.

A number of independent experts reviewed the water test summaries provided by the six families. These included chemist and MacArthur "genuis" award-winner chemist and first responder Wilma Subra, water test expert Steven Penningroth, toxicologist Theo Colborn, and SUNY Oneonta chemist Ron Bishop. All concluded that methane levels were dangerous to residents and pointed at the long chain of science implicating Cabot Oil and Gas and faulty gas wells as the source of the the thermogenic gas.

"Any suggestion that water from these wells is safe for domestic use would be preliminary or inappropriate," said Dr. Bishop.

"The large number of chemicals detected in the water wells, even though present in concentrations below primary and secondary MCL, pose a cumulative risk threat to individuals continuing to be exposed to the water source," said Dr. Subra.

And Dr. Penningroth writes, "All six wells have measurable concentrations of ethane associated with the relatively high concentrations of methane noted above. The presence of methane and ethane together suggests that both may come from shale formations. In other words, the presence off ethane suggests that the methane is deep and thermogenic, not shallow and biogenic."

Gasland and Water Defense called for the complete test results to be released by the EPA for further analysis, citing inconsistencies in the available data. Among the concerns cited were differing standards of safety and differing detection levels employed for the same contaminants on different tests.

--
****

So, is Dimock's Water Really Safe to Drink?

by Abrahm Lustgarten
ProPublica, March 20, 2012, 2:42 p.m.

When the Environmental Protection Agency announced last week that tests showed the water is safe to drink in Dimock,

Penn., a national hot spot for concerns about fracking, it seemed to vindicate the energy industry's insistence that drilling had not caused pollution in the area.

But what the agency didn't say – at least, not publicly – is that the water samples contained dangerous quantities of methane gas, a finding that confirmed some of the agency's initial concerns and the complaints raised by Dimock residents since 2009.

The test results also showed the group of wells contained dozens of other contaminants, including low levels of chemicals known to cause cancer and heavy metals that exceed the agency's "trigger level" and could lead to illness if consumed over an extended period of time. The EPA's assurances suggest that the substances detected do not violate specific drinking water standards, but no such standards exist for some of the contaminants and some experts said the agency should have acknowledged that they were detected at all.

"Any suggestion that water from these wells is safe for domestic use would be preliminary or inappropriate," said Ron Bishop, a chemist at the State University of New York's College at Oneonta, who has spoken out about environmental concerns from drilling.

Dimock residents are struggling to reconcile the EPA's public account with the results they have been given in private.

"I'm sitting here looking at the values I have on my sheet – I'm over the thresholds – and yet they are telling me my water is drinkable," said Scott Ely, a Dimock resident whose water contains methane at three times the state limit, as well as lithium, a substance that can cause kidney and thyroid disorders. "I'm confused about the whole thing… I'm flabbergasted."

The water in Dimock first became the focus of international attention after residents there alleged in 2009 that natural gas drilling, and fracking, had led to widespread contamination. That April, ProPublica reported [1] that a woman's drinking water well blew up. Pennsylvania officials eventually determined [2] that underground methane gas leaks had been caused by Cabot Oil and Gas, which was drilling wells nearby. Pennsylvania sanctioned Cabot, and for a short time the company provided drinking water to households in the Dimock area.

This January, the EPA announced [3] it would take over the state's investigation, testing the water in more than 60 homes and agreeing to provide drinking water to several of families – including the Elys – in the meantime.

Then, last Thursday, the EPA released a brief statement saying that the first 11 samples to come back from the lab "did not show levels of contamination that could present a health concern." The agency noted that some metals, methane, salt and bacteria had been detected, but at low levels that did not exceed federal thresholds. It said that arsenic exceeding federal water standards was detected in two samples.

But Dimock residents say the agency's description didn't jibe with the material in test packets distributed to them, and they voiced concerns about why the EPA had passed judgment before seeing results from nearly 50 homes. Several shared raw data and materials they were given by the EPA with Josh Fox, the director of the Academy Award-nominated documentary "GasLand," who shared them with ProPublica.

EPA press secretary Betsaida Alcantara said the agency was trying to be forthcoming by giving the tests results to Dimock residents and is now considering whether to release more information to the public about the water samples. "We made a commitment to the residents that we would give them the information as soon as we had it," she said. "For the sake of transparency we felt it was the right thing to do."

However preliminary, the data is significant because it is the first EPA research into drilling-related concerned on the east coast, and the agency's first new information since it concluded that there was likely a link [4] between fracking and water contamination in central Wyoming last December. The EPA is currently in the midst of a national investigation into the effects of fracking on groundwater, but that research is separate.

As the agency has elsewhere, the EPA began the testing in Dimock in search of methane and found it.

Methane is not considered poisonous to drink, and therefore is not a health threat in the same way as other pollutants. But the gas can collect in confined spaces and cause deadly explosions, or smother people if they breathe too much of it. Four of the five residential water results obtained by ProPublica show methane levels exceeding Pennsylvania standards; one as high as seven times the threshold and nearly twice the EPA's less stringent standard.

The methane detections were accompanied by ethane, another type of natural gas that experts say often signifies the

methane came from deeply buried gas deposits similar to those being drilled for energy and not from natural sources near the surface.

Among the other substances detected at low levels in Dimock's water are a suite of chemicals known to come from some sort of hydrocarbon substance, such as diesel fuel or roofing tar. They include anthracene, fluoranthene, pyrene and benzo(a)pyrene– all substances described by a branch of the Centers for Disease Control and Prevention as cancer-causing even in very small amounts. Chromium, aluminum, lead and other metals were also detected, as were chlorides, salts, bromium and strontium, minerals that can occur naturally but are often associated with natural gas drilling.

It is unclear whether these contaminants have any connection to drilling activities near Dimock. The agency says it plans further testing and research.

Many of the compounds detected have not been evaluated for exposure risk by federal scientists or do not have an exposure limit assigned to them, making it difficult to know whether they present a risk to human health.

Inconsistencies in the EPA's sampling results also are raising concerns. EPA documents, for example, list two different thresholds for the detection of bromide, a naturally occurring substance sometimes used in drilling fluids, opening up the possibility that bromide may have been detected, but not reported, in some tests.

"The threshold that it is safe, that shouldn't be changing," said Susan Riha, director of the New York State Water Resources Group and a professor of earth sciences at Cornell University. "For some reason … one was twice as sensitive as the other one."

The EPA did not respond to questions about the detection limits, or any other technical inquiries about the test data [4].

A spokesman for Cabot declined to comment on the water test results or their significance, saying that he had not yet seen the data.